

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER ☐

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Cross Timbers Operating Company

3. ADDRESS AND TELEPHONE NO.

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface

1,645' FSL & 1,160' FEL

At proposed prod. zone

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

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 1,160'

16. NO. OF ACRES IN LEASE

320.51

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320.51

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

275'

19. PROPOSED DEPTH

6825' 6875'

20. ROTARY OR CABLE TOOLS

0-6825' Rotary Tools

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,009' 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	+6825' 6875'	+ 705 sx cmt

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

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 all  
"GENERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is 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

*[Signature]*

TITLE Drilling Engineer

DATE 7/17/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

11/27/01

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:

/s/ Jim Lovato

NOV 27 2001

APPROVED BY

TITLE

DATE

\*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.

K

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  
Geology, Minerals & Natural Resources Department

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

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

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-30755		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 22757	<sup>5</sup> Property Name KUTZ FEDERAL "J"		<sup>6</sup> Well Number 2E
<sup>7</sup> GRID No. 167067	<sup>8</sup> Operator Name CROSS TIMBERS OPERATING CO.		<sup>9</sup> Elevation 6009'

#### <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
1	6	27-N	10-W		1645'	SOUTH	1160	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
<sup>12</sup> Dedicated Acres 320.51 E/2		<sup>13</sup> Joint or Infill I		<sup>14</sup> Consolidation Code		<sup>15</sup> 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

<sup>16</sup> LOT 4 LOT 3 LOT 2 LOT 1 LOT 5 LOT 6 LOT 7 QTR. CORNER FD. U.S.G.L.O. BC. 1913 S 89-44-47 E 2641.4' (M) QTR. CORNER MONUMENT DESTROYED BY WATER DIVERSION LAT. = 36-36-06 N. LONG. = 107-55-55 W. 995' 1160' 161' 325' 1645' 2640.0' (R) N 0-05 W				<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature <u>Jeffrey W. Patton</u> Printed Name <u>JEFFREY W. PATTON</u> Title <u>DRILLING ENGINEER</u> Date <u>7-18-01</u>	
<sup>18</sup> 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 <u>3-28-2001</u> Signature and Seal of Professional Surveyor <u>ROY A. RUSH</u> 8894 Certificate Number					

