

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

HOBBS OCD  
MAY 16 2017  
RECEIVED

5. Lease Serial No.  
SHL-NM-381550C BHL-NM-26395

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
Perla Negra Federal Com 5H

9. API Well No.  
30-025-43810

10. Field and Pool, or Exploratory  
Lea; Bone Spring

11. Sec., T. R. M. or Blk. and Survey or Area  
Section 24, T-19-S, R-34-E

12. County or Parish  
Lea

13. State  
NM

1a. Type of work:  DRILL  REENTER

1b. Type of Well:  Oil Well  Gas Well  Other  Single Zone  Multiple Zone

2. Name of Operator XTO Energy, Inc (5380)

3a. Address 500 W. Illinois St Ste 100  
Midland, Texas 79701

3b. Phone No. (include area code)  
432-620-6749

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface 605 FSL & 450 FWL  
At proposed prod. zone 200 FNL & 449 FWL

14. Distance in miles and direction from nearest town or post office\*  
18 miles west southwest of Hobbs, NM

15. Distance from proposed\* location to nearest property or lease line, ft.  
(Also to nearest drig. unit line, if any)  
450'

16. No. of acres in lease  
SH 320 BH 480

17. Spacing Unit dedicated to this well  
160

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
325'

19. Proposed Depth  
TVD: 10421'  
MD: 14654'

20. BLM/BIA Bond No. on file  
UTB000138

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3784' GL

22. Approximate date work will start\*  
ASAP

23. Estimated duration  
90 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- 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 required by the BLM.

25. Signature  
Kendall Chance  
Title  
Regulatory Analyst

Name (Printed/Typed)  
Kendall Chance

Date  
07/21/2016

Approved by (Signature)  
Cody R. Layton  
Title  
FIELD MANAGER

Name (Printed/Typed)  
Cody R. Layton  
Office  
BLM-CARLSBAD FIELD OFFICE

Date  
05/10/17

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.  
APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

\*(Instructions on page 2)

APPROVAL SUBJECT TO  
REGULATORY REQUIREMENTS AND  
CONDITIONS OF APPROVAL  
ATTACHED

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

KR  
05/10/17

DRILLING PLAN: BLM COMPLIANCE  
(Supplement to BLM 3160-3)

XTO Energy Inc.  
Perla Negra Federal COM 5H  
Projected TD: 14654' MD / 10421' TVD  
SHL: 605' FSL & 450' FWL, SECTION 24, T19S, R34E  
BHL: 200' FNL & 449' FWL, SECTION 24, T19S, R34E  
Lea County, NM

**1. GEOLOGIC NAME OF SURFACE FORMATION:**

A. Permian

**2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

Formation	Well Depth (TVD)	Water / Oil / Gas
Rustler	1821'	Water
Top of Salt	1944'	
Base of Salt	3272'	
Delaware	6377'	Water
Brushy Canyon	6663'	Water/Oil/Gas
Bone Spring	8219'	Water/Oil/Gas
1 <sup>st</sup> Bone Spring Ss	9544'	Water/Oil/Gas
2 <sup>nd</sup> Bone Spring Ss	10074'	Water/Oil/Gas
Target/Land Curve	10421'	Water/Oil/Gas
3 <sup>rd</sup> Bone Spring Lm	10484'	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

\*\*\* Groundwater depth 180'.

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8" casing @ 1900' above the salt and circulating cement back to surface. The salt will be isolated by setting 9-5/8" casing at 4050' and circulating cement to surface. An 8-3/4" curve and lateral hole will be drilled to MD/TD and 5-1/2" casing will be set at TD and cemented back 500' into the 9-5/8" casing shoe.

**3. CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1900'	13-3/8"	54.5#	STC	J-55	New	3.29	1.30	4.96
12-1/4"	0' – 3500'	9-5/8"	36#	LTC	J-55	New	2.00	1.34	3.06
	3500' – 4050'	9-5/8"	40#	LTC	J-55	New	2.24	1.64	23.64
8-3/4"	0' – 14654'	5-1/2"	17#	BTC	P-110	New	1.12	1.53	2.28

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

## WELLHEAD:

- A. Starting Head: 13-5/8" 3000 psi top flange x 13-3/8" SOW bottom
- B. 'B' Section/ Drilling Spool: 13-5/8" 3000psi bottom flange x 11" 5M top flange
- C. Tubing Head: 11" 5000psi bottom flange x 7-1/16" 10,000psi top flange

## 4. CEMENT PROGRAM:

- A. **Surface Casing:** 13-3/8", 54.5#, NEW J-55, STC casing to be set at  $\pm 1900'$ .

