Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM068905 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER 1a. Type of work: POKER LAKE / NMNM 071016X 1b. Type of Well: Oil Well ✓ Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone POKER LAKE UNIT 23 DTD 122H 9. API Well No. 30-015-54414 2. Name of Operator XTO PERMIAN OPERATING LLC 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 6401 Holiday Hill Road, Bldg 5, Midland, TX 79707 (432) 682-8873 PURPLE SAGE; WOLFCAMP (GAS) 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 23/T24S/R30E/NMP At surface SWSW / 406 FSL / 281 FWL / LAT 32.211727 / LONG -103.859365 At proposed prod. zone LOT 3 / 200 FNL / 1430 FWL / LAT 32.253567 / LONG -103.855622 14. Distance in miles and direction from nearest town or post office\* 12. County or Parish 13 State **EDDY** NM 27 miles 15. Distance from proposed\* 16. No of acres in lease 17. Spacing Unit dedicated to this well 281 feet location to nearest property or lease line, ft. 960.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location\* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 11455 feet / 27419 feet FED: COB000050 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3446 feet 12/29/2021 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) STEPHANIE RABADUE / Ph: (432) 682-8873 08/17/2021 Title Regulatory Coordinator Approved by (Signature) Date Name (Printed/Typed) 03/07/2022 (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

APPROVED WITH CONDITIONS Released to Imaging: 12/6/2023 4:12:03 PM Approval Date: 03/07/2022

(Continued on page 2)

\*(Instructions on page 2)

## **Additional Operator Remarks**

### **Location of Well**

 $0. \ SHL: \ SWSW \ / \ 406 \ FSL \ / \ 281 \ FWL \ / \ TWSP: \ 24S \ / \ RANGE: \ 30E \ / \ SECTION: \ 23 \ / \ LAT: \ 32.211727 \ / \ LONG: \ -103.859365 \ ( \ TVD: \ 0 \ feet, \ MD: \ 0 \ feet \ )$   $PPP: \ SESW \ / \ 100 \ FSL \ / \ 1430 \ FWL \ / \ TWSP: \ 24S \ / \ RANGE: \ 30E \ / \ SECTION: \ 14 \ / \ LAT: \ 32.210896 \ / \ LONG: \ -103.855653 \ ( \ TVD: \ 11455 \ feet, \ MD: \ 27419 \ feet \ )$   $BHL: \ LOT \ 3 \ / \ 200 \ FNL \ / \ 1430 \ FWL \ / \ TWSP: \ 24S \ / \ RANGE: \ 30E \ / \ SECTION: \ 2 \ / \ LAT: \ 32.253567 \ / \ LONG: \ -103.855622 \ ( \ TVD: \ 11455 \ feet, \ MD: \ 27419 \ feet \ )$ 

#### **BLM Point of Contact**

Name: Priscilla Perez

Title: Legal Instruments Examiner

Phone: (575) 234-5934 Email: pperez@blm.gov District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Santa Fe, NM 87505

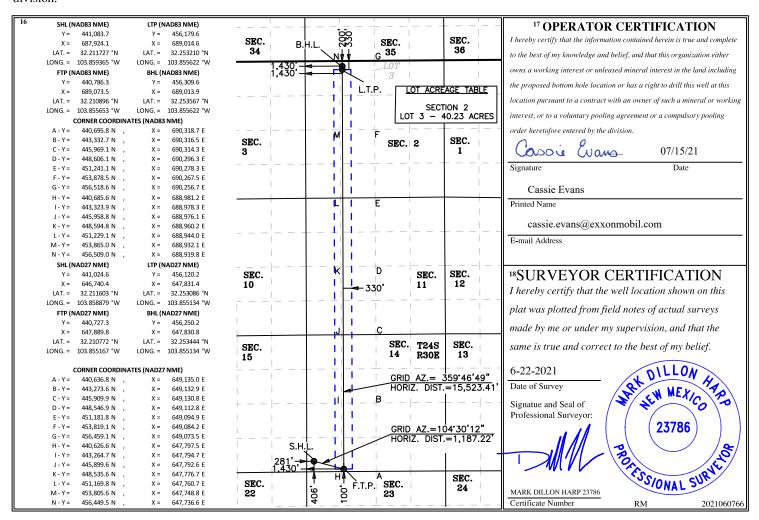
<sup>1</sup> API Number 30-015-	er 54414	<sup>2</sup> Pool Code 98220	<sup>3</sup> Pool Name Purple Sage; Wolfcamp	
<sup>4</sup> Property Code		<sup>5</sup> Pr	operty Name	<sup>6</sup> Well Number
325598		POKER LA	AKE UNIT 23 DTD	122H
<sup>7</sup> OGRID No.		<sup>9</sup> Elevation		
373075		XTO PERMIA	AN OPERATING, LLC	3,449'

#### <sup>10</sup> Surface Location

Į l	JL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County					
	M	14	24 S	30 E		406	SOUTH	281	WEST	EDDY					
	<sup>11</sup> Bottom Hole Location If Different From Surface														
ī	JL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County					
	3	2	24 S	30 E		200	NORTH	1,430	WEST	EDDY					

12 Dedicated Acres 960 13 Joint or Infill 14 Consolidation Code 15 Order No.

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



Well Name: POKER LAKE UNIT 23 DTD



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

# Drilling Plan Data Report

06/30/2022

APD ID: 10400078621

Submission Date: 08/17/2021

Highlighted data reflects the most recent changes

**Operator Name: XTO PERMIAN OPERATING LLC** 

Well Number: 122H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

**Show Final Text** 

## **Section 1 - Geologic Formations**

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
6828403	QUATERNARY	3449	0	Ö	ALLUVIUM	USEABLE WATER	N
6828404	RUSTLER	2839	610	610	SANDSTONE	USEABLE WATER	N
6828405	TOP SALT	2479	970	970	SALT	POTASH	N
6828406	BASE OF SALT	-401	3850	3850	SALT	POTASH	N
6828407	DELAWARE	-611	4060	4060	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	N
6828408	BONE SPRING	-4441	7890	7890	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
6828409	WOLFCAMP	-7721	11170	11170	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	Y

## **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 10M Rating Depth: 11455

Equipment: Once the permanent WH is installed on the 11-3/4 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8 minimum 10M Hydril and a 13-5/8 minimum 10M 3-Ram BOP. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 psi.

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. A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to ONLY retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad (First well will be the deepest Intermediate) 2. When skidding to drill an intermediate section does not penetrate into the Wolfcamp 3. Full BOP test will be required prior to drilling the production hole. Permanent Wellhead – Multibowl System A. Starting Head: 13-5/8" 10M top flange x 11-3/4" SOW bottom B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange · Wellhead will be installed by manufacturer's

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

Operator will test the 7-5/8" casing per BLM Onshore Order 2 • Wellhead Manufacturer representative will not be present for BOP test plug installation

**Testing Procedure:** All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 70% of the working pressure. When nippling up on the 11-3/4", 10M bradenhead and flange, the BOP test will be limited to 7500 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

#### **Choke Diagram Attachment:**

PLU\_23\_DTD\_10MCM\_20210803061532.pdf

#### **BOP Diagram Attachment:**

PLU\_23\_DTD\_5M10MBOP\_20210803061538.pdf

## **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	12.2 5	9.625	NEW	API	N	0	870	0	870	3446	2576	870	J-55	40	BUTT	6.53	1.29	DRY	18.1	DRY	18.1
	INTERMED IATE	8.75	7.625	NEW	API	Y	0	10738	0	10738	3329	-7292	10738	HCL -80	-	OTHER - Flush Joint	1.87	1.59	DRY	2.03	DRY	2.03
3	PRODUCTI ON	6.75	5.5	NEW	API	Y	0	27419	0	11455	3329	-8009	27419	P- 110		OTHER - Semi-Flush	2.12	1.21	DRY	4.72	DRY	4.72

## **Casing Attachments**

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

**Casing Attachments** 

Casing ID: 1

String

**SURFACE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

PLU\_23\_DTD\_122H\_csg\_20210805070343.pdf

Casing ID: 2

String

**INTERMEDIATE** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

PLU\_23\_DTD\_122H\_csg\_20210805070232.pdf

Casing Design Assumptions and Worksheet(s):

PLU\_23\_DTD\_122H\_csg\_20210805070254.pdf

Casing ID: 3

String

**PRODUCTION** 

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

PLU\_23\_DTD\_122H\_csg\_20210805070312.pdf

Casing Design Assumptions and Worksheet(s):

PLU\_23\_DTD\_122H\_csg\_20210805070319.pdf

**Section 4 - Cement** 

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	870	310	1.87	12.9	579.7		EconoCem- HLTRRC	None

INTERMEDIATE	Lead		0	1073 8	850	2.77	10.5	2354. 5	30	Class C	None - See Cement Attachment
INTERMEDIATE	Tail		0	1073 8	750	1.33	14.8	997.5	30	Class C	None - See Cement Attachment
PRODUCTION	Lead	1	1043 8	2741 9	20	2.69	11.5	53.8	100	NeoCem	None
PRODUCTION	Tail	1	1043 8	2741 9	1180	1.51	13.2	1781. 8	100	Versacem	None

## **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 and set 11-3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4 surface casing with a brine/oil direct emulsion mud system. 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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	870	SPUD MUD	8.7	9.2							

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

Top Depth	Bottom Depth	od L pn W OTHER : Brine / Cut Brine / Direct Emulsion	G Min Weight (lbs/gal)	U Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	표	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1073	2741 9	OTHER : Cut Brine / WBM / OBM	11.5	12							The necessary mud products for weight addition and fluid loss control will be on location at all times.

## **Section 6 - Test, Logging, Coring**

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

Mud Logger: Mud Logging Unit (2 man) below intermediate casing. Open hole logging will not be done on this well.

