Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM005912

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other
1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.
POKER LAKE / NMNM 071016X

8. Lease Name and Well No.
POKER LAKE UNIT 13-24 PC
105H

2. Name of Operator
XTO PERMIAN OPERATING LLC

9. API Well No.
30-015-53551

3a. Address
6401 Holiday Hill Road, Bldg 5, Midland, TX 79707

3b. Phone No. *(include area code)*
(432) 682-8873

10. Field and Pool, or Exploratory
Purple Sage/WOLFCAMP

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWNE / 2414 FNL / 2445 FEL / LAT 32.218181 / LONG -103.937405
At proposed prod. zone SWSE / 200 FSL / 2310 FEL / LAT 32.196208 / LONG -103.936944

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 13/T24S/R29E/NMP

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

12. County or Parish
EDDY

13. State
NM

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

16. No of acres in lease

17. Spacing Unit dedicated to this well
480.0

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

19. Proposed Depth
10422 feet / 18429 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3092 feet

22. Approximate date work will start*
12/01/2021

23. Estimated duration
60 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	KELLY KARDOS / Ph: (432) 682-8873	10/16/2020

Title
Regulatory Coordinator

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	CODY LAYTON / Ph: (575) 234-5959	11/17/2022

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

Approval Date: 11/17/2022

(Continued on page 2)

*(Instructions on page 2)

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 53551	98220	Purple Sage;Wolfcamp

[4] Property Code	[5] Property Name	[6] Well Number
333842	POKER LAKE UNIT 13-24 PC	105H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,092'

[10] Surface Location

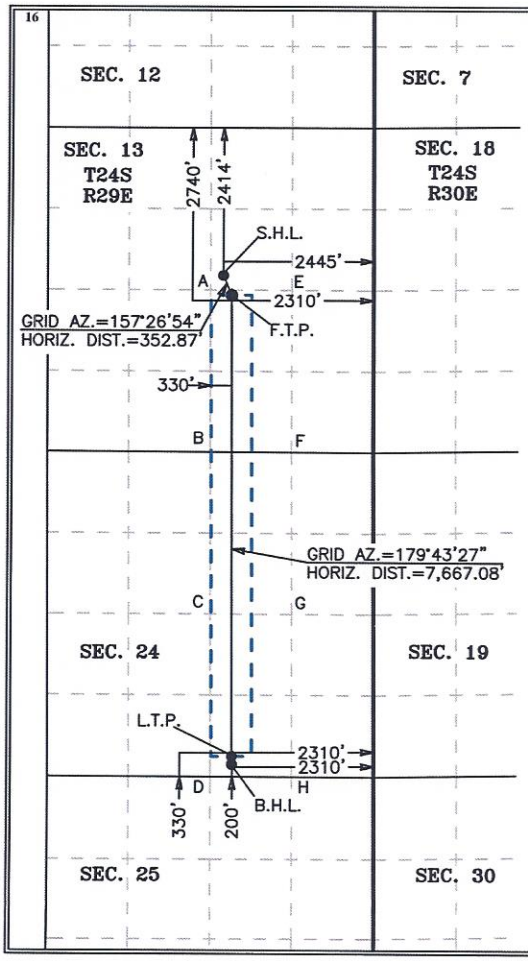
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	13	24 S	29 E		2,414	NORTH	2,445	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	24	24 S	29 E		200	SOUTH	2,310	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
480			

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.



SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	443,333.9	Y =	435,471.0
X =	663,779.4	X =	663,950.9
LAT. =	32.218181 °N	LAT. =	32.196566 °N
LONG. =	103.937405 °W	LONG. =	103.936945 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	443,008.0	Y =	435,341.0
X =	663,914.7	X =	663,951.6
LAT. =	32.217284 °N	LAT. =	32.196208 °N
LONG. =	103.936971 °W	LONG. =	103.936944 °W

CORNER COORDINATES (NAD83 NME)

A - Y =	443,093.9 N ,	X =	663,576.0 E
B - Y =	440,439.6 N ,	X =	663,581.8 E
C - Y =	437,788.4 N ,	X =	663,595.7 E
D - Y =	435,141.5 N ,	X =	663,609.5 E
E - Y =	443,091.0 N ,	X =	664,900.3 E
F - Y =	440,434.7 N ,	X =	664,906.3 E
G - Y =	437,785.4 N ,	X =	664,921.5 E
H - Y =	435,139.5 N ,	X =	664,936.2 E

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	443,274.5	Y =	435,411.8
X =	622,595.9	X =	622,767.1
LAT. =	32.218157 °N	LAT. =	32.196441 °N
LONG. =	103.936916 °W	LONG. =	103.936456 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	442,948.6	Y =	435,281.8
X =	622,731.2	X =	622,767.9
LAT. =	32.217160 °N	LAT. =	32.196084 °N
LONG. =	103.936483 °W	LONG. =	103.936456 °W

CORNER COORDINATES (NAD27 NME)

A - Y =	443,034.6 N ,	X =	622,392.5 E
B - Y =	440,380.3 N ,	X =	622,398.3 E
C - Y =	437,729.1 N ,	X =	622,412.0 E
D - Y =	435,082.3 N ,	X =	622,425.8 E
E - Y =	443,031.7 N ,	X =	623,716.8 E
F - Y =	440,375.4 N ,	X =	623,722.7 E
G - Y =	437,726.2 N ,	X =	623,737.8 E
H - Y =	435,080.4 N ,	X =	623,752.5 E

[17] OPERATOR CERTIFICATION

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

Cassie Evans — 04/21/2020
Signature — Date

Cassie Evans
Printed Name

cassie_evans@xtoenergy.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

1-2-2020
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — JC — 2019051532

P:\PROJECTS\2019\2019051532-XTO-POKER LAKE UNIT 13-24 PC 105H-EDDY\DWG\2019051532-XTO-POKER LAKE UNIT 13-24 PC 105H C102.dwg

AFMSS

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

Drilling Plan Data Report
11/17/2022

APD ID: 10400063592 **Submission Date:** 10/16/2020

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
915732	PERMIAN	3092	0	0	OTHER : Quaternary	NONE	N
915723	RUSTLER	2857	235	235	SILTSTONE	USEABLE WATER	N
915724	TOP SALT	2570	522	522	SALT	OTHER : Produced Water	N
915725	BASE OF SALT	-3	3095	3095	SALT	OTHER : Produced Water	N
915721	DELAWARE	-210	3302	3302	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
915722	BONE SPRING	-3960	7052	7052	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
915720	BONE SPRING 1ST	-4985	8077	8077	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
915719	BONE SPRING 2ND	-5820	8912	8912	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
915738	BONE SPRING 3RD	-6920	10012	10012	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
915740	WOLFCAMP	-7285	10377	10377	SHALE	NATURAL GAS, OIL, OTHER : Produced Water	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 10422

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 5M Hydril and a 13-5/8 minimum 5M 3-Ram BOP. MASP should not exceed 3940 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. Permanent Wellhead – Multibowl System A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M 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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

8-5/8" casing per BLM Onshore Order 2 · Wellhead Manufacturer representative will not be present for BOP test plug installation Approval to utilize a spudder rig to pre-set surface casing per the attached Description of Operations. XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per GE recommendations, XTO will contact the BLM on each rig skid on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells. ONLY test broken pressure seals on the BOP equipment per the attached procedure. A variance is requested to cement offline for the surface and intermediate casing strings.

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", 5M bradenhead and flange, the BOP test will be limited to 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

Choke Diagram Attachment:

PLU_13_PC_5MBOP_20201016112447.pdf

BOP Diagram Attachment:

PLU_13_PC_5MCM_20201016112511.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	14.75	11.75	NEW	API	N	0	490	0	490	3092	2602	490	J-55	47	BUTT	5.93	1.17	BUOY	20.71	DRY	20.71
2	INTERMEDIATE	10.625	8.625	NEW	API	N	0	10600	0	10600	3370	-7508	10600	HCL-80	32	BUTT	1.43	1.46	DRY	2.16	DRY	2.16
3	PRODUCTION	7.875	5.5	NEW	API	N	0	18429	0	10422	3370	-7330	18429	P-110	20	BUTT	1.78	1.18	DRY	2.48	DRY	2.48

Casing Attachments

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_13_24_PC_105H_csg_20201016112623.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_13_24_PC_105H_csg_20201016112744.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_13_24_PC_105H_csg_20201016112904.pdf

Section 4 - Cement

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	490	310	1.35	14.8	418.5	100	Halcem-C	2% CaCl
INTERMEDIATE	Lead		290	10600	2010	1.88	12.8	3778.8	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				310	1.33	14.8	412.3	100	Halcem-C	2% CaCl
INTERMEDIATE	Lead	540	0	10600	40	1.87	12.8	74.8	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				30	1.35	14.8	40.5	100	Halcem-C	2% CaCl
PRODUCTION	Lead		0	18429	1420	1.33	13.2	1888.6	20	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: A Pason or Totco will be used to detect changes in loss or gain of mud volume.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
10600	18429	OTHER : FW / Cut Brine /	11.2	11.8							A mud test will be performed every 24 hours

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
		Polymer / OBM									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
0	490	OTHER : FW/Native	8.4	8.8							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
490	10600	OTHER : FW / Cut Brine / Direct Emulsion	8.7	9.8							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

Section 6 - Test, Logging, Coring

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

Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from kick-off point to intermediate casing shoe.

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

CEMENT BOND LOG,COMPENSATED NEUTRON LOG,DIRECTIONAL SURVEY,GAMMA RAY LOG,MUD LOG/GEOLOGIC LITHOLOGY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring will take place on this well.

