

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM 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. SF-078978
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 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM	3b. Phone No. (include area code) 505-324-1090	8. Lease Name and Well No. GARTNER #2
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 960' FNL x 770' FWL in Sec 27, T26N, 11W At proposed prod. zone SAME		9. API Well No. 30-045-22942
14. Distance in miles and direction from nearest town or post office* Approx 17.2 miles due South of Bloomfield, NM Post Office		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 770'	16. No. of Acres in lease 760.13	11. Sec., T., R., M., or Blk. and Survey or Area 0 S27, T26N, R11W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 150'	19. Proposed Depth 1750'	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6199' Ground Elevation	22. Approximate date work will start* summer 2005	13. State NM
17. Spacing Unit dedicated to this well 320 N/2		20. BLM/BIA Bond No. on file
23. Estimated duration 2 weeks		

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. |

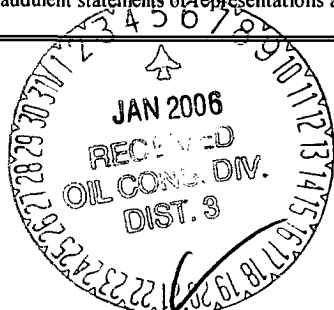
25. Signature <i>Kyla Vaughan</i>	Name (Printed/Typed) Kyla Vaughan	Date 03/04/05
Title Regulatory Compliance Tech		

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 12/30/05
Title 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.

*(Instructions on page 2)



NMOCD

2005 MAR 9 PM 12:00
RECEIVED
070 FARMINGTON NM

DISTRICT I
1525 N. Fench Dr., Hobbs, N.M. 88240

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

DISTRICT III
1000 Rio Brazos Rd., Altec, 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 87504-2088

Form C-102

Revised June 10, 2003

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32942		*Pool Code 71627		*Pool Name Basin Fruitland Coal	
*Property Code 22612		*Property Name GARTNER		*Well Number 2	
*DORD No. 161067		*Operator Name XTO ENERGY INC.		*Elevation 6199'	

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
D	27	26--N	11--W		960	NORTH	770	WEST	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
*Dedicated Acres 320.012			*Joint or split		*Consolidation Code			*Order No.	

16 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

SEC. CORNER FD 2 1/2" DC Q.L. 1930	N 89-58-23 E 2639.6' (M)	QTR. CORNER FD 2 1/2" DC Q.L. 1930	LAT: 36°27'49" N. (NAD 27) LONG: 107°58'50" W. (NAD 27)	770'	960'	27	N 90-01-59 W 2641.1' (M)	QTR. CORNER FD 2 1/2" DC Q.L. 1930	RECEIVED 020 FARMINGTON NM 2005 MAR 9 PM 12 00	17 OPERATOR CERTIFICATION	
										I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
									Signature Kathy K. Smith		
									Printed Name Kathy K. Smith		
									Title Drilling Assistant		
									Date 3/5/05		
									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.		
									Date of Survey JUN 2004		
									Signature and Seal JOHN A. VUKONICH		
									Registered Professional Surveyor 14837		
									Certificate Number		

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL APINO. 30-045- <u>32942</u>	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. SF-078978	
7. Lease Name or Unit Agreement Name GARTNER	
8. Well Number #2	
9. OGRID Number 167067	
10. Pool name or Wildcat FRUITLAND COAL	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
XTO ENERGY INC.

3. Address of Operator
2700 FARMINGTON AVE, SUITE K-1, FARMINGTON, NM 87401

4. Well Location
Unit Letter D : 960 feet from the NORTH line and 770 feet from the WEST line
Section 27 Township 26N Range 11W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6199'GL

Pit or Below-grade Tank Application ☒ Closure ☐

Pit type DRILLING Depth to Groundwater >100 Distance from nearest fresh water well >1000' Distance from nearest surface water >200' < 1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: DRILLING X

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

XTO Energy, proposes to install a lined pit on location for drilling. The pit will be removed from location in accordance with New Mexico Oil Conservation division guidelines when work is completed.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kyle Vaughan TITLE Regulatory Compliance Tech DATE 03/04/05

Type or print name Kyle Vaughan E-mail address: Telephone No.