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

CEMENT BOND LOG, DIRECTIONAL SURVEY,

Coring operation description for the well:

No Coring Operations for Well

## **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 6850 Anticipated Surface Pressure: 4329

Anticipated Bottom Hole Temperature(F): 170

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

PLU\_23\_DTD\_H2S\_Dia\_20210803062628.pdf PLU\_23\_DTD\_H2S\_Plan\_20210803062634.pdf

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

## **Section 8 - Other Information**

## Proposed horizontal/directional/multi-lateral plan submission:

PLU\_23\_DTD\_122H\_DD\_20210805070604.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

PLU\_23\_DTD\_122H\_cmt\_20210805070628.pdf

#### Other Variance attachment:

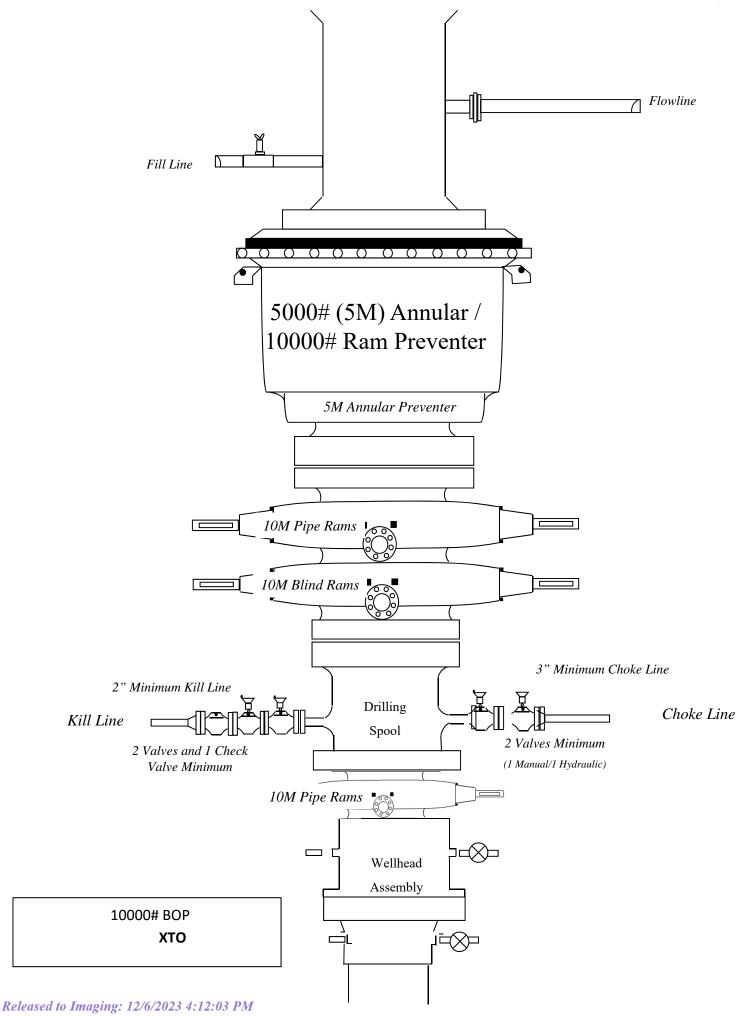
PLU\_23\_DTD\_BOP\_Break\_20210803062742.pdf

PLU\_23\_DTD\_FH\_20210803062714.pdf

PLU\_23\_DTD\_MBS\_20210803062722.pdf

PLU\_23\_DTD\_OFCV\_20210803062728.pdf

PLU\_23\_DTD\_Spud\_20210803062736.pdf



#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 870'	9.625	40	J-55	BTC	New	1.29	6.53	18.10
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.65	1.75
8.75	4000' – 10738'	7.625	29.7	HC L-80	Flush Joint	New	1.59	1.87	2.03
6.75	0' – 10638'	5.5	23	RY P-110	Semi- Premium	New	1.21	2.29	1.86
6.75	10638' - 11455'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.12	4.11
6.75	11455' - 27419'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.12	4.72

- · XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry
- · XTO requests to not utilize centralizers in the curve and lateral
- · 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
- · XTO requests the option to use 5" BTC Float equipment for the the production casing

#### Wellhead:

#### Permanent Wellhead – Cactus CRC-MBU-3T-CFL Multibowl System

Temporary Wellhead

21-1/4" 2M flange top x 18-5/8" SOW bottom

Permanent Wellhead - Multibowl System

- A. Starting Head: 13-5/8" 10M top flange x 9-5/8" SOW bottom
- B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange
  - · Wellhead will be installed by manufacturer's representatives.
  - · Manufacturer will monitor welding process to ensure appropriate temperature of seal.
  - · Operator will test the 7-5/8" casing per BLM Onshore Order 2
  - · Wellhead Manufacturer representative will not be present for BOP test plug installation

## **Cement Variance Request**

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 Brushy Canyon (6270') 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 to surface on the first stage. If cement is brought to surface, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

In the event cement is not circulated to surface on the first stage, whether intentionally or unintentionally, 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 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 GE procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

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 180 days from the point at which the wells are secured and the spudder rig is moved off location.
  - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
- 7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- 8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.



GATES E & S NORTH AMERICA, INC

**DU-TEX** 

134 44TH STREET

CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807

FAX: 361-887-0812

EMAIL: crpe&s@gates.com

WEB: www.gates.com

## GRADE D PRESSURE TEST CERTIFICATE

Customer: Customer Ref. :

Invoice No.:

AUSTIN DISTRIBUTING

PENDING

201709

Test Date:

Hose Senal No.:

Created By:

6/8/2014

D-060814-1

NORMA

Product Description:

FD3.042.0R41/16.5KFLGE/E LE

End Filting 1:

Gates Part No. :

Working Pressure:

4 1/16 in.5K FLG 4774-6001

5,000 PSI

End Fitting 2:

Assembly Code:

Test Pressure:

4 1/16 in.5K FLG

L33090011513D-060814-1

7,500 PSI

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

Quality:

Date:

Signature:

QUALITY

6/8/2014

Technical Supervisor:

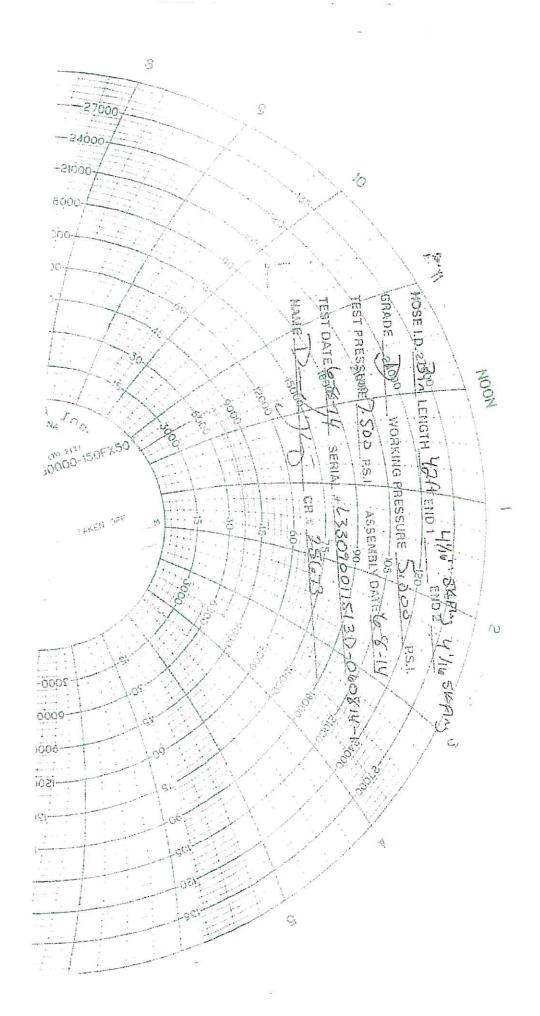
Date:

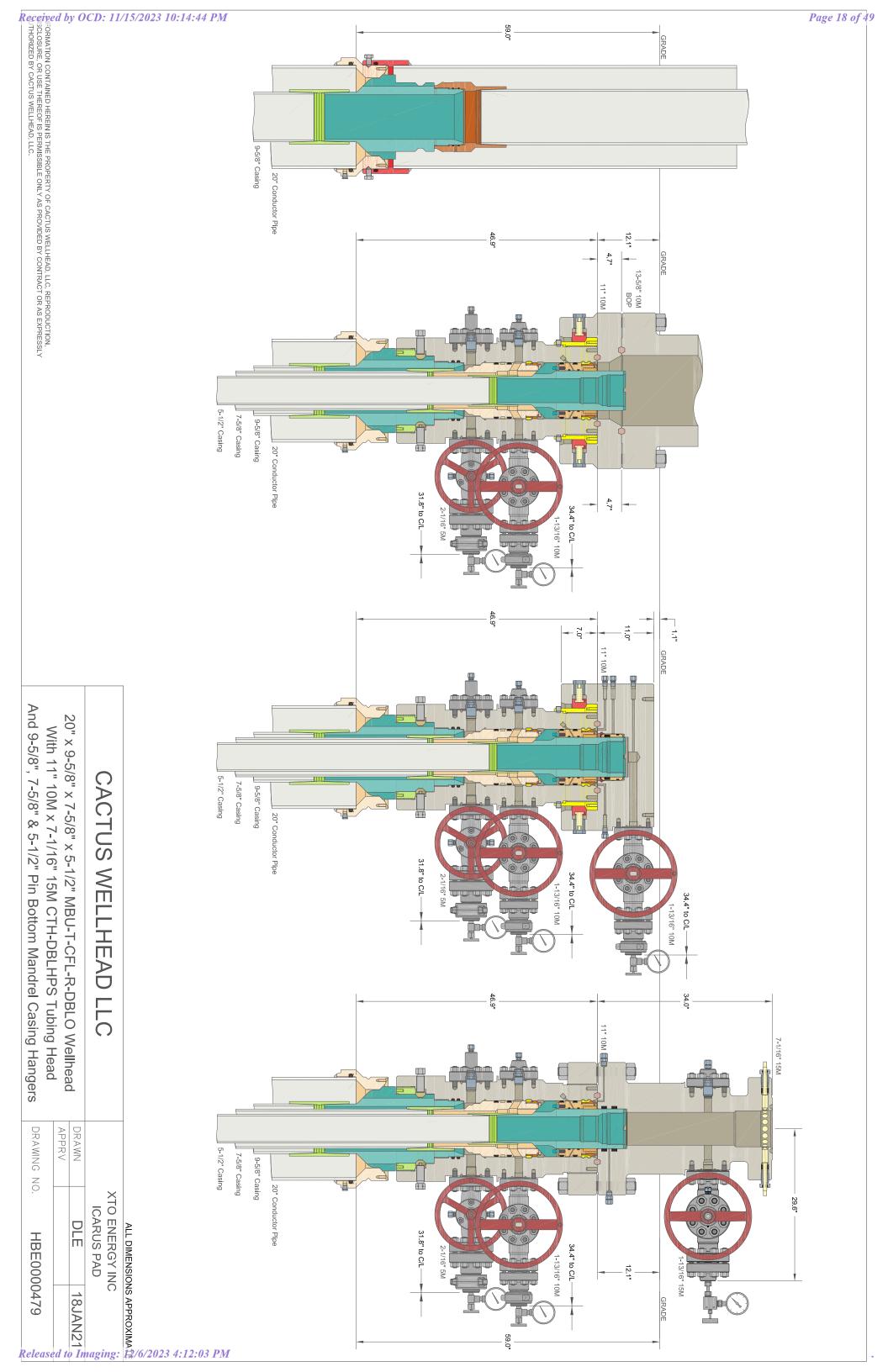
Signature:

**PRODUCTION** 

6/8/2014

Form PTC - 01 Rev.0 2





#### **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

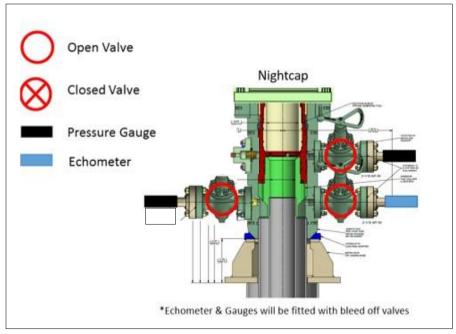
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

- 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

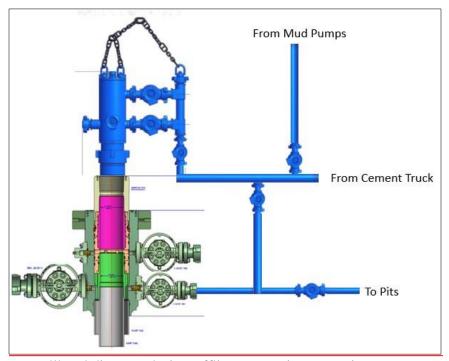
#### **XTO Permian Operating, LLC Offline Cementing Variance Request**



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 3<sup>rd</sup> 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.

