

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

| | | | |
|---|--|--|--|
| 1a. Type of Work DRILL | | 5. Lease Number NM-03547 | |
| 1b. Type of Well GAS | | 6. If Indian, Name of Allottee or Tribe | |
| 2. Operator CAULKINS OIL COMPANY | | 7. API Number 30-039-29998 | |
| 3. Address & Phone No. of Operator c/o ROBERT VERQUER 1409 W. Aztec Blvd. # 7 Aztec, N. M. 87410 (505) 334-4323 | | 8. Farm or Lease Name BREECH "F" | |
| 4. Location of Well 1900 FNL & 890' FEL | | 9. Well Number 16 | |
| 10. Filed, Pool, or Wildcat Basin Dakota | | 11. Section, Township, & Range, Meridian, or Block H 33-27N-6W | |
| 12. County Rio Arriba | | 13. State New Mexico | |
| 14. Distance in Miles from Nearest Town 35 miles southeast of Blanco, NM Post Office. | | 15. Distance from Proposed Location To Nearest Property Line or Lease Line 890' | |
| 16. Acres in Lease 1600 Acres | | 17. Acres Assigned to Well EAST - 320 Acres | |
| 18. Distance From Proposed Location To Nearest Well Drill, Compl., Or Applied For on Lease 915' | | 19. Proposed Depth 7675' | |
| 20. Rotary or Cable Tools ROTARY | | 21. Elevations (DR, RT, GR, Etc.) 6633 GR | |
| 22. Approximate Date Work Will Start SEPTEMBER 4, 2006 | | 23. Proposed Casing and Cementing Program | |

EXHIBITS attached as follows

"A" C-103 & Location and Elevation Plat
"B" Ten-Point Compliance Program
"C" Blowout Preventer Schematic
"D" Multi-Point Requirements for APD
"E" Vicinity Map - Access Roads

"F" Drill Rig Layout
"G" Production Facility Schematic
"H" Acreage dedication plat
"I" Archaeological Report
"J" Pipeline Schematic

24. Signed Robert L. Verquer Title Superintendent Date 7-14-06
Robert L. Verquer

Permit No. Approval Date
Approved By Title AFM Date 8/1/06

NOTE: THIS FORMAT IS ISSUED IN LIEU OF U.S. BLM FORM 3160-3

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

NMOC

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

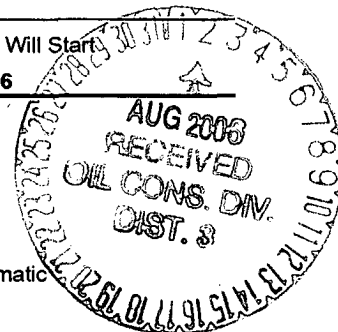


EXHIBIT "I"

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

DISTRICT II
811 South First, Artesia, N.M. 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|-----------------------------|--|----------------------------|
| *API Number 30-039-29998 | *Pool Code 71599 | *Pool Name Basin Dakota |
| *Property Code 2460 | *Property Name BREECH F | *Well Number 16 |
| *OGRID No. 3824 | *Operator Name CAULKINS OIL COMPANY | *Elevation 6633 |

