

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
OMB NO 1004-0137  
Expires July 31, 2010

APR 10 2009

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. NMNM 03039	
1b Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name N/A	
2 Name of Operator XTO Energy Inc.		7 Unit or CA Agreement Name and No N/A	
3a Address 382 CR 3100 Aztec, New Mexico 87410		8 Lease Name and Well No HUERFANO UNIT #322	
3b Phone No (include area code) 505-333-3100		9 API Well No. 30-045-34948	
4 Location of Well (Report location clearly and in accordance with any State requirements)* At surface 1895' FNL x 1955' FEL At proposed prod zone SAME		10 Field and Pool, or Exploratory BASIN DAKOTA	
14 Distance in miles and direction from nearest town or post office* Approximately 23 miles SE of Bloomfield, NM Post Office		11 Sec, T, R, M., or Blk and Survey or Area SEC 10-T25N-R9W	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest dig unit line, if any) 1895'		12 County or Parish SAN JUAN	
16 No. of Acres in lease 2080.60		13 State NM	
17 Spacing Unit dedicated to this well DK: E/2 320			
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft N/A		19 Proposed Depth 6900'	
20 BLM/BIA Bond No. on file UTB000138			
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 6540' Ground Elevation		22 Approximate date work will start* 05/11/2009	
23 Estimated duration 2 weeks			

## 24. Attachments

RCVD AUG 28 '09

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.  | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2 A Drilling Plan.   | 5 Operator certification.  |
| 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) | 6 Such other site specific information and/or plans as may be required by the BLM              |

OIL CONS. DIV.

DIST. 3

25. Signature Jennifer M. Hembry	Name (Printed/Typed) JENNIFER M. HEMBRY	Date 04/09/2009
Title REGULATORY CLERK		
Approved by (Signature) D. Montecarlo	Name (Printed/Typed) AFM	Date 8/27/09
Title AFM	Office FFO	

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.

(Continued on page 2)

\*(Instructions on page 2)

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS.

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

APD/ROW

SEP 03 2009

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
1220 South St Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED

Bureau of Land Management  
Farmington Field Office

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-34948		2 Pool Code 71599		3 Pool Name Basin Dakota	
4 Property Code 36992		5 Property Name HUERFANO UNIT			6 Well Number 322
7 OGRID No 5380		8 Operator Name XTO ENERGY INC.			9 Elevation 6540'

10 Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	25-N	9-W		1895	NORTH	1955	EAST	SAN JUAN

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
12 Dedicated Acres E/2 - 320					13 Joint or Infill		14 Consolidation Code		15 Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>16</p> <p>FD. 2 1/2" BC. 1947 G.L.O.</p> <p>S 89°54'58" W 2619.57' (M)</p> <p>1895'</p> <p>1955'</p> <p>10</p> <p>FD. 2 1/2" BC. 1947 G.L.O.</p> <p>SURFACE: LAT: 36.41770° N. (NAD 83) LONG: 107.77426° W. (NAD 83) LAT: 36°25'03.68" N. (NAD 27) LONG: 107°46'25.13" W. (NAD 27)</p>		<p>17</p> <p>FD. 2 1/2" BC. 1947 G.L.O.</p> <p>S 00°00'48" W 2644.17' (M)</p> <p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>J. Hembry</i> Signature Date <i>Jennifer M. Hembry</i> Printed Name</p>	
		<p>18</p> <p>SURVEYOR CERTIFICATION</p> <p>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 knowledge &amp; belief.</p> <p>JANUARY 22 2009 Date of Survey Signature and Seal of Professional Surveyor: <i>[Signature]</i> 02109-09 PROFESSIONAL LAND SURVEYOR Certificate Number</p>	

# XTO ENERGY INC.

Huerfano Unit #322

APD Data

April 9, 2009

1455'

Location: 1895' FNL x 195' FEL Sec 10, T25N, R9W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6900'  
APPROX GR ELEV: 6540'