**<u>Subject:</u>** 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 (OOGO) No. 2, 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. OOGO No. 2, Section I.D.2 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 OOGO No. 2, Section IV., XTO Energy submits this request for the variance.

#### **Supporting Documentation**

OOGO No. 2 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 OOGO No. 2 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. OOGO No. 2 recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

	200000000000000000000000000000000000000	sting, Surface BOP Stacks  Pressure Test—	-High Pressureac
Component to be Pressure Tested	Pressure Test—Low Pressure <sup>ac</sup> psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer <sup>b</sup>	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers <sup>bd</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokese	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or M whichever is lower	MASP for the well program,
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
	during the evaluation period. The p	pressure shall not decrease below the	The state of the s
	from one wellhead to another within when the integrity of a pressure se	n the 21 days, pressure testing is req	uired for pressure-containing and

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

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

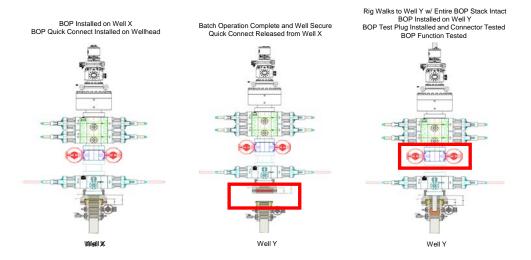
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of OOGO No. 2 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the OOGO No. 2.

#### **Procedures**

- XTO Energy will use this document for our break testing plan for New Mexico Delaware basin.
   The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
- 2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
  - a. A full BOP test will be conducted on the first well on the pad.
  - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
    - i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
    - ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
  - c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
  - d. A full BOP test will be required prior to drilling any production hole.
- 3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
  - a. Between the HCV valve and choke line connection
  - b. Between the BOP quick connect and the wellhead
- 4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
- 5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
- 6. The connections mentioned in 3a and 3b will then be reconnected.
- 7. Install test plug into the wellhead using test joint or drill pipe.
- 8. A shell test is performed against the upper pipe rams testing the two breaks.
- 9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
- 10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

- 11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
- 12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



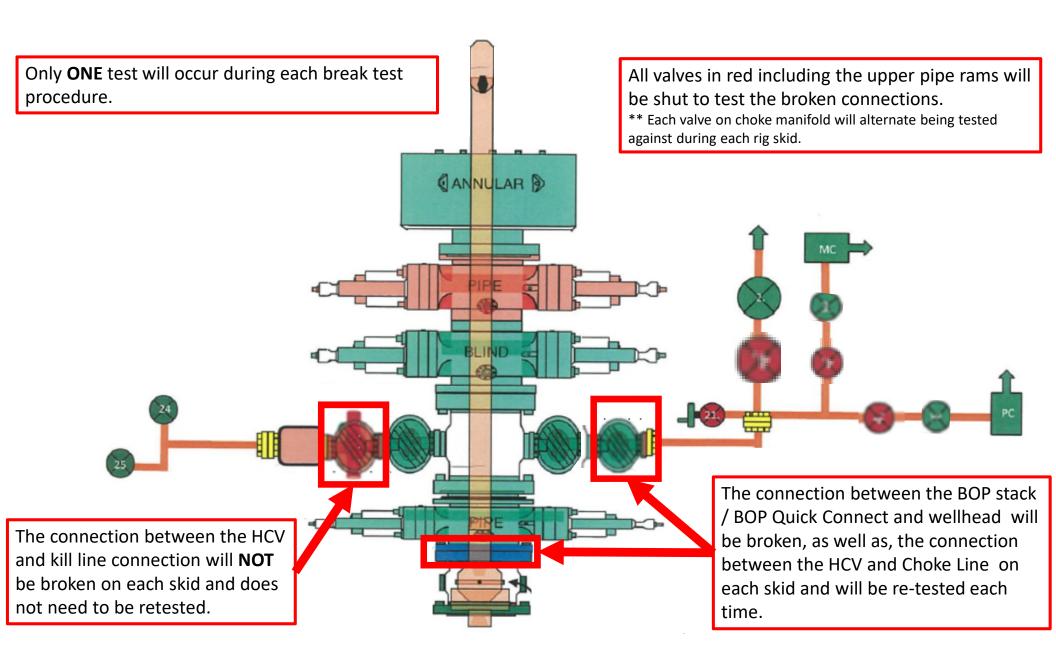
#### **Summary**

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

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

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

- 1. After a full BOP test is conducted on the first well on the pad.
- 2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
- 3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4. Full BOP test will be required prior to drilling the production hole.





## **XTO Energy**

Eddy County, NM (NAD-27) POKER LAKE UNIT 23 DTD #122H

Wellbore #1

**Plan: PERMIT** 

## **Standard Planning Report**

29 June, 2021

Project: Eddy County, NM (NAD-27) Site: POKER LAKE UNIT 23 DTD Well: #122H Wellbore: Wellbore #1 Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

#### WELL DETAILS: #122H

Rig Name: RKB = 30' @ 3479.00usft Ground Level: 3449.00 Easting

+N/-S 0.00 Latittude 32.2116034 +E/-W 0.00 Northing 441024.60 Longitude -103.8588786

#### DESIGN TARGET DETAILS

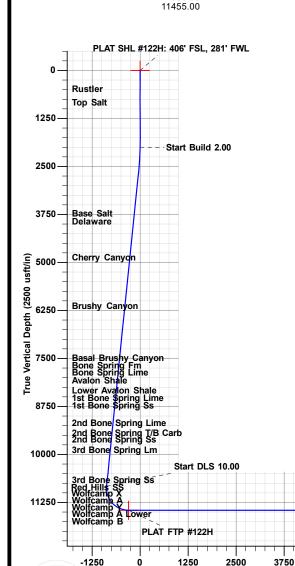
Name PLAT SHL #122H: 406' FSL, 281' FWL PLAT BHL #122H: 200' FNL, 1430' FWL PLAT FTP #122H	TVD 0.00 11455.00 11455.00	+N/-S 0.00 15225.60 -297.30	+E/-W 0.00 1090.40 1149.40	Northing 441024.60 456250.20 440727.30	Easting 646740.40 647830.80 647889.80	Latitude 32.2116034 32.2534437 32.2107722	-103.8588786 -103.8551340	Shape Point Point Point
PLAT FTP #122H	11455.00	-297.30	1149.40	440727.30	647889.80	32.2107722		Point
PLAT LTP #122H	11455.00	15095.60	1091.00	456120.20	647831.40	32.2530864		Point

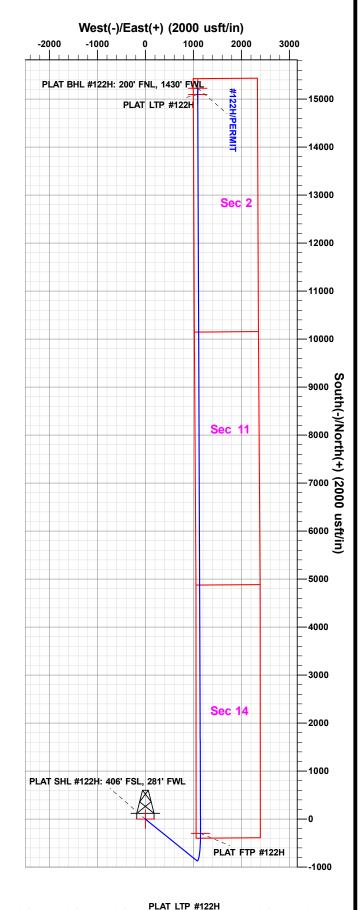
#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
3	2455.91	9.12	128.94	2453.99	-22.75	28.16	2.00	128.94	-22.86
4	10938.65	9.12	128.94	10829.53	-867.67	1073.73	0.00	0.00	-871.79
5	11896.08	90.00	359.78	11455.00	-297.30	1149.40	10.00	-128.80	-301.71
6	27289.09	90.00	359.78	11455.00	15095.60	1090.89	0.00	0.00	15091.30
7	27419.09	90.00	359.78	11455.00	15225.60	1090.40	0.00	0.00	15221.30

#### FORMATION TOP DETAILS

Formation	TVDPath
Rustler	610.00
Top Salt	970.00
Base Salt	3850.00
Delaware	4060.00
Cherry Canyon	5000.00
Brushy Canyon	6270.00
Basal Brushy Canyon	7620.00
Bone Spring Fm	7890.00
Bone Spring Lime	8000.00
Avalon Shale	8030.00
Lower Avalon Shale	8465.00
1st Bone Spring Lime	8660.00
1st Bone Spring Ss	8860.00
2nd Bone Spring Lime	9310.00
2nd Bone Spring Ss	9740.00
2nd Bone Spring T/B Carb	9740.00
3rd Bone Spring Lm	10015.00
3rd Bone Spring Ss	10800.00
Red Hills SS	11090.00
Wolfcamp	11170.00
Wolfcamp X	11200.00
Wolfcamp Y	11280.00
Wolfcamp A	11330.00
`LP	11455.00





PLAT BHL #122H; 200' FNL, 1430' FWL TD at 27419.09

#122H/PERMIT 10000 11250 12500 13750 15000 16250

8750

Vertical Section at 359.78° (2500 usft/in) Plan: PERMIT (#122H/Wellbore #1)

Created By: Matthew May Date: 21:53, June 29 2021

invited, for any damages incurred either directly or indirectly by the use of this electronica Released to Imaging: 12/6/2023c.45 has 102de My

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6250

7500



EDM 5000.1.13 Single User Db Database:

Company: XTO Energy

Project: Eddy County, NM (NAD-27) POKER LAKE UNIT 23 DTD Site:

Well: #122H Wellbore: Wellbore #1 Design: **PERMIT** 

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft RKB = 30' @ 3479.00usft

359.78

Minimum Curvature

**Project** Eddy County, NM (NAD-27)

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001 System Datum: Mean Sea Level

