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.
NMLC0061705B

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.
NMNM 071016X

8. Lease Name and Well No.
POKER LAKE UNIT 17 TWR
107H

2. Name of Operator
XTO PERMIAN OPERATING LLC

9. API Well No.
3001547082

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
WELCH/null

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NENE / 95 FNL / 785 FEL / LAT 32.209822 / LONG -103.793833
At proposed prod. zone SESE / 220 FSL / 660 FEL / LAT 32.181651 / LONG -103.793389

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 20/T24S/R31E/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
1730.31

17. Spacing Unit dedicated to this well
640.0

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

19. Proposed Depth
11628 feet / 21984 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3525 feet

22. Approximate date work will start*
05/01/2020

23. Estimated duration
45 days

24. Attachments

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

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

25. Signature
(Electronic Submission)

Name *(Printed/Typed)*
Kelly Kardos / Ph: (432) 682-8873

Date
12/27/2019

Title
Regulatory Coordinator

Approved by *(Signature)*
(Electronic Submission)

Name *(Printed/Typed)*
Cody Layton / Ph: (575) 234-5959

Date
05/05/2020

Title
Assistant Field Manager Lands & Minerals

Office
Carlsbad Field Office

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

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

Entered 05/06/2020 - KMS NMOCD

APPROVED WITH CONDITIONS

Approval Date: 05/05/2020

(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- 47082	98220	PURPLE SAGE; WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
325469	POKER LAKE UNIT 17 TWR	107H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,525'

[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
A	20	24 S	31 E		95	NORTH	785	EAST	EDDY

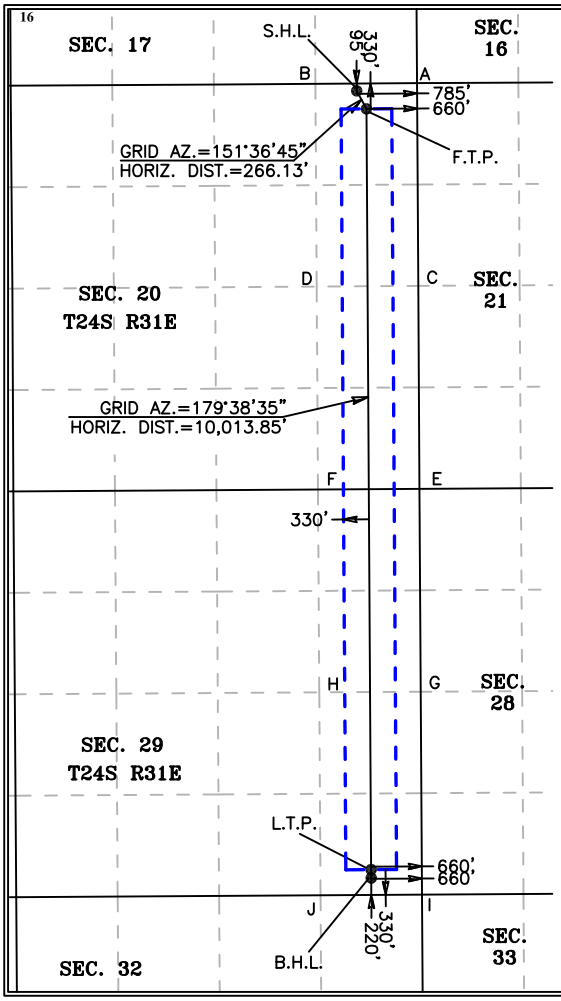
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	24 S	31 E		220	SOUTH	660	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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.

[16]



GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION	GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION
Y= 440,427.3	Y= 440,486.1
X= 667,011.1	X= 708,195.2
LAT.= 32.209699°N	LAT.= 32.209822°N
LONG.= 103.793349°W	LONG.= 103.793833°W

FIRST TAKE POINT NAD 27 NME	FIRST TAKE POINT NAD 83 NME
Y= 440,193.2	Y= 440,252.0
X= 667,137.7	X= 708,321.8
LAT.= 32.209053°N	LAT.= 32.209177°N
LONG.= 103.792944°W	LONG.= 103.793428°W

CORNER COORDINATES TABLE
NAD 27 NME

A – Y= 440,527.6 N,	X= 667,795.6 E	
B – Y= 440,518.8 N,	X= 666,473.4 E	
C – Y= 437,889.0 N,	X= 667,812.0 E	
D – Y= 437,879.7 N,	X= 666,490.0 E	
E – Y= 435,246.1 N,	X= 667,828.0 E	
F – Y= 435,238.0 N,	X= 666,506.6 E	
G – Y= 432,605.0 N,	X= 667,844.5 E	
H – Y= 432,596.9 N,	X= 666,523.3 E	
I – Y= 429,963.9 N,	X= 667,861.0 E	
J – Y= 429,955.8 N,	X= 666,540.2 E	

CORNER COORDINATES TABLE
NAD 83 NME

A – Y= 440,586.4 N,	X= 708,979.7 E	
B – Y= 440,577.6 N,	X= 707,657.5 E	
C – Y= 437,947.7 N,	X= 708,996.2 E	
D – Y= 437,938.4 N,	X= 707,674.2 E	
E – Y= 435,304.7 N,	X= 709,012.3 E	
F – Y= 435,296.6 N,	X= 707,690.8 E	
G – Y= 432,663.6 N,	X= 709,028.9 E	
H – Y= 432,655.5 N,	X= 707,707.7 E	
I – Y= 430,022.4 N,	X= 709,045.5 E	
J – Y= 430,014.3 N,	X= 707,724.7 E	

LAST TAKE POINT NAD 27 NME	LAST TAKE POINT NAD 83 NME
Y= 430,289.9	Y= 430,348.4
X= 667,199.0	X= 708,383.5
LAT.= 32.181829°N	LAT.= 32.181953°N
LONG.= 103.792907°W	LONG.= 103.793389°W

BOTTOM HOLE LOCATION NAD 27 NME	BOTTOM HOLE LOCATION NAD 83 NME
Y= 430,179.9	Y= 430,238.4
X= 667,199.7	X= 708,384.2
LAT.= 32.181527°N	LAT.= 32.181651°N
LONG.= 103.792906°W	LONG.= 103.793389°W

[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.

Kelly Kardos — 12/12/19
Signature — Date

Kelly Kardos
Printed Name

kelly_kardos@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.

8-27-2019
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — LM — 2019030732

P:\PROJECTS\2019\2019030735-XTO-POKER_LAKE_UNIT_17_TWR_107H-EDDY\DWG\2019030735-XTO-POKER_LAKE_UNIT_17_TWIN_WELL_RANCH_107H_C-102.dwg

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
XTO PERMIAN OPERATING, LLC	Poker Lake Unit 17 TWR	107H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	20	24S	31E		95	North	785	EAST	Eddy

Latitude	Longitude	NAD
32.209822	-103.793833	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	20	24S	31E		330	North	660	EAST	Eddy

Latitude	Longitude	NAD
32.209177	-103.793428	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	29	24S	31E		330	South	660	EAST	Eddy

Latitude	Longitude	NAD
32.181935	-103.793389	83

Is this well the defining well for the Horizontal Spacing Unit? [N]

Is this well an infill well? [Y]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-015-46656

Operator Name:	Property Name:	Well Number
XTO PERMIAN OPERATING, LLC	POKER LAKE UNIT 17 TWR	127H

KZ 06/29/2018

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO Permian Operating LLC
LEASE NO.: NMLC0061705B
LOCATION: Section 20, T.24 S., R.31 E., NMPM
COUNTY: Eddy County, New Mexico

Well Pad 1
Poker Lake Unit 17 TWR 702H
Surface Hole Location: 318 FNL' FNL & 783' FWL, Section 20, T. 24 S., R. 31 E.
Bottom Hole Location: 2220' FSL & 1170' FWL, Section 29, T. 24 S, R 31 E.

Well Pad 2
Poker Lake Unit 17 TWR 704H
Surface Hole Location: 317' FNL & 2273' FWL, Section 20, T. 24 S., R. 31 E.
Bottom Hole Location: 220' FSL & 2430 FW, Section 29, T. 24 S, R 31 E.

Well Pad 3
Poker Lake Unit 17 TWR 706H
Surface Hole Location: 75' FNL & 1613' FEL, Section 20, T. 24 S., R. 31 E.
Bottom Hole Location: 220' FSL & 1320' FEL, Section 29, T. 24 S, R 31 E.

Well Pad 4
Poker Lake Unit 17 TWR 107H
Surface Hole Location: 95' FNL & 7850' FEL, Section 20, T. 24 S., R. 31 E.
Bottom Hole Location: 220' FSL & 660' FEL, Section 29, T. 24 S, R 31 E.

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Well Pads
Roads

☐ **Road Section Diagram**

☐ **Production (Post Drilling)**

Well Structures & Facilities
Surface Pipelines
Buried Pipelines
Electric Lines

☐ **Interim Reclamation**

☐ **Final Abandonment & Reclamation**

GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

IV. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

Hydrology:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to

water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

V. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which

creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

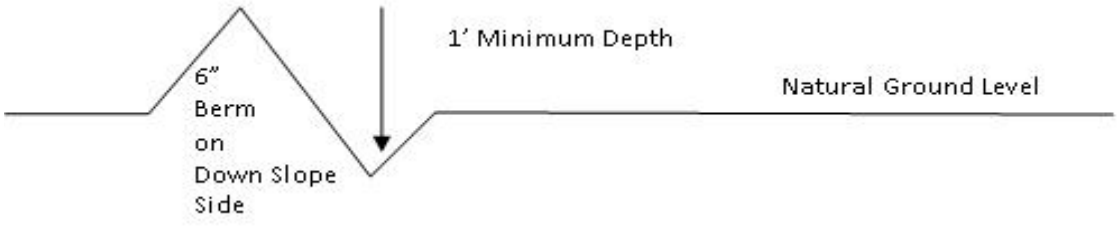
Ditching
Ditching shall be required on both sides of the road.

Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Cattle guards
An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement
Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access
Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

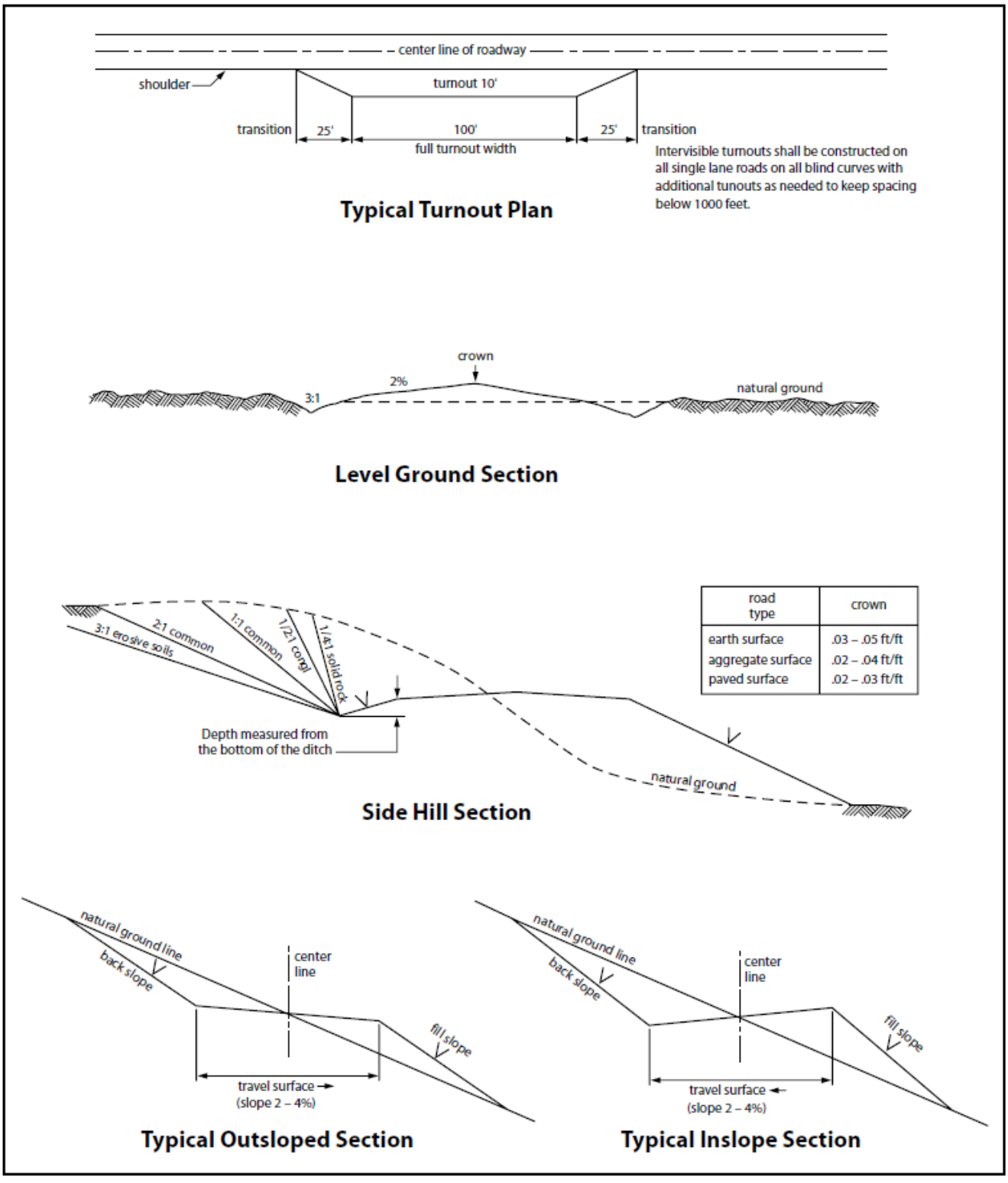


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VI. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

VIII. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 17 TWR 107H
LOCATION:	Sec 20-24S-31E-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

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 18 5/8 inch surface casing shall be set at approximately 900 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 **13-3/8** inch intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

3. The minimum required fill of cement behind the **9-5/8** 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 should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. 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.

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) 393-3612

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.

APD ID: 10400052837 **Submission Date:** 12/27/2019

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

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 Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
620490	PERMIAN	3525	0	0	OTHER : Quaternary	NONE	N
620481	RUSTLER	2917	608	609	SILTSTONE	USEABLE WATER	N
620482	TOP SALT	2547	978	978	SALT	OTHER : Produced Water	N
620483	BASE OF SALT	-625	4150	4150	SALT	OTHER : Produced Water	N
620479	DELAWARE	-823	4348	4348	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
620480	BONE SPRING	-4643	8168	8168	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
620494	WOLFCAMP	-8103	11628	11628	SHALE	NATURAL GAS, OIL, OTHER : Produced Water	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 11628

Equipment: Once the permanent WH is installed on the 13-3/8 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 4576 psi.
Requesting Variance? YES

Variance request: XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint. 18-5/8" Collapse analyzed using 75% evacuation. Casing to be filled while running. · 13-3/8" & 9-5/8" 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 WELLHEAD: Permanent Wellhead – GE RSH Multibowl System · 18-5/8" SOW bottom x 21-1/4" 2M top flange. A. Starting Head: 13-5/8” 5M top flange x 13-3/8” SOW bottom B. Tubing Head: 13-5/8” 5M bottom flange x 7-1/16” 10M top flange 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. 13-3/8" & 9-5/8" Collapse analyzed using 50% evacuation based on regional experience. 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).
Testing Procedure: All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8” 5M bradenhead and flange, the BOP test will be limited to 5000 psi. Since a multibowl system will be used, subsequent BOP pressure tests will be performed as necessary based on required testing schedule (i.e., at least every 30 days). 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.

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

Choke Diagram Attachment:

2M3MCM_20191227113259.pdf

5MCM_20191227113317.pdf

10MCM_20191227113332.pdf

BOP Diagram Attachment:

2MBOP_20191227113346.pdf

5MBOP_20191227113401.pdf

5M10M_BOP_20191227113414.pdf

Multibowl_Diagram_13.375_x_9.625_x_5.5_20191227113438.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	24	18.625	NEW	API	N	0	950	0	950	3525	2575	950	J-55	87.5	ST&C	1.9	1.74	DRY	9.07	DRY	9.07
2	INTERMEDIATE	17.5	13.375	NEW	API	N	0	4170	0	4170		-645	4170	J-55	68	ST&C	1.49	1.13	DRY	2.38	DRY	2.38
3	INTERMEDIATE	12.25	9.625	NEW	API	N	0	10940	0	10940		-7415	10940	HCL-80	40	LT&C	1.36	1.31	DRY	1.91	DRY	1.91
4	PRODUCTION	8.75	5.5	NEW	API	N	0	21984	0	11628		-8103	21984	P-110	20	BUTT	1.59	1.33	DRY	2.07	DRY	2.07

Casing Attachments

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_17_TWR_107H_Csg_20191227113856.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_17_TWR_107H_Csg_20191227113932.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_17_TWR_107H_Csg_20191227113824.pdf

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

Casing Attachments

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_17_TWR_107H_Csg_20191227114021.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	950	2870	1.87	12.9	5366.9	100	EconoCemt-HLTRRC	None
SURFACE	Tail				300	1.35	14.8	405	100	HalCem-C	2% CaCl
INTERMEDIATE	Lead		0	4170	2870	1.87	12.9	5395.6	100	EconoCem-HLTRRC	none
INTERMEDIATE	Tail		3870		300	1.35	14.8	405	100	Halcem-C	2% CaCl
INTERMEDIATE	Lead	4270	4270	10940	1250	1.88	12.9	2350	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				230	1.33	14.8	305.9	100	Halcem-C	2%CaCl
INTERMEDIATE	Lead		0	10940	1250	1.88	12.6	2350	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				230	1.33	14.8	305.9	100	Halcem-C	2% CaCl
PRODUCTION	Lead		0	21984	2630	1.61	13.2	4234.3	30	VersaCem	None

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

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
10940	11628	OIL-BASED MUD	10.5	12							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
4170	10940	OTHER : FW / Cut Brine	8.7	10							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
0	950	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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

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
											as a closed loop system
950	4170	OTHER : Brine	9.8	10.2							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:

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

Coring operation description for the well:

No coring will take place on this well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7240 **Anticipated Surface Pressure:** 4681

Anticipated Bottom Hole Temperature(F): 165

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 attachment:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR **Well Number:** 107H

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

PLU_17_TWR_H2S_Plan_20191227114500.pdf

PLU_17_TWR_H2S_Dia_Pad_4E_20191227114528.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU_17_TWR_107H_DD_20191227114609.pdf

Other proposed operations facets description:

The surface fresh water sands will be protected by setting 18-5/8 inch casing @ 950' (28' above the salt) and circulating cement back to surface. The salt will be isolated by setting 13-3/8 inch casing at 4170' and circulating cement to surface. 9-5/8 inch intermediate casing will be set at 10940'. An 8-3/4 inch curve and 8-1/2 inch lateral hole will be drilled to TD, where 5-1/2 inch casing will be set and cemented back up to the 9-5/8 inch casing shoe.

Other proposed operations facets attachment:

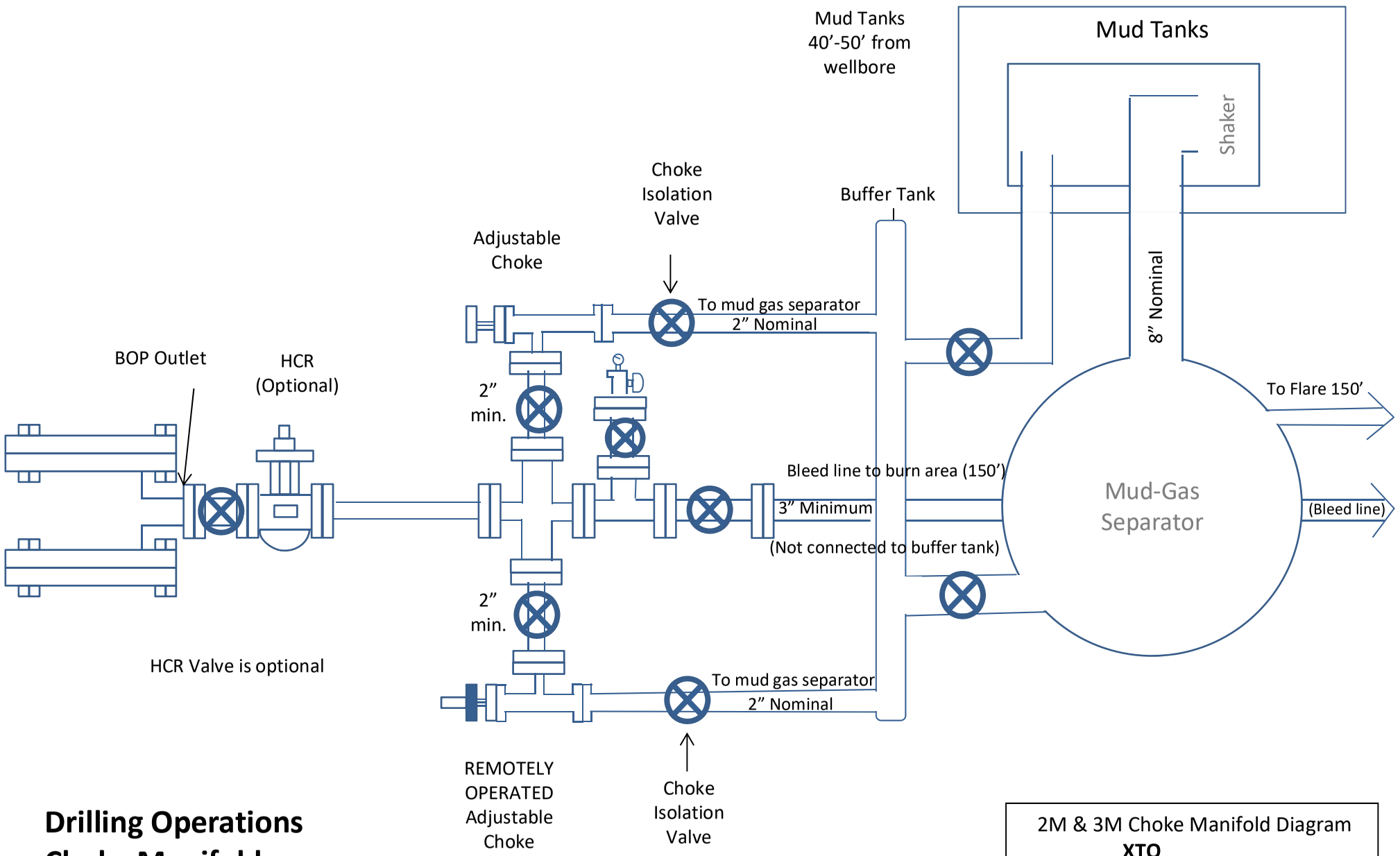
PLU_17_TWR_GCPE2_20191227114720.pdf

PLU_17_TWR_GCPW2_20191227114732.pdf

Other Variance attachment:

