

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires March 31, 2007

## APPLICATION FOR PERMIT TO DRILL OR REENTER

|   |  |   |  |
|---|--|---|--|
| 1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER   |  | 5. Lease Serial No.<br><b>NMSF-077382</b>   |  |
| 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<br><b>25</b>   |  |
| 2. Name of Operator<br><b>XTO Energy Inc.</b>   |  | 7. Unit or CA Agreement Name and No.  |  |
| 3a. Address<br><b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM</b>   |  | 8. Lease Name and Well No.<br><b>RP Hargrave H #1F</b>  |  |
| 3b. Phone No. (include area code)<br><b>505-324-1090</b>  |  | 9. API Well No.<br><b>30-045-32634</b>  |  |
| 4. Location of Well (Report location clearly and in accordance with any State requirements)*<br>At surface <b>2325' FNL x 735' FEL in Sec 9, T27N, R10W</b><br>At proposed prod. zone                                 |  | 10. Field and Pool, or Exploratory<br><b>Basin Dakota</b>   |  |
| 14. Distance in miles and direction from nearest town or post office*<br><b>Approx 12 air miles SouthEast of the Bloomfield, NM Post Office</b>   |  | 11. Sec., T., R., M., or Blk. and Survey or Area<br><b>Sec 9, T27N, R10W</b>  |  |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)<br><b>735'</b>   |  | 12. County or Parish<br><b>San Juan</b>   |  |
| 16. No. of Acres in lease<br><b>2523.52</b>   |  | 13. State<br><b>NM</b>  |  |
| 17. Spacing Unit dedicated to this well<br><b>320 E/2</b>   |  | 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.<br><b>600'</b> |  |
| 19. Proposed Depth<br><b>6975'</b>  |  | 20. BLM/BIA Bond No. on file  |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br><b>6231' Ground Level</b>  |  | 22. Approximate date work will start*<br><b>winter 2005</b>   |  |
| 23. Estimated duration<br><b>2 weeks</b>  |  |   |  |

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

|   |   |                         |
|---|---|-------------------------|
| 25. Signature<br><b>Kyla Vaughan</b>          | Name (Printed/Typed)<br><b>Kyla Vaughan</b> | Date<br><b>10/15/05</b> |
| Title<br><b>Regulatory Compliance Tech</b>    |   |                         |
| Approved by (Signature)<br><b>[Signature]</b> | Name (Printed/Typed)                        | Date<br><b>2-10-05</b>  |
| Title<br><b>APM</b>                           | Office<br><b>FFO</b>                        |                         |

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.

\*(Instructions on page 2)

NMOC

APD/ROW

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

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised June 10, 2003  
Instructions on back

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

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                             |                                   |                     |                            |
|-----------------------------|-----------------------------------|---------------------|----------------------------|
| *API Number<br>30-015-32636 |                                   | *Pool Code<br>71599 | *Pool Name<br>BASIN JAKETH |
| *Property Code<br>34636     | *Property Name<br>RP HARGRAVE H   |                     | *Well Number<br>1F         |
| *GRID No.<br>167067         | *Operator Name<br>XTO ENERGY INC. |                     | *Elevation<br>6231         |