0.00

POKER LAKE UNIT 23 DTD

Site

Northing: 441,023.90 usft Site Position: Latitude: 32.2116026 From: Мар Easting: 646,650.40 usft Longitude: -103.8591696 **Position Uncertainty: Grid Convergence:** 0.25°

0.00 usft Slot Radius: 13-3/16 "

Well #122H

**Well Position** +N/-S 0.70 usft Northing: 441,024.60 usft Latitude: 32.2116034 +E/-W 90.00 usft Easting: 646,740.40 usft Longitude: -103.8588786

**Position Uncertainty** 0.00 usft Wellhead Elevation: 0.00 usft **Ground Level:** 3,449.00 usft

Wellbore Wellbore #1

Declination Field Strength Magnetics **Model Name** Sample Date **Dip Angle** (nT) (°) (°) IGRF2020 06/29/21 6.67 59.85 47.453

Design **PERMIT** 

**Audit Notes:** 

Tie On Depth: Version: Phase: **PLAN** 0.00

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

0.00

**Plan Sections** Measured Vertical Dogleg Build Turn Depth Depth +N/-S Inclination **Azimuth** +E/-W Rate Rate Rate **TFO** (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (°) (°) **Target** (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2,000.00 0.00 0.00 2,000.00 0.00 0.00 0.00 0.00 0.00 0.00 2,455.91 9.12 128.94 2,453.99 -22.75 28.16 2.00 2.00 0.00 128.94 10,829.53 0.00 0.00 10,938.65 9.12 128.94 -867.67 1,073.73 0.00 0.00 11,896.08 90.00 359.78 11.455.00 -297.30 1,149.40 10.00 8.45 -13.49 -128.80 PLAT FTP #122H 27,289.09 90.00 359.78 11,455.00 15,095.60 1,090.89 0.00 0.00 0.00 0.00 PLAT LTP #122H 27,419.09 90.00 359.78 11,455.00 15,225.60 1,090.40 0.00 0.00 0.00 0.00 PLAT BHL #122H: 2

0.00



EDM 5000.1.13 Single User Db Database: Company:

XTO Energy

Eddy County, NM (NAD-27) POKER LAKE UNIT 23 DTD Project: Site:

Well: #122H Wellbore: Wellbore #1 PERMIT Design:

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Desigi	•	1 LI (IVIII I								
Plann	ed Survey									
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
	400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
	610.00	0.00	0.00	610.00	0.00	0.00	0.00	0.00	0.00	0.00
	700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
	800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
	900.00 970.00 <b>Top Salt</b>	0.00 0.00	0.00 0.00	900.00 970.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
	1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
	1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
	2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
	2,100.00	2.00	128.94	2,099.98	-1.10	1.36	-1.10	2.00	2.00	0.00
	2,200.00	4.00	128.94	2,199.84	-4.39	5.43	-4.41	2.00	2.00	0.00
	2,300.00	6.00	128.94	2,299.45	-9.86	12.21	-9.91	2.00	2.00	0.00
	2,400.00	8.00	128.94	2,398.70	-17.52	21.68	-17.61	2.00	2.00	0.00
	2,455.91	9.12	128.94	2,453.99	-22.75	28.16	-22.86	2.00	2.00	0.00
	2,500.00	9.12	128.94	2,497.52	-27.14	33.59	-27.27	0.00	0.00	0.00
	2,600.00	9.12	128.94	2,596.26	-37.11	45.92	-37.28	0.00	0.00	0.00
	2,700.00	9.12	128.94	2,694.99	-47.07	58.24	-47.29	0.00	0.00	0.00
	2,800.00	9.12	128.94	2,793.73	-57.03	70.57	-57.30	0.00	0.00	0.00
	2,900.00	9.12	128.94	2,892.47	-66.99	82.89	-67.30	0.00	0.00	0.00
	3,000.00	9.12	128.94	2,991.20	-76.95	95.22	-77.31	0.00	0.00	0.00
	3,100.00	9.12	128.94	3,089.94	-86.91	107.55	-87.32	0.00	0.00	0.00
	3,200.00	9.12	128.94	3,188.68	-96.87	119.87	-97.33	0.00	0.00	0.00
	3,300.00	9.12	128.94	3,287.41	-106.83	132.20	-107.34	0.00	0.00	0.00
	3,400.00	9.12	128.94	3,386.15	-116.79	144.52	-117.34	0.00	0.00	0.00
	3,500.00	9.12	128.94	3,484.88	-126.75	156.85	-127.35	0.00	0.00	0.00
	3,600.00	9.12	128.94	3,583.62	-136.71	169.18	-137.36	0.00	0.00	0.00
	3,700.00	9.12	128.94	3,682.36	-146.67	181.50	-147.37	0.00	0.00	0.00
	3,800.00	9.12	128.94	3,781.09	-156.63	193.83	-157.37	0.00	0.00	0.00
	3,869.79	9.12	128.94	3,850.00	-163.58	202.43	-164.36	0.00	0.00	0.00
	Base Salt 3,900.00 4,000.00	9.12 9.12	128.94 128.94	3,879.83 3,978.57	-166.59 -176.55	206.15 218.48	-167.38 -177.39	0.00 0.00	0.00 0.00	0.00 0.00
	4,082.48	9.12	128.94	4,060.00	-184.77	228.64	-185.64	0.00	0.00	0.00
	<b>Delaware</b> 4,100.00 4,200.00 4,300.00 4,400.00	9.12 9.12 9.12 9.12	128.94 128.94 128.94 128.94	4,077.30 4,176.04 4,274.77 4,373.51	-186.51 -196.47 -206.43 -216.39	230.80 243.13 255.46 267.78	-187.40 -197.40 -207.41 -217.42	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00



**Database:** EDM 5000.1.13 Single User Db

Company: XTO Energy

Project: Eddy County, NM (NAD-27)
Site: POKER LAKE UNIT 23 DTD

Well: #122H
Wellbore: Wellbore #1
Design: PERMIT

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Grid

Jesigii	·•	FLIXIVIII								
Planne	ed Survey									
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	4,500.00	9.12	128.94	4,472.25	-226.35	280.11	-227.43	0.00	0.00	0.00
	4,600.00	9.12	128.94	4,570.98	-236.31	292.43	-237.44	0.00	0.00	0.00
	4,700.00	9.12	128.94	4,669.72	-246.28	304.76	-247.44	0.00	0.00	0.00
	4,800.00	9.12	128.94	4,768.46	-256.24	317.09	-257.45	0.00	0.00	0.00
	4,900.00	9.12	128.94	4,867.19	-266.20	329.41	-267.46	0.00	0.00	0.00
	5,000.00	9.12	128.94	4,965.93	-276.16	341.74	-277.47	0.00	0.00	0.00
	5,034.51	9.12	128.94	5,000.00	-279.59	345.99	-280.92	0.00	0.00	0.00
	Cherry Car	nyon								
	5,100.00	9.12	128.94	5,064.67	-286.12	354.06	-287.47	0.00	0.00	0.00
	5,200.00	9.12	128.94	5,163.40	-296.08	366.39	-297.48	0.00	0.00	0.00
	5,300.00	9.12	128.94	5,262.14	-306.04	378.72	-307.49	0.00	0.00	0.00
	5,400.00	9.12	128.94	5,360.87	-316.00	391.04	-317.50	0.00	0.00	0.00
	5,500.00	9.12	128.94	5,459.61	-325.96	403.37	-327.51	0.00	0.00	0.00
	5,600.00	9.12	128.94	5,558.35	-335.92	415.69	-337.51	0.00	0.00	0.00
	5,700.00	9.12	128.94	5,657.08	-345.88	428.02	-347.52	0.00	0.00	0.00
	5,800.00	9.12	128.94	5,755.82	-355.84	440.34	-357.53	0.00	0.00	0.00
	5,900.00	9.12	128.94	5,854.56	-365.80	452.67	-367.54	0.00	0.00	0.00
	6,000.00	9.12	128.94	5,953.29	-375.76	465.00	-377.54	0.00	0.00	0.00
	6,100.00	9.12	128.94	6,052.03	-385.72	477.32	-387.55	0.00	0.00	0.00
	6,200.00	9.12	128.94	6,150.77	-395.68	489.65	-397.56	0.00	0.00	0.00
	6,300.00	9.12	128.94	6,249.50	-405.64	501.97	-407.57	0.00	0.00	0.00
	6,320.76 Brushy Ca	9.12 <b>nyon</b>	128.94	6,270.00	-407.71	504.53	-409.64	0.00	0.00	0.00
	6,400.00	9.12	128.94	6,348.24	-415.60	514.30	-417.57	0.00	0.00	0.00
	6,500.00	9.12	128.94	6,446.97	-425.56	526.63	-427.58	0.00	0.00	0.00
	6,600.00	9.12	128.94	6,545.71	-435.52	538.95	-437.59	0.00	0.00	0.00
	6,700.00	9.12	128.94	6,644.45	-445.48	551.28	-447.60	0.00	0.00	0.00
	6,800.00	9.12	128.94	6,743.18	-455.44	563.60	-457.61	0.00	0.00	0.00
	6,900.00	9.12	128.94	6,841.92	-465.41	575.93	-467.61	0.00	0.00	0.00
	7,000.00	9.12	128.94	6,940.66	-475.37	588.25	-477.62	0.00	0.00	0.00
	7,100.00	9.12	128.94	7,039.39	-485.33	600.58	-487.63	0.00	0.00	0.00
	7,200.00	9.12	128.94	7,138.13	-495.29	612.91	-497.64	0.00	0.00	0.00
	7,300.00	9.12	128.94	7,236.86	-505.25	625.23	-507.64	0.00	0.00	0.00
	7,400.00	9.12	128.94	7,335.60	-515.21	637.56	-517.65	0.00	0.00	0.00
	7,500.00	9.12	128.94	7,434.34	-525.17	649.88	-527.66	0.00	0.00	0.00
	7,600.00	9.12	128.94	7,533.07	-535.13	662.21	-537.67	0.00	0.00	0.00
	7,688.04	9.12	128.94	7,620.00	-543.90	673.06	-546.48	0.00	0.00	0.00
	Basal Brus	hy Canyon								
	7,700.00	9.12	128.94	7,631.81	-545.09	674.54	-547.68	0.00	0.00	0.00
	7,800.00	9.12	128.94	7,730.55	-555.05	686.86	-557.68	0.00	0.00	0.00
	7,900.00	9.12	128.94	7,829.28	-565.01	699.19	-567.69	0.00	0.00	0.00
	7,961.49	9.12	128.94	7,890.00	-571.14	706.77	-573.84	0.00	0.00	0.00
	<b>Bone Sprir</b> 8,000.00	9.12	128.94	7,928.02	-574.97	711.51	-577.70	0.00	0.00	0.00
	8,072.90	9.12	128.94	8,000.00	-582.23	720.50	-584.99	0.00	0.00	0.00
	Bone Sprir	•								
	8,100.00	9.12	128.94	8,026.76	-584.93	723.84	-587.71	0.00	0.00	0.00
	8,103.29	9.12	128.94	8,030.00	-585.26	724.24	-588.03	0.00	0.00	0.00
	Avalon Sha									
	8,200.00	9.12	128.94	8,125.49	-594.89	736.16	-597.71	0.00	0.00	0.00
	8,300.00	9.12	128.94	8,224.23	-604.85	748.49	-607.72	0.00	0.00	0.00
	8,400.00	9.12	128.94	8,322.96	-614.81	760.82	-617.73	0.00	0.00	0.00
	8,500.00	9.12	128.94	8,421.70	-624.77	773.14	-627.74	0.00	0.00	0.00