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6232 **Anticipated Surface Pressure:** 3939

Anticipated Bottom Hole Temperature(F): 155

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

Describe:

Potential loss of circulation through the Capitan Reef.

Contingency Plans geoharzards description:

The necessary mud products for weight addition and fluid loss control will be on location at all times.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. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

PLU_13_PC_H2S_Plan_20201016120421.pdf

PLU_13_PC_Pad_1_H2S_Dia_20201016120429.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU_13_24_PC_105H_DD_20201016120700.pdf

Other proposed operations facets description:

The surface fresh water sands will be protected by setting 11.75 inch casing @ 490' (32' above the salt) and circulating cement back to surface. A 10-5/8 inch vertical hole will be drilled to 10600' and 8-5/8 inch casing ran and cemented 200' into the 11-3/4 inch casing, this will also isolate the salt. An 7-7/8 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 casing will be set at TD and cemented back 300' into the 8-5/8 inch casing shoe.

8-5/8" Collapse analyzed using 50% evacuation based on regional experience.
5-1/2 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.

Other proposed operations facets attachment:

PLU_13_24_PC_GCP_20201016120911.pdf

Other Variance attachment:

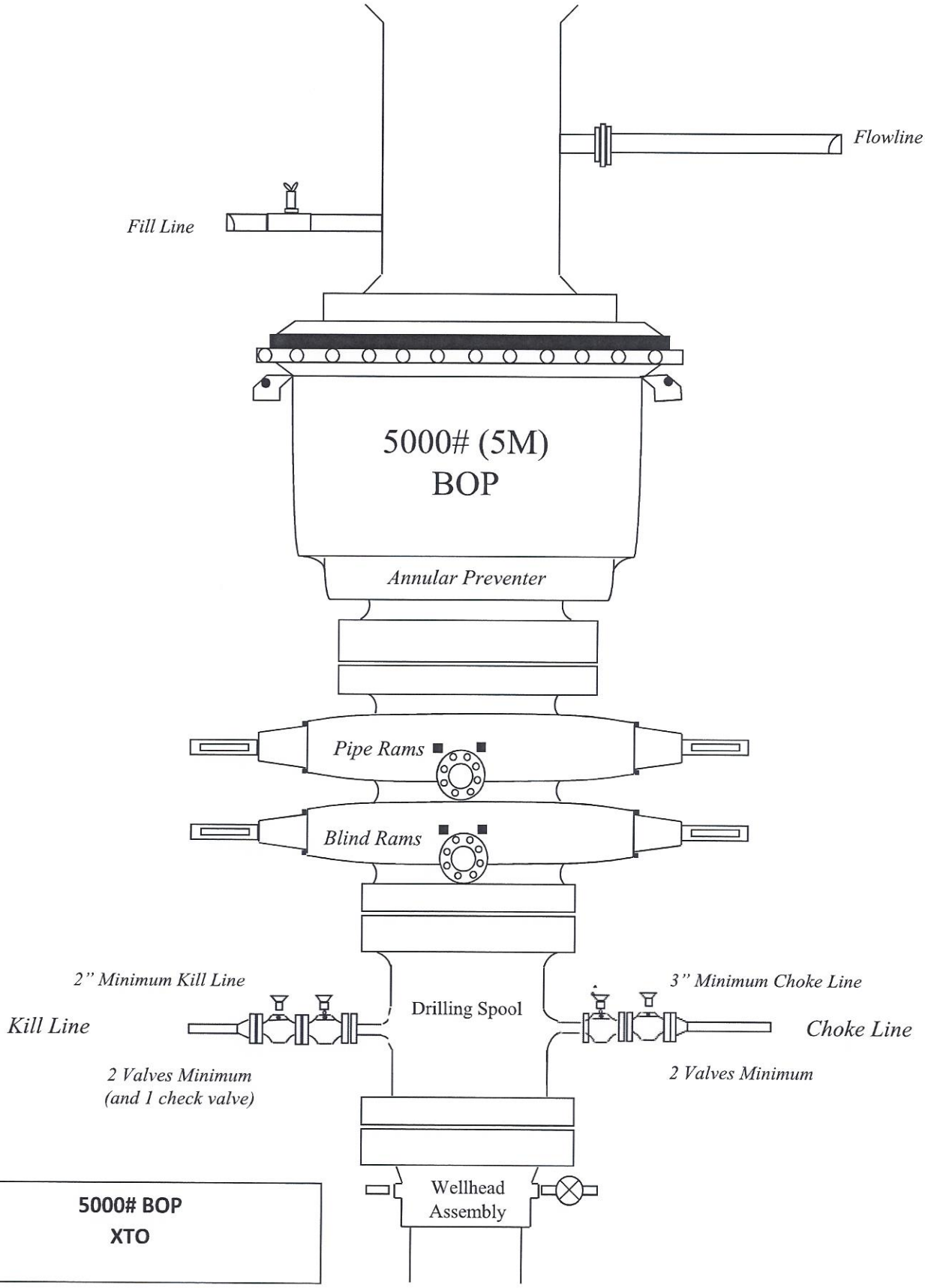
PLU_13_PC_MBD_20201016120928.pdf

PLU_13_PC_FH_20201016120948.pdf

PLU_13_PC_Spud_20201016121004.pdf

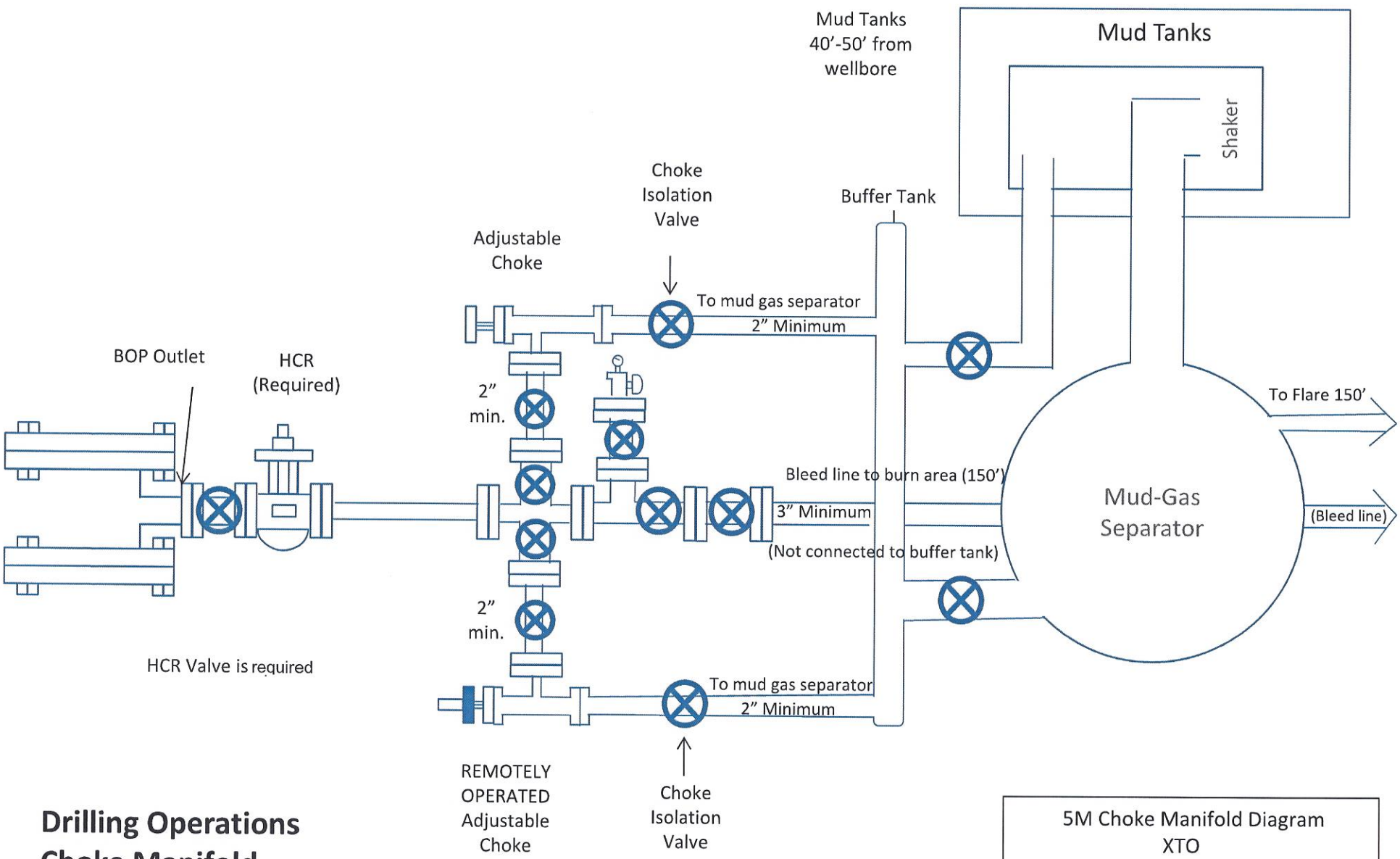
PLU_13_PC_break_20201016121015.pdf

PLU_13_PC_cmt_20201016121035.pdf


Flowline
Fill Line
5000# (5M)
BOP
Annular Preventer
Pipe Rams
Blind Rams
2" Minimum Kill Line
3" Minimum Choke Line
Kill Line
Drilling Spool
Choke Line
2 Valves Minimum
(and 1 check valve)
2 Valves Minimum
Wellhead
Assembly

5000# BOP

XTO



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 490'	11-3/4"	47	BTC	J-55	New	1.17	5.93	20.71
10-5/8"	0' – 10600'	8-5/8"	32	BTC	HCL-80	New	1.46	1.43	2.16
7-7/8"	0' – 18428.51'	5-1/2"	20	BTC	P-110	New	1.18	1.78	2.48

· XTO requests to not utilize centralizers in the curve and lateral
8-5/8" Collapse analyzed using 50% evacuation based on regional experience.
5-1/2" 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

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head (RSH System): 11-3/4" SOW bottom x 13-5/8" 5M top flange
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M 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 8-5/8" casing per Onshore Order 2.
   - Wellhead manufacturer representative may not be present for BOP test plug installation

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.