Lead: 20 bbls FW, then 1240 sx ExtendaCem-CZ (mixed at 13.7 ppg, 1.68 ft<sup>3</sup>/sk, 8.72 gal/sx wtr)

Tail: 410 sx HalCem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sk, 6.39 gal/sx wtr)  
\*\*\*All volumes 100% excess in open hole. Cement to surface.

- B. **Intermediate Casing:** 9-5/8", 36#/40#, NEW J-55, LTC casing to be set at  $\pm 4050'$ .

Lead: 20 bbls FW, then 1183 sx EconoCem-HLC + 5% salt + 5 lbm/sk Kol-Seal (mixed at 12.9 ppg, 1.88 ft<sup>3</sup>/sk, 9.61 gal/sx wtr)

Tail: 235 sx HalCem-C (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/sk, 6.34 gal/sx wtr)  
\*\*\*All volumes 100% excess in open hole. Cement to surface.

- C. **Production Casing:** 5-1/2", 17#, NEW P-110, BTC casing to be set at  $\pm 14654'$ . Casing will be cemented 500' back into intermediate shoe.

Lead: 20 bbls FW, then 665 sx Tuned Light + 0.5 lbm/sk CFR-3 + 1.5 lbm/sk salt + 0.1% HR601 (mixed at 10.5 ppg, 2.69 ft<sup>3</sup>/sk, 12.26 gal/sx wtr)

Tail: 1153 sx VersaCem PBHS2 + 0.5% LAP-1 + 0.25 lbm/sk D-air 5000 + 0.2% HR 601 + 0.4% CFR-3 + 1 pps Salt (mixed at 13.2 ppg, 1.61 ft<sup>3</sup>/sk, 8.38 gal/sx wtr)  
\*\*\*All volumes 30% excess in open hole. Planned top of cement 500' into intermediate casing shoe

## 5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. Max bottom hole pressure should not exceed 4875 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 3000psi. When nipping up on the 9-5/8", the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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.

## 6. PROPOSED MUD CIRCULATION SYSTEM:

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 1900'	17-1/2"	FW/Native	8.4 - 8.8	35 - 40	NC
1900' to 4050'	12-1/4"	Brine/Gel Sweeps	9.8 - 10.2	30 - 32	NC
4050' to 14654'	8-3/4"	FW / Cut Brine / Poly-Sweeps	8.6 - 9.0	29 - 32	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

**7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:**

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13-3/8" casing.

**8. LOGGING, CORING AND TESTING PROGRAM:**

Mud Logger: Mud Logging Unit (2 man) on @ 4050'.  
Catch 20' samples from 4050' to TD