EDM 5000.1.13 Single User Db Database: Company:

XTO Energy

Eddy County, NM (NAD-27) POKER LAKE UNIT 23 DTD Project: Site:

Well: #122H Wellbore: Wellbore #1 PERMIT Design:

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,543.85	9.12	128.94	8,465.00	-629.14	778.55	-632.13	0.00	0.00	0.00
8,600.00 8,700.00	9.12 9.12	128.94 128.94	8,520.44 8,619.17	-634.73 -644.69	785.47 797.79	-637.74 -647.75	0.00 0.00	0.00 0.00	0.00 0.00
8,741.35	9.12	128.94	8,660.00	-648.81	802.89	-651.89	0.00	0.00	0.00
	pring Lime	0.0 .	0,000.00	0.0.0.	002.00	001.00	0.00	0.00	0.00
8,800.00 8,900.00 8,943.91	9.12 9.12 9.12	128.94 128.94 128.94	8,717.91 8,816.65 8,860.00	-654.65 -664.61 -668.99	810.12 822.45 827.86	-657.76 -667.77 -672.16	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
1st Bone S 9,000.00	<b>Spring Ss</b> 9.12	128.94	8,915.38	-674.58	834.77	-677.78	0.00	0.00	0.00
9,100.00 9,200.00 9,300.00 9,399.67	9.12 9.12 9.12 9.12 9.12	128.94 128.94 128.94 128.94	9,014.12 9,112.85 9,211.59 9,310.00	-684.54 -694.50 -704.46 -714.38	847.10 859.42 871.75 884.03	-687.78 -697.79 -707.80 -717.77	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
· ·	Spring Lime	120.54	3,310.00	-7 14.00	004.00	-7 17.77	0.00	0.00	0.00
9,400.00	9.12	128.94	9,310.33	-714.42	884.08	-717.81	0.00	0.00	0.00
9,500.00 9,600.00 9,700.00 9,800.00 9,835.17	9.12 9.12 9.12 9.12 9.12	128.94 128.94 128.94 128.94 128.94	9,409.06 9,507.80 9,606.54 9,705.27 9,740.00	-724.38 -734.34 -744.30 -754.26 -757.76	896.40 908.73 921.05 933.38 937.71	-727.81 -737.82 -747.83 -757.84 -761.36	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	Spring T/B Ca			707.70	007.77	701.00	0.00	0.00	0.00
9,900.00 10,000.00 10,100.00 10,113.69	9.12 9.12 9.12 9.12	128.94 128.94 128.94 128.94	9,804.01 9,902.75 10,001.48 10,015.00	-764.22 -774.18 -784.14 -785.50	945.70 958.03 970.36 972.04	-767.84 -777.85 -787.86 -789.23	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
3rd Bone S									
10,200.00	9.12	128.94	10,100.22	-794.10	982.68	-797.87	0.00	0.00	0.00
10,300.00 10,400.00 10,500.00 10,600.00 10,700.00	9.12 9.12 9.12 9.12 9.12	128.94 128.94 128.94 128.94 128.94	10,198.95 10,297.69 10,396.43 10,495.16 10,593.90	-804.06 -814.02 -823.98 -833.94 -843.90	995.01 1,007.33 1,019.66 1,031.99 1,044.31	-807.88 -817.88 -827.89 -837.90 -847.91	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
10,800.00 10,900.00 10,908.74	9.12 9.12 9.12	128.94 128.94 128.94	10,692.64 10,791.37 10,800.00	-853.86 -863.82 -864.69	1,056.64 1,068.96 1,070.04	-857.91 -867.92 -868.80	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
3rd Bone S			10 000 ==	co=	4 0=0 =:	<b>^=</b> / =-			
10,938.65 10,950.00	9.12 8.45	128.94 122.91	10,829.53 10,840.75	-867.67 -868.69	1,073.73 1,075.13	-871.79 -872.81	0.00 10.00	0.00 -5.86	0.00 -53.11
11,000.00 11,050.00 11,100.00 11,150.00 11,200.00	7.10 8.90 12.56 16.91 21.54	86.61 52.39 33.74 23.94 18.16	10,890.32 10,939.86 10,988.99 11,037.34 11,084.54	-870.51 -867.96 -861.08 -849.90 -834.52	1,081.30 1,087.46 1,093.55 1,099.52 1,105.34	-874.65 -872.13 -865.27 -854.12 -838.76	10.00 10.00 10.00 10.00 10.00	-2.70 3.59 7.32 8.70 9.26	-72.60 -68.44 -37.31 -19.59 -11.57
11,205.88 Red Hills \$	22.10	17.63	11,090.00	-832.44	1,106.01	-836.68	10.00	9.43	-8.94
11,250.00 11,295.25	26.30 30.67	14.37 11.90	11,130.24 11,170.00	-815.06 -794.04	1,110.95 1,115.82	-819.32 -798.32	10.00 10.00	9.53 9.66	-7.41 -5.46
Wolfcamp	00.01		, 0.00		.,	. 30.02		3.33	3
11,300.00 11,330.78 <b>Wolfcamp</b>	31.13 34.13	11.67 10.36	11,174.08 11,200.00	-791.65 -775.36	1,116.32 1,119.48	-795.93 -779.65	10.00 10.00	9.71 9.73	-4.68 -4.26



Database: EDM 5000.1.13 Single User Db

Company: XTO Energy

Project: Eddy County, NM (NAD-27)
Site: POKER LAKE UNIT 23 DTD

Well: #122H
Wellbore: Wellbore #1
Design: PERMIT

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft RKB = 30' @ 3479.00usft

Grid

Plann	ed Survey									
	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	11,350.00	36.00	9.64	11,215.73	-764.49	1,121.40	-768.79	10.00	9.77	-3.74
	11,400.00	40.90	8.04	11,254.87	-733.77	1,126.15	-738.09	10.00	9.80	-3.20
	11,434.13	44.26	7.12	11,280.00	-710.88	1,129.19	-715.21	10.00	9.83	-2.70
	Wolfcamp \ 11,450.00 11,500.00	45.82 50.75	6.73 5.62	11,291.21 11,324.47	-699.74 -662.64	1,130.55 1,134.54	-704.07 -666.99	10.00 10.00	9.85 9.86	-2.47 -2.22
	11,508.82	51.63	5.44	11,330.00	-655.79	1,135.21	-660.15	10.00	9.87	-2.03
	Wolfcamp A 11,550.00 11,600.00 11,650.00 11,700.00	55.69 60.64 65.59 70.55	4.65 3.80 3.02 2.30	11,354.40 11,380.76 11,403.36 11,422.03	-622.76 -580.41 -535.91 -489.59	1,138.12 1,141.24 1,143.88 1,146.03	-627.13 -584.79 -540.29 -493.99	10.00 10.00 10.00 10.00	9.88 9.89 9.90 9.91	-1.91 -1.71 -1.55 -1.44
	11,750.00	75.51	1.63	11,436.62	-441.81	1,147.66	-446.21	10.00	9.92	-1.35
	11,800.00	80.47	0.98	11,447.02	-392.93	1,148.77	-397.34	10.00	9.92	-1.29
	11,850.00	85.43	0.35	11,453.16	-343.33	1,149.35	-347.74	10.00	9.92	-1.25
	11,896.08	90.00	359.78	11,455.00	-297.30	1,149.40	-301.71	10.00	9.92	-1.24
	LP	00.00	250.70	11 455 00	202.20	1 140 20	207.70	0.00	0.00	0.00
	11,900.00	90.00	359.78	11,455.00	-293.38	1,149.39	-297.79	0.00	0.00	0.00
	12,000.00	90.00	359.78	11,455.00	-193.38	1,149.01	-197.79	0.00	0.00	0.00
	12,100.00	90.00	359.78	11,455.00	-93.38	1,148.62	-97.79	0.00	0.00	0.00
	12,200.00	90.00	359.78	11,455.00	6.62	1,148.24	2.21	0.00	0.00	0.00
	12,300.00	90.00	359.78	11,455.00	106.62	1,147.86	102.21	0.00	0.00	0.00
	12,400.00	90.00	359.78	11,455.00	206.62	1,147.48	202.21	0.00	0.00	0.00
	12,500.00	90.00	359.78	11,455.00	306.62	1,147.10	302.21	0.00	0.00	0.00
	12,600.00	90.00	359.78	11,455.00	406.62	1,146.72	402.21	0.00	0.00	0.00
	12,700.00	90.00	359.78	11,455.00	506.61	1,146.34	502.21	0.00	0.00	0.00
	12,800.00	90.00	359.78	11,455.00	606.61	1,145.96	602.21	0.00	0.00	0.00
	12,900.00	90.00	359.78	11,455.00	706.61	1,145.58	702.21	0.00	0.00	0.00
	13,000.00	90.00	359.78	11,455.00	806.61	1,145.20	802.21	0.00	0.00	0.00
	13,100.00	90.00	359.78	11,455.00	906.61	1,144.82	902.21	0.00	0.00	0.00
	13,200.00	90.00	359.78	11,455.00	1,006.61	1,144.44	1,002.21	0.00	0.00	0.00
	13,300.00	90.00	359.78	11,455.00	1,106.61	1,144.06	1,102.21	0.00	0.00	0.00
	13,400.00	90.00	359.78	11,455.00	1,206.61	1,143.68	1,202.21	0.00	0.00	0.00
	13,500.00	90.00	359.78	11,455.00	1,306.61	1,143.30	1,302.21	0.00	0.00	0.00
	13,600.00	90.00	359.78	11,455.00	1,406.61	1,142.92	1,402.21	0.00	0.00	0.00
	13,700.00	90.00	359.78	11,455.00	1,506.61	1,142.54	1,502.21	0.00	0.00	0.00
	13,800.00	90.00	359.78	11,455.00	1,606.61	1,142.16	1,602.21	0.00	0.00	0.00
	13,900.00	90.00	359.78	11,455.00	1,706.61	1,141.78	1,702.21	0.00	0.00	0.00
	14,000.00	90.00	359.78	11,455.00	1,806.61	1,141.40	1,802.21	0.00	0.00	0.00
	14,100.00	90.00	359.78	11,455.00	1,906.60	1,141.02	1,902.21	0.00	0.00	0.00
	14,200.00	90.00	359.78	11,455.00	2,006.60	1,140.64	2,002.21	0.00	0.00	0.00
	14,300.00	90.00	359.78	11,455.00	2,106.60	1,140.26	2,102.21	0.00	0.00	0.00
	14,400.00	90.00	359.78	11,455.00	2,206.60	1,139.88	2,202.21	0.00	0.00	0.00
	14,500.00	90.00	359.78	11,455.00	2,306.60	1,139.50	2,302.21	0.00	0.00	0.00
	14,600.00	90.00	359.78	11,455.00	2,406.60	1,139.12	2,402.21	0.00	0.00	0.00
	14,700.00	90.00	359.78	11,455.00	2,506.60	1,138.74	2,502.21	0.00	0.00	0.00
	14,800.00	90.00	359.78	11,455.00	2,606.60	1,138.36	2,602.21	0.00	0.00	0.00
	14,900.00	90.00	359.78	11,455.00	2,706.60	1,137.98	2,702.21	0.00	0.00	0.00
	15,000.00	90.00	359.78	11,455.00	2,806.60	1,137.60	2,802.21	0.00	0.00	0.00
	15,100.00	90.00	359.78	11,455.00	2,906.60	1,137.22	2,902.21	0.00	0.00	0.00
	15,200.00	90.00	359.78	11,455.00	3,006.60	1,136.84	3,002.21	0.00	0.00	0.00
	15,300.00	90.00	359.78	11,455.00	3,106.60	1,136.46	3,102.21	0.00	0.00	0.00
	15,400.00	90.00	359.78	11,455.00	3,206.60	1,136.08	3,202.21	0.00	0.00	0.00