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

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

Background

Onshore Oil and Gas Order (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.

62 API STANDARD 53

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure[a][c] psig (MPa)	Pressure Test—High Pressure[a][c]	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer[b]	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers[b][d]	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

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

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

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

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

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

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

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

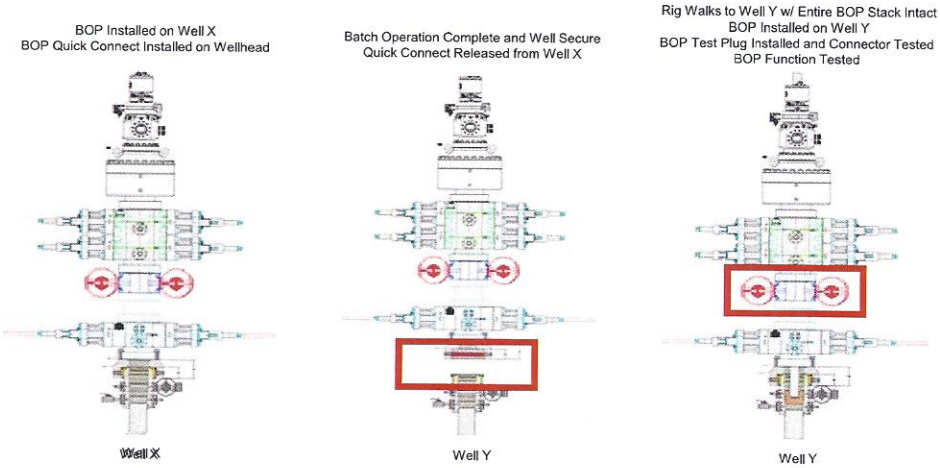
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that 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

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

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

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



Summary

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

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

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

1. After a full BOP test is conducted on the first well on the pad.

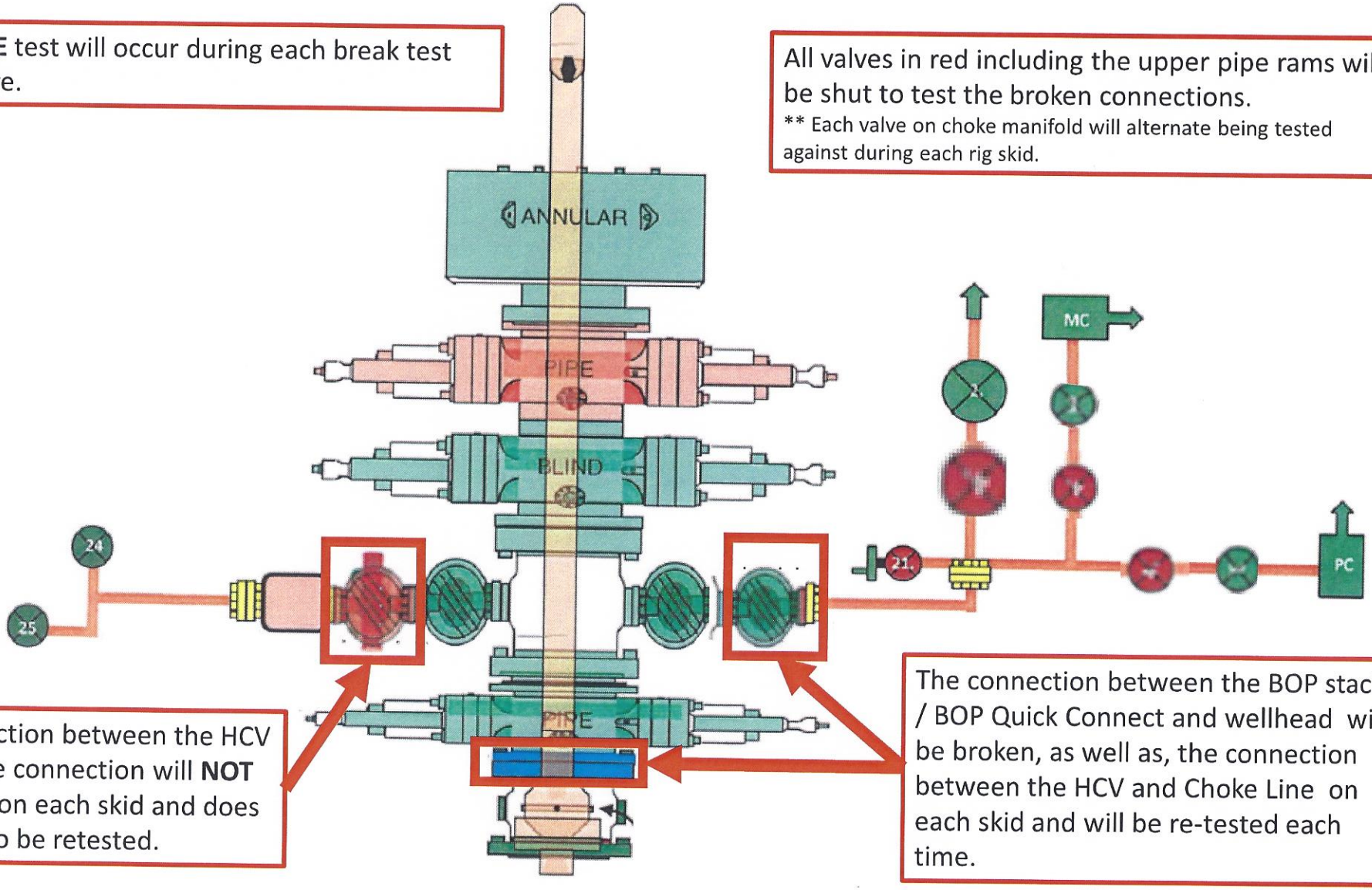
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

4. Full BOP test will be required prior to drilling the production hole.

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

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



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

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

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

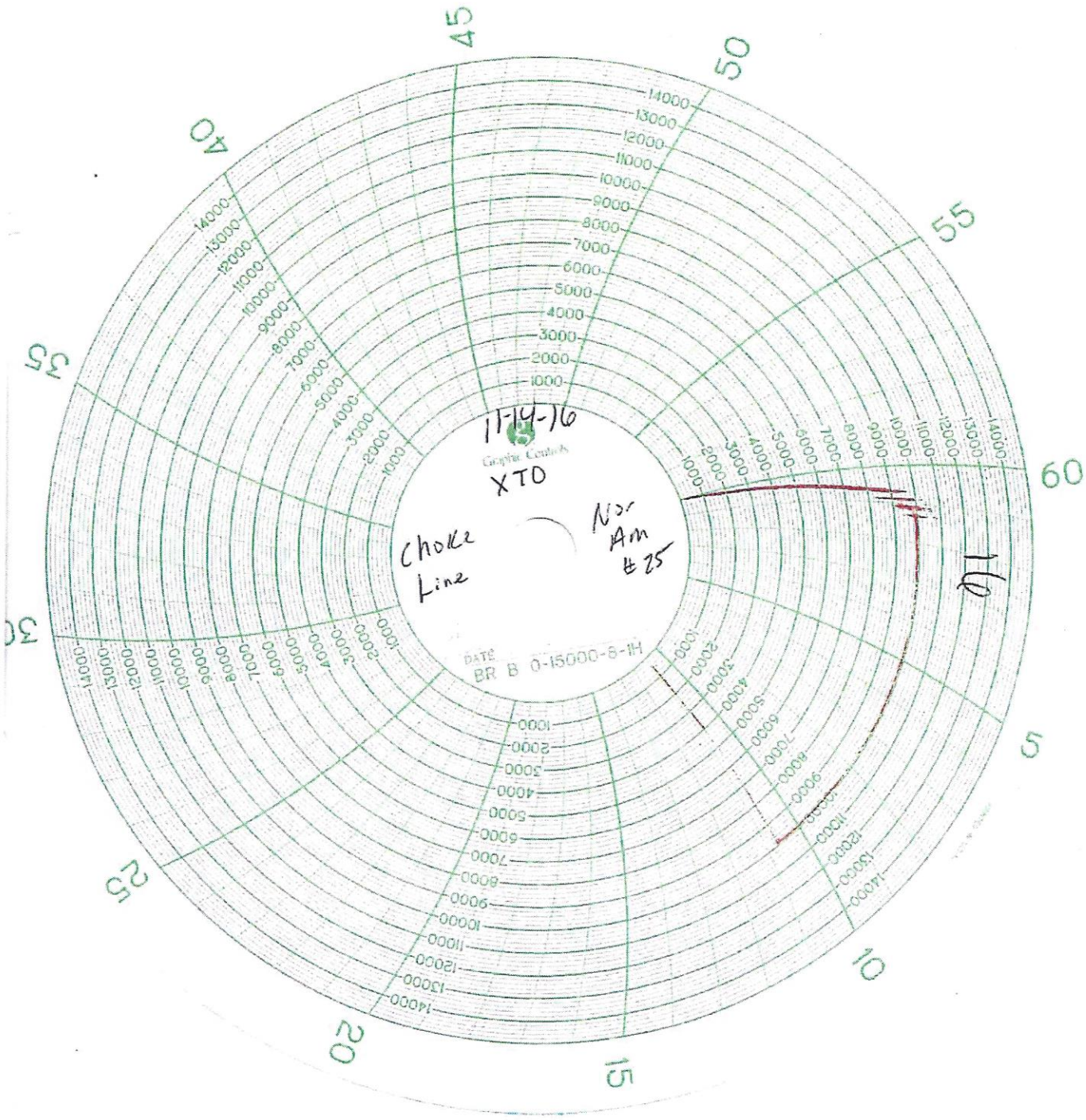
Product Description:	FD3.042.0R41/16.5KFLGE/E LE