OBJECTIVE: Basin Dakota  
Est KB ELEV: 6552' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 2500'	2500' to 6900'
HOLE SIZE	12.25"	7.875"	7.875"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 8.625" casing to be set at  $\pm 360'$  in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-360'	360'	24.0#	J-55	ST&C	1370	2950	244	8.097	7.972	7.950	17.13	28.24

Production Casing: 5.5" casing to be set at TD ( $\pm 6900'$ ) in 7.875" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-6900	6900'	15.5#	J-55	ST&C	4040	4810	202	4.950	4.825	1.22	1.46	1.89

Remarks: All Casing strings will be centralized in accordance with Onshore Order #2 and NTL FRA-90-1.

## 3. WELLHEAD:

- Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom (or slip-on, weld-on), 8-5/8" 8rnd thread on top.

**4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):**

A Surface: 8.625", 24.0#, J-55, ST&C casing to be set at  $\pm 360'$  in 12-1/4" hole.

214 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft<sup>3</sup>/sk, & 6.70 gal wtr/sk.

*Total slurry volume is 297 ft<sup>3</sup>, 100% excess of calculated annular volume to 360'.*

B Production: 5 5", 15.5#, J-55 (or K-55), ST&C casing to be set at  $\pm 6900'$  in 7 875" hole. DV Tool set @  $\pm 4300'$

1<sup>st</sup> Stage

LEAD:

$\pm 199$  sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2<sup>nd</sup> Stage

LEAD:

$\pm 360$  sx of Type III or equivalent cement with 8% gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

*Total estimated slurry volume for the 5-1/2" production casing is 1683 ft<sup>3</sup>.*

*Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 40%. It will be attempted to circulate cement to the surface.*

**5. LOGGING PROGRAM:**

A. Mud Logger: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6900') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (6900') to 3,000'.

6. **FORMATION TOPS:**

Est. KB Elevation: 6552'

FORMATION	Sub-Sea	MD	FORMATION	TV Sub-Sea	MD
Ojo Alamo SS	5443	1109	Gallup	1159	5393
Kirtland Shale	5282	1270	Greenhorn	262	6290
Farmington SS			Graneros	215	6337
Fruitland Formation	5053	1499	Dakota 1*	193	6359
Lower Fruitland Coal	4607	1945	Dakota 2*	129	6423
Pictured Cliffs SS	4600	1952	Dakota 3*	101	6451
Lewis Shale	4412	2140	Dakota 4*	28	6524
Chacra SS	3732	2820	Dakota 5*	-19	6571
Cliffhouse SS*	3021	3531	Dakota 6*	-67	6619
Menefee**	2985	3567	Burro Canyon	-110	6662
Point Lookout SS*	2205	4347	Morrison*	-165	6717
Mancos Shale	1887	4665	<b>TD</b>	-348	<b>6900</b>

\* *Primary Objective*

\*\* *Secondary Objective*

\*\*\*\* Maximum anticipated BHP should be <2,000 psig ( <0.30 psi/ft) \*\*\*\*\*