EDM 5000.1.13 Single User Db Database: Company:

XTO Energy

Eddy County, NM (NAD-27) POKER LAKE UNIT 23 DTD Project: Site:

Well: #122H Wellbore: Wellbore #1 PERMIT Design:

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,500.00 15,600.00 15,700.00 15,800.00 15,900.00	90.00 90.00 90.00 90.00 90.00	359.78 359.78 359.78 359.78 359.78	11,455.00 11,455.00 11,455.00 11,455.00 11,455.00	3,306.59 3,406.59 3,506.59 3,606.59 3,706.59	1,135.70 1,135.32 1,134.94 1,134.56 1,134.18	3,302.21 3,402.21 3,502.21 3,602.21 3,702.21	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
16,000.00	90.00	359.78	11,455.00	3,806.59	1,133.80	3,802.21	0.00	0.00	0.00
16,100.00	90.00	359.78	11,455.00	3,906.59	1,133.42	3,902.21	0.00	0.00	0.00
16,200.00	90.00	359.78	11,455.00	4,006.59	1,133.04	4,002.21	0.00	0.00	0.00
16,300.00	90.00	359.78	11,455.00	4,106.59	1,132.66	4,102.21	0.00	0.00	0.00
16,400.00	90.00	359.78	11,455.00	4,206.59	1,132.28	4,202.21	0.00	0.00	0.00
16,500.00	90.00	359.78	11,455.00	4,306.59	1,131.90	4,302.21	0.00	0.00	0.00
16,600.00	90.00	359.78	11,455.00	4,406.59	1,131.52	4,402.21	0.00	0.00	0.00
16,700.00	90.00	359.78	11,455.00	4,506.59	1,131.14	4,502.21	0.00	0.00	0.00
16,800.00	90.00	359.78	11,455.00	4,606.59	1,130.76	4,602.21	0.00	0.00	0.00
16,900.00	90.00	359.78	11,455.00	4,706.58	1,130.38	4,702.21	0.00	0.00	0.00
17,000.00	90.00	359.78	11,455.00	4,806.58	1,130.00	4,802.21	0.00	0.00	0.00
17,100.00	90.00	359.78	11,455.00	4,906.58	1,129.62	4,902.21	0.00	0.00	0.00
17,200.00	90.00	359.78	11,455.00	5,006.58	1,129.24	5,002.21	0.00	0.00	0.00
17,300.00	90.00	359.78	11,455.00	5,106.58	1,128.86	5,102.21	0.00	0.00	0.00
17,400.00	90.00	359.78	11,455.00	5,206.58	1,128.48	5,202.21	0.00	0.00	0.00
17,500.00	90.00	359.78	11,455.00	5,306.58	1,128.10	5,302.21	0.00	0.00	0.00
17,600.00	90.00	359.78	11,455.00	5,406.58	1,127.72	5,402.21	0.00	0.00	0.00
17,700.00	90.00	359.78	11,455.00	5,506.58	1,127.34	5,502.21	0.00	0.00	0.00
17,800.00	90.00	359.78	11,455.00	5,606.58	1,126.96	5,602.21	0.00	0.00	0.00
17,900.00	90.00	359.78	11,455.00	5,706.58	1,126.58	5,702.21	0.00	0.00	0.00
18,000.00	90.00	359.78	11,455.00	5,806.58	1,126.20	5,802.21	0.00	0.00	0.00
18,100.00	90.00	359.78	11,455.00	5,906.58	1,125.82	5,902.21	0.00	0.00	0.00
18,200.00	90.00	359.78	11,455.00	6,006.58	1,125.44	6,002.21	0.00	0.00	0.00
18,300.00	90.00	359.78	11,455.00	6,106.57	1,125.06	6,102.21	0.00	0.00	0.00
18,400.00	90.00	359.78	11,455.00	6,206.57	1,124.68	6,202.21	0.00	0.00	0.00
18,500.00	90.00	359.78	11,455.00	6,306.57	1,124.30	6,302.21	0.00	0.00	0.00
18,600.00	90.00	359.78	11,455.00	6,406.57	1,123.92	6,402.21	0.00	0.00	0.00
18,700.00	90.00	359.78	11,455.00	6,506.57	1,123.54	6,502.21	0.00	0.00	0.00
18,800.00	90.00	359.78	11,455.00	6,606.57	1,123.16	6,602.21	0.00	0.00	0.00
18,900.00	90.00	359.78	11,455.00	6,706.57	1,122.78	6,702.21	0.00	0.00	0.00
19,000.00	90.00	359.78	11,455.00	6,806.57	1,122.40	6,802.21	0.00	0.00	0.00
19,100.00	90.00	359.78	11,455.00	6,906.57	1,122.02	6,902.21	0.00	0.00	0.00
19,200.00	90.00	359.78	11,455.00	7,006.57	1,121.64	7,002.21	0.00	0.00	0.00
19,300.00	90.00	359.78	11,455.00	7,106.57	1,121.26	7,102.21	0.00	0.00	0.00
19,400.00	90.00	359.78	11,455.00	7,206.57	1,120.88	7,202.21	0.00	0.00	0.00
19,500.00	90.00	359.78	11,455.00	7,306.57	1,120.50	7,302.21	0.00	0.00	0.00
19,600.00	90.00	359.78	11,455.00	7,406.57	1,120.12	7,402.21	0.00	0.00	0.00
19,700.00	90.00	359.78	11,455.00	7,506.56	1,119.74	7,502.21	0.00	0.00	0.00
19,800.00	90.00	359.78	11,455.00	7,606.56	1,119.36	7,602.21	0.00	0.00	0.00
19,900.00	90.00	359.78	11,455.00	7,706.56	1,118.98	7,702.21	0.00	0.00	0.00
20,000.00	90.00	359.78	11,455.00	7,806.56	1,118.60	7,802.21	0.00	0.00	0.00
20,100.00	90.00	359.78	11,455.00	7,906.56	1,118.22	7,902.21	0.00	0.00	0.00
20,200.00	90.00	359.78	11,455.00	8,006.56	1,117.84	8,002.21	0.00	0.00	0.00
20,300.00	90.00	359.78	11,455.00	8,106.56	1,117.46	8,102.21	0.00	0.00	0.00
20,400.00	90.00	359.78	11,455.00	8,206.56	1,117.08	8,202.21	0.00	0.00	0.00
20,500.00	90.00	359.78	11,455.00	8,306.56	1,116.70	8,302.21	0.00	0.00	0.00
20,600.00	90.00	359.78	11,455.00	8,406.56	1,116.32	8,402.21	0.00	0.00	0.00
20,700.00	90.00	359.78	11,455.00	8,506.56	1,115.94	8,502.21	0.00	0.00	0.00
20,800.00	90.00	359.78	11,455.00	8,606.56	1,115.56	8,602.21	0.00	0.00	0.00



