Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.
~~SW-359~~ SF-077382

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
22766

1a. TYPE OF WORK
DRILL [X] — DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] — OTHER — SINGLE ZONE [X] — MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.
Martin "C" Federal #1E

2. NAME OF OPERATOR
Cross Timbers Operating Company

9. API WELL NO.
30-045 30763

3. ADDRESS AND TELEPHONE NO.
2700 Farmington Ave., Bldg. K, Ste 1 Farmington, NM 87401

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
At surface
1,050' FSL & 1,200' FEL
At proposed prod. zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 3, T27N, R10W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
This well is located approx 23 southeast of the Bloomfield NM post office

12. COUNTY OR PARISH
San Juan

13. STATE
NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1,050'	321.28	321.28
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
325'	6925'	0-6925' Rotary Tools

21. ELEVATIONS (Show whether DF,RT, GR, etc.)
6086' Ground Level

22. APPROX. DATE WORK WILL START*
Oct. 2001

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24 #/ft	+-350'	+- 245 sx cl B cmt
7-7/8"	4-1/2", J-55	10.5 #/ft	+-6925'	+- 715 sx cmt

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

SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

Cross Timbers plans to drill the above mentioned well as described in the enclosed Surface Use Program.

AUG 2001
RECEIVED
OIL CON. DIV
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposalis to deepen, give data on present productive zone and proposednew productivezone. If proposalis to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED J W Patton TITLE Drilling Engineer DATE 7/17/01

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 8/21/01

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

APPROVED BY /s/ Joel Farrell TITLE _____ DATE AUG 21

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

NMOCD

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

RECEIVED
070 FARMINGTON NM
MAY 21 2001

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-30763	71599	BASIN DAKOTA

[4] Property Code	[5] Property Name	[6] Well Number
22766	MARTIN "C" FEDERAL	1E

[7] OGRID No.	[8] Operator Name	[9] Elevation
167067	CROSS TIMBERS OPERATING CO.	6086'

[10] Surface Location

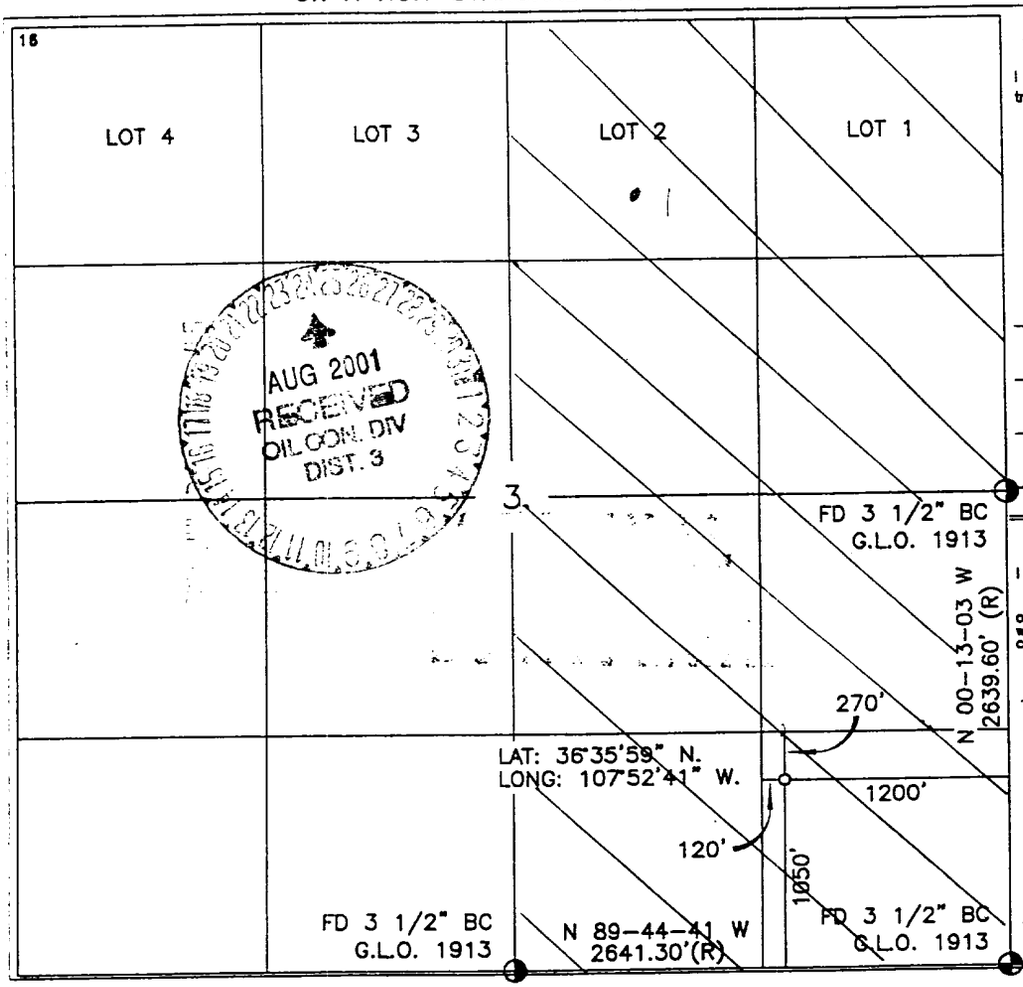
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	3	27-N	10-W		1050'	SOUTH	1200'	EAST	SAN JUAN