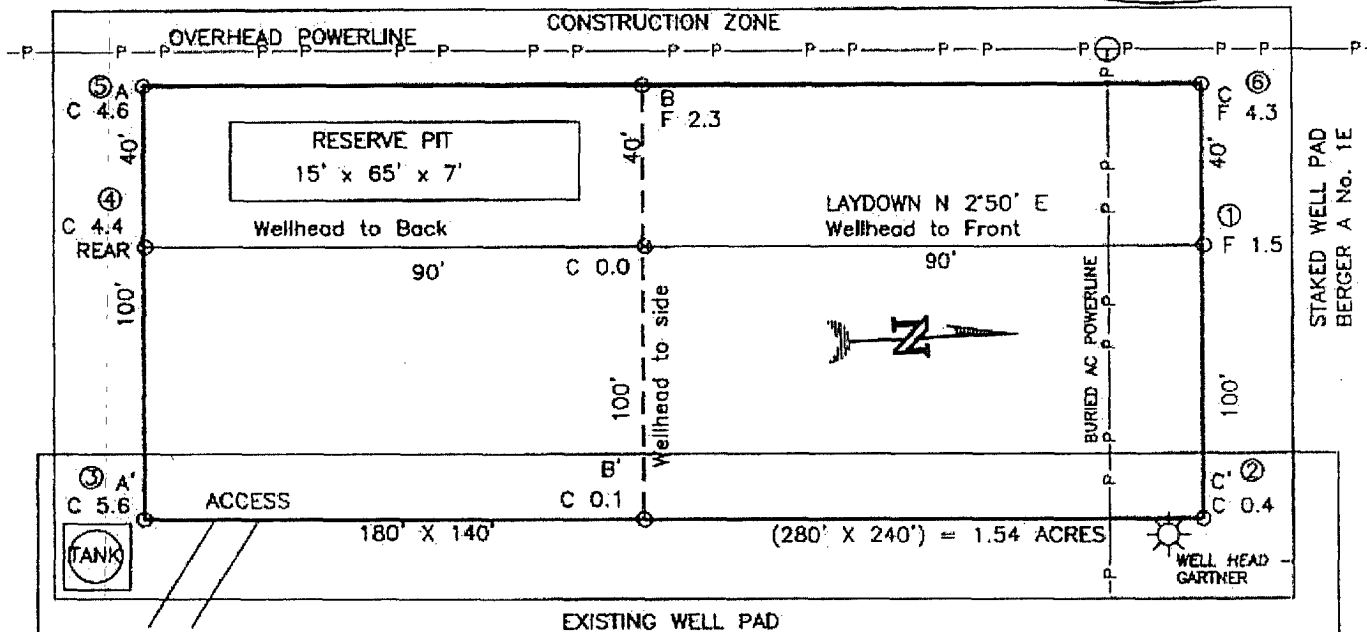
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 4 DATE JAN 05 2006

Conditions of Approval (if any):

XTO ENERGY INC.
 GARTNER No. 2, 960 FNL 770 FWL
 SECTION 27, T26N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 6199, DATE: JUNE 17, 2004

LAT: 36°27'49" N.
 LONG: 107°59'50" W.
 NAD 27



RESERVE PIT DIKE: TO BE 8" ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).

BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

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.

ELEV. A-A'

C/L

ELEV.	A-A'	C/L
6210		
6200		
6190		
6180		

ELEV. B-B'

C/L

ELEV.	B-B'	C/L
6210		
6200		
6190		
6180		

ELEV. C-C'

C/L

ELEV.	C-C'	C/L
6210		
6200		
6190		
6180		

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.

REVISION	DATE	BY	DATE	BY
NAME CHANGE per B. WOOD	9/20/04	B.L.		
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15088 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 328-6019 NEW MEXICO L.S. No. 14831 CARLOS CRUZ/CRS DATE 07/27/04				
DRAWN BY: A.G. REVIEW: CR348				

XTO ENERGY INC.

DRILLING PROCEDURE

Gartner #2

Basin Fruitland Coal

March 4, 2005

Location: 960' FNL & 770' FWL, Sec 27, T26N, R11W County: San Juan State: New Mexico

PROJECTED TOTAL DEPTH: 1,750' OBJECTIVE: Fruitland Coal GR ELEV: 6,199'

1. MUD PROGRAM:

INTERVAL	0'-200'	200'-TD
HOLE SIZE	11"	7-7/8"
MUD TYPE	FW/Native	FW/Polymer
MUD WEIGHT, ppg	8.6-9.0	8.6-9.1
VISCOSITY, sec/qt	28-32	28-33
WATER LOSS, cc	NC	NC

Remarks: Drill the surface hole with fresh water. Run and cement 7" surface casing, circulating cement to surface. NU and test BOP equipment, then drill out with fresh water. Use polymer sweeps as needed for hole cleaning. At TD, sweep the hole prior to TOH to log.