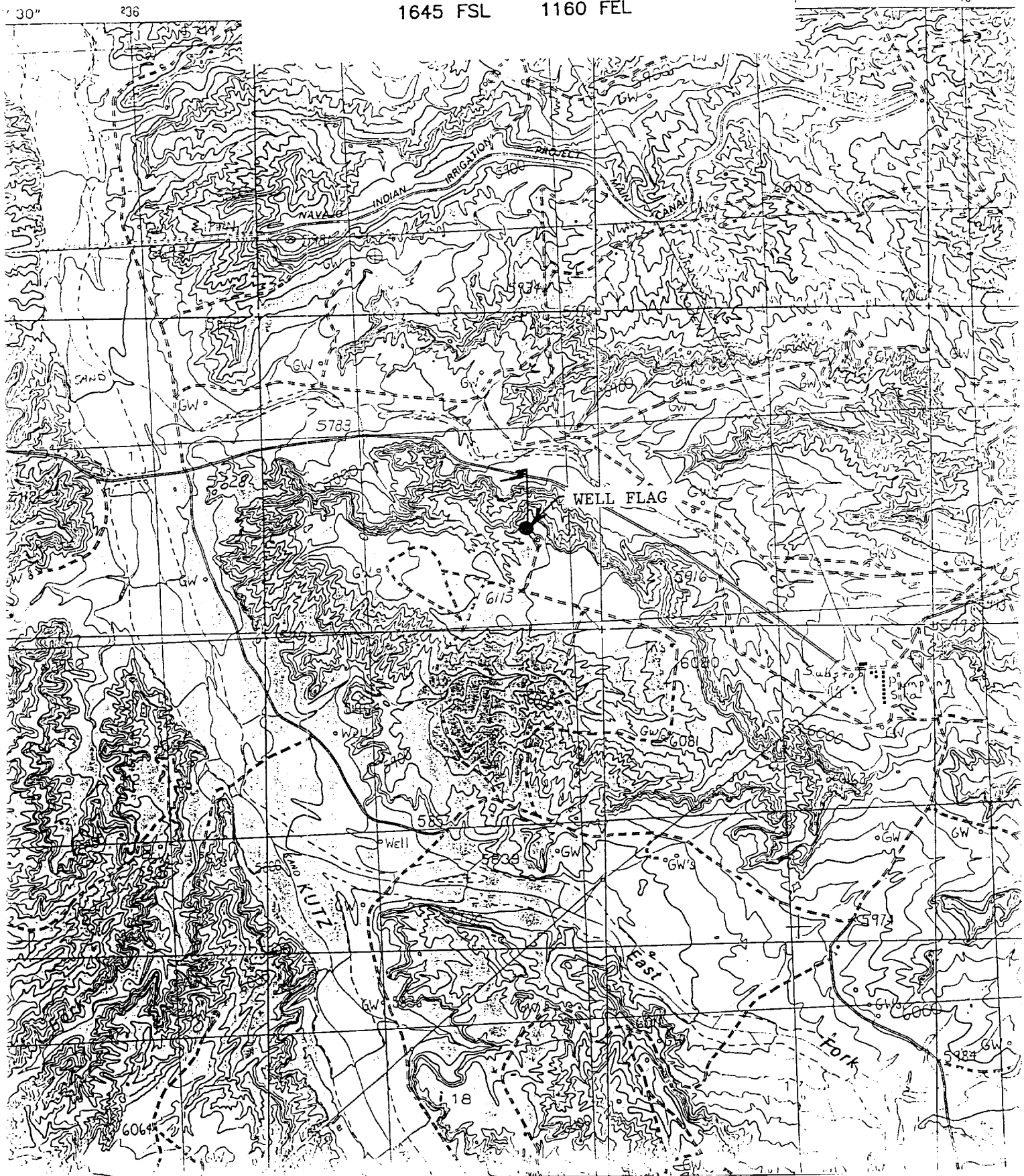
# CROSS TIMBERS OPERATING COMPANY

KUTZ FEDERAL "J" #2E

SE/4 SEC. 6, T-27-N, R-10-W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

1645 FSL 1160 FEL



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse NOV 2001

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

2. Name of Operator

Cross Timbers Operating Company

3a. Address

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1,645' FSL & 1,160' FEL in sec 6, T27N, R10W

5. Lease Serial No.

NMSF - 077384

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No

8. Well Name and No.

Kutz Federal "J" #2E

9. API Well No.

10. Field and Pool, or Exploratory Area  
Basin Dakota

11. County or Parish, State

San Juan NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> Acidize                 | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing            | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair           | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other          |
| <input checked="" type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       |   |
| <input type="checkbox"/> Convert to Injection    | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximated duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Cross Timber Operating Co. has filed the APD for the above mentioned well. A correction has been made to the formation tops and the total depth of the well. The attached drilling program will replace the original drilling program that was filed with the APD.

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

*Jim Lovato*

Title

Drilling Engineer

Date 8/17/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Jim Lovato

Title

Date NOV 27 2001

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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.

(Instructions on reverse)

NMOC

# CROSS TIMBERS OPERATING COMPANY

"Kutz Federal "J" #2E"

APD Data

August 17, 2001

Location: Sec 6, T27N R10W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 6,875'  
APPROX GR ELEV: 6,009'

OBJECTIVE: Basin Dakota  
Est KB ELEV: 6,021' (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  $\pm$  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	6,875'	10.5#	J-55	STC	4010	4790	132	4.052	3.875	1.66	1.33	2.44

## 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), 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  $\pm 350'$ .

245 sx of Class "B" cement containing 2%  $\text{CaCl}_2$ , 1/4 pps celloflake, mixed at 15.6 ppg, 1.18  $\text{ft}^3/\text{sk}$ , & 5.20 gal wtr/sk.

*Total slurry volume is 289  $\text{ft}^3$ , 100% excess of calculated annular volume to 350'.*

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 6,875'$ .

505 sx of Lite-Crete cement (proprietary blend) containing 1/4 pps celloflake mixed at 9.5 ppg, 2.52  $\text{ft}^3/\text{sk}$ , 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 1,555  $\text{ft}^3$  (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.*

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**5. LOGGING PROGRAM:**

A. Mud Logger: The mud logger will come on at 5,200' 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'. FMI log will be run from  $\pm 6,875'$  to 6,375'.

**6. FORMATION TOPS:**

Est. KB Elevation: 6,021'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5193'	828'
Kirtland Shale	+5051'	970'
Fruitland Formation	+4434'	1587'
Lower Fruitland Coal	+4153'	1868'
Pictured Cliffs SS	+4135'	1886'
Lewis Shale	+3981'	2040'
Cliffhouse SS	+2627'	3394'
Menefee	+2484'	3537'
Point Lookout SS	+1772'	4248'
Mancos Shale	+1429'	4592'
Gallup SS	+601'	5420'
Greenhorn Limestone	-194'	6215'
Graneros Shale	-249'	6270'
Dakota SS	-283'	6304'
Burro Canyon SS	-577'	6598'
Morrison Shale	-635'	6656'
Project TD	-854'	6875'

**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

# **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.

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.**