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
321.28 E/2	I		

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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

JW Patton
Signature

JEFFREY W PATTON
Printed Name

DRILLING ENGINEER
Title

7-17-01
Date

[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.

5/8/01
Date of Survey

Signature and Seal of Professional Surveyor:

14827
Certificate Number

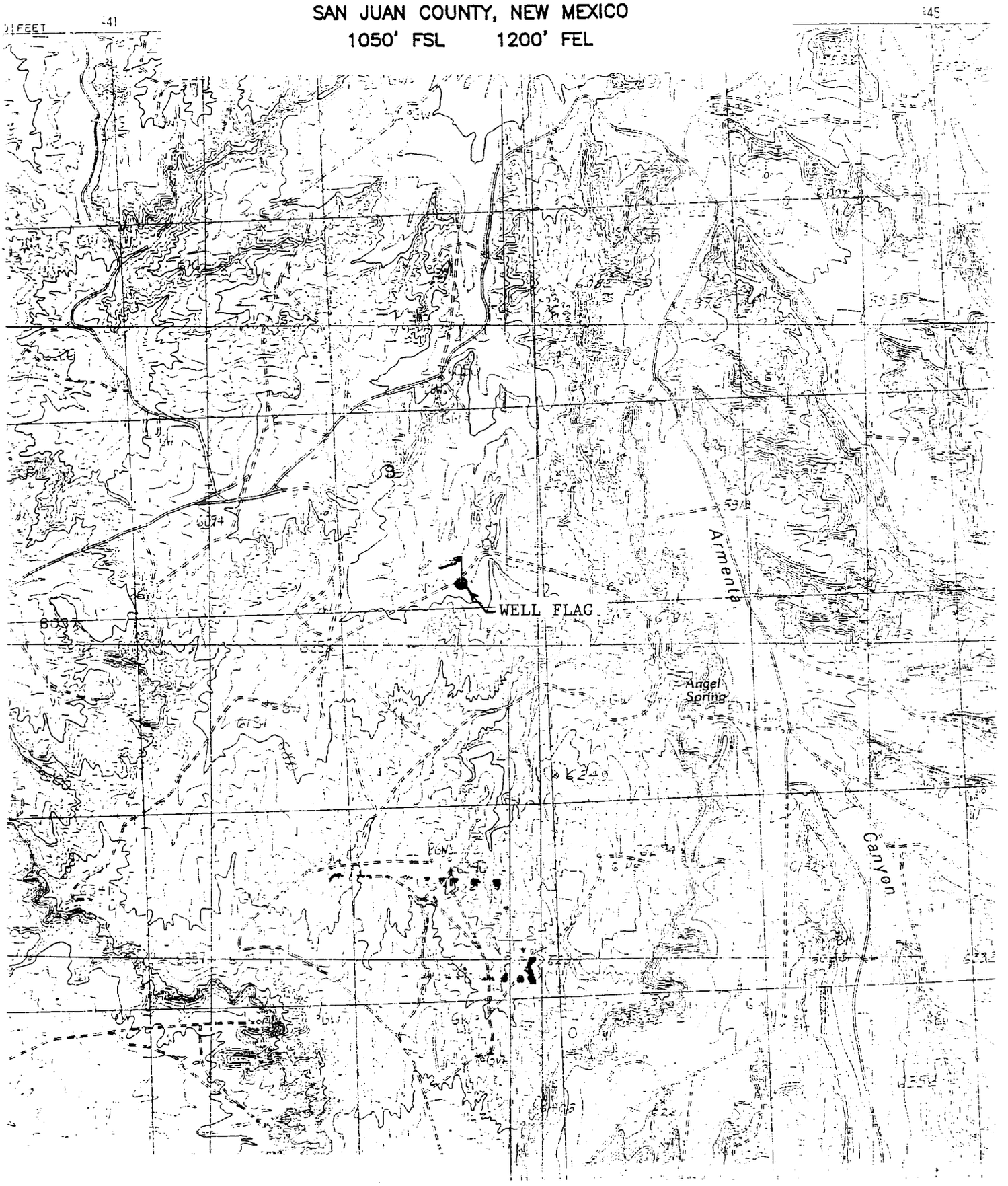
CROSS TIMBERS OPERATING COMPANY

MARTIN "C" FEDERAL #1E

SE/4 SEC. 3, T-27-N, R-10-W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

1050' FSL 1200' FEL



CROSS TIMBERS OPERATING COMPANY

"Martin "C" Federal #1E"

APD Data

July 30, 2001

Location: Sec 3, T27N R10W **County**: San Juan **State**: New Mexico

GREATEST PROJECTED TD: 6,925' OBJECTIVE: Basin Dakota
APPROX GR ELEV: 6,086' Est KB ELEV: 6,098' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 350'	350' to 4,500'	4,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	PolyPlus
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 ± 350' in 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'-350'	350'	24#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 4-1/2" casing to be set at TD in 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	6,925'	10.5#	J-55	STC	4010	4790	132	4.052	3.875	1.66	1.33	2.44

3. WELLHEAD:

A. 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.
B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 4-1/2" 8rnd female thread on bottom, 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: 8-5/8", 24#, J-55, STC casing to be set at ± 350'. circulate

245 sx of Class "B" cement containing 2% $CaCl_2$, ¼ pps celloflake, mixed at 15.6 ppg, 1.18 ft^3/sk, & 5.20 gal wtr/sk.

Total slurry volume is 289 ft^3, 100% excess of calculated annular volume to 350'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at ±6,925'.

515 sx of Lite-Crete cement (proprietary blend) containing ¼ pps celloflake mixed at 9.5 ppg, 2.52 ft^3/sk, 11.50 gal wtr/sx followed by 200 sx 50/50 class "G" with poz, 6 % gel, 1/4#/sx cellofalke, 0.2% dispersant & 0.2% fluid loss additive mixed at 13.0 ppg, 1.42 cuft/sx, 9.85 gal/sx.

Total estimated slurry volume for the 4-1/2" production casing is 1,575 ft^3 (no excess).

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 30%. It will be attempted to circulate cement to the surface.

5. LOGGING PROGRAM:

A. Mud Logger: The mud logger will come on at 3,500' and will remain on the hole until TD. The mud will be logged in 10' intervals.