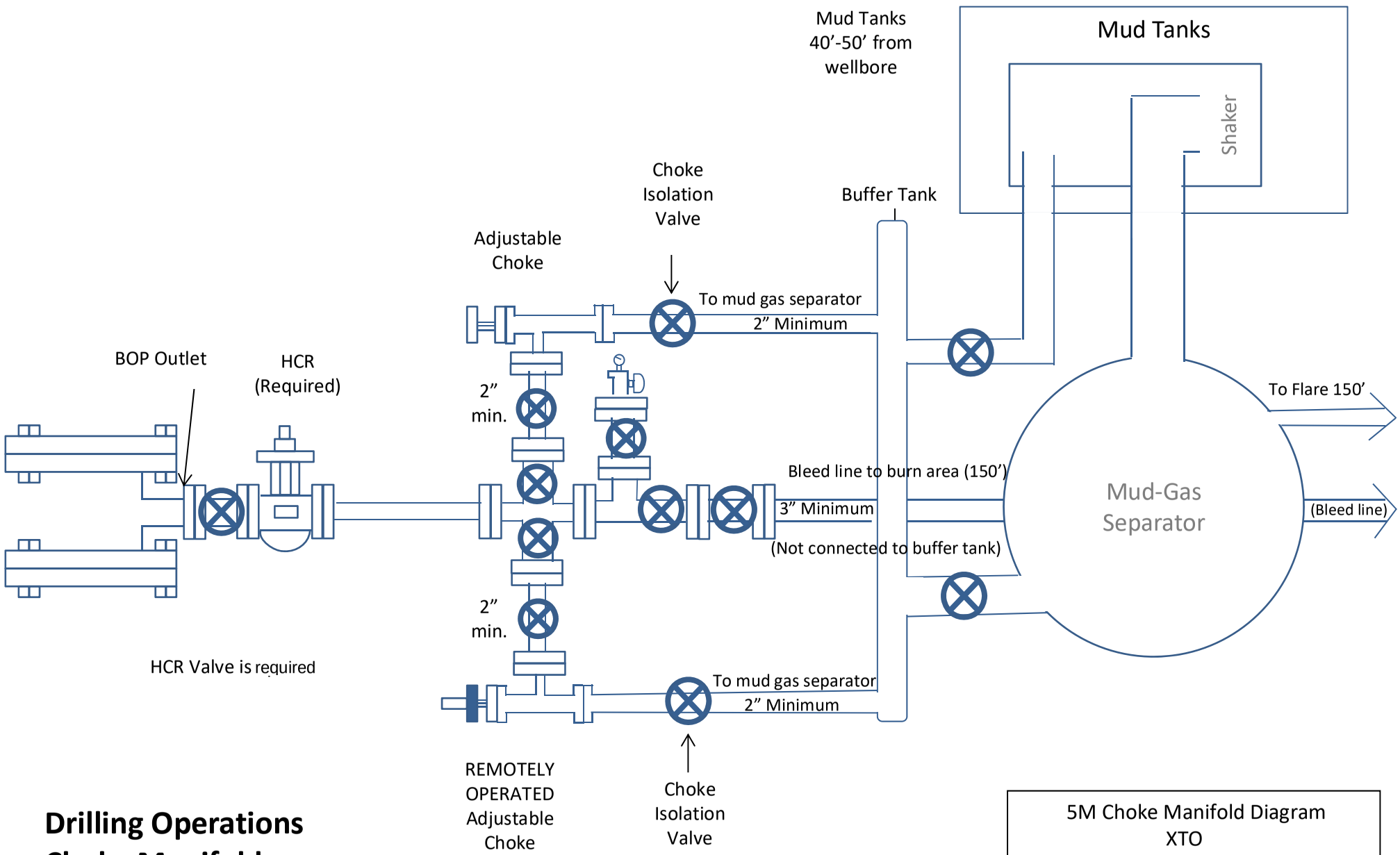
PLU_17_TWR_FH_20191227114750.pdf

Wild_Well_Control_Plan_20191227114821.pdf



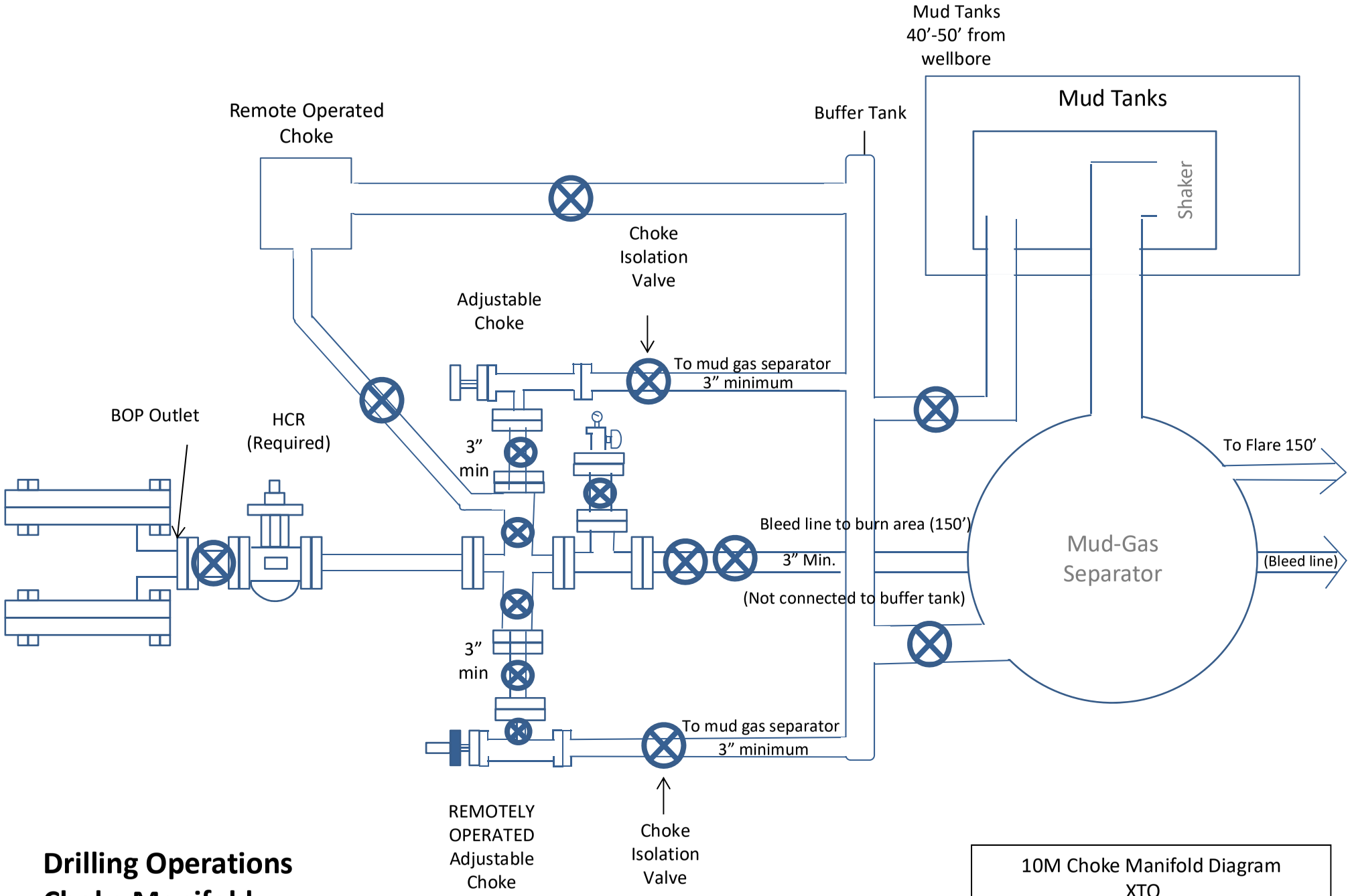
Drilling Operations
Choke Manifold
2M & 3M Service

2M & 3M Choke Manifold Diagram
XTO



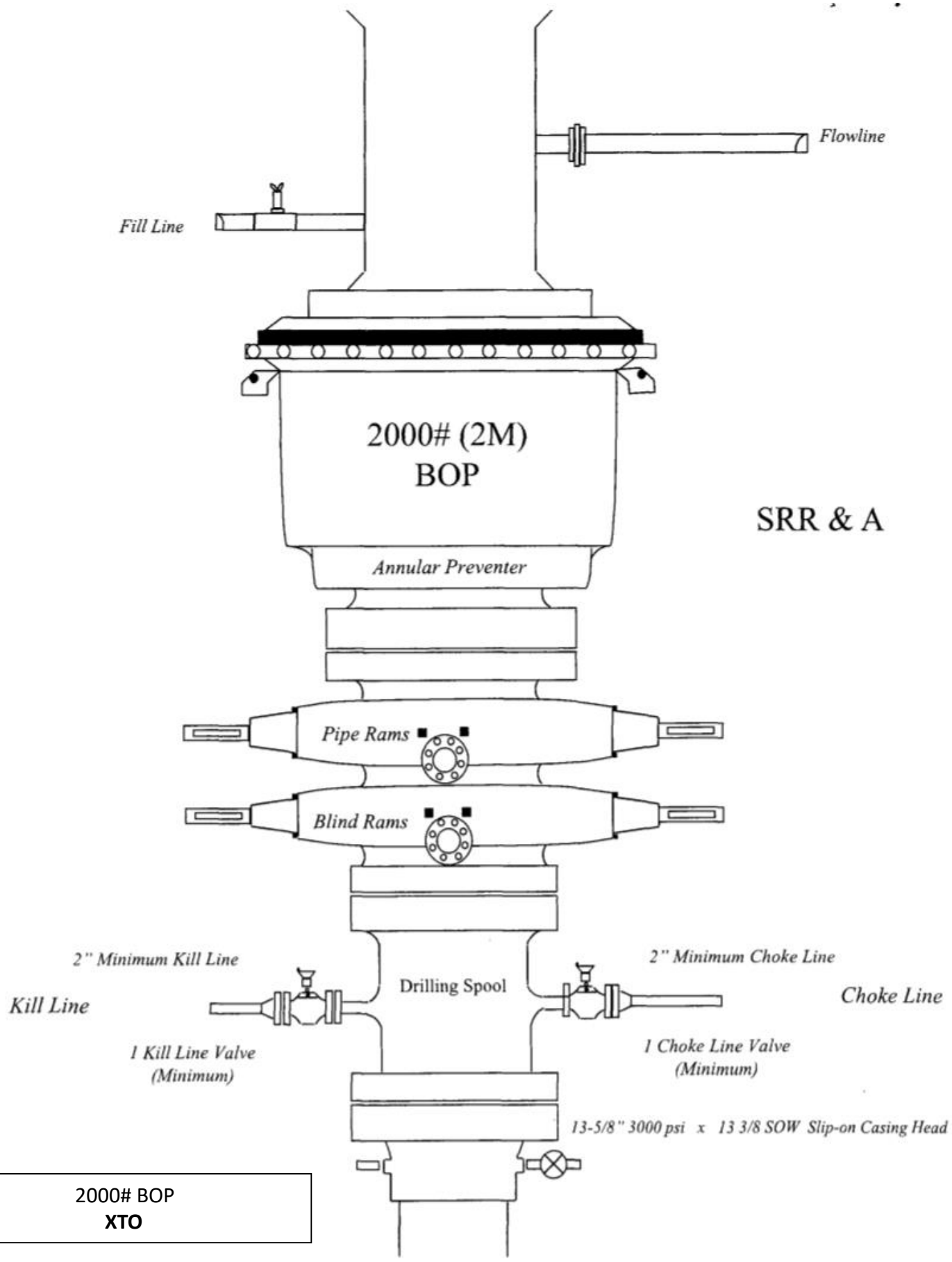
Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO

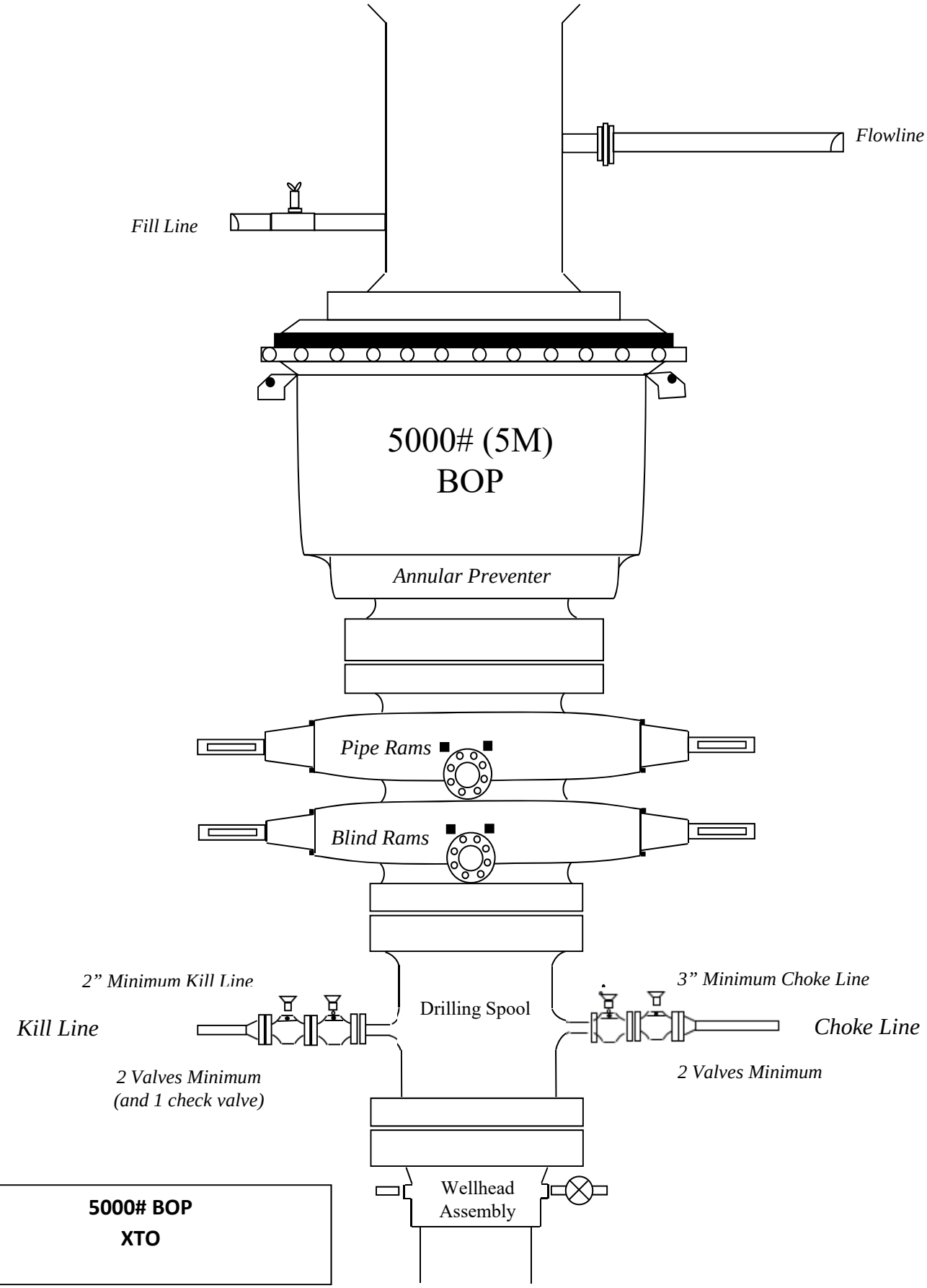


Drilling Operations
Choke Manifold
10M Service

10M Choke Manifold Diagram
XTO

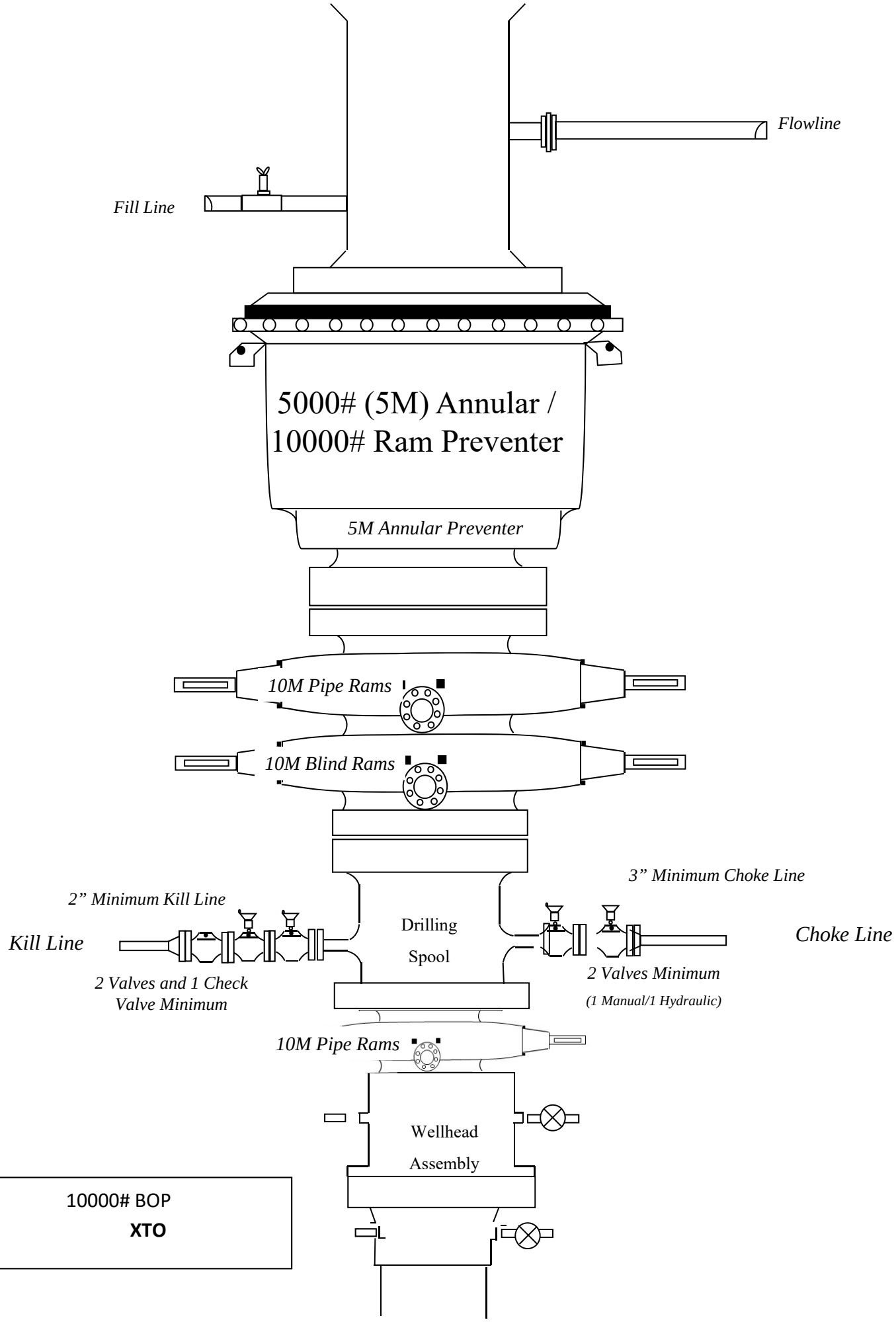

Flowline
Fill Line
2000# (2M)
BOP
SRR & A
Annular Preventer
Pipe Rams
Blind Rams
2" Minimum Kill Line
2" Minimum Choke Line
Drilling Spool
Kill Line
Choke Line
1 Kill Line Valve
(Minimum)
1 Choke Line Valve
(Minimum)
13-5/8" 3000 psi x 13 3/8 SOW Slip-on Casing Head

2000# BOP
XTO


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

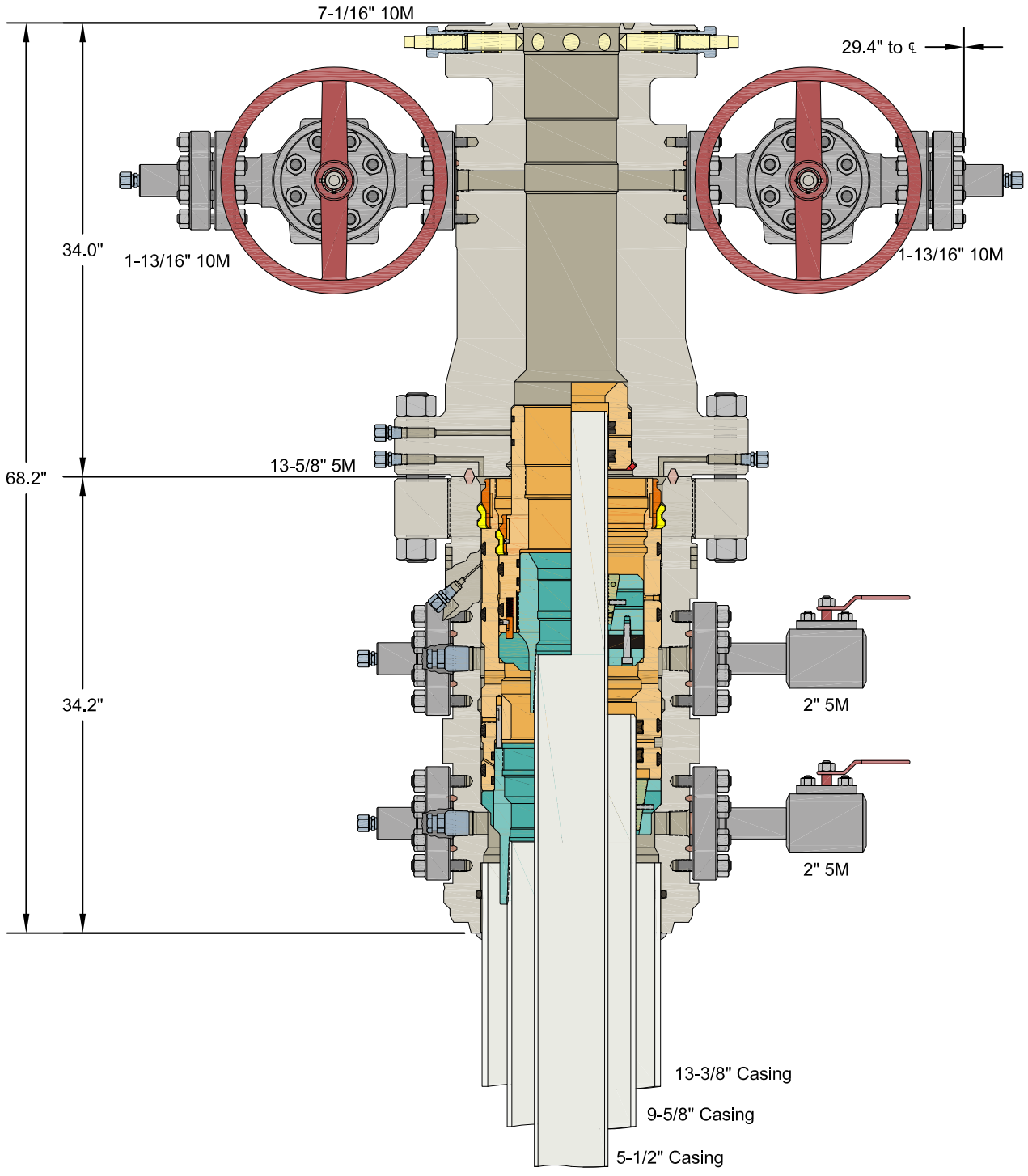
XTO



10000# BOP

XTO

GE Oil & Gas



ALL DIMENSIONS ARE APPROXIMATE

XTO ENERGY, INC.

