

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT86  
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. <b>SF-081239</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 <b>N/A</b>
2. Name of Operator <b>XTO Energy Inc.</b>		7. Unit or CA Agreement Name and No. <b>N/A</b>
3a. Address <b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM</b>		8. Lease Name and Well No. <b>LC KELLY #2F</b>
3b. Phone No. (include area code) <b>505-324-1090</b>		9. API Well No. <b>30-045-33240</b>
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface <b>1810' FNL x 665' FEL in Sec 5, T30N, R12W</b> At proposed prod. zone <b>SAME</b>		10. Field and Pool, or Exploratory <b>Basin DAKOTA</b>
14. Distance in miles and direction from nearest town or post office* <b>Approx 3.29 air miles northwest of Flora Vista, NM Post Office</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>H55, T30N, R12W</b>
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) <b>665'</b>	16. No. of Acres in lease <b>2410.24</b>	17. Spacing Unit dedicated to this well <b>E/2 297.89</b>
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. <b>510'</b>	19. Proposed Depth <b>7100'</b>	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>5894' Ground Elevation</b>	22. Approximate date work will start* <b>fall 2005</b>	23. Estimated duration <b>21 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 <b>Kyla Vaughan</b>	Name (Printed/Typed) <b>Kyla Vaughan</b>	Date <b>07/15/05</b>
Title <b>Regulatory Compliance Tech</b>		

Approved by (Signature) <b>Roland Adams</b>	Name (Printed/Typed) <b>ROLAND ADAMS</b>	Date <b>08/11/05</b>
Title <b>Acting AFM</b>	Office <b>FARMINGTON DISTRICT OFFICE</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)

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

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**

NHCDD

DISTRICT I  
1825 N. French Dr., Hobbs, N.M. 88240

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

DISTRICT III  
1000 Rio Brazos Rd., Artesia, 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 13

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

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code	*Pool Name
	71599	Basin Dakota
*Property Code	*Property Name	*Well Number
22620	L.C. KELLY	2F
*OCRD No.	*Operator Name	*Elevation
167067	XTO ENERGY INC.	5894

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
H	5	30-N	12-W	12	1810	NORTH	665	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

*Dedicated Acres	*Joint or Infill	*Consolidation Code	*Order No.
8/2 297.89			

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

LOT 8	QTR. CORNER FD 3 1/4" BC 1951 B.L.M.	LOT 7	N 89-03-33 W 2623' (C)	LOT 6	CALC'D COR.	LOT 5	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Kelly K. Small Drilling Assistant Date: 5/20/05
LOT 9		LOT 10	LAT: 36°50'37.1" N. (NAD 27) LONG: 108°06'50.9" W. (NAD 27)	LOT 11	1810	LOT 12	5 04-33-45 2474.9' (C)
LOT 16		LOT 15	5	LOT 14	QTR. CORNER FD 3 1/4" BC 1976 B.L.M.	LOT 13	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 knowledge and belief.  FEDERAL BUREAU OF SURVEY NEW MEXICO 14831 15 14831
LOT 17		LOT 18		LOT 19		LOT 20	

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
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

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004

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

WELL API NO.

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name:

LC KELLY

8. Well Number

#2F

9. OGRID Number

167067

10. Pool name or Wildcat

BASIN DAKOTA

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., Bldg. K. Ste 1 Farmington, NM 87401

4. Well Location

Unit Letter H : 1810 feet from the NORTH line and 665 feet from the EAST line

Section 5 Township 30N Range 12W NMPM NMPM County SAN JUAN

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

5894'

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type DRILL Depth to Groundwater >100 Distance from nearest fresh water well 1 MILE 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 COMPLETION ☐

OTHER: PIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

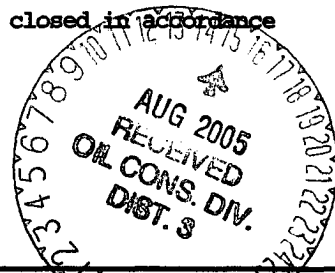
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND 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 proposed to install a pit on location for drilling. The pit will be closed in accordance with NMOCD 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 ☐