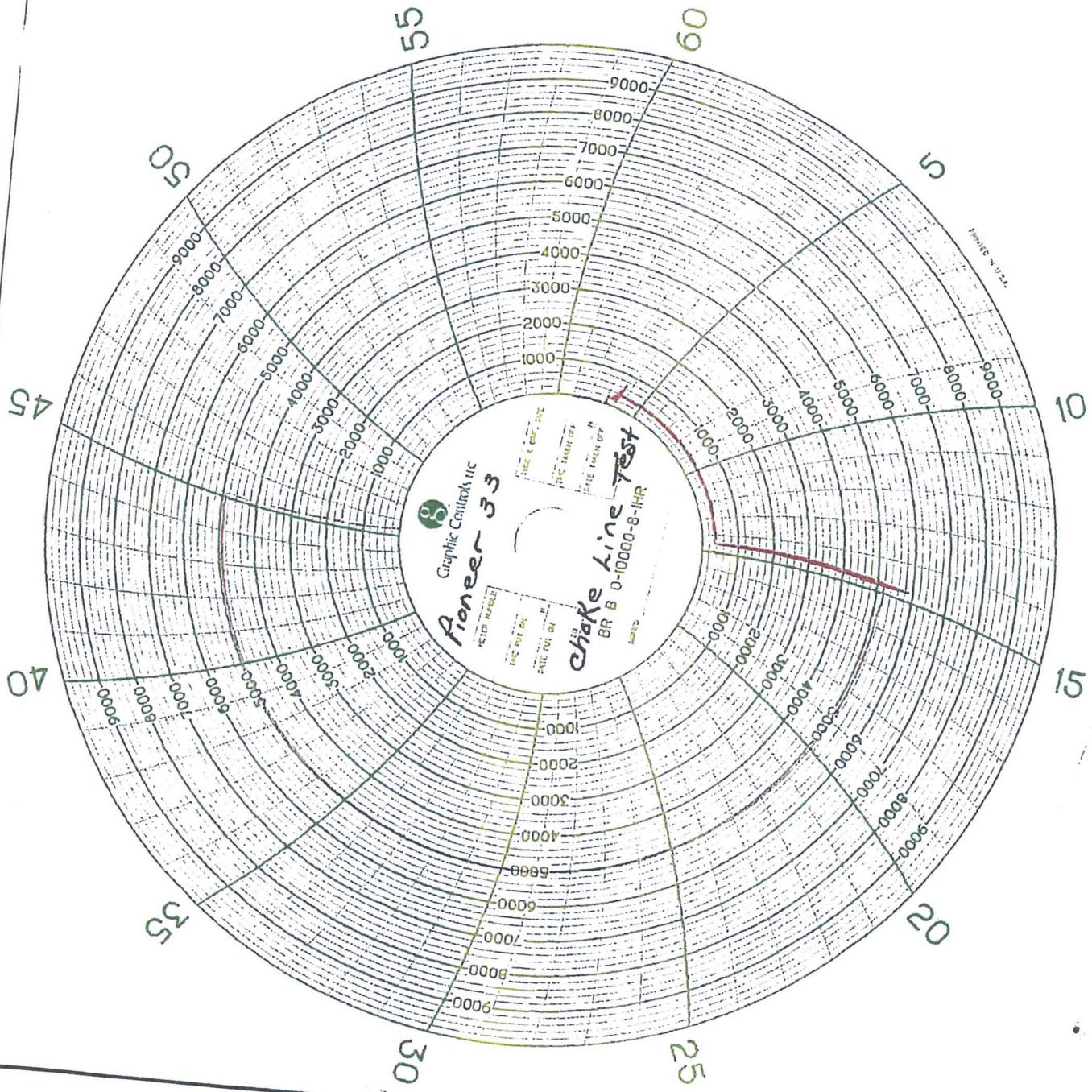
Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from pilot hole TD to intermediate casing shoe.

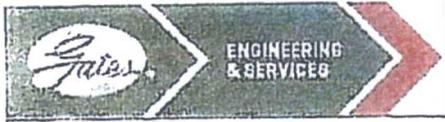
**9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:**

None anticipated. BHT of 160 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. 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.

**10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:**

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.