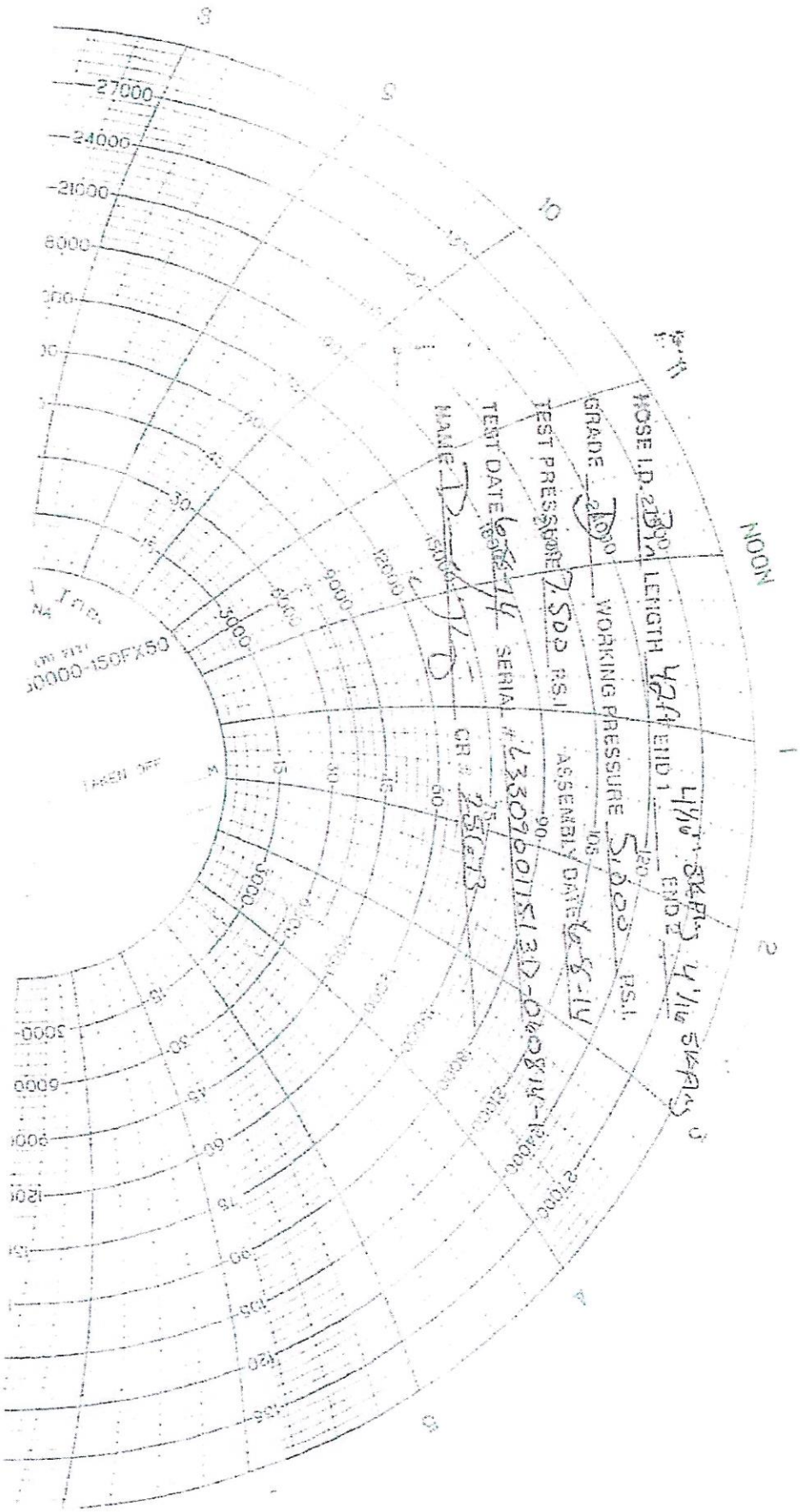
End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

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

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :		Signature :	

Form PTC - 01 Rev.0 2


11-14-16
XTO
Choke Line
Nor Am #25
DATE
BR B 0-15000-8-1H


NOON
HOSE I.D. 2"
LENGTH 40ft
END 1
WORKING PRESSURE 5000 PSI
GRADE D
TEST PRESSURE 7500 PSI
ASSEMBLY DATE 6-26-14
TEST DATE 6-26-14
SERIAL # 233026011512D-040814-1800
MADE D
CR # 25673
27000
24000
21000
18000
15000
12000
9000
6000
3000

XTO Permian Operating, LLC Offline Cementing Variance Request

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

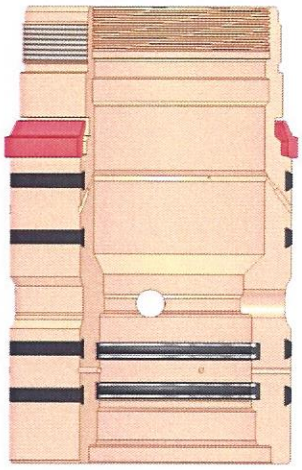
1. Cement Program

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

2. Offline Cementing Procedure

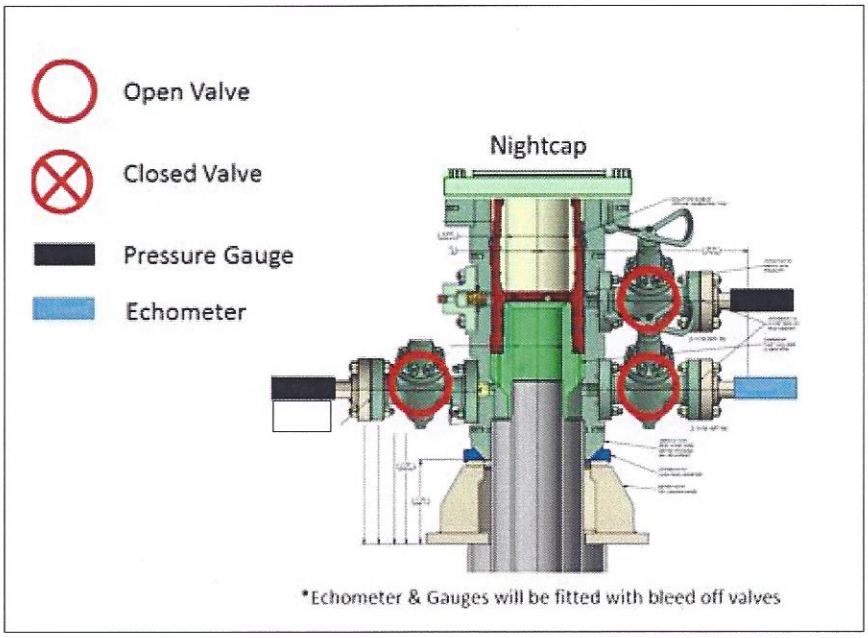
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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



Annular packoff with both external and internal seals

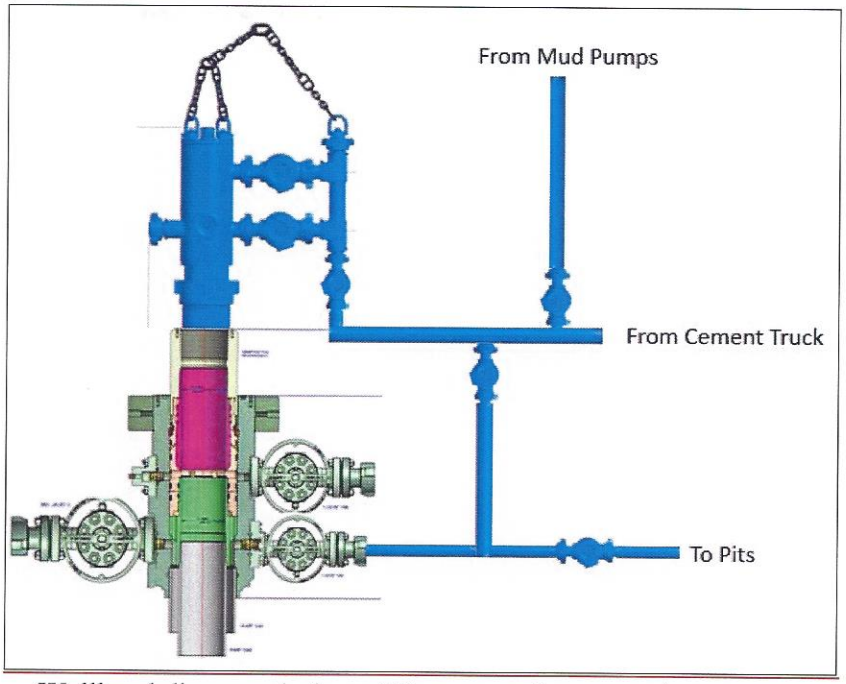
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