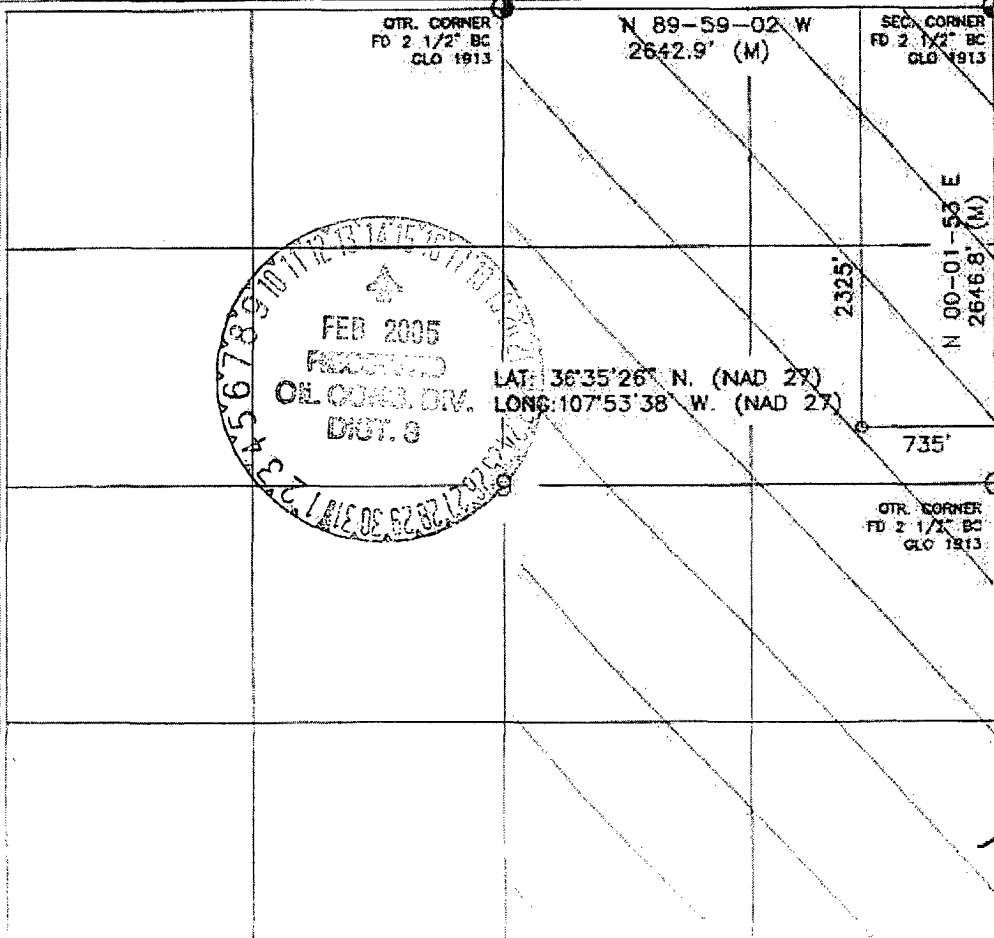

<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| H             | 9       | 27-N     | 10-W  |         | 2325          | NORTH            | 735           | EAST           | SAN JUAN |

<sup>11</sup> 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 |
|-----------------------------|---------|-----------------------|-------|---------------------|---------------|------------------|---------------|----------------|--------|
|                             |         |                       |       |                     |               |                  |               |                |        |
| *Dedicated Acres<br>320 E/2 |         | *Joint or Infill<br>I |       | *Consolidation Code |               | *Order No.       |               |                |        |

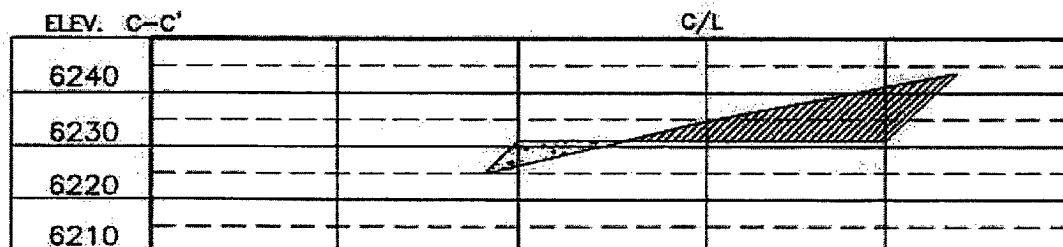
15 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION.

|   |  |
|---|--|
|  | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <u>[Signature]</u></p> <p>Printed Name: <u>JEFFREY W. PATTON</u></p> <p>Title: <u>DRAWING ENGINEER</u></p> <p>Date: <u>10-4-04</u></p>   |
|   | <p>18 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 belief.</p> <p>Date of Survey: <u>JUL 2004</u></p> <p>Signature: <u>[Signature]</u></p> <p>Professional Surveyor</p> <p></p> <p>Certificate Number: _____</p> |

LAT: 36°35'26" N.  
LONG: 107°53'38" W.  
NAD 27



**NOTE:** DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.


|   |                |
|---|----------------|
|    |                |
| Daggett Enterprises, Inc.<br>Surveying and Oil Field Services<br>P. O. Box 15083 • Farmington, NM 87401<br>Phone (505) 326-1772 • fax (505) 326-6019<br><br>NEW MEXICO L.S. No. 14831 |                |
| CHECK BY: A.D.  | CARD: C4318CF9 |
| SOW#: C431B   | DATE: 06/30/94 |
| REASON:   | ISSUED BY:     |
| DATE:   |                |