GATES E & S NORTH AMERICA, INC  
 DU-TEX  
 134 44TH STREET  
 CORPUS CHRISTI, TEXAS 78405

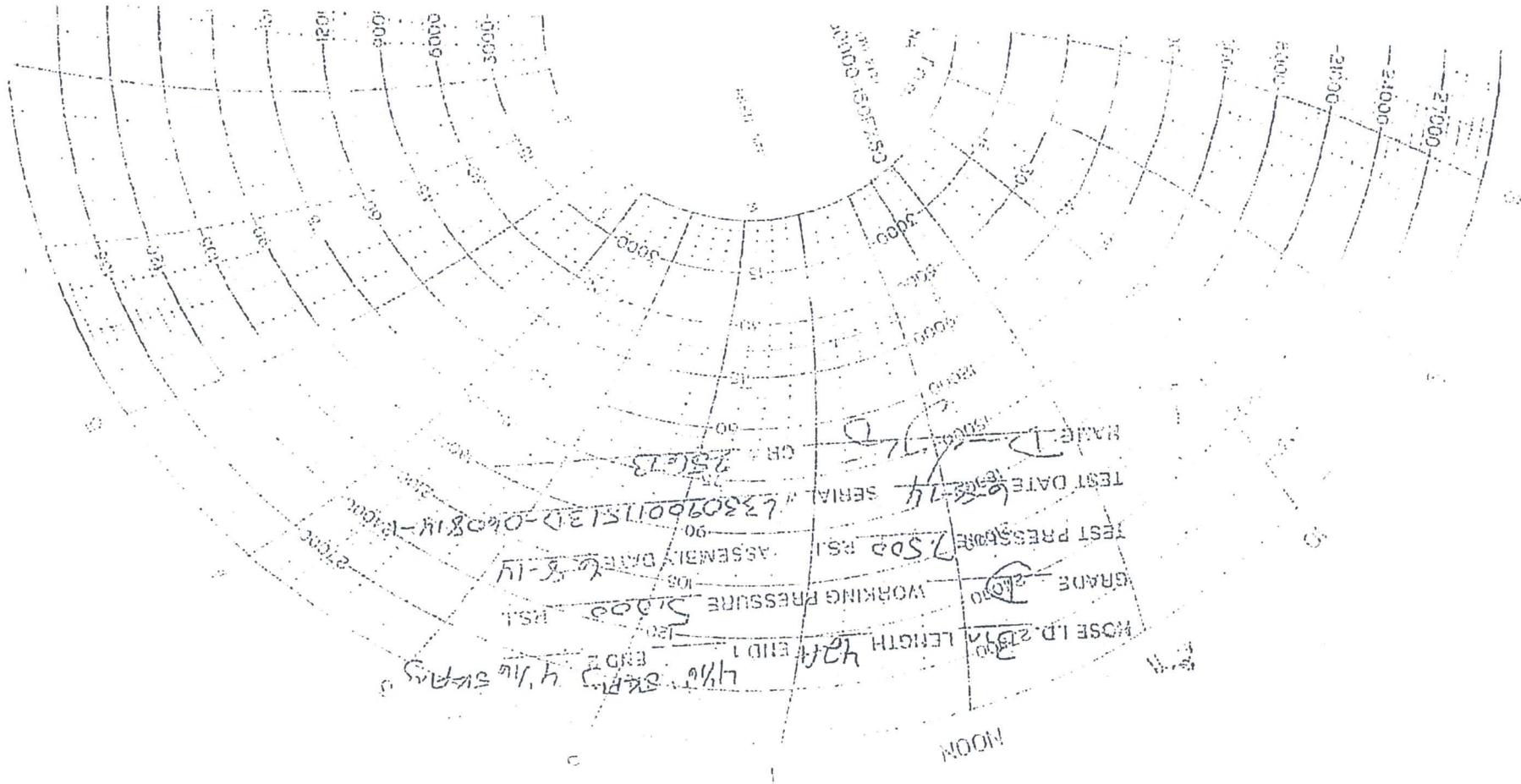
PHONE: 361-887-9807  
 FAX: 361-887-0812  
 EMAIL: crpe@s@gates.com  
 WEB: www.gates.com

**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 L/E		
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 :	<i>[Signature]</i>	Signature :	<i>[Signature]</i>