¹⁰ Surface Location

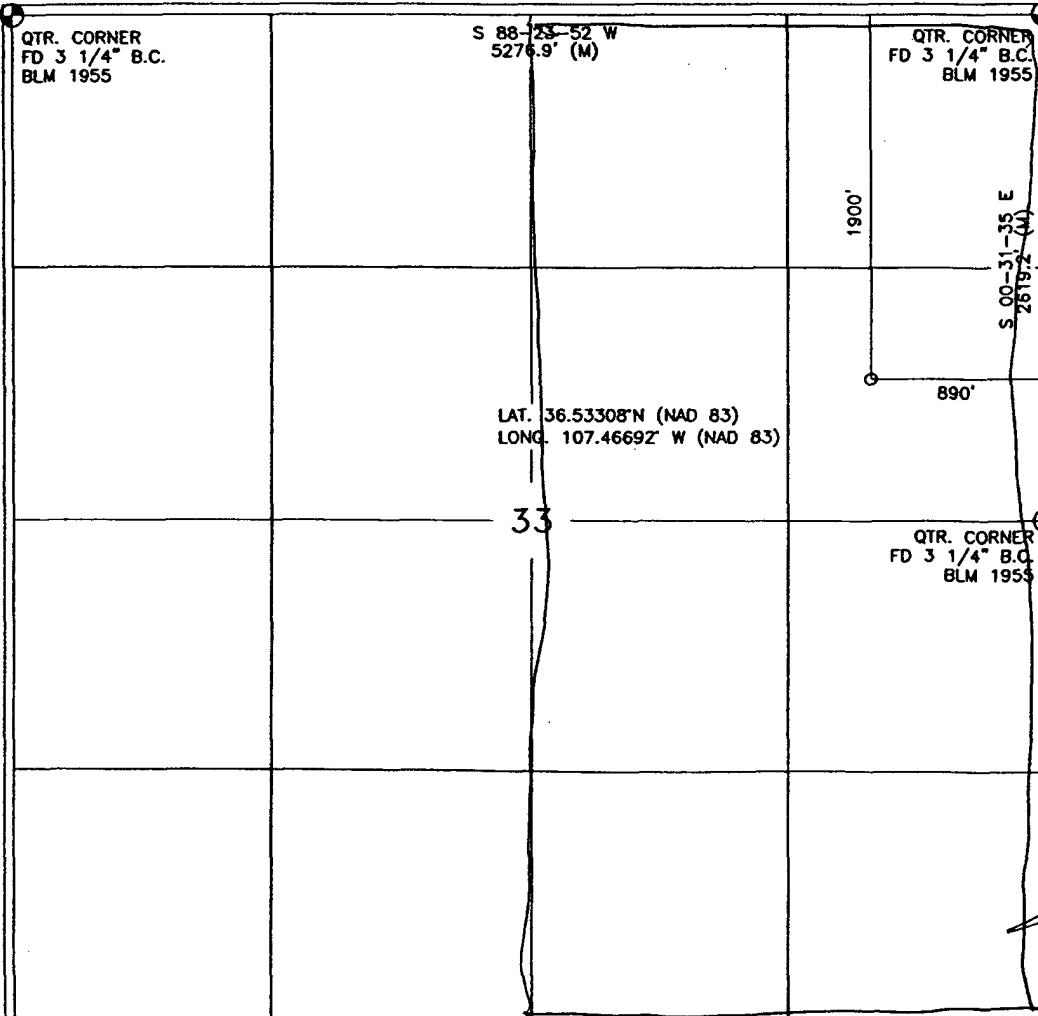
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| H | 33 | 27-N | 6-W | | 1900 | NORTH | 890 | EAST | RIO ARriba |

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. | | |
| | | | | | | | | | |

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

16



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Robert L. Vergner 7-14-06
Signature Date

Robert L. Vergner
Printed Name

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.

APRIL 5, 2006

Date of Survey
Signature of Registered Professional Surveyor

Certification Number

14831

EXHIBIT "A"
State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Frances Dr.
Santa Fe, New Mexico 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR TO 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

Caulkins Oil Company

3. Address of Operator

1409 W. Aztec Blvd., Suite B7, Aztec, NM 87410

4. Well Location

Unit Letter H : 1900' feet from the North line and 890' feet from the West line
33 Section 27N Township 6W Range NMPM Rio Arriba County

10. Elevation (Show Whether DF, RKB, RT, GR, etc.)

6633 GR

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well 1 mile Distance from nearest surface water 1/2 mile

Pit Liner thickness: 30 mil Below-grade Tank: Volume _____ bbls; Construction Material _____

NOTICE OF INTENTION TO:

Perform Remedial Work ☐ Plug and Abandon ☐

Temporarily Abandon ☐ Change Plans ☐

Pull or Alter Casing ☐ Multiple Completion ☐

Other: Drilling Pit ☒

SUBSEQUENT REPORT OF:

Remedial Work ☐ Altering Casing ☐

Commence Drilling Opns. ☐ Plug and Abandonment ☐

Casing Test and Cement Job ☐

Other: _____ ☐

12. Describe Proposed or Completed Operations

Construct new below-grade drilling pit along with location.

Cut and fill diagram attached.

A liner will be installed in this pit to prevent ground water contamination.

Construction is scheduled to begin August 2006.

NOTE: This format is in lieu of State Form C-103.