**Database:** EDM 5000.1.13 Single User Db

Company: XTO Energy

Project: Eddy County, NM (NAD-27)
Site: POKER LAKE UNIT 23 DTD

Well: #122H
Wellbore: Wellbore #1
Design: PERMIT

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Grid

Design:	PERMIT								
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,900.00	90.00	359.78	11,455.00	8,706.56	1,115.18	8,702.21	0.00	0.00	0.00
21,000.00	90.00	359.78	11,455.00	8,806.55	1,114.80	8,802.21	0.00	0.00	0.00
21,100.00	90.00	359.78	11,455.00	8,906.55	1,114.42	8,902.21	0.00	0.00	0.00
21,200.00	90.00	359.78	11,455.00	9,006.55	1,114.04	9,002.21	0.00	0.00	0.00
21,300.00	90.00	359.78	11,455.00	9,106.55	1,113.66	9,102.21	0.00	0.00	0.00
21,400.00	90.00	359.78	11,455.00	9,206.55	1,113.28	9,202.21	0.00	0.00	0.00
21,500.00	90.00	359.78	11,455.00	9,306.55	1,112.90	9,302.21	0.00	0.00	0.00
21,600.00	90.00	359.78	11,455.00	9,406.55	1,112.52	9,402.21	0.00	0.00	0.00
21,700.00	90.00	359.78	11,455.00	9,506.55	1,112.14	9,502.21	0.00	0.00	0.00
21,800.00	90.00	359.78	11,455.00	9,606.55	1,111.76	9,602.21	0.00	0.00	0.00
21,900.00	90.00	359.78	11,455.00	9,706.55	1,111.38	9,702.21	0.00	0.00	0.00
22,000.00	90.00	359.78	11,455.00	9,806.55	1,111.00	9,802.21	0.00	0.00	0.00
22,100.00	90.00	359.78	11,455.00	9,906.55	1,110.62	9,902.21	0.00	0.00	0.00
22,200.00	90.00	359.78	11,455.00	10,006.55	1,110.24	10,002.21	0.00	0.00	0.00
22,300.00	90.00	359.78	11,455.00	10,106.55	1,109.86	10,102.21	0.00	0.00	0.00
22,400.00	90.00	359.78	11,455.00	10,206.54	1,109.48	10,202.21	0.00	0.00	0.00
22,500.00	90.00	359.78	11,455.00	10,306.54	1,109.10	10,302.21	0.00	0.00	0.00
22,600.00	90.00	359.78	11,455.00	10,406.54	1,108.72	10,402.21	0.00	0.00	0.00
22,700.00	90.00	359.78	11,455.00	10,506.54	1,108.34	10,502.21	0.00	0.00	0.00
22,800.00	90.00	359.78	11,455.00	10,606.54	1,107.96	10,602.21	0.00	0.00	0.00
22,900.00	90.00	359.78	11,455.00	10,706.54	1,107.58	10,702.21	0.00	0.00	0.00
23,000.00	90.00	359.78	11,455.00	10,806.54	1,107.20	10,802.21	0.00	0.00	0.00
23,100.00	90.00	359.78	11,455.00	10,906.54	1,106.82	10,902.21	0.00	0.00	0.00
23,200.00	90.00	359.78	11,455.00	11,006.54	1,106.44	11,002.21	0.00	0.00	0.00
23,300.00	90.00	359.78	11,455.00	11,106.54	1,106.06	11,102.21	0.00	0.00	0.00
23,400.00	90.00	359.78	11,455.00	11,206.54	1,105.68	11,202.21	0.00	0.00	0.00
23,500.00	90.00	359.78	11,455.00	11,306.54	1,105.30	11,302.21	0.00	0.00	0.00
23,600.00	90.00	359.78	11,455.00	11,406.54	1,104.92	11,402.21	0.00	0.00	0.00
23,700.00	90.00	359.78	11,455.00	11,506.54	1,104.54	11,502.21	0.00	0.00	0.00
23,800.00	90.00	359.78	11,455.00	11,606.53	1,104.16	11,602.21	0.00	0.00	0.00
23,900.00	90.00	359.78	11,455.00	11,706.53	1,103.78	11,702.21	0.00	0.00	0.00
24,000.00	90.00	359.78	11,455.00	11,806.53	1,103.40	11,802.21	0.00	0.00	0.00
24,100.00	90.00	359.78	11,455.00	11,906.53	1,103.02	11,902.21	0.00	0.00	0.00
24,200.00	90.00	359.78	11,455.00	12,006.53	1,102.64	12,002.21	0.00	0.00	0.00
24,300.00	90.00	359.78	11,455.00	12,106.53	1,102.26	12,102.21	0.00	0.00	0.00
24,400.00	90.00	359.78	11,455.00	12,206.53	1,101.88	12,202.21	0.00	0.00	0.00
24,500.00	90.00	359.78	11,455.00	12,306.53	1,101.49	12,302.21	0.00	0.00	0.00
24,600.00	90.00	359.78	11,455.00	12,406.53	1,101.11	12,402.21	0.00	0.00	0.00
24,700.00	90.00	359.78	11,455.00	12,506.53	1,100.73	12,502.21	0.00	0.00	0.00
24,800.00	90.00	359.78	11,455.00	12,606.53	1,100.35	12,602.21	0.00	0.00	0.00
24,900.00	90.00	359.78	11,455.00	12,706.53	1,099.97	12,702.21	0.00	0.00	0.00
25,000.00	90.00	359.78	11,455.00	12,806.53	1,099.59	12,802.21	0.00	0.00	0.00
25,100.00	90.00	359.78	11,455.00	12,906.53	1,099.21	12,902.21	0.00	0.00	0.00
25,200.00	90.00	359.78	11,455.00	13,006.52	1,098.83	13,002.21	0.00	0.00	0.00
25,300.00	90.00	359.78	11,455.00	13,106.52	1,098.45	13,102.21	0.00	0.00	0.00
25,400.00	90.00	359.78	11,455.00	13,206.52	1,098.07	13,202.21	0.00	0.00	0.00
25,500.00	90.00	359.78	11,455.00	13,306.52	1,097.69	13,302.21	0.00	0.00	0.00
25,600.00	90.00	359.78	11,455.00	13,406.52	1,097.31	13,402.21	0.00	0.00	0.00
25,700.00	90.00	359.78	11,455.00	13,506.52	1,096.93	13,502.21	0.00	0.00	0.00
25,800.00	90.00	359.78	11,455.00	13,606.52	1,096.55	13,602.21	0.00	0.00	0.00
25,900.00	90.00	359.78	11,455.00	13,706.52	1,096.17	13,702.21	0.00	0.00	0.00
26,000.00	90.00	359.78	11,455.00	13,806.52	1,095.79	13,802.21	0.00	0.00	0.00
26,100.00	90.00	359.78	11,455.00	13,906.52	1,095.41	13,902.21	0.00	0.00	0.00
26,200.00	90.00	359.78	11,455.00	14,006.52	1,095.03	14,002.21	0.00	0.00	0.00



**Database:** EDM 5000.1.13 Single User Db

Company: XTO Energy

Project: Eddy County, NM (NAD-27)
Site: POKER LAKE UNIT 23 DTD

Well: #122H
Wellbore: Wellbore #1
Design: PERMIT

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
26,300.00	90.00	359.78	11,455.00	14,106.52	1,094.65	14,102.21	0.00	0.00	0.00
26,400.00	90.00	359.78	11,455.00	14,206.52	1,094.27	14,202.21	0.00	0.00	0.00
26,500.00	90.00	359.78	11,455.00	14,306.52	1,093.89	14,302.21	0.00	0.00	0.00
26,600.00	90.00	359.78	11,455.00	14,406.51	1,093.51	14,402.21	0.00	0.00	0.00
26,700.00	90.00	359.78	11,455.00	14,506.51	1,093.13	14,502.21	0.00	0.00	0.00
26,800.00	90.00	359.78	11,455.00	14,606.51	1,092.75	14,602.21	0.00	0.00	0.00
26,900.00	90.00	359.78	11,455.00	14,706.51	1,092.37	14,702.21	0.00	0.00	0.00
27,000.00	90.00	359.78	11,455.00	14,806.51	1,091.99	14,802.21	0.00	0.00	0.00
27,100.00	90.00	359.78	11,455.00	14,906.51	1,091.61	14,902.21	0.00	0.00	0.00
27,200.00	90.00	359.78	11,455.00	15,006.51	1,091.23	15,002.21	0.00	0.00	0.00
27,289.09	90.00	359.78	11,455.00	15,095.60	1,090.89	15,091.30	0.00	0.00	0.00
27,300.00	90.00	359.78	11,455.00	15,106.51	1,090.85	15,102.21	0.00	0.00	0.00
27,400.00	90.00	359.78	11,455.00	15,206.51	1,090.47	15,202.21	0.00	0.00	0.00
27,419.09	90.00	359.78	11,455.00	15,225.60	1,090.40	15,221.30	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PLAT SHL #122H: 406 - plan hits target co - Point	0.00 enter	0.00	0.00	0.00	0.00	441,024.60	646,740.40	32.2116034	-103.8588786
PLAT LTP #122H - plan misses targe - Point	0.00 et center by		11,455.00 27289.09u	15,095.60 sft MD (1145	1,091.00 5.00 TVD, 1	456,120.20 5095.60 N, 1090.	647,831.40 .89 E)	32.2530864	-103.8551339
PLAT FTP #122H - plan hits target ce - Point	0.00 enter	0.00	11,455.00	-297.30	1,149.40	440,727.30	647,889.80	32.2107722	-103.8551666
PLAT BHL #122H: 200 - plan hits target co - Point	0.00 enter	0.00	11,455.00	15,225.60	1,090.40	456,250.20	647,830.80	32.2534437	-103.8551340



### **Planning Report**

Database: EDM 5000.1.13 Single User Db

Company: XTO Energy

Project: Eddy County, NM (NAD-27)
Site: POKER LAKE UNIT 23 DTD

Well: #122H
Wellbore: Wellbore #1
Design: PERMIT

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well #122H

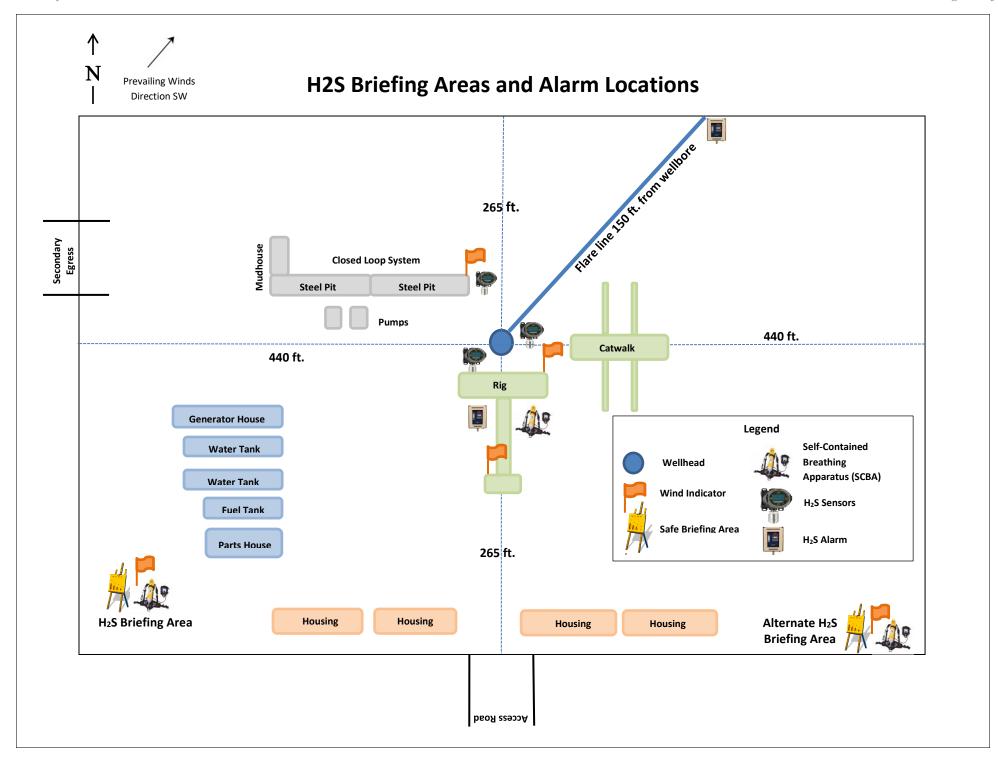
RKB = 30' @ 3479.00usft

RKB = 30' @ 3479.00usft

Grid

Minimum Curvature

rmations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	610.00	610.00	Rustler			
	970.00	970.00	Top Salt			
	3,869.79	3,850.00	Base Salt			
	4,082.48	4,060.00	Delaware			
	5,034.51	5,000.00	Cherry Canyon			
	6,320.76	6,270.00	Brushy Canyon			
	7,688.04	7,620.00	Basal Brushy Canyon			
	7,961.49	7,890.00	Bone Spring Fm			
	8,072.90	8,000.00	Bone Spring Lime			
	8,103.29	8,030.00	Avalon Shale			
	8,543.85	8,465.00	Lower Avalon Shale			
	8,741.35	8,660.00	1st Bone Spring Lime			
8,943.91 8,860.00 1st Bone Sprir		1st Bone Spring Ss				
9,399.67 9,310.00 2nd E		2nd Bone Spring Lime				
9,835.17 9,740.00 2nd E		2nd Bone Spring T/B Carb				
	9,835.17	9,740.00	2nd Bone Spring Ss			
	10,113.69	10,015.00	3rd Bone Spring Lm			
	10,908.74	10,800.00	3rd Bone Spring Ss			
	11,205.88	11,090.00	Red Hills SS			
	11,295.25	11,295.25 11,170.00 Wolfcamp				
	11,330.78	11,200.00	Wolfcamp X			
	11,434.13	11,280.00	Wolfcamp Y			
	11,508.82	11,330.00	Wolfcamp A			
	11,896.08	11,455.00	LP			