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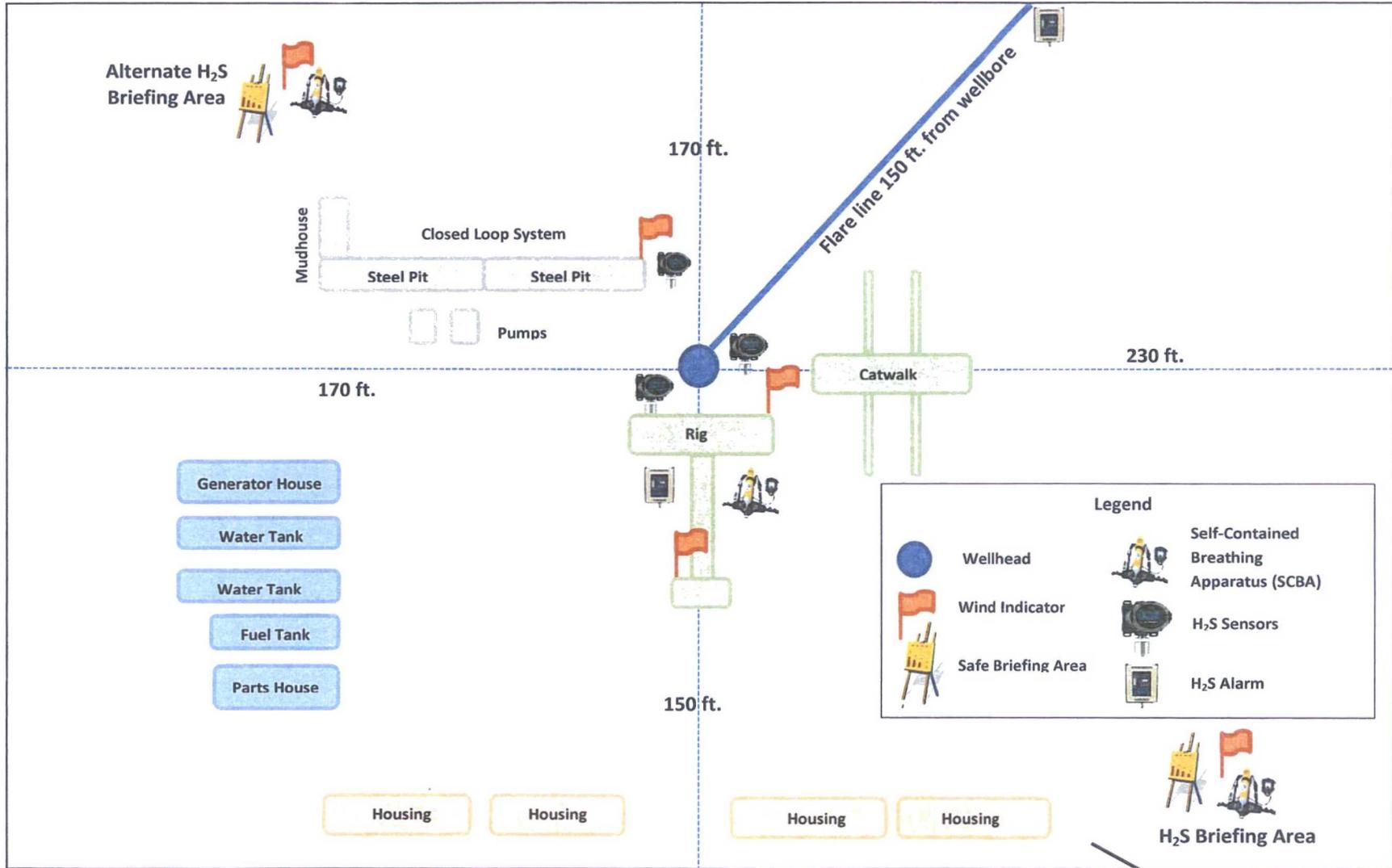
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Prevailing Winds  
Direction SW

# H<sub>2</sub>S Briefing Areas and Alarm Locations





Kendall Chance  
Regulatory Analyst  
XTO Energy Inc.  
500 W. Illinois St Ste 100  
Midland, Texas 79701  
(432) 620-6749  
Kendall\_chance@xtoenergy.com

October 25, 2016

Bureau of Land Management  
Carlsbad Field Office  
620 E. Greene Street  
Carlsbad, NM 88220

RE: Operating Agreement/Rights for Perla Negra Federal Com #5H, 6H, 7H, 8H

To Whom It May Concern:

XTO Energy, Inc. is has operating rights over leases: NMNM0381550C and NMNM26395. The lessor of record is Mobil Producing. XTO Energy, Inc is a subsidiary of ExxonMobil Corporation, which is the operator of all domestic Exxon and Mobil acreage.

Sincerely,

A handwritten signature in blue ink that reads "Kendall Chance". The signature is written in a cursive, flowing style.