13-3/8" x 9-5/8" x 5-1/2" 10M RSH-2 Wellhead Assembly, With T-EBS-F Tubing Head

DRAWN	VJK	16FEB17
APPRV	KN	16FEB17

FOR REFERENCE ONLY
DRAWING NO. 10012842

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
24"	0' – 950'	18-5/8"	87.5	STC	J-55	New	1.74	1.90	9.07
17-1/2"	0' – 4170'	13-3/8"	68	STC	J-55	New	1.13	1.49	2.38
12-1/4"	0' – 10940'	9-5/8"	40	LTC	HCL-80	New	1.31	1.36	1.91
8-3/4"	0' – 21984'	5-1/2"	20	BTC	P-110	New	1.33	1.59	2.07

· XTO requests to not utilize centralizers in the curve and lateral

- 18-5/8" Collapse analyzed using 75% evacuation. Casing to be filled while running.
- 13-3/8" & 9-5/8" 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: 13-5/8" 5M top flange x 13-3/8" SOW bottom

B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange

GENERAL OFFICES – MIDLAND, TEXAS

BOPCO, L.P.

6401 Holiday Hill Road
Midland, Tx 79707
(432) 683-2277

HYDROGEN SULFIDE (H_2S) 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 = l**	**10 ppm**	**100 ppm/hr**	**600 ppm**
Sulfur Dioxide	**SO_2**	**2.21 Air = l**	**2 ppm**	**N/A**	**1000 ppm**

Contacting Authorities

BOPCO, L.P. 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

BOPCO, L.P. 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:

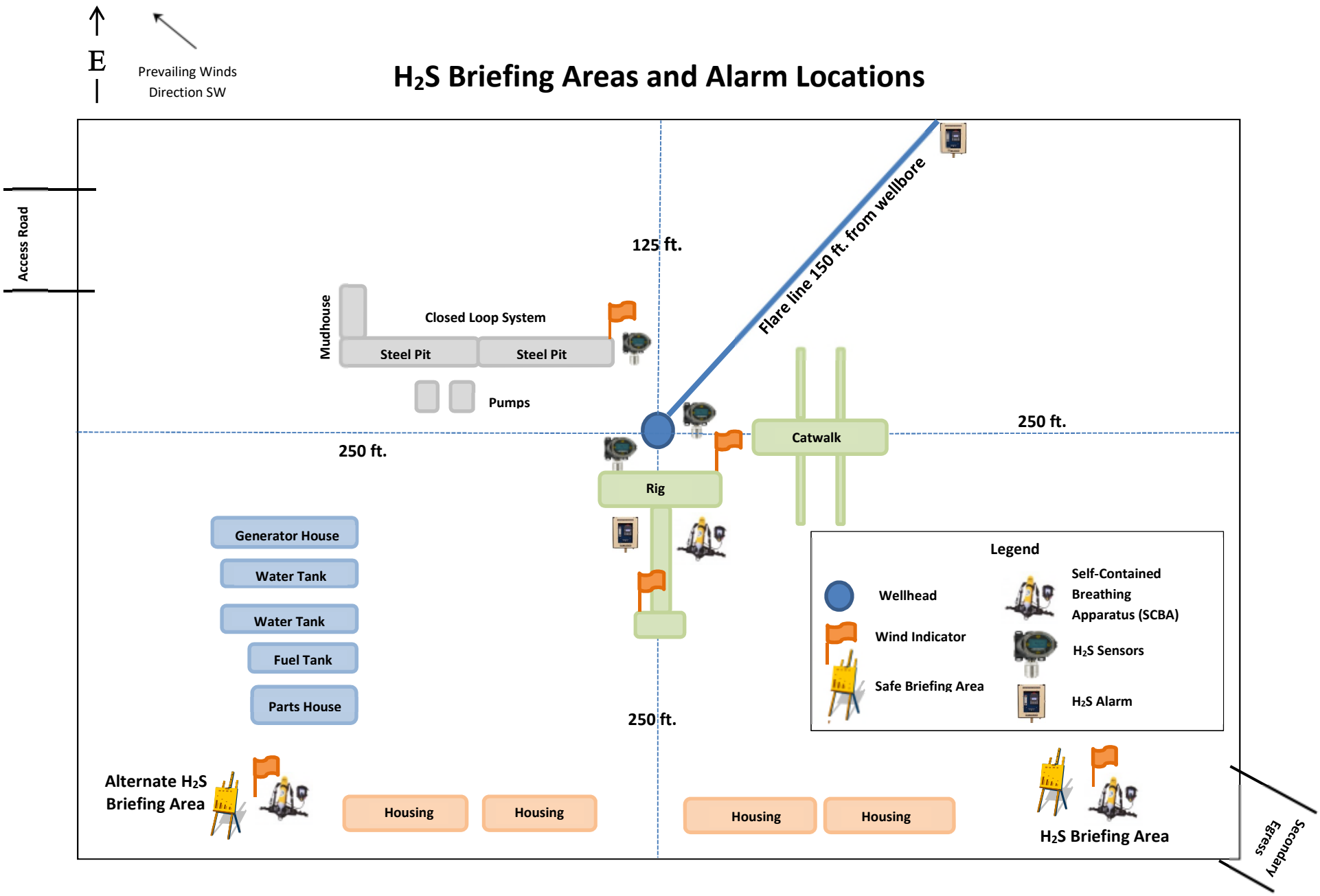
For Lea County:

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

H_2S Briefing Areas and Alarm Locations



XTO Energy

Eddy County, NM (NAD-27)
Poker Lake Unit 17 TWR
#107H

OH

Plan: PERMIT

Standard Planning Report

13 November, 2019

Project: Eddy County, NM (NAD-27)
Site: Poker Lake Unit 17 TWR
Well: #107H
Wellbore: OH
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: #107H

Rig Name:
RKB = 23' @ 3548.00usft
Ground Level: 3525.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	440427.30	667011.10	32.2096986	-103.7933495

DESIGN TARGET DETAILS

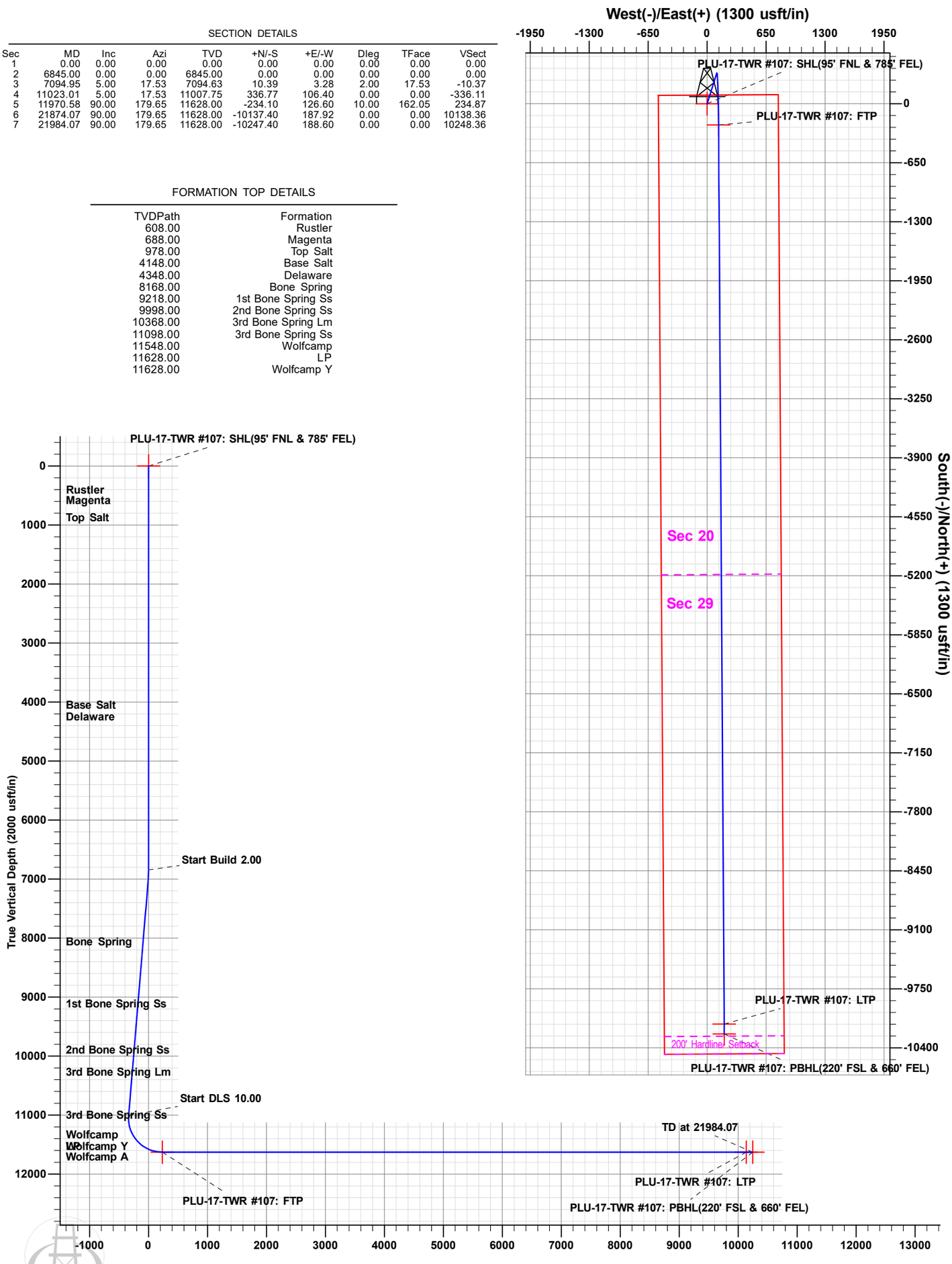
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PLU-17-TWR #107: SHL(95' FNL & 785' FEL)	0.00	0.00	0.00	440427.30	667011.10	32.2096986	-103.7933495	Point
PLU-17-TWR #107: FTP	11628.00	-234.10	126.60	440193.20	667137.70	32.2090533	-103.7929440	Point
PLU-17-TWR #107: LTP	11628.00	-10137.40	187.90	430289.90	667199.00	32.1818294	-103.7929068	Point
PLU-17-TWR #107: PBHL(220' FSL & 660' FEL)	11628.00	-10247.40	188.60	430179.90	667199.70	32.1815270	-103.7929063	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	6845.00	0.00	0.00	6845.00	0.00	0.00	0.00	0.00	0.00
3	7094.95	5.00	17.53	7094.63	10.39	3.28	2.00	17.53	-10.37
4	11023.01	5.00	17.53	11007.75	336.77	106.40	0.00	0.00	-336.11
5	11970.58	90.00	179.65	11628.00	-234.10	126.60	10.00	162.05	234.87
6	21874.07	90.00	179.65	11628.00	-10137.40	187.92	0.00	0.00	10138.36
7	21984.07	90.00	179.65	11628.00	-10247.40	188.60	0.00	0.00	10248.36