SIGNATURE Kyla Vaughan TITLE Regulatory Compliance Tech DATE 07/15/05

Type or print name Kyla Vaughan

E-mail address: kyla\_vaughan@ctoenergy.com

Telephone No. 505-564-6726

For State Use Only

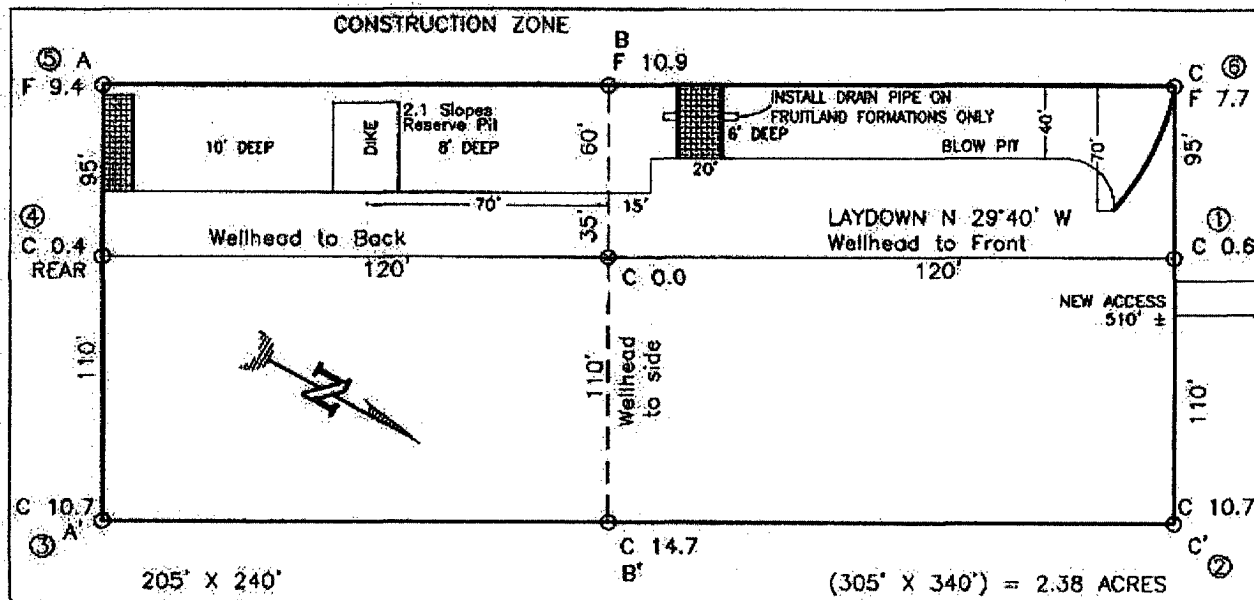
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE AUG 15 2005

Conditions of Approval, if any:

EXHIBIT D

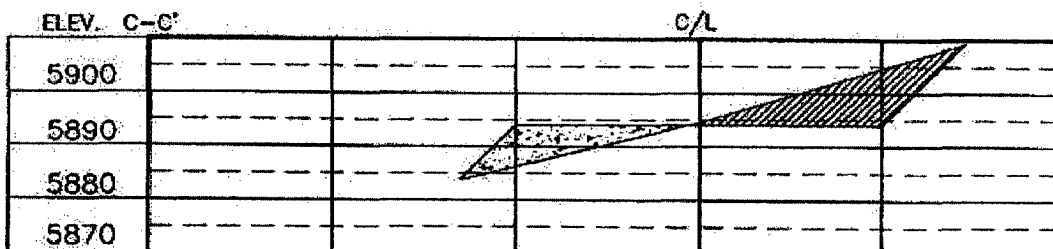
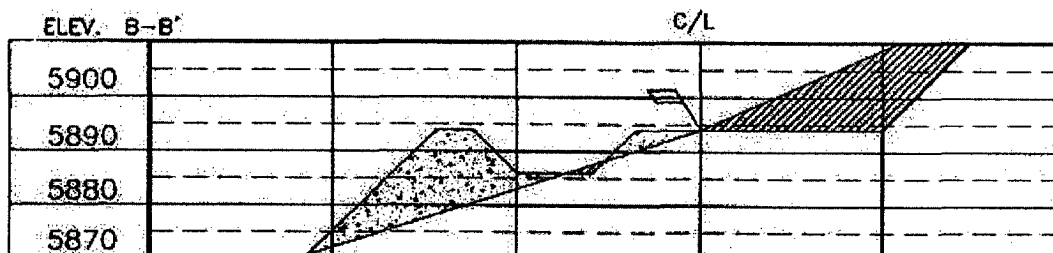
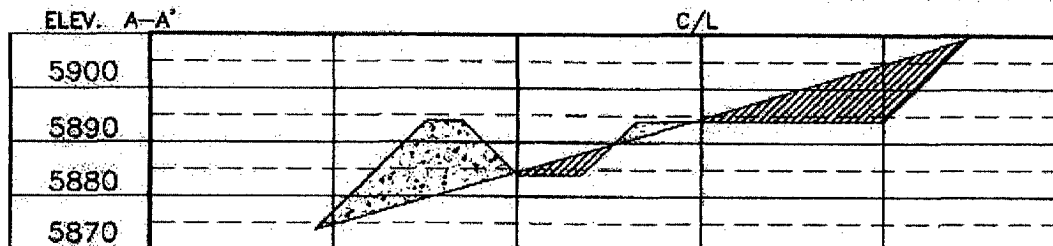
XTO ENERGY INC.  
 L.C. KELLY No. 2F, 1810' FNL 665' FEL  
 SECTION 5, T30N, R12W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 5894', DATE: FEBRUARY 22, 2005