Kendall Chance  
Regulatory Analyst  
XTO Energy, Inc



Certification

July 21, 2016

Kendall Chance  
XTO Energy Inc.  
500 W. Illinois, Ste. 100  
Midland, TX 79701  
432-620-6749  
Kendall\_chance@xtoenergy.com

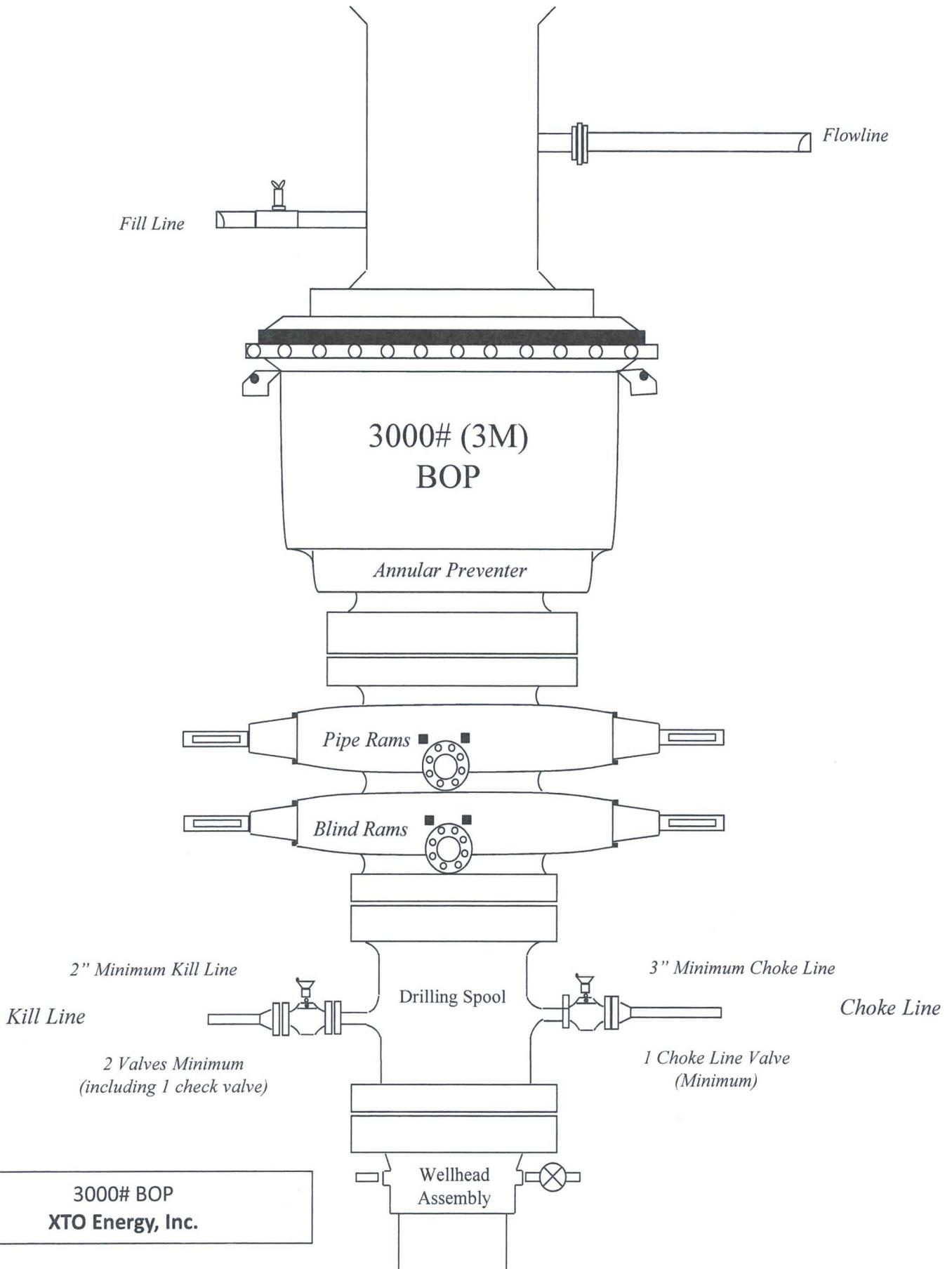
Bureau of Land Management  
620 E. Greene  
Carlsbad, NM 88220  
575-234-5972