7. **COMPANY PERSONNEL:**

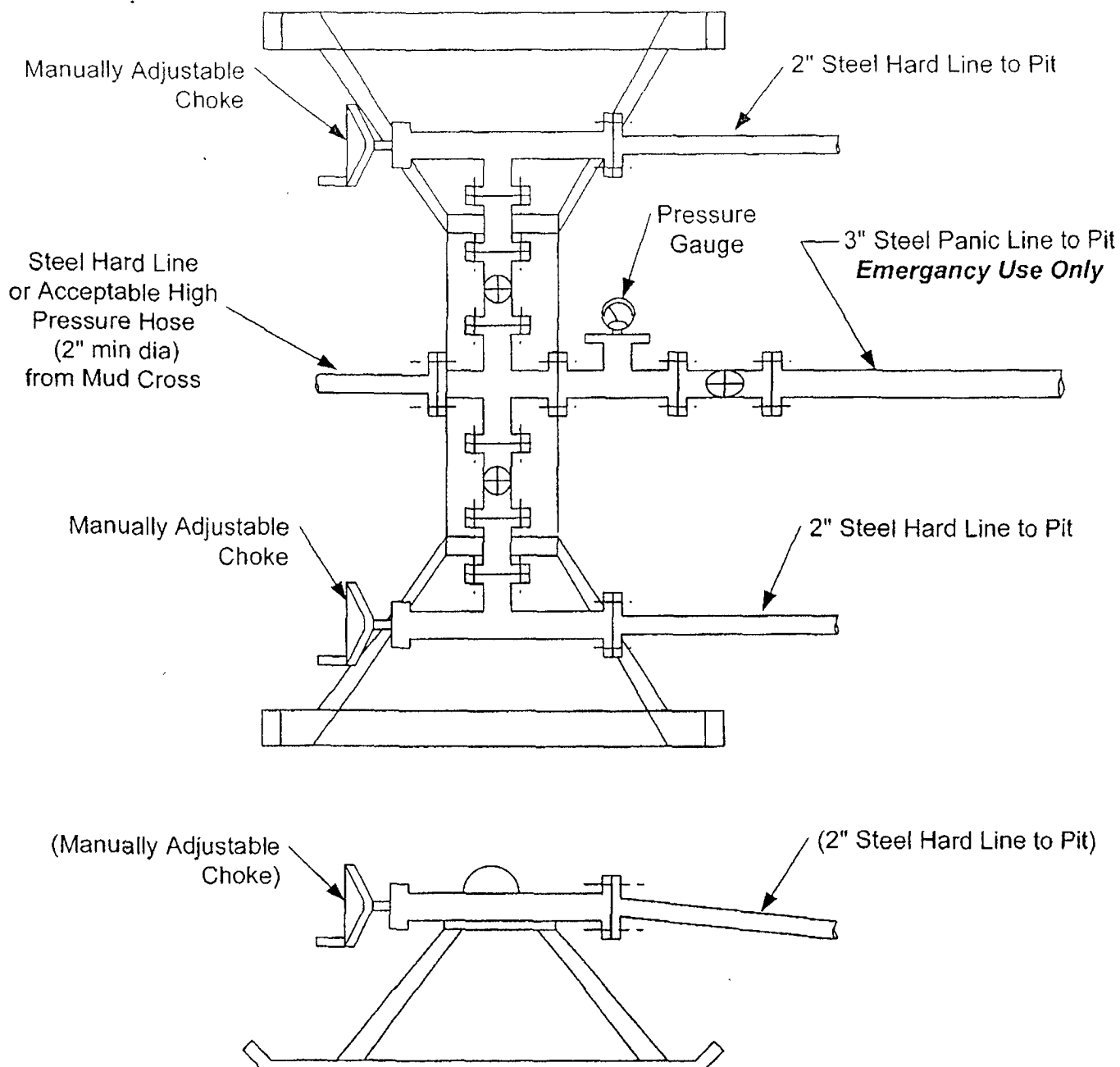
Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	--