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

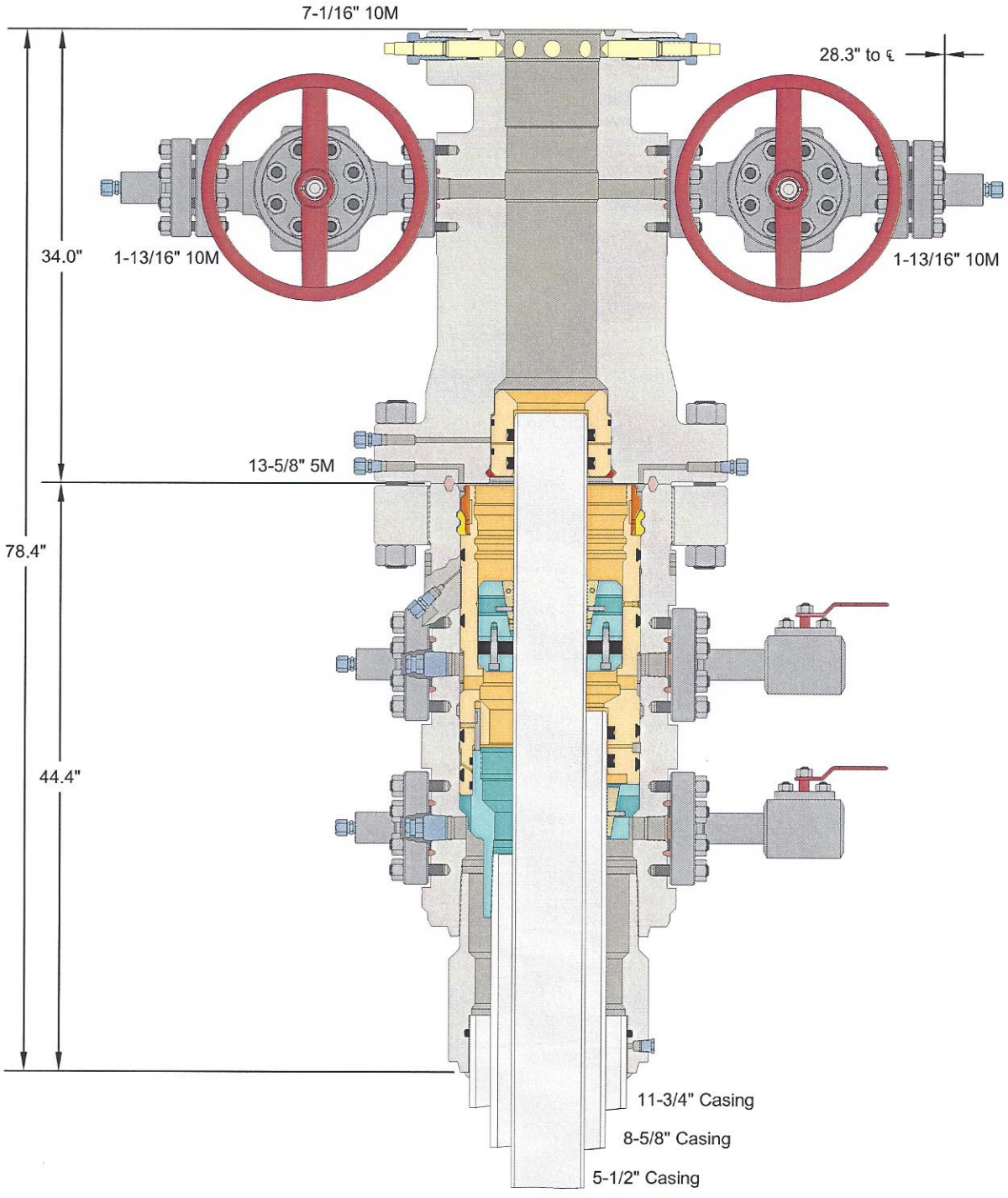
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

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

GE Oil & Gas



ALL DIMENSIONS ARE APPROXIMATE

XTO ENERGY, INC.

11-3/4" x 8-5/8" x 5-1/2" 10M RSH-2 Wellhead Assembly, With T-EBS-F Tubing Head

DRAWN	VJK	31OCT16
APPRV	KN	31OCT16

FOR REFERENCE ONLY
DRAWING NO. 10012358

XTO Energy

Eddy County, NM (NAD-27)
Poker Lake Unit 13-24 Pierce Canyon
105H

Wellbore #1

Plan: PERMIT

Standard Planning Report

17 January, 2020

XTO ENERGY

Project: Eddy County, NM (NAD-27)
Site: Poker Lake Unit 13-24 Pierce Canyon
Well: 105H
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: 105H

Rig Name:
RKB=30' @ 3122.00usft
Ground Level: 3092.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	443274.50	622595.90	32.218057	-103.936916

DESIGN TARGET DETAILS

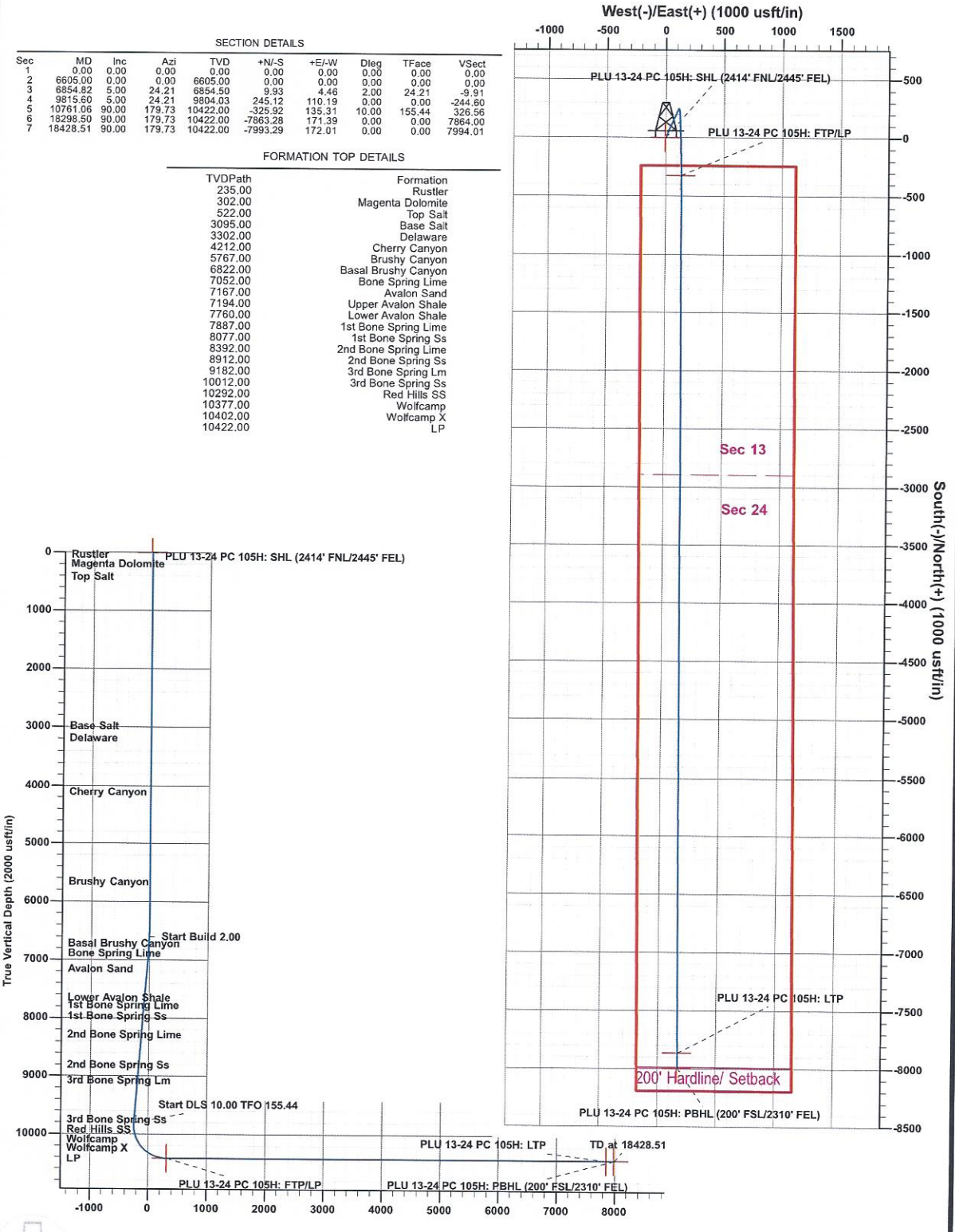
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PLU 13-24 PC 105H: SHL (2414' FNL/2445' FEL)	0.00	0.00	0.00	443274.50	622595.90	32.218057	-103.936916	Point
PLU 13-24 PC 105H: FTP/LP	10422.00	-325.92	135.31	442948.60	622731.20	32.217160	-103.936483	Point
PLU 13-24 PC 105H: LTP	10422.00	-7863.28	171.21	435411.80	622767.10	32.196441	-103.936457	Point
PLU 13-24 PC 105H: PBHL (200' FSL/2310' FEL)	10422.00	-7993.29	172.01	435281.80	622767.90	32.196084	-103.936456	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	6605.00	0.00	0.00	6605.00	0.00	0.00	0.00	0.00	0.00
3	6854.82	5.00	24.21	6854.50	9.93	4.46	2.00	24.21	-9.91
4	9815.60	5.00	24.21	9804.03	245.12	110.19	0.00	0.00	-244.60
5	10761.06	90.00	179.73	10422.00	-325.92	135.31	10.00	155.44	326.56
6	18298.50	90.00	179.73	10422.00	-7863.28	171.39	0.00	0.00	7864.00
7	18428.51	90.00	179.73	10422.00	-7993.29	172.01	0.00	0.00	7994.01