LAT. = 36°50'37.1" N.  
 LONG. = 108°06'50.9" W  
 NAD 27

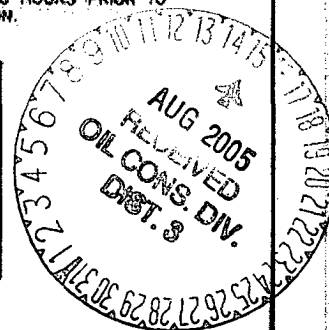


RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

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.



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.



DATE:	REVISED BY:	Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15068 • Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-0019 NEW MEXICO P.L.S. No. 14831 CORDO GR494578 DRAWN BY: A.G. CHECKED: CR466
DATE:	REVISED BY:	

EXHIBIT E

# XTO ENERGY INC.

LC Kelly #2F

APD Data

July 12, 2005

Location: 1,810' FNL x 665' FEL Sec 5, T30N, R12W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7,100'

APPROX GR ELEV: 5,894'

OBJECTIVE: Basin Dakota

Est KB ELEV: 5,906' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4,000'	4,000' 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 ( $\pm 7,100'$ ) 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	7,100'	15.5#	J-55	STC	4040	4810	202	4.950	4.825	1.25	1.48	1.88

## 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 F

**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  $\pm 7,100'$  in 7-7/8" hole. DV Tool set @  $\pm 4,000'$

1<sup>st</sup> Stage

LEAD:

$\pm 225$  sx of Premium Lite HS (or equivalent) with salt, dispersant, fluid loss & LCM mixed at 12.5 ppg, 2.01 ft<sup>3</sup>/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III cement (or equivalent) 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:

$\pm 500$  sx of Type III cement (or equivalent) with gel & LCM mixed at 11.9 ppg, 2.54 ft<sup>3</sup>/sk, 15.00 gal wtr/sx.

TAIL:

100 sx Type III cement (or equivalent) neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

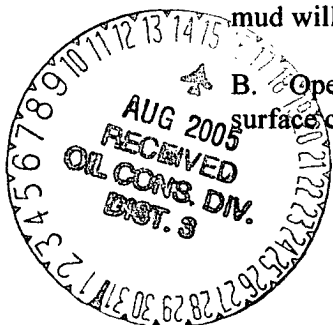
*Total estimated slurry volume for the 5-1/2" production casing is 2,092 ft<sup>3</sup>.*

*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 2,900' 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 (7,100') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7,100') to 2,000'.



**EXHIBIT F**

## 6. FORMATION TOPS:

Est. KB Elevation: 5,906'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5300'	606'
Kirtland Shale	+5214'	692'
Farmington SS	+5090'	816'
Fruitland Formation	+4159'	1747'
Lower Fruitland Coal	+3959'	1947'
Pictured Cliffs SS	+3759'	2147'
Lewis Shale	+3559'	2347'
Chacra	+2696'	3210'
Cliffhouse SS	+2129'	3777'
Menefee	+2029'	3877'
Point Lookout SS	+1406'	4500'
Mancos Shale	+1250'	4656'
Gallup SS	+144'	5762'
Greenhorn Limestone	-600'	6506'
Graneros Shale	-658'	6564'
1 <sup>st</sup> Dakota SS	-727'	6633'
2 <sup>nd</sup> Dakota SS	n/a	n/a
3 <sup>rd</sup> Dakota SS	-774'	6680'
4 <sup>th</sup> Dakota SS	n/a	n/a
5 <sup>th</sup> Dakota SS	-813'	6719'
6 <sup>th</sup> Dakota SS	-851'	6757'
Burro Canyon SS	-943'	6849'
Morrison Shale	-1000'	6906'
Project TD	-1176'	7100'

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

## 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
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP  
7/12/05