JDN  
4/8/09

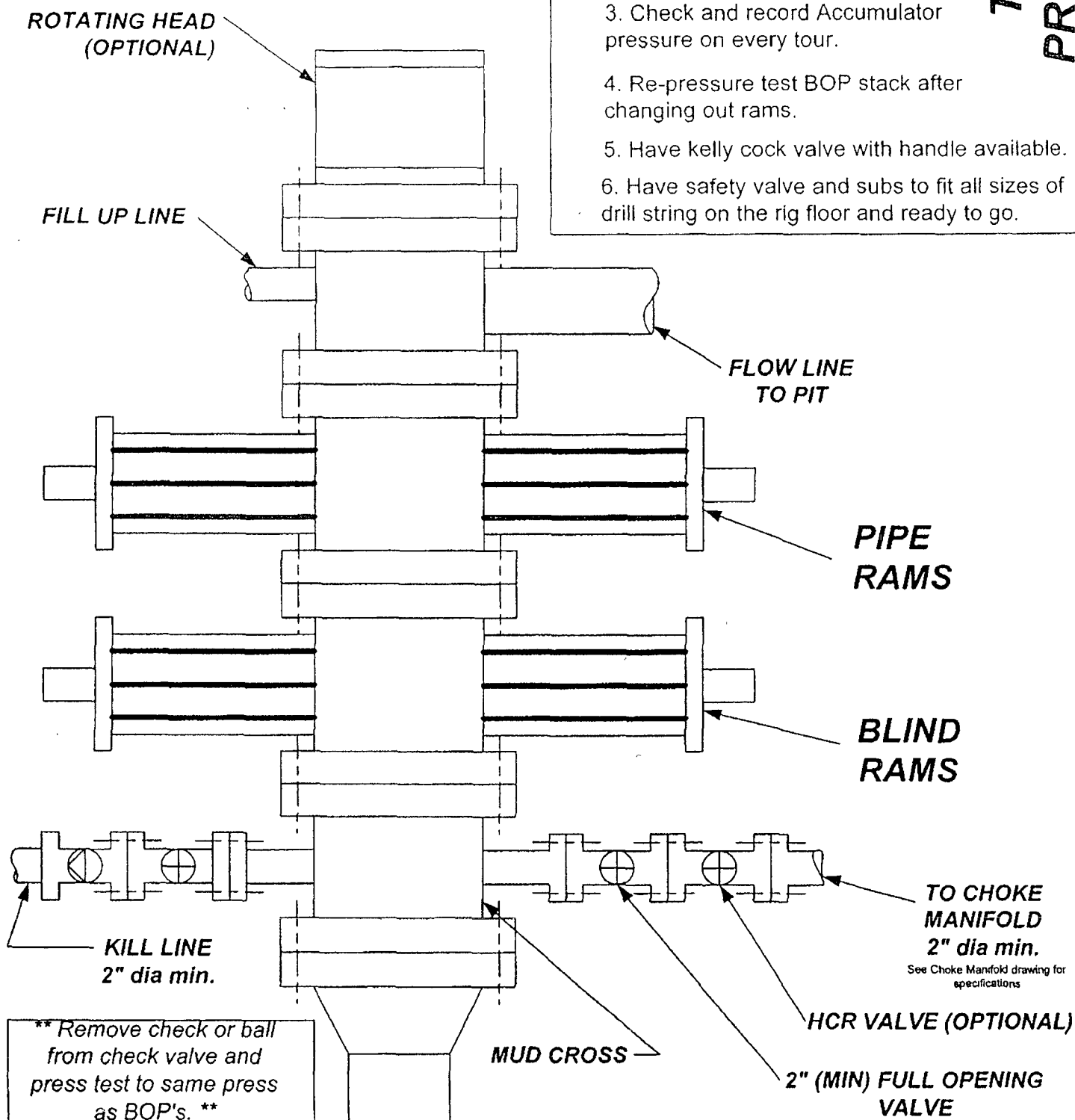
# **CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE**

1. Stake all lines from choke manifold to pit.
2. Pressure test choke manifold after installation.
3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

## **TESTING PROCEDURE**



# BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE



## 1. Test BOP after installation:

Pressure test BOP to 200-300 psig (low pressure) for 10 min.

Test BOP to Working Press or to 70% internal yield of surf csg (10 min) or which ever is less.

## 2. Test operation of (both) rams on every trip.

## 3. Check and record Accumulator pressure on every tour.

## 4. Re-pressure test BOP stack after changing out rams.

## 5. Have kelly cock valve with handle available.

## 6. Have safety valve and subs to fit all sizes of drill string on the rig floor and ready to go.

# TESTING PROCEDURE