FORMATION TOP DETAILS

TVDPath	Formation
235.00	Rustler
302.00	Magenta Dolomite
522.00	Top Salt
3095.00	Base Salt
3302.00	Delaware
4212.00	Cherry Canyon
5767.00	Brushy Canyon
6822.00	Basal Brushy Canyon
7052.00	Bone Spring Lime
7167.00	Avalon Sand
7194.00	Upper Avalon Shale
7760.00	Lower Avalon Shale
7887.00	1st Bone Spring Lime
8077.00	1st Bone Spring Ss
8392.00	2nd Bone Spring Lime
8912.00	2nd Bone Spring Ss
9182.00	3rd Bone Spring Lm
10012.00	3rd Bone Spring Ss
10292.00	Red Hills SS
10377.00	Wolfcamp
10402.00	Wolfcamp X
10422.00	LP



Plan: PERMIT (105H/Wellbore #1)
Created By: Matthew May Date: 15:40, January 18 2020

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Project Eddy County, NM (NAD-27)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site Poker Lake Unit 13-24 Pierce Canyon

Site Position:		**Northing:**	443,274.50 usft	**Latitude:**	32.218057
From:	Map	**Easting:**	622,595.90 usft	**Longitude:**	-103.936917
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.21 °

Well 105H

Well Position	**+N/-S**	0.00 usft	**Northing:**	443,274.50 usft	**Latitude:**	32.218057
	+E/-W	0.00 usft	**Easting:**	622,595.90 usft	**Longitude:**	-103.936917
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,092.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/17/2020	6.84	59.97	47,633

Design PERMIT

Audit Notes:

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.73

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,605.00	0.00	0.00	6,605.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,854.82	5.00	24.21	6,854.50	9.93	4.46	2.00	2.00	0.00	24.21	
9,815.60	5.00	24.21	9,804.03	245.12	110.19	0.00	0.00	0.00	0.00	
10,761.06	90.00	179.73	10,422.00	-325.92	135.31	10.00	8.99	16.45	155.44	PLU 13-24 PC 105H:
18,298.50	90.00	179.73	10,422.00	-7,863.28	171.39	0.00	0.00	0.00	0.00	PLU 13-24 PC 105H:
18,428.52	90.00	179.73	10,422.00	-7,993.29	172.01	0.00	0.00	0.00	0.00	PLU 13-24 PC 105H:

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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)
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
235.00	0.00	0.00	235.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
302.00	0.00	0.00	302.00	0.00	0.00	0.00	0.00	0.00	0.00
Magenta Dolomite									
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
522.00	0.00	0.00	522.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
600.00	0.00	0.00	600.00	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	0.00	0.00	900.00	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	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,095.00	0.00	0.00	3,095.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,302.00	0.00	0.00	3,302.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,212.00	0.00	0.00	4,212.00	0.00	0.00	0.00	0.00	0.00	0.00

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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)
Cherry Canyon									
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,767.00	0.00	0.00	5,767.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,605.00	0.00	0.00	6,605.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	1.90	24.21	6,699.98	1.44	0.65	-1.43	2.00	2.00	0.00
6,800.00	3.90	24.21	6,799.85	6.05	2.72	-6.04	2.00	2.00	0.00
6,822.21	4.34	24.21	6,822.00	7.51	3.37	-7.49	2.00	2.00	0.00
Basal Brushy Canyon									
6,854.82	5.00	24.21	6,854.50	9.93	4.46	-9.91	2.00	2.00	0.00
6,900.00	5.00	24.21	6,899.51	13.52	6.08	-13.49	0.00	0.00	0.00
7,000.00	5.00	24.21	6,999.13	21.46	9.65	-21.42	0.00	0.00	0.00
7,053.07	5.00	24.21	7,052.00	25.68	11.54	-25.62	0.00	0.00	0.00
Bone Spring Lime									
7,100.00	5.00	24.21	7,098.75	29.40	13.22	-29.34	0.00	0.00	0.00
7,168.51	5.00	24.21	7,167.00	34.85	15.66	-34.77	0.00	0.00	0.00
Avalon Sand									
7,195.61	5.00	24.21	7,194.00	37.00	16.63	-36.92	0.00	0.00	0.00
Upper Avalon Shale									
7,200.00	5.00	24.21	7,198.37	37.35	16.79	-37.27	0.00	0.00	0.00
7,300.00	5.00	24.21	7,297.99	45.29	20.36	-45.19	0.00	0.00	0.00
7,400.00	5.00	24.21	7,397.61	53.23	23.93	-53.12	0.00	0.00	0.00
7,500.00	5.00	24.21	7,497.23	61.18	27.50	-61.05	0.00	0.00	0.00
7,600.00	5.00	24.21	7,596.85	69.12	31.07	-68.97	0.00	0.00	0.00
7,700.00	5.00	24.21	7,696.47	77.07	34.64	-76.90	0.00	0.00	0.00
7,763.77	5.00	24.21	7,760.00	82.13	36.92	-81.96	0.00	0.00	0.00
Lower Avalon Shale									
7,800.00	5.00	24.21	7,796.09	85.01	38.21	-84.83	0.00	0.00	0.00
7,891.25	5.00	24.21	7,887.00	92.26	41.47	-92.06	0.00	0.00	0.00
1st Bone Spring Lime									
7,900.00	5.00	24.21	7,895.71	92.95	41.79	-92.75	0.00	0.00	0.00

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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)
8,000.00	5.00	24.21	7,995.33	100.90	45.36	-100.68	0.00	0.00	0.00
8,081.98	5.00	24.21	8,077.00	107.41	48.28	-107.18	0.00	0.00	0.00
1st Bone Spring Ss									
8,100.00	5.00	24.21	8,094.95	108.84	48.93	-108.61	0.00	0.00	0.00
8,200.00	5.00	24.21	8,194.57	116.78	52.50	-116.53	0.00	0.00	0.00
8,300.00	5.00	24.21	8,294.19	124.73	56.07	-124.46	0.00	0.00	0.00
8,398.18	5.00	24.21	8,392.00	132.53	59.58	-132.24	0.00	0.00	0.00
2nd Bone Spring Lime									
8,400.00	5.00	24.21	8,393.81	132.67	59.64	-132.39	0.00	0.00	0.00
8,500.00	5.00	24.21	8,493.43	140.61	63.21	-140.31	0.00	0.00	0.00
8,600.00	5.00	24.21	8,593.05	148.56	66.78	-148.24	0.00	0.00	0.00
8,700.00	5.00	24.21	8,692.67	156.50	70.35	-156.17	0.00	0.00	0.00
8,800.00	5.00	24.21	8,792.29	164.44	73.92	-164.09	0.00	0.00	0.00
8,900.00	5.00	24.21	8,891.91	172.39	77.49	-172.02	0.00	0.00	0.00
8,920.16	5.00	24.21	8,912.00	173.99	78.21	-173.62	0.00	0.00	0.00
2nd Bone Spring Ss									
9,000.00	5.00	24.21	8,991.53	180.33	81.07	-179.95	0.00	0.00	0.00
9,100.00	5.00	24.21	9,091.15	188.27	84.64	-187.87	0.00	0.00	0.00
9,191.19	5.00	24.21	9,182.00	195.52	87.89	-195.10	0.00	0.00	0.00
3rd Bone Spring Lm									
9,200.00	5.00	24.21	9,190.77	196.22	88.21	-195.80	0.00	0.00	0.00
9,300.00	5.00	24.21	9,290.39	204.16	91.78	-203.73	0.00	0.00	0.00
9,400.00	5.00	24.21	9,390.01	212.10	95.35	-211.65	0.00	0.00	0.00
9,500.00	5.00	24.21	9,489.63	220.05	98.92	-219.58	0.00	0.00	0.00
9,600.00	5.00	24.21	9,589.25	227.99	102.49	-227.51	0.00	0.00	0.00
9,700.00	5.00	24.21	9,688.87	235.93	106.06	-235.43	0.00	0.00	0.00
9,800.00	5.00	24.21	9,788.49	243.88	109.63	-243.36	0.00	0.00	0.00
9,815.60	5.00	24.21	9,804.03	245.12	110.19	-244.60	0.00	0.00	0.00
9,850.00	2.35	61.65	9,838.36	246.82	111.43	-246.29	10.00	-7.69	108.86
9,900.00	4.41	151.72	9,888.30	245.61	113.24	-245.08	10.00	4.12	180.13
9,950.00	9.13	166.70	9,937.94	240.05	115.06	-239.51	10.00	9.44	29.96
10,000.00	14.04	171.40	9,986.91	230.19	116.89	-229.64	10.00	9.83	9.40
10,026.02	16.62	172.76	10,012.00	223.37	117.83	-222.82	10.00	9.91	5.21
3rd Bone Spring Ss									
10,050.00	19.00	173.69	10,034.83	216.09	118.69	-215.53	10.00	9.93	3.89
10,100.00	23.98	175.05	10,081.34	197.86	120.46	-197.30	10.00	9.95	2.73
10,150.00	28.96	175.97	10,126.08	175.65	122.19	-175.08	10.00	9.97	1.84
10,200.00	33.95	176.64	10,168.72	149.62	123.86	-149.04	10.00	9.98	1.34
10,250.00	38.94	177.16	10,208.93	119.97	125.46	-119.38	10.00	9.98	1.03
10,300.00	43.93	177.57	10,246.40	86.93	126.97	-86.33	10.00	9.98	0.83
10,350.00	48.93	177.92	10,280.85	50.74	128.39	-50.14	10.00	9.99	0.69
10,367.27	50.65	178.02	10,292.00	37.57	128.86	-36.96	10.00	9.99	0.62
Red Hills SS									
10,400.00	53.92	178.21	10,312.02	11.69	129.71	-11.08	10.00	9.99	0.58
10,450.00	58.92	178.47	10,339.67	-29.94	130.91	30.55	10.00	9.99	0.52
10,500.00	63.91	178.71	10,363.59	-73.81	131.99	74.44	10.00	9.99	0.47
10,532.39	67.15	178.85	10,377.00	-103.29	132.61	103.91	10.00	9.99	0.44
Wolfcamp									
10,550.00	68.91	178.93	10,383.59	-119.61	132.93	120.24	10.00	9.99	0.42
10,600.00	73.90	179.13	10,399.53	-166.98	133.73	167.61	10.00	9.99	0.40
10,609.18	74.82	179.16	10,402.00	-175.82	133.87	176.45	10.00	9.99	0.39
Wolfcamp X									
10,650.00	78.90	179.32	10,411.28	-215.56	134.39	216.19	10.00	9.99	0.38