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

SIGNATURE

Robert L. Verquer

ROBERT L. VERQUER

TITLE Superintendent

DATE July 14, 2006

Ph. (505) 334-4323

(This space for State Use)

APPROVED BY

[Signature]

DEPUTY OIL & GAS INSPECTOR, DIST. #9

TITLE

DATE

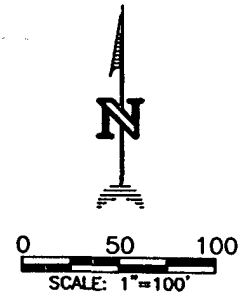
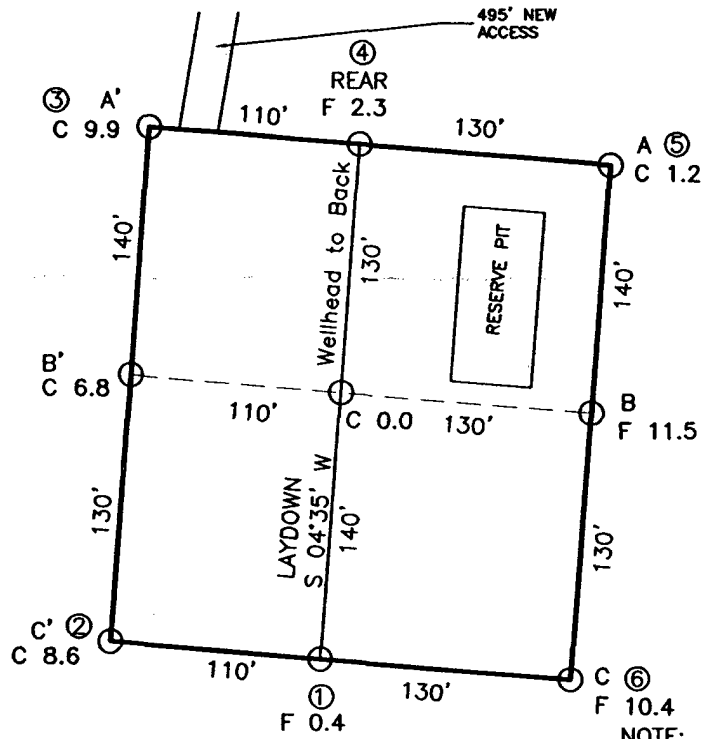
AUG 02 2006

CONDITIONS OF APPROVAL, IF ANY:

EXHIBIT "A"

CAULKINS OIL CO.
BREECH F No. 16, 1900 FNL 890 FEL
SECTION 33, T27N, R6W, N.M.P.M., RIO ARRIBA COUNTY, N. M.
GROUND ELEVATION: 6633', DATE: APRIL 5, 2006

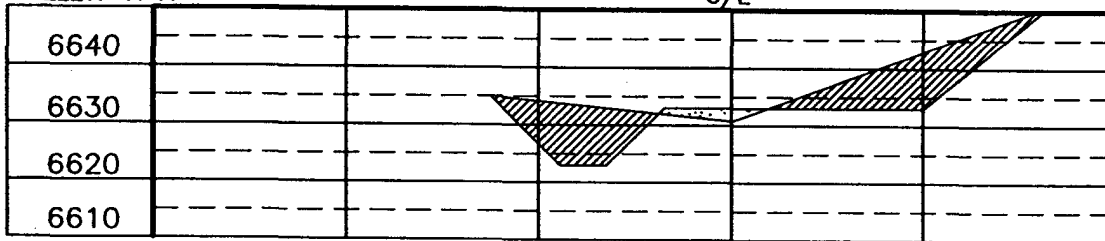
LAT. = 36.53308° N.
LONG. = 107.46692° W
NAD 83



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.

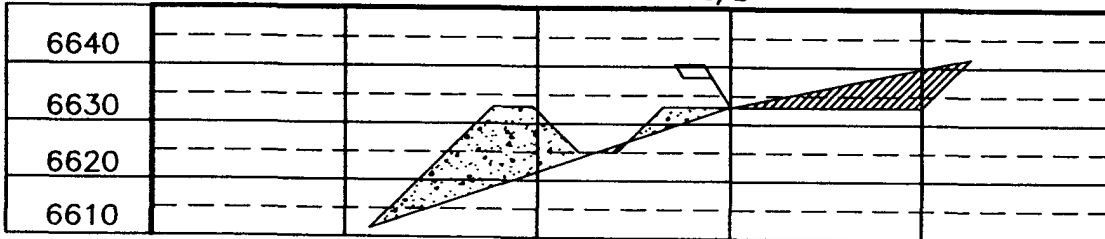
ELEV. A-A'