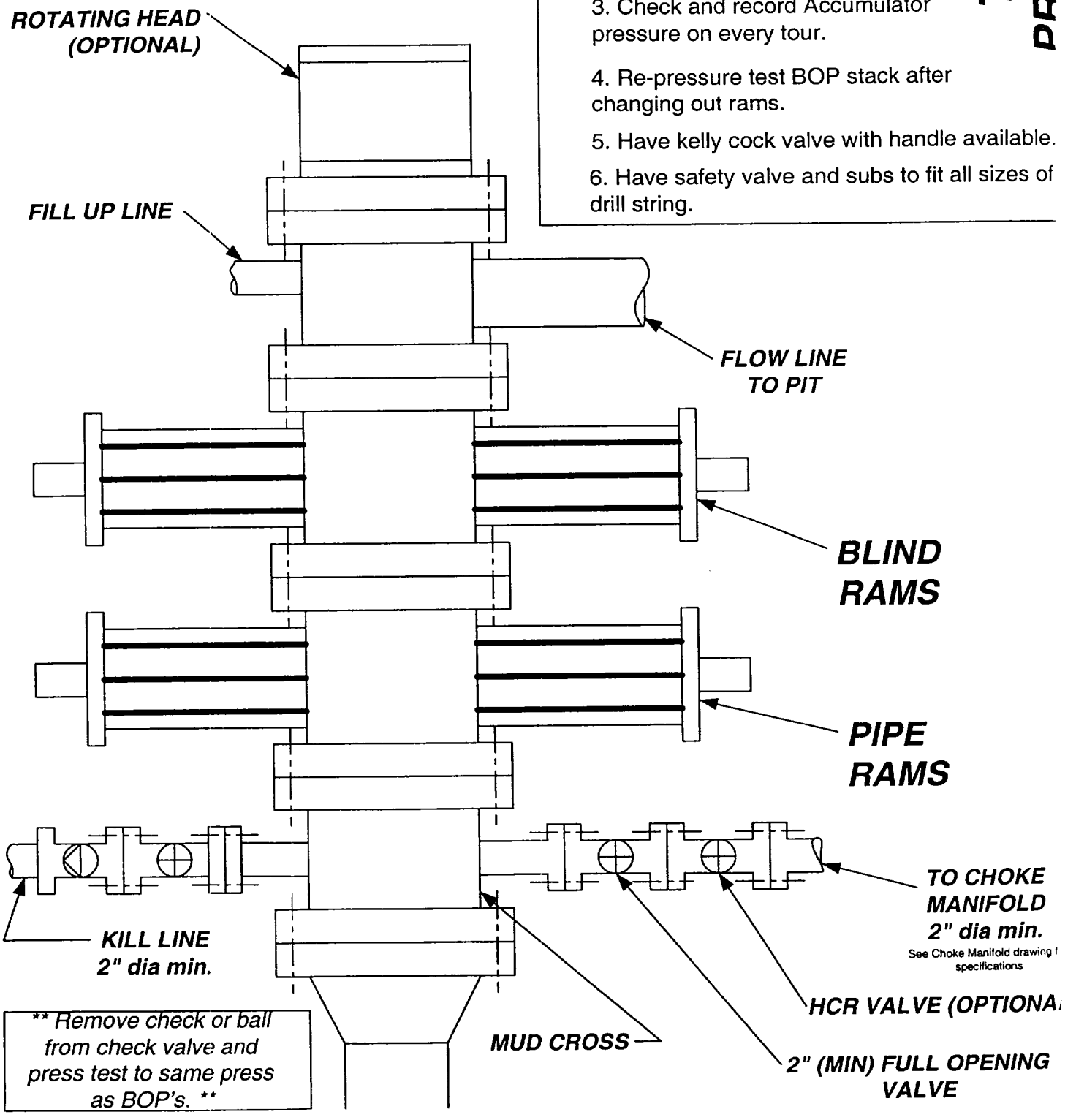
B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD to 5,000'.

Cross Timbers Operating Company

BOP SCEMATIC 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.
   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.



** Remove check or ball from check valve and press test to same press as BOP's. **