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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)
10,700.00	83.90	179.50	10,418.75	-264.98	134.90	265.61	10.00	9.99	0.37
10,750.00	88.89	179.69	10,421.89	-314.86	135.25	315.50	10.00	9.99	0.36
10,761.06	90.00	179.73	10,422.00	-325.92	135.31	326.56	10.00	9.99	0.36
LP									
10,800.00	90.00	179.73	10,422.00	-364.86	135.50	365.50	0.00	0.00	0.00
10,900.00	90.00	179.73	10,422.00	-464.86	135.98	465.50	0.00	0.00	0.00
11,000.00	90.00	179.73	10,422.00	-564.86	136.45	565.50	0.00	0.00	0.00
11,100.00	90.00	179.73	10,422.00	-664.86	136.93	665.50	0.00	0.00	0.00
11,200.00	90.00	179.73	10,422.00	-764.86	137.41	765.50	0.00	0.00	0.00
11,300.00	90.00	179.73	10,422.00	-864.86	137.89	865.50	0.00	0.00	0.00
11,400.00	90.00	179.73	10,422.00	-964.85	138.37	965.50	0.00	0.00	0.00
11,500.00	90.00	179.73	10,422.00	-1,064.85	138.85	1,065.50	0.00	0.00	0.00
11,600.00	90.00	179.73	10,422.00	-1,164.85	139.33	1,165.50	0.00	0.00	0.00
11,700.00	90.00	179.73	10,422.00	-1,264.85	139.80	1,265.50	0.00	0.00	0.00
11,800.00	90.00	179.73	10,422.00	-1,364.85	140.28	1,365.50	0.00	0.00	0.00
11,900.00	90.00	179.73	10,422.00	-1,464.85	140.76	1,465.50	0.00	0.00	0.00
12,000.00	90.00	179.73	10,422.00	-1,564.85	141.24	1,565.50	0.00	0.00	0.00
12,100.00	90.00	179.73	10,422.00	-1,664.85	141.72	1,665.50	0.00	0.00	0.00
12,200.00	90.00	179.73	10,422.00	-1,764.85	142.20	1,765.50	0.00	0.00	0.00
12,300.00	90.00	179.73	10,422.00	-1,864.84	142.68	1,865.50	0.00	0.00	0.00
12,400.00	90.00	179.73	10,422.00	-1,964.84	143.16	1,965.50	0.00	0.00	0.00
12,500.00	90.00	179.73	10,422.00	-2,064.84	143.63	2,065.50	0.00	0.00	0.00
12,600.00	90.00	179.73	10,422.00	-2,164.84	144.11	2,165.50	0.00	0.00	0.00
12,700.00	90.00	179.73	10,422.00	-2,264.84	144.59	2,265.50	0.00	0.00	0.00
12,800.00	90.00	179.73	10,422.00	-2,364.84	145.07	2,365.50	0.00	0.00	0.00
12,900.00	90.00	179.73	10,422.00	-2,464.84	145.55	2,465.50	0.00	0.00	0.00
13,000.00	90.00	179.73	10,422.00	-2,564.84	146.03	2,565.50	0.00	0.00	0.00
13,100.00	90.00	179.73	10,422.00	-2,664.84	146.51	2,665.50	0.00	0.00	0.00
13,200.00	90.00	179.73	10,422.00	-2,764.83	146.98	2,765.50	0.00	0.00	0.00
13,300.00	90.00	179.73	10,422.00	-2,864.83	147.46	2,865.50	0.00	0.00	0.00
13,400.00	90.00	179.73	10,422.00	-2,964.83	147.94	2,965.50	0.00	0.00	0.00
13,500.00	90.00	179.73	10,422.00	-3,064.83	148.42	3,065.50	0.00	0.00	0.00
13,600.00	90.00	179.73	10,422.00	-3,164.83	148.90	3,165.50	0.00	0.00	0.00
13,700.00	90.00	179.73	10,422.00	-3,264.83	149.38	3,265.50	0.00	0.00	0.00
13,800.00	90.00	179.73	10,422.00	-3,364.83	149.86	3,365.50	0.00	0.00	0.00
13,900.00	90.00	179.73	10,422.00	-3,464.83	150.34	3,465.50	0.00	0.00	0.00
14,000.00	90.00	179.73	10,422.00	-3,564.83	150.81	3,565.50	0.00	0.00	0.00
14,100.00	90.00	179.73	10,422.00	-3,664.82	151.29	3,665.50	0.00	0.00	0.00
14,200.00	90.00	179.73	10,422.00	-3,764.82	151.77	3,765.50	0.00	0.00	0.00
14,300.00	90.00	179.73	10,422.00	-3,864.82	152.25	3,865.50	0.00	0.00	0.00
14,400.00	90.00	179.73	10,422.00	-3,964.82	152.73	3,965.50	0.00	0.00	0.00
14,500.00	90.00	179.73	10,422.00	-4,064.82	153.21	4,065.50	0.00	0.00	0.00
14,600.00	90.00	179.73	10,422.00	-4,164.82	153.69	4,165.50	0.00	0.00	0.00
14,700.00	90.00	179.73	10,422.00	-4,264.82	154.16	4,265.50	0.00	0.00	0.00
14,800.00	90.00	179.73	10,422.00	-4,364.82	154.64	4,365.50	0.00	0.00	0.00
14,900.00	90.00	179.73	10,422.00	-4,464.81	155.12	4,465.50	0.00	0.00	0.00
15,000.00	90.00	179.73	10,422.00	-4,564.81	155.60	4,565.50	0.00	0.00	0.00
15,100.00	90.00	179.73	10,422.00	-4,664.81	156.08	4,665.50	0.00	0.00	0.00
15,200.00	90.00	179.73	10,422.00	-4,764.81	156.56	4,765.50	0.00	0.00	0.00
15,300.00	90.00	179.73	10,422.00	-4,864.81	157.04	4,865.50	0.00	0.00	0.00
15,400.00	90.00	179.73	10,422.00	-4,964.81	157.52	4,965.50	0.00	0.00	0.00
15,500.00	90.00	179.73	10,422.00	-5,064.81	157.99	5,065.50	0.00	0.00	0.00
15,600.00	90.00	179.73	10,422.00	-5,164.81	158.47	5,165.50	0.00	0.00	0.00

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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)
15,700.00	90.00	179.73	10,422.00	-5,264.81	158.95	5,265.50	0.00	0.00	0.00
15,800.00	90.00	179.73	10,422.00	-5,364.80	159.43	5,365.50	0.00	0.00	0.00
15,900.00	90.00	179.73	10,422.00	-5,464.80	159.91	5,465.50	0.00	0.00	0.00
16,000.00	90.00	179.73	10,422.00	-5,564.80	160.39	5,565.50	0.00	0.00	0.00
16,100.00	90.00	179.73	10,422.00	-5,664.80	160.87	5,665.50	0.00	0.00	0.00
16,200.00	90.00	179.73	10,422.00	-5,764.80	161.35	5,765.50	0.00	0.00	0.00
16,300.00	90.00	179.73	10,422.00	-5,864.80	161.82	5,865.50	0.00	0.00	0.00
16,400.00	90.00	179.73	10,422.00	-5,964.80	162.30	5,965.50	0.00	0.00	0.00
16,500.00	90.00	179.73	10,422.00	-6,064.80	162.78	6,065.50	0.00	0.00	0.00
16,600.00	90.00	179.73	10,422.00	-6,164.80	163.26	6,165.50	0.00	0.00	0.00
16,700.00	90.00	179.73	10,422.00	-6,264.79	163.74	6,265.50	0.00	0.00	0.00
16,800.00	90.00	179.73	10,422.00	-6,364.79	164.22	6,365.50	0.00	0.00	0.00
16,900.00	90.00	179.73	10,422.00	-6,464.79	164.70	6,465.50	0.00	0.00	0.00
17,000.00	90.00	179.73	10,422.00	-6,564.79	165.17	6,565.50	0.00	0.00	0.00
17,100.00	90.00	179.73	10,422.00	-6,664.79	165.65	6,665.50	0.00	0.00	0.00
17,200.00	90.00	179.73	10,422.00	-6,764.79	166.13	6,765.50	0.00	0.00	0.00
17,300.00	90.00	179.73	10,422.00	-6,864.79	166.61	6,865.50	0.00	0.00	0.00
17,400.00	90.00	179.73	10,422.00	-6,964.79	167.09	6,965.50	0.00	0.00	0.00
17,500.00	90.00	179.73	10,422.00	-7,064.79	167.57	7,065.50	0.00	0.00	0.00
17,600.00	90.00	179.73	10,422.00	-7,164.78	168.05	7,165.50	0.00	0.00	0.00
17,700.00	90.00	179.73	10,422.00	-7,264.78	168.53	7,265.50	0.00	0.00	0.00
17,800.00	90.00	179.73	10,422.00	-7,364.78	169.00	7,365.50	0.00	0.00	0.00
17,900.00	90.00	179.73	10,422.00	-7,464.78	169.48	7,465.50	0.00	0.00	0.00
18,000.00	90.00	179.73	10,422.00	-7,564.78	169.96	7,565.50	0.00	0.00	0.00
18,100.00	90.00	179.73	10,422.00	-7,664.78	170.44	7,665.50	0.00	0.00	0.00
18,200.00	90.00	179.73	10,422.00	-7,764.78	170.92	7,765.50	0.00	0.00	0.00
18,298.50	90.00	179.73	10,422.00	-7,863.28	171.39	7,864.00	0.00	0.00	0.00
18,300.00	90.00	179.73	10,422.00	-7,864.78	171.40	7,865.50	0.00	0.00	0.00
18,400.00	90.00	179.73	10,422.00	-7,964.77	171.88	7,965.50	0.00	0.00	0.00
18,428.52	90.00	179.73	10,422.00	-7,993.29	172.01	7,994.01	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
PLU 13-24 PC 105H: SH - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	443,274.50	622,595.90	32.218057	-103.936917
PLU 13-24 PC 105H: FT - plan hits target center - Point	0.00	0.00	10,422.00	-325.92	135.31	442,948.60	622,731.20	32.217160	-103.936483
PLU 13-24 PC 105H: LT - plan misses target center by 0.18usft at 18298.50usft MD (10422.00 TVD, -7863.28 N, 171.39 E) - Point	0.00	0.00	10,422.00	-7,863.28	171.21	435,411.80	622,767.10	32.196441	-103.936457
PLU 13-24 PC 105H: PE - plan hits target center - Point	0.00	0.00	10,422.00	-7,993.29	172.01	435,281.80	622,767.90	32.196084	-103.936456