# **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<sub>2</sub>S, 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<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - o Detection of H<sub>2</sub>S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

### **Ignition of Gas source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). 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<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	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:  Kendall Decker, Drilling Manager  Milton Turman, Drilling Superintendent  Jeff Raines, Construction Foreman  Toady Sanders, EH & S Manager  Wes McSpadden, Production Foreman	903-521-6477 817-524-5107 432-557-3159 903-520-1601 575-441-1147
SHERIFF DEPARTMENTS: Eddy County Lea County	575-887-7551 575-396-3611
NEW MEXICO STATE POLICE:	575-392-5588
FIRE DEPARTMENTS: Carlsbad Eunice Hobbs Jal Lovington	911 575-885-2111 575-394-2111 575-397-9308 575-395-2221 575-396-2359
HOSPITALS: Carlsbad Medical Emergency Eunice Medical Emergency Hobbs Medical Emergency Jal Medical Emergency Lovington Medical Emergency	911 575-885-2111 575-394-2112 575-397-9308 575-395-2221 575-396-2359
AGENT NOTIFICATIONS: For Lea County: Bureau of Land Management – Hobbs New Mexico Oil Conservation Division – Hobbs	575-393-3612 575-393-6161
For Eddy County: Bureau of Land Management - Carlsbad New Mexico Oil Conservation Division - Artesia	575-234-5972 575-748-1283

**Operator Name: XTO PERMIAN OPERATING LLC** 

Well Name: POKER LAKE UNIT 23 DTD Well Number: 122H

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

**FACILITY** 

Disposal type description:

Disposal location description: A licensed 3rd Party contractor will be used to haul and dispose of human waste.

Waste type: GARBAGE

Waste content description: Garbage

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. Debris. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location. No potential adverse materials or substances will be left on location.

#### Safe containment attachment:

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

**FACILITY** 

Disposal type description:

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

### **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

### **Cuttings Area**

Cuttings Area being used? NO

Are you storing cuttings on location? Y

**Description of cuttings location** Cuttings. The well will be drilled utilizing a closed-loop mud system. Drill cutting 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.

# 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 Perr	nian Operating	g, LLC	OGRID: _3	73075	D	ate: 11 / 13/ 2023		
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	»:							
be recompleted from a s	e following int ingle well pad	formation for each a corrected to a correct to a	new or recomp entral delivery	pleted well or set of v point.	vells proposed to	be drilled or proposed to		
Well Name	API	ULSTR	Footage	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D		
SEE ATTACHED WELL LIST								
proposed to be recomple	e: Provide the	following informat	tion for each n	See 19.15.27.9(D)(1)  ew or recompleted wateral delivery point.	_	proposed to be drilled or		
Well Name	API	Spud Date	TD Reached Date	Completion Commencement	Initial F Date Back D			
SEE ATTACHED WELL LIST								
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

IX. Anticipated Natural Gas Production:  Well API Anticipated Average Natural Gas Rate MCF/D Gas for the First Year MCF  Natural Gas Rate MCF/D Gas for the First Year MCF  X. Natural Gas Gathering System (NGGS):  Operator System ULSTR of Tie-in Anticipated Gathering Start Date 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.			EFFECTIV	E APRIL 1, 2022	EFFECTIVE APRIL 1, 2022								
IX. Anticipated Natural Gas Production:  Well API Anticipated Average Natural Gas Rate MCF/D Gas for the First Year MCF  Natural Gas Rate MCF/D Gas for the First Year MCF  X. Natural Gas Gathering System (NGGS):  Operator System ULSTR of Tie-in Anticipated Gathering Start Date 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.	Beginning April 1, reporting area must	, 2022, an operator t t complete this section	hat is not in compliance	with its statewide natural g	gas capture requirement for the applicable								
Well API Anticipated Average Natural Gas Rate MCF/D 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	☐ 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.												
Natural Gas Rate MCF/D  X. Natural Gas Gathering System (NGGS):  Operator System ULSTR of Tie-in Anticipated Gathering Start Date of System Segment Tie-in of System Segment Tie-in Start Date of System Segment Tie-in 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.	IX. Anticipated N	atural Gas Producti	ion:										
Operator System ULSTR of Tie-in Anticipated Gathering Start Date 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	V	Vell	API										
Start Date 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 location of the well(s), the anticipated pipeline route(s) connecting the location of the well(s).	X. Natural Gas Ga	nthering System (NO	GGS):										
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 \( \triangle \triang	Operator	System	ULSTR of Tie-in										
	the segment or port.  XII. Line Capacity production volume  XIII. Line Pressur natural gas gatherin  □ Attach Operator  XIV. Confidentiali Section 2 as provide	ion of the natural gas gas.  The natural gas gas from the well prior to the composition of the system of the composition of the natural gas gas from the composition of the natural gas gas from the composition of the natural gas gas from the composition of the	thering system   will   the date of first product   does not anticipate that dabove will continue to be duction in response to the erts confidentiality pursuant   Subsection D of 19.15.2	the natural gas gathering syst which the well(s) will be con will not have capacity to go tion.  It its existing well(s) connect meet anticipated increases in the increased line pressure.	gather 100% of the anticipated natural gas ted to the same segment, or portion, of the a line pressure caused by the new well(s).								

# 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.  $\square$  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: Lusten Hen
Printed Name: RUSTY KLEIN
Title: REGULATORY ANALYST
E-mail Address: ranell.klein@exxonmobil.com
Date: November 13, 2023
Phone: 575-703-6412
OIL CONSERVATION DIVISION  (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

### III. WELLS

WELL NAME	API	ULSTR	FOOTAGES	ANTICPATED	ANTICPATED	ANTICPATED
Poker Lake Unit 23 DTD 101H				OIL BBL/DAY	GAS	PRODUCED
		M-23-T24S-R30E	406' FSL & 191' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 102H		M-23-T24S-R30E	406' FSL & 251' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 107H		P-14-T24S-R30E	455' FSL & 606' FEL	2000	3200	3500
Poker Lake Unit 23 DTD 121H	TBD	M-23-T24S-R30E	406' FSL & 221' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 122H	TBD	M-23-T24S-R30E	406' FSL & 281' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 151H	TBD	M-23-T24S-R30E	406 FSL & 681' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 152H	TBD	M-23-T24S-R30E	406' FSL & 741' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 158H	TBD	G-23-T24S-R30E	1342' FNL & 1680' FEL	2000	3200	3500
Poker Lake Unit 23 DTD 171H	TBD	M-23-T24S-R30E	406' FSL & 711' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 172H	TBD	M-23-T24S-R30E	406' FSL & 771' FWL	2000	3200	3500
Poker Lake Unit 23 DTD 177H	TBD	P-14-T24S-R30E	455' FSL & 546' FEL	2000	3200	3500
Poker Lake Unit 23 DTD 178H	TBD	P-14-T24S-R30E	455' FSL & 516' FEL	2000	3200	3500
Poker Lake Unit 23 DTD 179H	TBD	P-14-T24S-R30E	455' FSL & 476' FEL	2000	3200	3500

# V. ANTICIPATED SCHEDULE

,				COMPLETION COMMENCEMENT	INITIAL FLOW	FIRST PRODUCTION
WELL NAME	API	SPUD DATE	TD REACHED DATED	DATE	BACK DATE	DATE
Poker Lake Unit 23 DTD 101H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 102H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 107H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 121H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 122H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 151H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 152H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 158H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 171H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 172H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 177H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 178H	TBD	TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 23 DTD 179H	TBD	TBD	TBD	TBD	TBD	TBD

### VI. Separation Equipment:

XTO Permian Operating, LLC. production tank batteries include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool in conjunction with the total number of wells planned to or existing within the facility. Separation equipment is upgraded prior to well being drilled or completed, if determined to be undersized or needed. The separation equipment is designed and built according to the relevant industry specifications (API Specification 12J and ASME Sec VIII Div I). Other recognized industry publications such as the Gas Processors Suppliers Association (GPSA) are referenced when designing separation equipment to optimize gas capture.

#### VII. Operational Practices:

#### 1. Subsection B.

- During drilling, flare stacks will be located a minimum of 150 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

### 2. Subsection C.

 During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.

For emergencies, equipment malfunction, or if the operator decides to produce oil and gas during well completion:

- o Flowlines will be routed for flowback fluids into a completion or storage tank and, if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

### 3. Subsection D.

- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.
- Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.

 Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

### 4. Subsection E.

- All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
- Flare stack was installed prior to May 25, 2021 but has been designed for proper size and combustion efficiency. Flare currently has a continuous pilot and is located more than 100 feet from any known well and storage tanks.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

#### 5. Subsection F.

- Measurement equipment is installed to measure the volume of natural gas flared from process piping or a flowline piped from the equipment associated with a well and facility associated with the approved application for permit to drill that has an average daily production greater than 60 mcf of natural gas.
- Measurement equipment installed is not designed or equipped with a manifold to allow diversion of natural gas around the metering equipment, except for the sole purpose of inspecting and servicing the measurement equipment, as noted in NMAC 19.15.27.8 Subsection G.

### **VIII. Best Management Practices:**

- 1. During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- 2. Operator does not flow well (well shut in) during initial production until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.
- 3. Operator equips storage tanks with an automatic gauging system to reduce venting of natural gas.
- 4. Operator reduces the number of blowdowns by looking for opportunities to coordinate repair and maintenance activities.
- 5. Operator combusts natural gas that would otherwise be vented or flared, when feasible.
- 6. Operator has a flare stack designed in accordance with need and to handle sufficient volume to ensure proper combustion efficiency. Flare stacks are equipped with continuous pilots and securely anchored at least 100 feet (at minimum) from storage tanks and wells.
- 7. Operator minimizes venting (when feasible) through pump downs of vessels and reducing time required to purge equipment before returning equipment to service.
- 8. Operator will shut in wells (when feasible) in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 285910

### **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	285910
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

#### CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	12/6/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/6/2023
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	12/6/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	12/6/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	12/6/2023
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	12/6/2023
ward.rikala	XTO is currently out of compliance with Rule 5.9. This well can not be produced until the company is in compliance.	12/6/2023