FORMATION TOP DETAILS

TVDPath	Formation
608.00	Rustler
688.00	Magenta
978.00	Top Salt
4148.00	Base Salt
4348.00	Delaware
8168.00	Bone Spring
9218.00	1st Bone Spring Ss
9998.00	2nd Bone Spring Ss
10368.00	3rd Bone Spring Lm
11098.00	3rd Bone Spring Ss
11548.00	Wolfcamp
11628.00	LP
11628.00	Wolfcamp Y



Plan: PERMIT (#107H/OH)

Created By: Prototype Well Planning, LLC Date: 20:01, November 13 2019

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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		

Site Poker Lake Unit 17 TWR

Site Position:		**Northing:**	440,828.50 usft	**Latitude:**	32.2108531
From:	Map	**Easting:**	663,224.90 usft	**Longitude:**	-103.8055843
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.28 °

Well #107H

Well Position	**+N/-S**	-401.20 usft	**Northing:**	440,427.30 usft	**Latitude:**	32.2096986
	+E/-W	3,786.20 usft	**Easting:**	667,011.10 usft	**Longitude:**	-103.7933495
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,525.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/13/19	6.80	59.98	47,658

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	179.65

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	
6,845.00	0.00	0.00	6,845.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,094.95	5.00	17.53	7,094.63	10.39	3.28	2.00	2.00	0.00	17.53	
11,023.01	5.00	17.53	11,007.75	336.77	106.40	0.00	0.00	0.00	0.00	
11,970.58	90.00	179.65	11,628.00	-234.10	126.60	10.00	8.97	17.11	162.05	PLU-17-TWR #107
21,874.07	90.00	179.65	11,628.00	-10,137.40	187.92	0.00	0.00	0.00	0.00	PLU-17-TWR #107
21,984.07	90.00	179.65	11,628.00	-10,247.40	188.60	0.00	0.00	0.00	0.00	PLU-17-TWR #107

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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
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
608.00	0.00	0.00	608.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
688.00	0.00	0.00	688.00	0.00	0.00	0.00	0.00	0.00	0.00
Magenta									
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
978.00	0.00	0.00	978.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
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
3,100.00	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
3,400.00	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
4,148.00	0.00	0.00	4,148.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,348.00	0.00	0.00	4,348.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
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
5,800.00	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
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,845.00	0.00	0.00	6,845.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	1.10	17.53	6,900.00	0.50	0.16	-0.50	2.00	2.00	0.00
7,000.00	3.10	17.53	6,999.92	4.00	1.26	-3.99	2.00	2.00	0.00
7,094.95	5.00	17.53	7,094.63	10.39	3.28	-10.37	2.00	2.00	0.00
7,100.00	5.00	17.53	7,099.66	10.81	3.42	-10.79	0.00	0.00	0.00
7,200.00	5.00	17.53	7,199.28	19.12	6.04	-19.08	0.00	0.00	0.00
7,300.00	5.00	17.53	7,298.90	27.43	8.67	-27.37	0.00	0.00	0.00
7,400.00	5.00	17.53	7,398.52	35.74	11.29	-35.67	0.00	0.00	0.00
7,500.00	5.00	17.53	7,498.14	44.05	13.92	-43.96	0.00	0.00	0.00
7,600.00	5.00	17.53	7,597.76	52.35	16.54	-52.25	0.00	0.00	0.00
7,700.00	5.00	17.53	7,697.38	60.66	19.17	-60.55	0.00	0.00	0.00
7,800.00	5.00	17.53	7,797.00	68.97	21.79	-68.84	0.00	0.00	0.00
7,900.00	5.00	17.53	7,896.62	77.28	24.42	-77.13	0.00	0.00	0.00
8,000.00	5.00	17.53	7,996.24	85.59	27.04	-85.42	0.00	0.00	0.00
8,100.00	5.00	17.53	8,095.86	93.90	29.67	-93.72	0.00	0.00	0.00
8,172.42	5.00	17.53	8,168.00	99.92	31.57	-99.72	0.00	0.00	0.00
Bone Spring									
8,200.00	5.00	17.53	8,195.48	102.21	32.29	-102.01	0.00	0.00	0.00
8,300.00	5.00	17.53	8,295.10	110.52	34.92	-110.30	0.00	0.00	0.00
8,400.00	5.00	17.53	8,394.72	118.83	37.54	-118.59	0.00	0.00	0.00
8,500.00	5.00	17.53	8,494.34	127.14	40.17	-126.89	0.00	0.00	0.00
8,600.00	5.00	17.53	8,593.96	135.44	42.79	-135.18	0.00	0.00	0.00
8,700.00	5.00	17.53	8,693.58	143.75	45.42	-143.47	0.00	0.00	0.00
8,800.00	5.00	17.53	8,793.20	152.06	48.04	-151.77	0.00	0.00	0.00
8,900.00	5.00	17.53	8,892.82	160.37	50.67	-160.06	0.00	0.00	0.00
9,000.00	5.00	17.53	8,992.44	168.68	53.29	-168.35	0.00	0.00	0.00
9,100.00	5.00	17.53	9,092.06	176.99	55.92	-176.64	0.00	0.00	0.00
9,200.00	5.00	17.53	9,191.68	185.30	58.54	-184.94	0.00	0.00	0.00

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
9,226.42	5.00	17.53	9,218.00	187.49	59.24	-187.13	0.00	0.00	0.00
1st Bone Spring Ss									
9,300.00	5.00	17.53	9,291.30	193.61	61.17	-193.23	0.00	0.00	0.00
9,400.00	5.00	17.53	9,390.92	201.92	63.79	-201.52	0.00	0.00	0.00
9,500.00	5.00	17.53	9,490.54	210.22	66.42	-209.81	0.00	0.00	0.00
9,600.00	5.00	17.53	9,590.15	218.53	69.04	-218.11	0.00	0.00	0.00
9,700.00	5.00	17.53	9,689.77	226.84	71.67	-226.40	0.00	0.00	0.00
9,800.00	5.00	17.53	9,789.39	235.15	74.29	-234.69	0.00	0.00	0.00
9,900.00	5.00	17.53	9,889.01	243.46	76.92	-242.99	0.00	0.00	0.00
10,000.00	5.00	17.53	9,988.63	251.77	79.54	-251.28	0.00	0.00	0.00
10,009.40	5.00	17.53	9,998.00	252.55	79.79	-252.06	0.00	0.00	0.00
2nd Bone Spring Ss									
10,100.00	5.00	17.53	10,088.25	260.08	82.17	-259.57	0.00	0.00	0.00
10,200.00	5.00	17.53	10,187.87	268.39	84.80	-267.86	0.00	0.00	0.00
10,300.00	5.00	17.53	10,287.49	276.70	87.42	-276.16	0.00	0.00	0.00
10,380.82	5.00	17.53	10,368.00	283.41	89.54	-282.86	0.00	0.00	0.00
3rd Bone Spring Lm									
10,400.00	5.00	17.53	10,387.11	285.00	90.05	-284.45	0.00	0.00	0.00
10,500.00	5.00	17.53	10,486.73	293.31	92.67	-292.74	0.00	0.00	0.00
10,600.00	5.00	17.53	10,586.35	301.62	95.30	-301.03	0.00	0.00	0.00
10,700.00	5.00	17.53	10,685.97	309.93	97.92	-309.33	0.00	0.00	0.00
10,800.00	5.00	17.53	10,785.59	318.24	100.55	-317.62	0.00	0.00	0.00
10,900.00	5.00	17.53	10,885.21	326.55	103.17	-325.91	0.00	0.00	0.00
11,000.00	5.00	17.53	10,984.83	334.86	105.80	-334.21	0.00	0.00	0.00
11,023.01	5.00	17.53	11,007.75	336.77	106.40	-336.11	0.00	0.00	0.00
11,050.00	2.57	36.42	11,034.68	338.38	107.11	-337.72	10.00	-9.00	69.99
11,100.00	3.32	152.05	11,084.65	338.00	108.46	-337.33	10.00	1.50	231.27
11,113.39	4.55	159.91	11,098.00	337.16	108.82	-336.49	10.00	9.18	58.66
3rd Bone Spring Ss									
11,150.00	8.09	168.75	11,134.39	333.27	109.82	-332.59	10.00	9.67	24.15
11,200.00	13.03	172.98	11,183.53	324.22	111.20	-323.53	10.00	9.89	8.46
11,250.00	18.01	174.90	11,231.69	310.92	112.58	-310.22	10.00	9.95	3.85
11,300.00	22.99	176.01	11,278.51	293.47	113.94	-292.77	10.00	9.97	2.22
11,350.00	27.98	176.75	11,323.63	272.00	115.29	-271.29	10.00	9.98	1.46
11,400.00	32.97	177.27	11,366.71	246.69	116.60	-245.97	10.00	9.99	1.05
11,450.00	37.97	177.67	11,407.41	217.71	117.88	-216.98	10.00	9.99	0.80
11,500.00	42.96	177.99	11,445.44	185.29	119.10	-184.56	10.00	9.99	0.64
11,550.00	47.96	178.26	11,480.50	149.68	120.26	-148.94	10.00	9.99	0.53
11,600.00	52.96	178.48	11,512.32	111.15	121.35	-110.41	10.00	9.99	0.45
11,650.00	57.96	178.68	11,540.66	69.99	122.37	-69.24	10.00	9.99	0.40
11,664.11	59.37	178.73	11,548.00	57.95	122.64	-57.20	10.00	10.00	0.37
Wolfcamp									
11,700.00	62.95	178.86	11,565.31	26.52	123.30	-25.76	10.00	10.00	0.35
11,750.00	67.95	179.02	11,586.08	-18.94	124.14	19.70	10.00	10.00	0.32
11,800.00	72.95	179.17	11,602.80	-66.04	124.88	66.80	10.00	10.00	0.30
11,850.00	77.95	179.32	11,615.36	-114.41	125.52	115.18	10.00	10.00	0.29
11,900.00	82.94	179.45	11,623.66	-163.70	126.05	164.47	10.00	10.00	0.28
11,950.00	87.94	179.59	11,627.63	-213.53	126.46	214.29	10.00	10.00	0.27
11,970.58	90.00	179.65	11,628.00	-234.10	126.60	234.87	10.00	10.00	0.27
LP - Wolfcamp Y									
12,000.00	90.00	179.65	11,628.00	-263.52	126.78	264.29	0.00	0.00	0.00
12,100.00	90.00	179.65	11,628.00	-363.52	127.40	364.29	0.00	0.00	0.00
12,200.00	90.00	179.65	11,628.00	-463.52	128.02	464.29	0.00	0.00	0.00