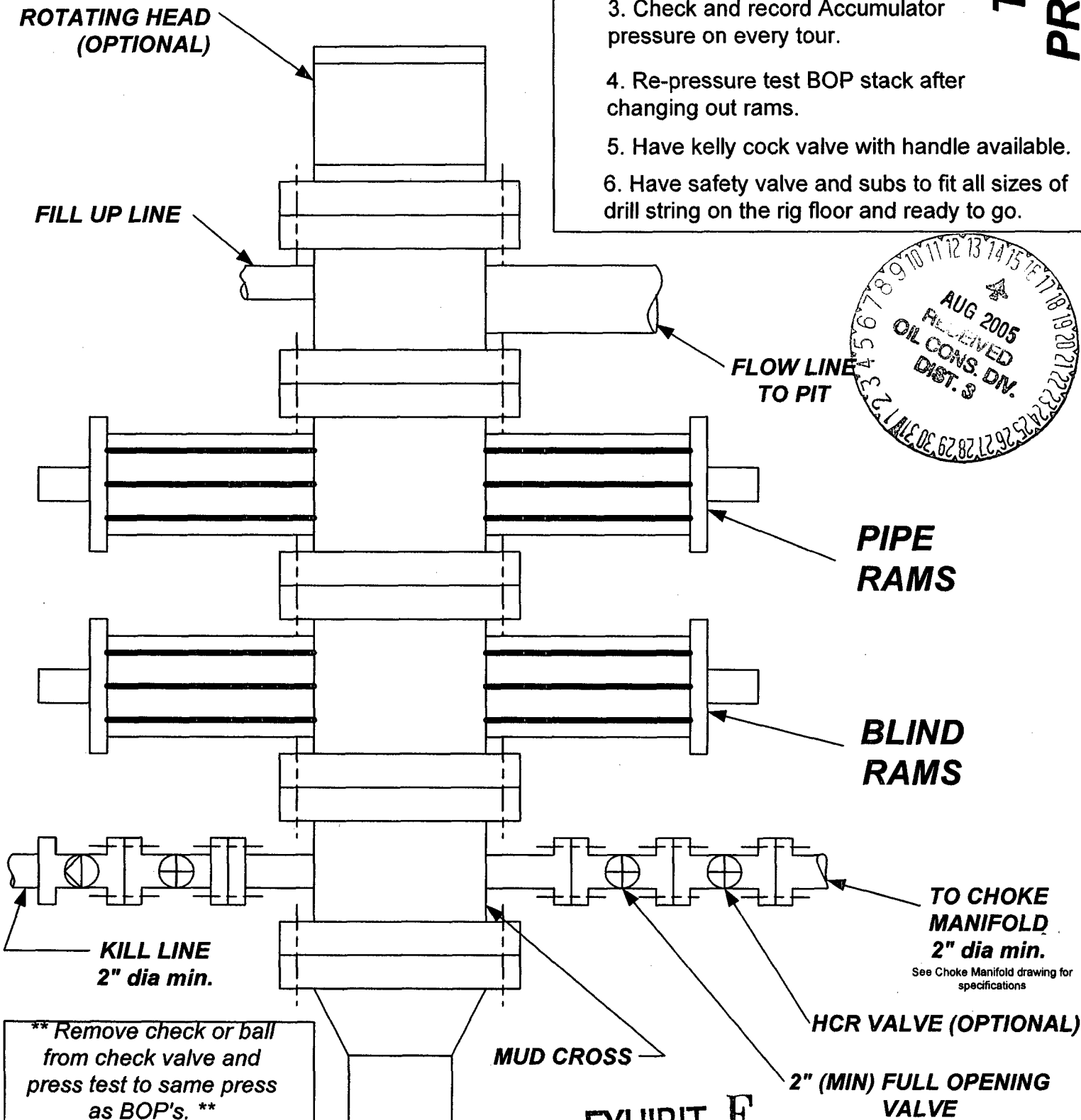


EXHIBIT F

# 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~~<sup>10</sup> 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.