EXHIBIT D

# XTO ENERGY INC.

RP Hargrave H #1F

APD Data

October 14, 2004

Location: 2,325' FNL x 735' FEL Sec 9, T27N R10W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6,975'  
APPROX GR ELEV: 6,231'

OBJECTIVE: Basin Dakota  
Est KB ELEV: 6,243' (12' AGL)

## 1. MUD PROGRAM:

| INTERVAL   | 0' to 360'  | 360' to 4,000' | 4,500' to TD        |
|------------|-------------|----------------|---------------------|
| HOLE SIZE  | 12-1/4"     | 7-7/8"         | 7-7/8"              |
| MUD TYPE   | FW/Spud Mud | FW/Polymer     | LSND / Gel Chemical |
| WEIGHT     | 8.6-9.0     | 8.4-8.8        | 8.6-9.0             |
| 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: 8-5/8" casing to be set at  $\pm 360'$  in a 12-1/4" hole filled with 8.8 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 | STC  | 1370              | 2950               | 244            | 8.097   | 7.972      | 7.32    | 7.95     | 29.39  |

Production Casing: 5-1/2" casing to be set at TD ( $\pm 6,975'$ ) in 7-7/8" hole filled with 9.0 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'-TD    | 6,975' | 15.5# | J-55 | STC  | 4040              | 4810               | <del>222</del> | 4.950   | 4.825      | 1.22    | 1.45     | 2.02   |

202

## 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, 8-5/8" 8rnd thread on top.

EXHIBIT E

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

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at  $\pm 360'$  in 12-1/4" hole.

210 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: 5-1/2", 15.5#, J-55 (or K-55), STC casing to be set at  $\pm 6,975'$  in 7-7/8" hole. DV Tool set @  $\pm 4,400'$

1<sup>st</sup> Stage

LEAD:

225 sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2<sup>nd</sup> Stage

LEAD:

375 sx of Type III with 8% gel, 1/4 pps cello & 2% 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 1,775 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: The mud logger will come on at 5,000' and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (6,975') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from 6,975' to 4,975'.

EXHIBIT E

6. FORMATION TOPS:

Est. KB Elevation: 6,243'

| Formation                 | Subsea Depth | Well Depth |
|---------------------------|--------------|------------|
| Ojo Alamo SS              | +5146'       | 1100'      |
| Kirtland Shale            | +4995'       | 1251'      |
| Farmington SS             | +4899'       | 1347'      |
| Fruitland Formation       | +4519'       | 1727'      |
| Lower Fruitland Coal      | +4155'       | 2091'      |
| Pictured Cliffs SS        | +4137'       | 2109'      |
| Lewis Shale               | +3984'       | 2262'      |
| Chacra                    | +3234'       | 3012'      |
| Cliffhouse SS             | +2626'       | 3620'      |
| Menefee                   | +2498'       | 3748'      |
| Point Lookout SS          | +1795'       | 4451'      |
| Mancos Shale              | +1445'       | 4801'      |
| Gallup SS                 | +618'        | 5628'      |
| Greenhorn Limestone       | -172'        | 6418'      |
| Graneros Shale            | -230'        | 6476'      |
| 1 <sup>st</sup> Dakota SS | -259'        | 6505'      |
| 2 <sup>nd</sup> Dakota SS | -291'        | 6537'      |
| 3 <sup>rd</sup> Dakota SS | -346'        | 6592'      |
| 4 <sup>th</sup> Dakota SS | -409'        | 6655'      |
| 5 <sup>th</sup> Dakota SS | -433'        | 6679'      |
| 6 <sup>th</sup> Dakota SS | -462'        | 6708'      |
| Burro Canyon SS           | -548'        | 6794'      |
| Morrison Shale            | -583'        | 6829'      |
| Project TD                | -729'        | 6975'      |

ABHP ~ 3000psi

7. COMPANY PERSONNEL:

| Name         | Title              | Office Phone | Home Phone   |
|--------------|--------------------|--------------|--------------|
| Jeff Patton  | Drilling Engineer  | 505-324-1090 | 505-632-7882 |
| Dennis Elrod | Drilling foreman   | 505-486-6460 | 505-326-2024 |
| Randy Hosey  | Project Geologist  | 817-885-2398 | 817-427-2475 |
| Barry Voigt  | Reservoir Engineer | 817-885-2462 | 817-540-2092 |