2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at $\pm 200'$ in 8.8 ppg mud in 11" open hole.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-200'	200'	24#	J-55	STC	1,370	2,950	244	8.097	7.972	14.64	31.52	50.8

Optimum makeup torque for 8-5/8" 24#, J-55, STC casing is 2,440 ft-lbs (Min - 1,830 ft-lbs, Max - 3,050 ft-lbs).

Production Casing: 5-1/2" casing to be set at $\pm 1,750'$ in 9.0 ppg mud in a 7-7/8" open hole.

Interval	Length	Wt (ppf)	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	DD (in)	SF Coll	SF Burst	SF Tension
0'-TD	1,750'	15.5#	J-55	STC	4,040	4,810	222	4.950	4.825	3.52	4.19	5.84

Optimum makeup torque for 5-1/2", 15.5#, J-55, casing is 2,020 ft-lbs (Min - 1,520 ft-lbs, Max - 2,530 ft-lbs).

Capacity of 8-5/8", 24# casing is: 0.0636 bbl/ft

Capacity of 5-1/2", 15.5# casing is: 0.0238 bbl/ft

3. WELLHEAD:

Casinghead: Larkin Fig 92 (or equivalent) 2,000 psig WP (4,000 psig test) with 8-5/8", 8rd pin on bottom and 10-3/4" API Modified 8rd thread on top (cap).

Tubinghead: Larkin Model 612 (or equivalent) 2,000 psig WP (4,000 psig test) with 5-1/2", 8rd bottom thread (or weld-on) and 8-5/8" 8rd API Modified top body thread, 4.090" minimum bore.

4. **CEMENT PROGRAM:**

A. **Surface:** 8-5/8", 24#, J-55, STC casing at $\pm 200'$.

Lead: 150 sx Type III cement (or equivalent) containing 1/4 pps celloflake, 2% CaCl₂ (mixed at 14.6 ppg, 1.39 ft³/sk, 6.67 gal wtr/sk).

Total slurry volume is ~~104.25~~ ²⁰⁸ ft³, 250% excess of calculated annular volume required to circulate cement to surface.

B. **Production:** 5-1/2", 15.5#, J-55, STC casing at $\pm 1,750'$.

Lead: $\pm 200'$ sx of Type III cement containing 8% gel, 1/4 pps Celloflake & 2% Phenoseal (mixed at 11.9 ppg, 2.54 ft³/sk, 15.00 gal wtr/sk).

Tail: 100 sx Type III cement containing 1% CaCl₂, 1/4 pps Celloflake & 2% Phenoseal (mixed at 14.5 ppg, 1.41 ft³/sk, 6.72 gal wtr/sk).

Total estimated slurry volume is 649 ft³, $\pm 40\%$ excess of calculated annular volume required to circulate cement to surface.

* Actual cement volumes will be determined using log caliper volume plus 40% excess.

5. **DRILLING HAZARDS:**

- H₂S or other Poisonous Gases: No formations known to contain H₂S or any other poisonous gases will be penetrated with this wellbore.
- Abnormal Pressures: No overpressured zones are known to exist or are anticipated to be encountered during the drilling of this well.
- Lost Circulation: Seepage and/or lost circulation may be encountered below surface casing and can be controlled with conventional lost circulation materials added to the mud system.

6. **LOGGING PROGRAM:**

Array Induction/DFL/GR/SP/Cal
DSN/Spectral Density/GR/Cal/Pe

TD to bottom of surf csg.
TD to bottom of surf csg.

7. **FORMATION TOPS:**

Formation	Subsea Depth	Well Depth
Ojo Alamo	+5841'	933'
Kirtland Shale	+5749'	1086'
Fruitland Fm	+5386'	1512'
Lower Fruitland Coal	+4834	1377'
Pictured Cliffs SS	+4815'	1396'
Lewis Shale	+4514'	1697'
T.D.	+4461'	±1750'

Note: These depths, indicated above, are approximate. Actual depths of the formation tops will be determined from the well logs.

Maximum anticipated bottomhole pressure encountered during drilling should not exceed 0.35-0.43 psi/ft.

8. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Dennis Elrod	Drilling Foreman	505-324-1090 505-486-6460 cellular	505-326-2024
Jeff Patton	Drilling Engineer	505-324-1090 505-330-2957 cellular	505-632-7882
John Klutsch	Project Geologist	817-885-2191	432-687-0615
Robin Tracy	Reservoir Engineer	817-885-2422	

9. **SPECIAL INSTRUCTIONS:**

- A. Daily drilling reports should be called in to the San Juan District office at (505) 324-1090 or faxed to (505) 564-6700 by 8:00 a.m.
- B. Deviation:
 Surface Hole: Maximum of 1° and not more than 1° change per 100'.
 Production Hole: Maximum of 4° and not more than 1° change per 100'.
Note: Maximum distance between surveys is 500'.
- C. NU & Pressure Test BOP, choke manifold & surface casing to 250/800 psig for 30 minutes. Report the pressure test on the IADC form as required.
- D. Drill out below surface casing after WOC 12 hours. Drill cement and float equipment with minimum weight and RPM until drill collars are below the bottom of the surface casing. Keep location clean and water usage to a minimum.
- E. Check BOP blind rams each trip and pipe rams each day. Strap the pipe on the last bit trip prior to reaching TD, or on the TOH to log.