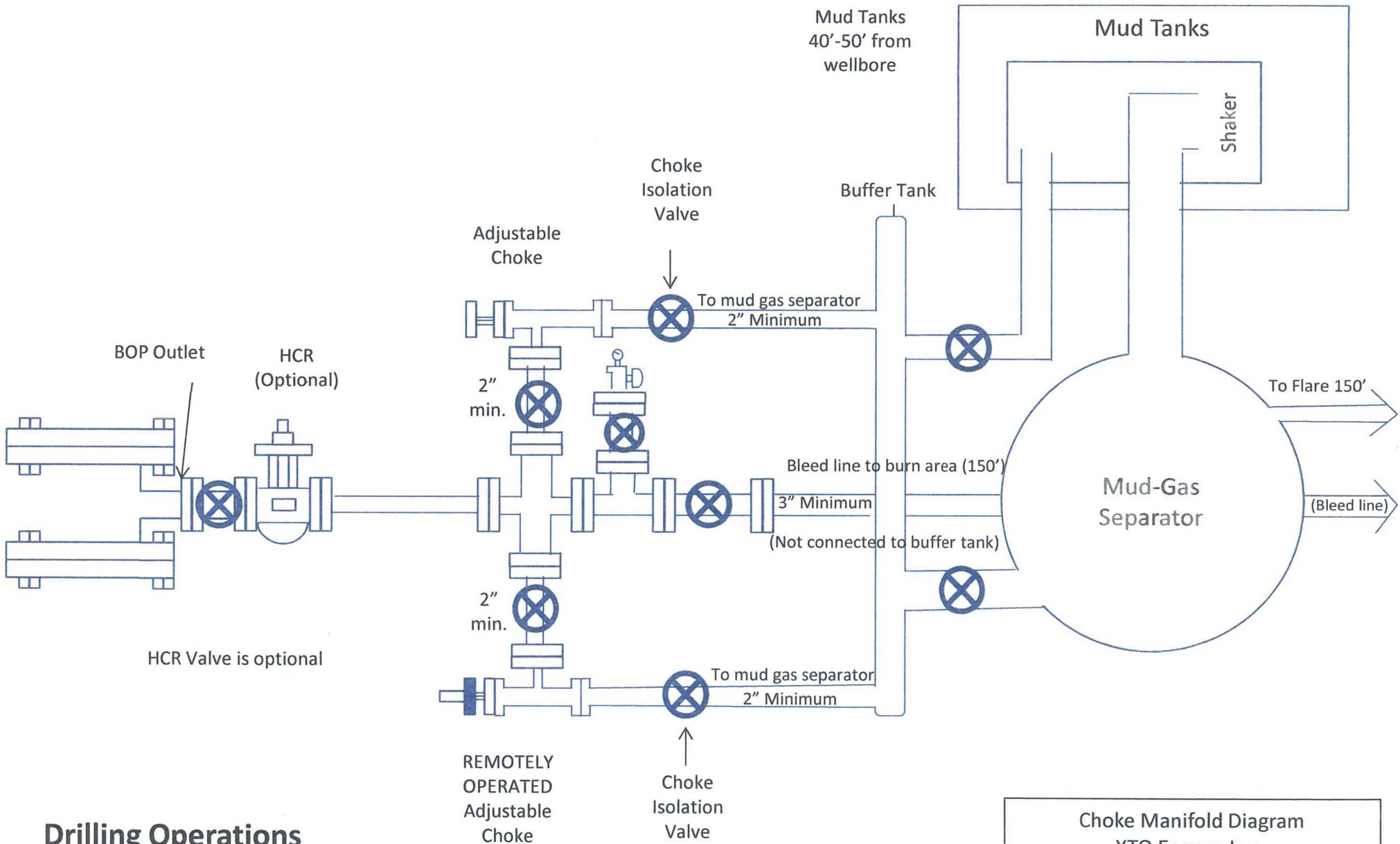
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed in conformity with this APD package and terms and conditions under which it is approved. I also certify that I, or XTO Energy, Inc., am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 21<sup>st</sup> day of July 2016.

Thank you,

A handwritten signature in blue ink that reads "Kendall Chance".