XTO ENERGY

Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 105H
Company:	XTO Energy	**TVD Reference:**	RKB=30' @ 3122.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB=30' @ 3122.00usft
Site:	Poker Lake Unit 13-24 Pierce Canyon	**North Reference:**	Grid
Well:	105H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
235.00	235.00	Rustler			
302.00	302.00	Magenta Dolomite			
522.00	522.00	Top Salt			
3,095.00	3,095.00	Base Salt			
3,302.00	3,302.00	Delaware			
4,212.00	4,212.00	Cherry Canyon			
5,767.00	5,767.00	Brushy Canyon			
6,822.21	6,822.00	Basal Brushy Canyon			
7,053.07	7,052.00	Bone Spring Lime			
7,168.51	7,167.00	Avalon Sand			
7,195.61	7,194.00	Upper Avalon Shale			
7,763.77	7,760.00	Lower Avalon Shale			
7,891.25	7,887.00	1st Bone Spring Lime			
8,081.98	8,077.00	1st Bone Spring Ss			
8,398.18	8,392.00	2nd Bone Spring Lime			
8,920.16	8,912.00	2nd Bone Spring Ss			
9,191.19	9,182.00	3rd Bone Spring Lm			
10,026.02	10,012.00	3rd Bone Spring Ss			
10,367.27	10,292.00	Red Hills SS			
10,532.39	10,377.00	Wolfcamp			
10,609.18	10,402.00	Wolfcamp X			
10,761.06	10,422.00	LP			

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 13-24 PC 105H
LOCATION:	Sec 13-24S-29E-NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☑ Unit

Break Testing	◉ Yes	○ No

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 490 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

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

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

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

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

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

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

b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

BOPE Break Testing Variance (Note: For 5M BOPE or less)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required.
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

GENERAL REQUIREMENTS

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

a. Spudding well (minimum of 24 hours)

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

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement

program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

Approval Date: 11/17/2022

HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H_2S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = I	2 ppm	N/A	1000 ppm

Contacting Authorities

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

CARLSBAD OFFICE – EDDY & LEA COUNTIES

3104 E. Greene St., Carlsbad, NM 88220
Carlsbad, NM 575-887-7329

XTO PERSONNEL:

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

SHERIFF DEPARTMENTS:

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

NEW MEXICO STATE POLICE: 575-392-5588

FIRE DEPARTMENTS: 911

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

HOSPITALS: 911

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

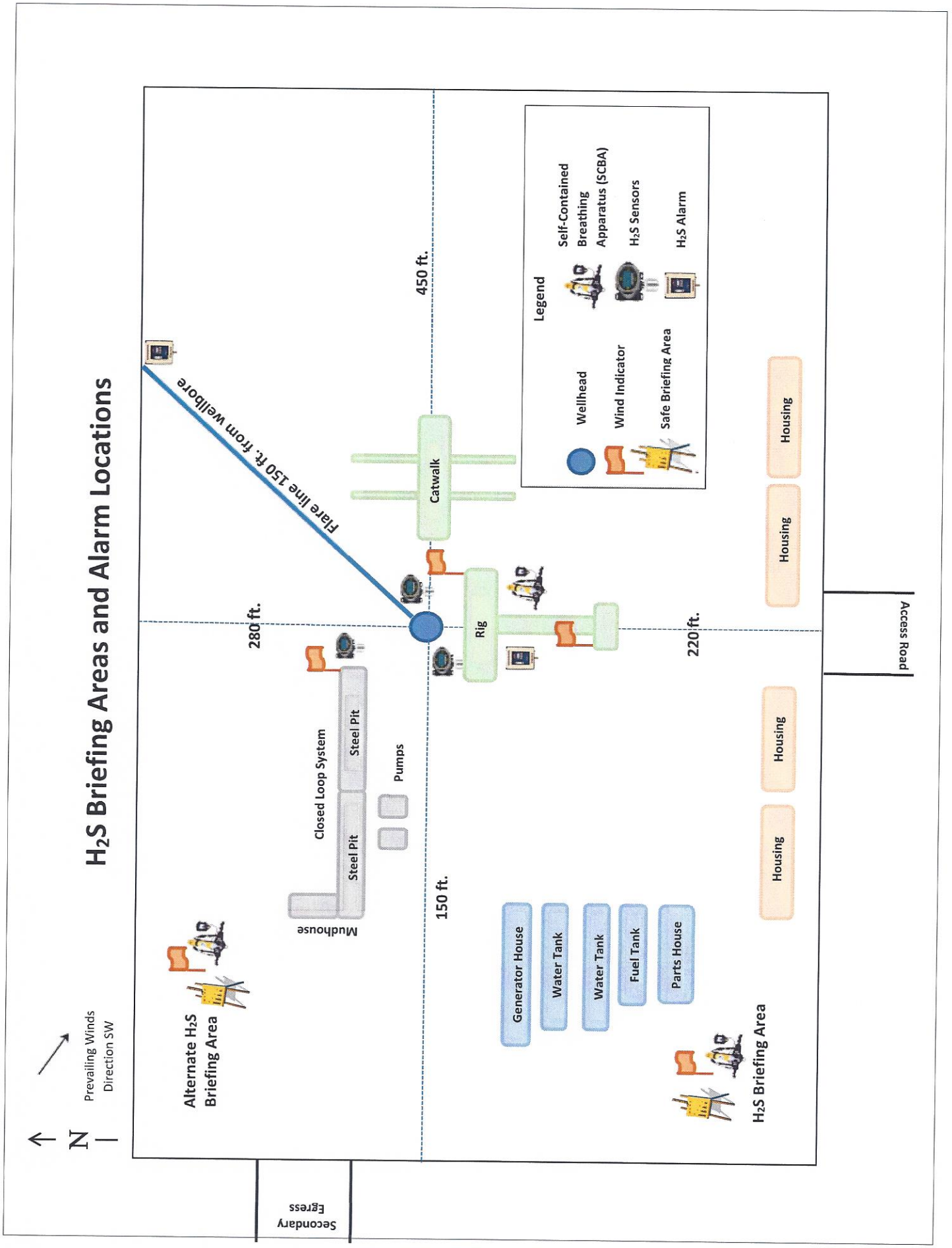
AGENT NOTIFICATIONS:

For Lea County:

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

For Eddy County:

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


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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

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

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

Waste type: GARBAGE

Waste content description: Garbage, junk and non-flammable waste materials

Amount of waste: 250 pounds

Waste disposal frequency : Weekly

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

Safe containmant attachment:

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

Disposal location description: A licensed 3rd party vendor will be contracted to haul and safely dispose of garbage, junk and non-flammable waste materials.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

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

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 13-24 PC **Well Number:** 105H

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

PLU_13_24_PC_105H_Layout_20201016121616.pdf

Comments: There are 4 multi-well pads in the Poker Lake Unit 13 PC lease anticipated. This will allow enough space for cuts and fills, topsoil storage, and storm water control. Interim reclamation of these pads is anticipated after the drilling and completion of all wells on the pad. Well site layouts for all pads are attached. From West to East: 1. Pad 1 is a 6-well pad expected to be 600x600. 2. Pad 2 is a 6-well pad expected to be 600x600. 3. Pad 3 is a 6-well pad expected to be 600x600. 4. Pad 4 is a 6-well pad expected to be 600x600.

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: POKER LAKE UNIT 13 PC

Multiple Well Pad Number: 1

Recontouring

PLU_13_PC_IR1_Dia_20201016121729.pdf

PLU_13_PC_IR2_Dia_20201016121737.pdf

PLU_13_PC_IR3_Dia_20201016121749.pdf

PLU_13_PC_IR4_Dia_20201016121800.pdf

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 187903
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Will require a administrative order for non-standard location prior to placing the well on production	2/27/2023
kpickford	Will require a name change complying with OCD policy prior to putting the well into production.	2/27/2023
kpickford	Notify OCD 24 hours prior to casing & cement	2/27/2023
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	2/27/2023
kpickford	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	2/27/2023
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	2/27/2023
kpickford	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	2/27/2023