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 $\frac{5}{10}$ min.

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

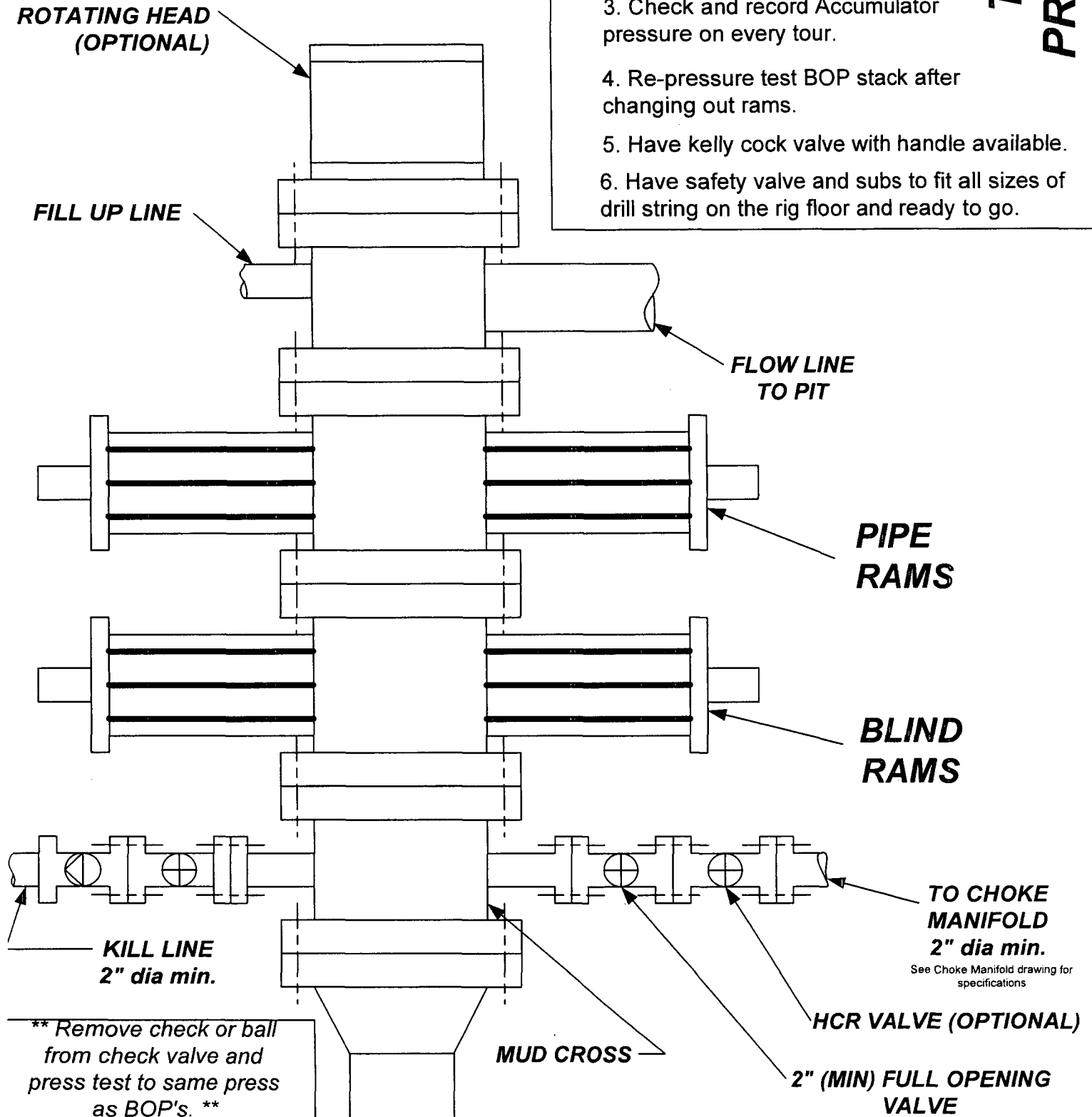
2. Test operation of (both) rams on every trip.

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.



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