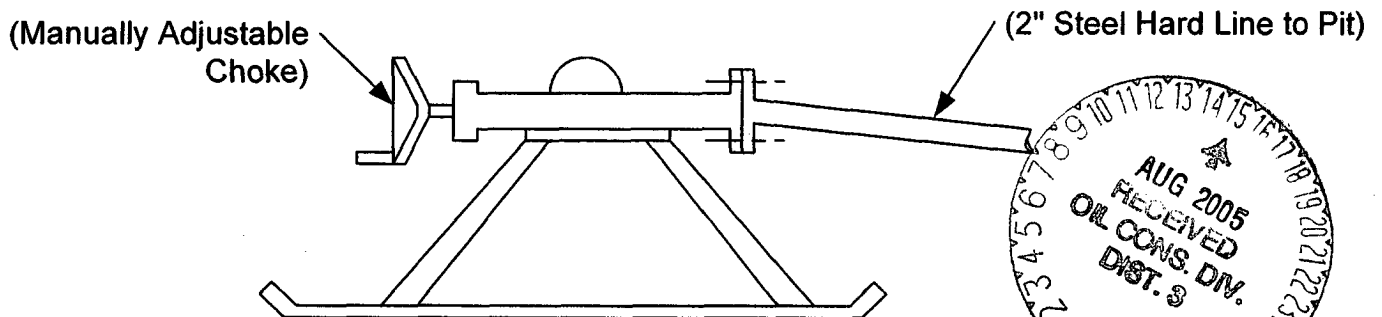
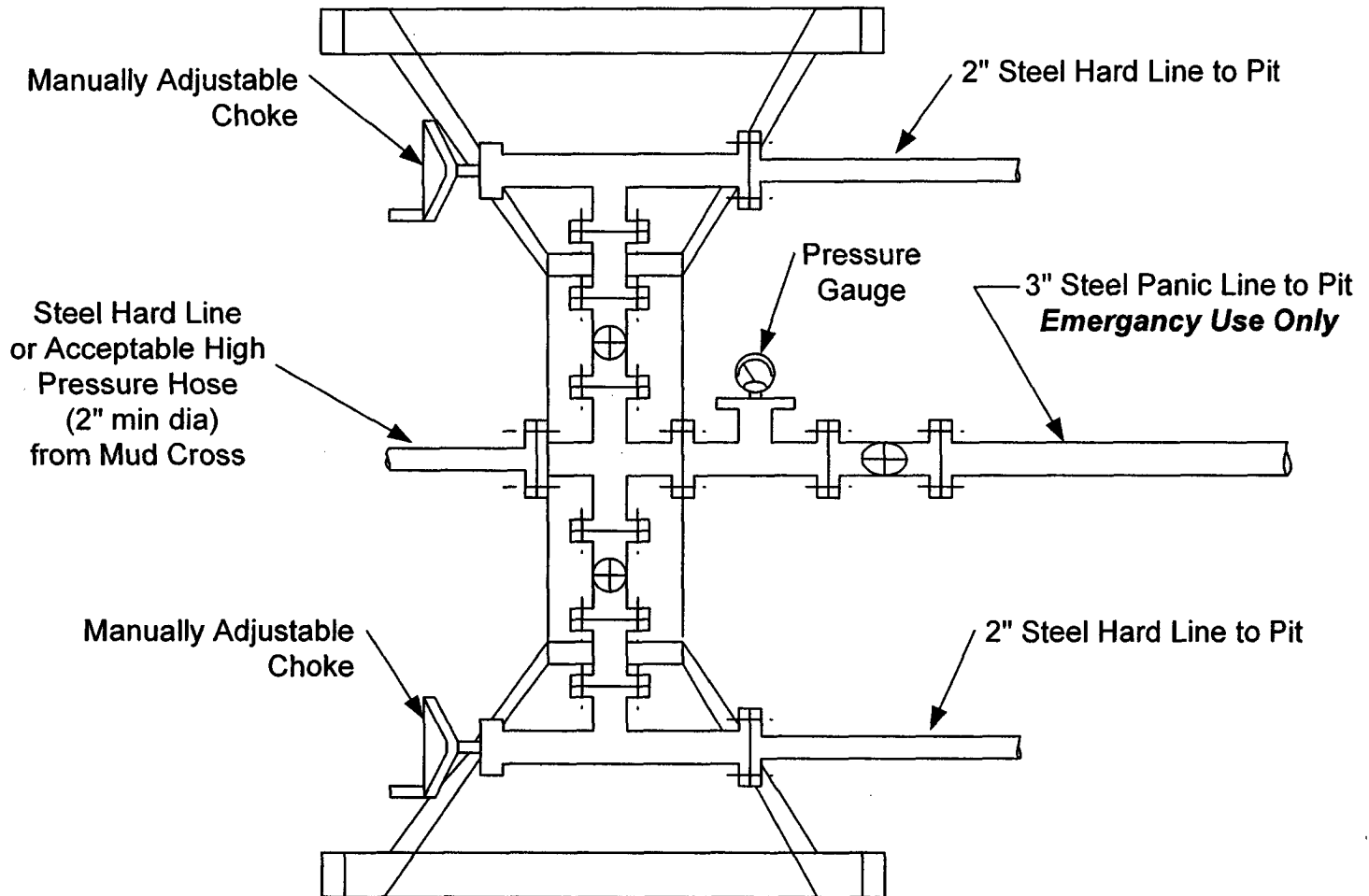




# **CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE**

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**



**EXHIBIT F**