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
12,300.00	90.00	179.65	11,628.00	-563.51	128.64	564.29	0.00	0.00	0.00
12,400.00	90.00	179.65	11,628.00	-663.51	129.26	664.29	0.00	0.00	0.00
12,500.00	90.00	179.65	11,628.00	-763.51	129.88	764.29	0.00	0.00	0.00
12,600.00	90.00	179.65	11,628.00	-863.51	130.50	864.29	0.00	0.00	0.00
12,700.00	90.00	179.65	11,628.00	-963.51	131.12	964.29	0.00	0.00	0.00
12,800.00	90.00	179.65	11,628.00	-1,063.51	131.74	1,064.29	0.00	0.00	0.00
12,900.00	90.00	179.65	11,628.00	-1,163.50	132.35	1,164.29	0.00	0.00	0.00
13,000.00	90.00	179.65	11,628.00	-1,263.50	132.97	1,264.29	0.00	0.00	0.00
13,100.00	90.00	179.65	11,628.00	-1,363.50	133.59	1,364.29	0.00	0.00	0.00
13,200.00	90.00	179.65	11,628.00	-1,463.50	134.21	1,464.29	0.00	0.00	0.00
13,300.00	90.00	179.65	11,628.00	-1,563.50	134.83	1,564.29	0.00	0.00	0.00
13,400.00	90.00	179.65	11,628.00	-1,663.49	135.45	1,664.29	0.00	0.00	0.00
13,500.00	90.00	179.65	11,628.00	-1,763.49	136.07	1,764.29	0.00	0.00	0.00
13,600.00	90.00	179.65	11,628.00	-1,863.49	136.69	1,864.29	0.00	0.00	0.00
13,700.00	90.00	179.65	11,628.00	-1,963.49	137.31	1,964.29	0.00	0.00	0.00
13,800.00	90.00	179.65	11,628.00	-2,063.49	137.93	2,064.29	0.00	0.00	0.00
13,900.00	90.00	179.65	11,628.00	-2,163.48	138.55	2,164.29	0.00	0.00	0.00
14,000.00	90.00	179.65	11,628.00	-2,263.48	139.17	2,264.29	0.00	0.00	0.00
14,100.00	90.00	179.65	11,628.00	-2,363.48	139.78	2,364.29	0.00	0.00	0.00
14,200.00	90.00	179.65	11,628.00	-2,463.48	140.40	2,464.29	0.00	0.00	0.00
14,300.00	90.00	179.65	11,628.00	-2,563.48	141.02	2,564.29	0.00	0.00	0.00
14,400.00	90.00	179.65	11,628.00	-2,663.47	141.64	2,664.29	0.00	0.00	0.00
14,500.00	90.00	179.65	11,628.00	-2,763.47	142.26	2,764.29	0.00	0.00	0.00
14,600.00	90.00	179.65	11,628.00	-2,863.47	142.88	2,864.29	0.00	0.00	0.00
14,700.00	90.00	179.65	11,628.00	-2,963.47	143.50	2,964.29	0.00	0.00	0.00
14,800.00	90.00	179.65	11,628.00	-3,063.47	144.12	3,064.29	0.00	0.00	0.00
14,900.00	90.00	179.65	11,628.00	-3,163.46	144.74	3,164.29	0.00	0.00	0.00
15,000.00	90.00	179.65	11,628.00	-3,263.46	145.36	3,264.29	0.00	0.00	0.00
15,100.00	90.00	179.65	11,628.00	-3,363.46	145.98	3,364.29	0.00	0.00	0.00
15,200.00	90.00	179.65	11,628.00	-3,463.46	146.60	3,464.29	0.00	0.00	0.00
15,300.00	90.00	179.65	11,628.00	-3,563.46	147.21	3,564.29	0.00	0.00	0.00
15,400.00	90.00	179.65	11,628.00	-3,663.46	147.83	3,664.29	0.00	0.00	0.00
15,500.00	90.00	179.65	11,628.00	-3,763.45	148.45	3,764.29	0.00	0.00	0.00
15,600.00	90.00	179.65	11,628.00	-3,863.45	149.07	3,864.29	0.00	0.00	0.00
15,700.00	90.00	179.65	11,628.00	-3,963.45	149.69	3,964.29	0.00	0.00	0.00
15,800.00	90.00	179.65	11,628.00	-4,063.45	150.31	4,064.29	0.00	0.00	0.00
15,900.00	90.00	179.65	11,628.00	-4,163.45	150.93	4,164.29	0.00	0.00	0.00
16,000.00	90.00	179.65	11,628.00	-4,263.44	151.55	4,264.29	0.00	0.00	0.00
16,100.00	90.00	179.65	11,628.00	-4,363.44	152.17	4,364.29	0.00	0.00	0.00
16,200.00	90.00	179.65	11,628.00	-4,463.44	152.79	4,464.29	0.00	0.00	0.00
16,300.00	90.00	179.65	11,628.00	-4,563.44	153.41	4,564.29	0.00	0.00	0.00
16,400.00	90.00	179.65	11,628.00	-4,663.44	154.03	4,664.29	0.00	0.00	0.00
16,500.00	90.00	179.65	11,628.00	-4,763.43	154.64	4,764.29	0.00	0.00	0.00
16,600.00	90.00	179.65	11,628.00	-4,863.43	155.26	4,864.29	0.00	0.00	0.00
16,700.00	90.00	179.65	11,628.00	-4,963.43	155.88	4,964.29	0.00	0.00	0.00
16,800.00	90.00	179.65	11,628.00	-5,063.43	156.50	5,064.29	0.00	0.00	0.00
16,900.00	90.00	179.65	11,628.00	-5,163.43	157.12	5,164.29	0.00	0.00	0.00
17,000.00	90.00	179.65	11,628.00	-5,263.42	157.74	5,264.29	0.00	0.00	0.00
17,100.00	90.00	179.65	11,628.00	-5,363.42	158.36	5,364.29	0.00	0.00	0.00
17,200.00	90.00	179.65	11,628.00	-5,463.42	158.98	5,464.29	0.00	0.00	0.00
17,300.00	90.00	179.65	11,628.00	-5,563.42	159.60	5,564.29	0.00	0.00	0.00
17,400.00	90.00	179.65	11,628.00	-5,663.42	160.22	5,664.29	0.00	0.00	0.00
17,500.00	90.00	179.65	11,628.00	-5,763.42	160.84	5,764.29	0.00	0.00	0.00
17,600.00	90.00	179.65	11,628.00	-5,863.41	161.46	5,864.29	0.00	0.00	0.00

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
17,700.00	90.00	179.65	11,628.00	-5,963.41	162.07	5,964.29	0.00	0.00	0.00
17,800.00	90.00	179.65	11,628.00	-6,063.41	162.69	6,064.29	0.00	0.00	0.00
17,900.00	90.00	179.65	11,628.00	-6,163.41	163.31	6,164.29	0.00	0.00	0.00
18,000.00	90.00	179.65	11,628.00	-6,263.41	163.93	6,264.29	0.00	0.00	0.00
18,100.00	90.00	179.65	11,628.00	-6,363.40	164.55	6,364.29	0.00	0.00	0.00
18,200.00	90.00	179.65	11,628.00	-6,463.40	165.17	6,464.29	0.00	0.00	0.00
18,300.00	90.00	179.65	11,628.00	-6,563.40	165.79	6,564.29	0.00	0.00	0.00
18,400.00	90.00	179.65	11,628.00	-6,663.40	166.41	6,664.29	0.00	0.00	0.00
18,500.00	90.00	179.65	11,628.00	-6,763.40	167.03	6,764.29	0.00	0.00	0.00
18,600.00	90.00	179.65	11,628.00	-6,863.39	167.65	6,864.29	0.00	0.00	0.00
18,700.00	90.00	179.65	11,628.00	-6,963.39	168.27	6,964.29	0.00	0.00	0.00
18,800.00	90.00	179.65	11,628.00	-7,063.39	168.89	7,064.29	0.00	0.00	0.00
18,900.00	90.00	179.65	11,628.00	-7,163.39	169.50	7,164.29	0.00	0.00	0.00
19,000.00	90.00	179.65	11,628.00	-7,263.39	170.12	7,264.29	0.00	0.00	0.00
19,100.00	90.00	179.65	11,628.00	-7,363.38	170.74	7,364.29	0.00	0.00	0.00
19,200.00	90.00	179.65	11,628.00	-7,463.38	171.36	7,464.29	0.00	0.00	0.00
19,300.00	90.00	179.65	11,628.00	-7,563.38	171.98	7,564.29	0.00	0.00	0.00
19,400.00	90.00	179.65	11,628.00	-7,663.38	172.60	7,664.29	0.00	0.00	0.00
19,500.00	90.00	179.65	11,628.00	-7,763.38	173.22	7,764.29	0.00	0.00	0.00
19,600.00	90.00	179.65	11,628.00	-7,863.38	173.84	7,864.29	0.00	0.00	0.00
19,700.00	90.00	179.65	11,628.00	-7,963.37	174.46	7,964.29	0.00	0.00	0.00
19,800.00	90.00	179.65	11,628.00	-8,063.37	175.08	8,064.29	0.00	0.00	0.00
19,900.00	90.00	179.65	11,628.00	-8,163.37	175.70	8,164.29	0.00	0.00	0.00
20,000.00	90.00	179.65	11,628.00	-8,263.37	176.32	8,264.29	0.00	0.00	0.00
20,100.00	90.00	179.65	11,628.00	-8,363.37	176.93	8,364.29	0.00	0.00	0.00
20,200.00	90.00	179.65	11,628.00	-8,463.36	177.55	8,464.29	0.00	0.00	0.00
20,300.00	90.00	179.65	11,628.00	-8,563.36	178.17	8,564.29	0.00	0.00	0.00
20,400.00	90.00	179.65	11,628.00	-8,663.36	178.79	8,664.29	0.00	0.00	0.00
20,500.00	90.00	179.65	11,628.00	-8,763.36	179.41	8,764.29	0.00	0.00	0.00
20,600.00	90.00	179.65	11,628.00	-8,863.36	180.03	8,864.29	0.00	0.00	0.00
20,700.00	90.00	179.65	11,628.00	-8,963.35	180.65	8,964.29	0.00	0.00	0.00
20,800.00	90.00	179.65	11,628.00	-9,063.35	181.27	9,064.29	0.00	0.00	0.00
20,900.00	90.00	179.65	11,628.00	-9,163.35	181.89	9,164.29	0.00	0.00	0.00
21,000.00	90.00	179.65	11,628.00	-9,263.35	182.51	9,264.29	0.00	0.00	0.00
21,100.00	90.00	179.65	11,628.00	-9,363.35	183.13	9,364.29	0.00	0.00	0.00
21,200.00	90.00	179.65	11,628.00	-9,463.34	183.75	9,464.29	0.00	0.00	0.00
21,300.00	90.00	179.65	11,628.00	-9,563.34	184.36	9,564.29	0.00	0.00	0.00
21,400.00	90.00	179.65	11,628.00	-9,663.34	184.98	9,664.29	0.00	0.00	0.00
21,500.00	90.00	179.65	11,628.00	-9,763.34	185.60	9,764.29	0.00	0.00	0.00
21,600.00	90.00	179.65	11,628.00	-9,863.34	186.22	9,864.29	0.00	0.00	0.00
21,700.00	90.00	179.65	11,628.00	-9,963.33	186.84	9,964.29	0.00	0.00	0.00
21,800.00	90.00	179.65	11,628.00	-10,063.33	187.46	10,064.29	0.00	0.00	0.00
21,874.07	90.00	179.65	11,628.00	-10,137.40	187.92	10,138.36	0.00	0.00	0.00
21,900.00	90.00	179.65	11,628.00	-10,163.33	188.08	10,164.29	0.00	0.00	0.00
21,984.07	90.00	179.65	11,628.00	-10,247.40	188.60	10,248.36	0.00	0.00	0.00