Kendall Chance  
Regulatory Analyst





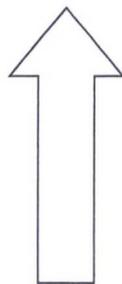
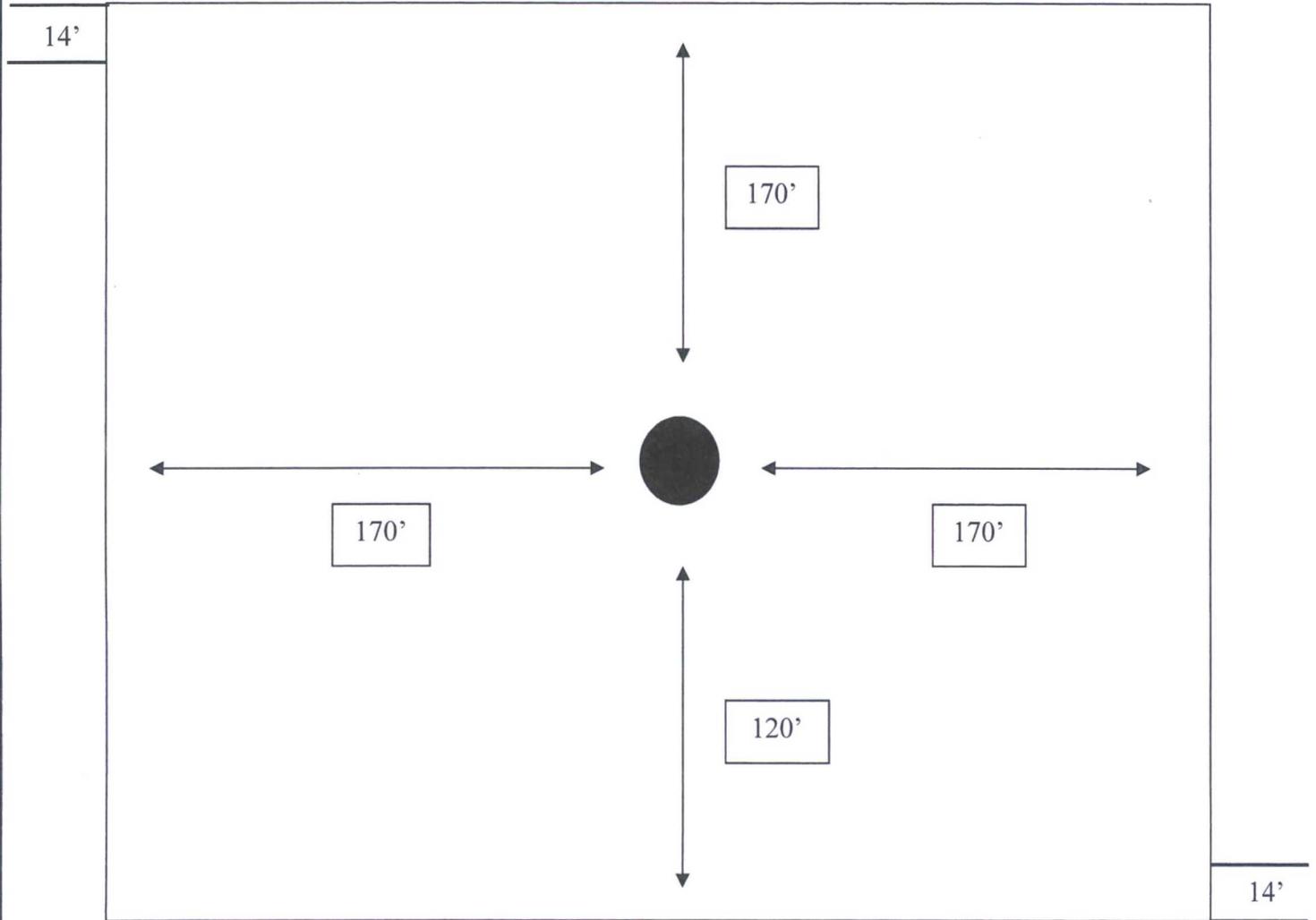
**Drilling Operations  
Choke Manifold**

Choke Manifold Diagram  
XTO Energy, Inc..

**EXHIBIT D**

**Rig Plat Only  
PERLA NEGRA FED COM #5H  
V-DOOR WEST**

NORTH



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