JWP  
10/14/04

EXHIBIT E

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

## TESTING PROCEDURE

### 1. Test BOP after installation:

Pressure test BOP to 200-300  
psig (low pressure) for 5 min.  
10

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

### 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.

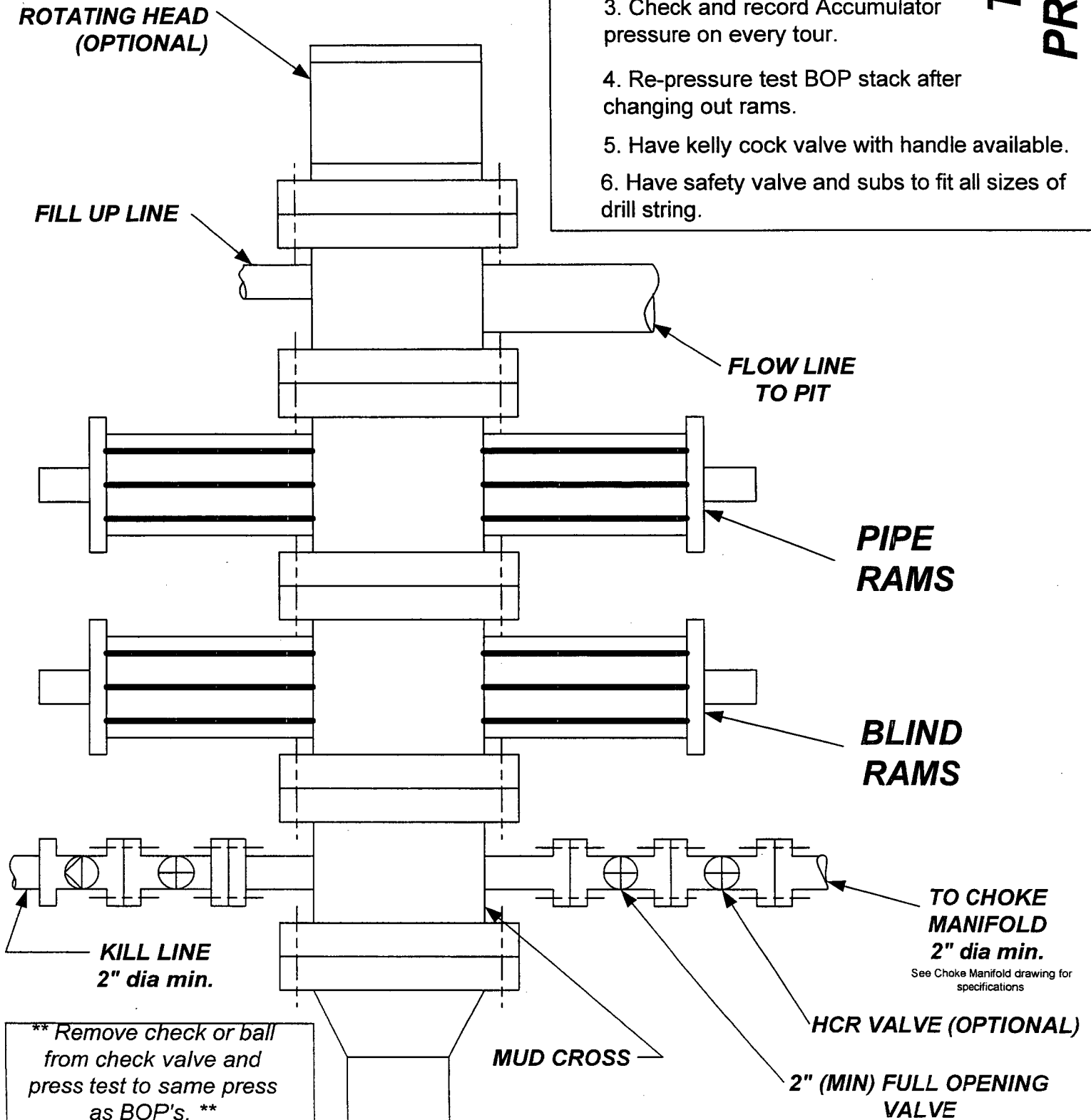


EXHIBIT F

# **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**