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well #107H
Company:	XTO Energy	**TVD Reference:**	RKB = 23' @ 3548.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 23' @ 3548.00usft
Site:	Poker Lake Unit 17 TWR	**North Reference:**	Grid
Well:	#107H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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-17-TWR #107: S - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	440,427.30	667,011.10	32.2096986	-103.7933495
PLU-17-TWR #107: F - plan hits target center - Point	0.00	0.01	11,628.00	-234.10	126.60	440,193.20	667,137.70	32.2090533	-103.7929440
PLU-17-TWR #107: P - plan hits target center - Point	0.00	0.00	11,628.00	-10,247.40	188.60	430,179.90	667,199.70	32.1815271	-103.7929063
PLU-17-TWR #107: L - plan misses target center by 0.02usft at 21874.07usft MD (11628.00 TVD, -10137.40 N, 187.92 E) - Point	0.00	0.00	11,628.00	-10,137.40	187.90	430,289.90	667,199.00	32.1818294	-103.7929068

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
608.00	608.00	Rustler			
688.00	688.00	Magenta			
978.00	978.00	Top Salt			
4,148.00	4,148.00	Base Salt			
4,348.00	4,348.00	Delaware			
8,172.42	8,168.00	Bone Spring			
9,226.42	9,218.00	1st Bone Spring Ss			
10,009.40	9,998.00	2nd Bone Spring Ss			
10,380.82	10,368.00	3rd Bone Spring Lm			
11,113.39	11,098.00	3rd Bone Spring Ss			
11,664.11	11,548.00	Wolfcamp			
11,970.58	11,628.00	LP			
11,970.58	11,628.00	Wolfcamp Y			

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 12/12/19

☒ Original Operator & OGRID No.: XTO Permian Operating, LLC [373075]
☐ Amended - Reason for Amendment:

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility: Poker Lake Unit 17 TWR East CTB

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
POKER LAKE UNIT 17 TWR 702H		D-20-24S-31E	318' FNL & 783' FWL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 704H		C-20-24S-31E	317' FNL & 2273' FWL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 706H		B-20-24S-31E	75' FNL & 1613' FEL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 107H		A-20-24S-31E	95' FNL & 785' FEL	2800	Flared/Sold	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Lucid and will be connected to Lucid low/high pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to low/high pressure gathering system. XTO provides (periodically) to Lucid a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, XTO and Lucid have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Red Hills Plant, Sec. 13, T24S, R33E or Roadrunner, Sec. 32, T32S, R28E, Eddy County. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Lucid system at that time. Based on current information, it is BOPCO's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared

- Compressed Natural Gas – On lease
    - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
    - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 12/12/19

☒ Original Operator & OGRID No.: XTO Permian Operating, LLC [373075]

☐ Amended - Reason for Amendment: _____

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Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility: Poker Lake Unit 17 TWR West CTB

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Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
POKER LAKE UNIT 17 TWR 702H		D-20-24S-31E	318' FNL & 783' FWL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 704H		C-20-24S-31E	317' FNL & 2273' FWL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 706H		B-20-24S-31E	75' FNL & 1613' FEL	2800	Flared/Sold	
POKER LAKE UNIT 17 TWR 107H		A-20-24S-31E	95' FNL & 785' FEL	2800	Flared/Sold	

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    - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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

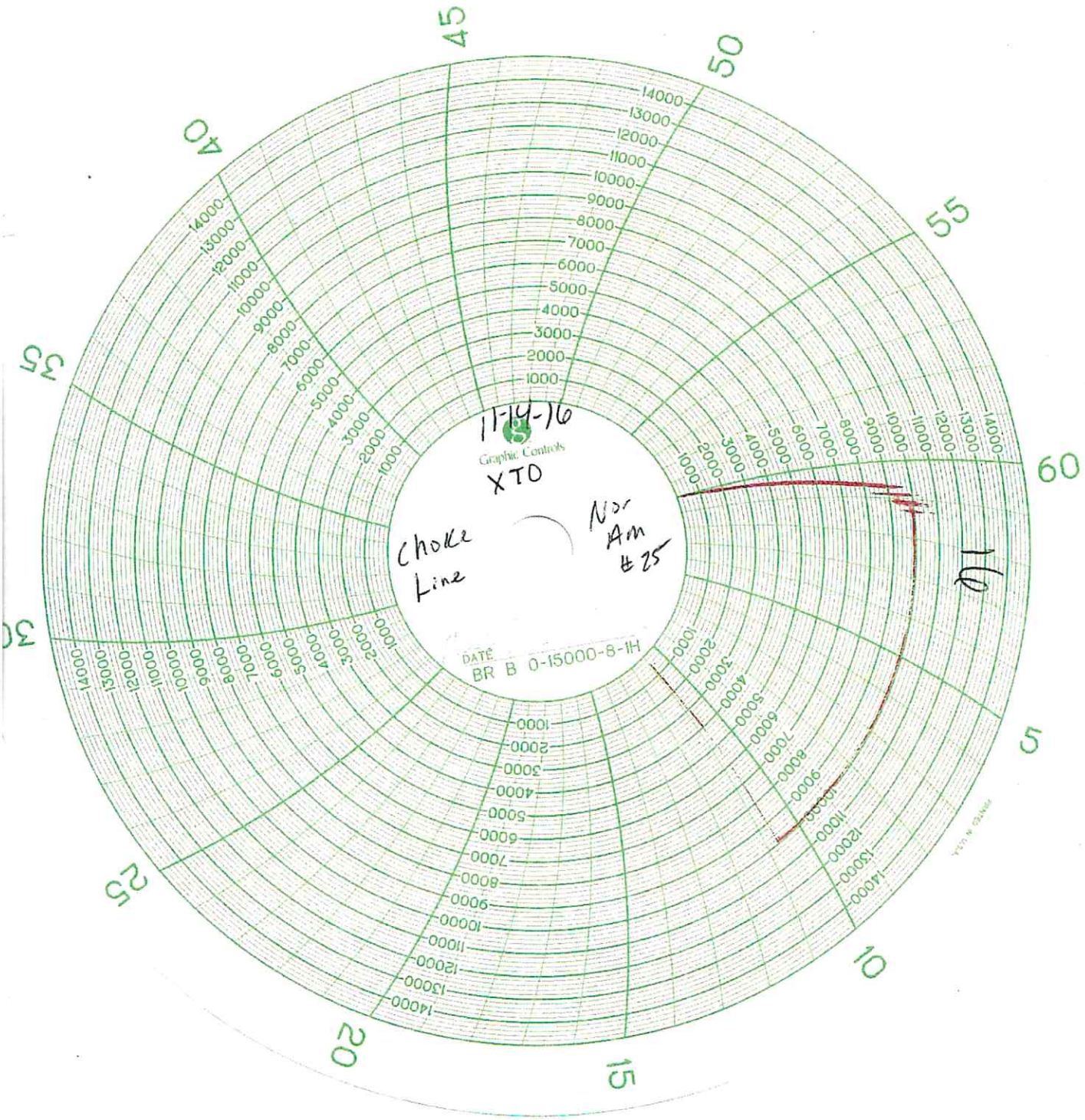
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

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 :	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Graphic Controls
XTO
Choke Line
Nor Am #25
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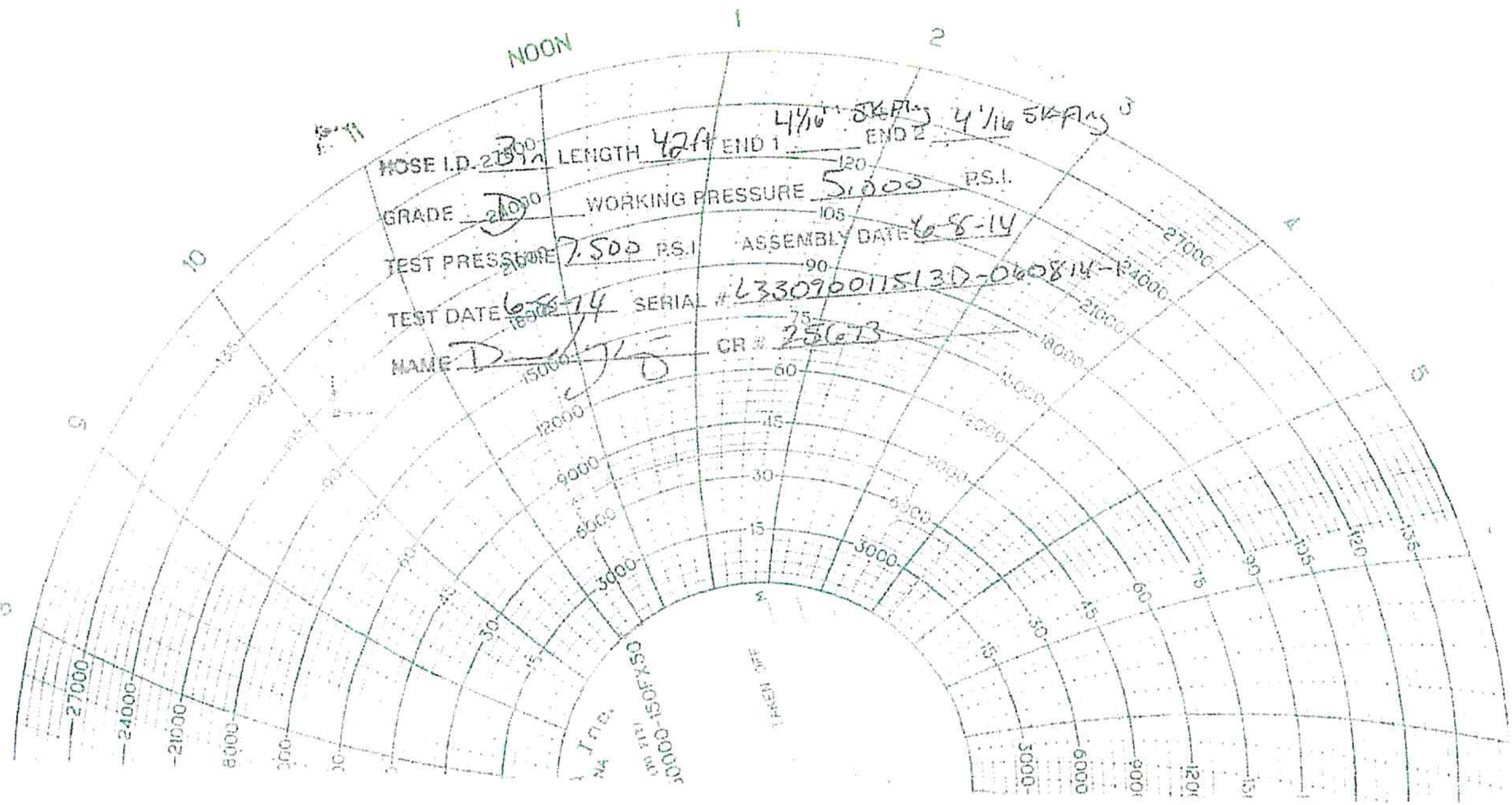
NOON
HOSE I.D. 3in LENGTH 42ft END 1 4 1/16" 5K Flg END 2 4 1/16 5K Flg
GRADE D WORKING PRESSURE 5,000 P.S.I.
TEST PRESSURE 7,500 P.S.I. ASSEMBLY DATE 6-8-14
TEST DATE 6-8-14 SERIAL # L3309001151 3D-060814-1
NAME
CR # 25673
TAKEN OFF

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

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

<u>General Procedure While Drilling</u>

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

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