C/L



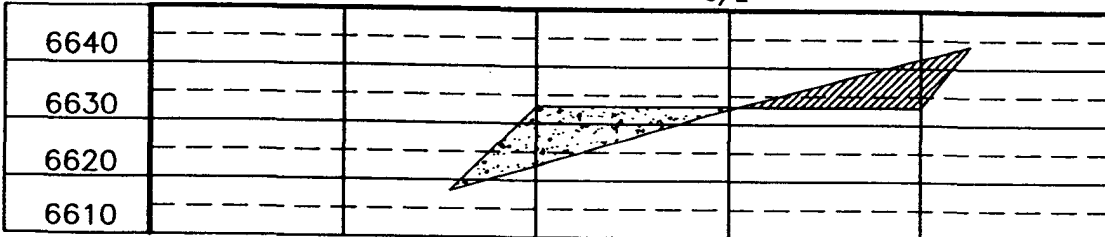
ELEV. B-B'

C/L



ELEV. C-C'

C/L



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.
Surveying and Oil Field Services
P. O. Box 15068 • Farmington, NM 87401
Phone (505) 326-1772 • Fax (505) 326-6019
NEW MEXICO L.S. No. 14831
COPIES: C0038CF8



DATE: 04/12/06
DRAWN BY: A.G.
REVISED BY: A.G.
REVISION: C0038

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breach "F" 16
1900' FNL & 890' FEL, Sec. 33, 27N, 6W
Rio Arriba County, New Mexico
Lease No. NM-03547

1. The Geological Surface Formation is : San Jose.
2. The Estimated Tops of Important Geological Markers:

| | |
|----------------|------|
| Ojo Alamo | 2201 |
| Fruitland | 2850 |
| Picture Cliffs | 3069 |
| Chacra | 4022 |
| Point Lookout | 5308 |
| Greenhorn | 7233 |
| Dakota | 7461 |
| TD | 7665 |

3. Estimated Depths and pressures of Anticipated Water, Oil, Gas or Minerals:

| Substance | Formation | Depth | Pressure |
|-----------|-----------------|-------|----------|
| Water | Alamo | 2355 | 0 |
| Gas | Fruitland | 3060 | 200 |
| Gas | Pictured Cliffs | 3172 | 450 |
| Gas | Chara | 4122 | 500 |
| Gas | Mesa Verde | 5454 | 1000 |
| Gas | Dakota | 7623 | 1500 |

4. The proposed casing program will be as follows:

| Depth | Hole Size | O.D. | Weight | Grade | Type | New/Used |
|-----------|-----------|-------|--------|-------|------|----------|
| 0-350 | 12-1/4 | 9-5/8 | 36# | J55 | LT&C | NEW |
| 0-1000 | 7-7/8 | 5-1/2 | 17# | K55 | LT&C | NEW |
| 1000-6675 | 7-7/8 | 5-1/2 | 15.50# | K55 | LT&C | NEW |
| 6675-7675 | 7-7/8 | 5-1/2 | 17# | K55 | LT&C | NEW |

The proposed cement program will be as follows:

Surface: 126 sacks type III with 2% CaCl and 1/4# per sack cellophane flake. *Circulate cement*

VOLUME CALCULATIONS

YIELD 1.47 350 ft x 0.3132 cu-ft/ft with 70% excess = 186 cu-ft

PRODUCTION:

Cement will be run in three stages with stage tools set at approximately 3675' and 5675'. *TOC at least 100' above surface csg. shoe*

1st stage Cement through shoe at approx. 7675' with 172 sacks Type III premium lite FM + 1/4 # /sk cellophane flake followed by 100 sacks Type III neat + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 2.09 1151 ft x 0.1732 cu-ft/ft with 80% excess = 359 cu-ft

YIELD 1.47 849 ft x 0.1732 cu-ft/ft with 0% excess = 147 cu-ft

2nd stage Cement through shoe at approx. 5675' with 172 sacks Type III premium lite FM + 1/4 # /sk cellophane flake followed by 100 sacks Type III neat + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 2.09 1151 ft x 0.1732 cu-ft/ft with 80% excess = 359 cu-ft

YIELD 1.47 849 ft x 0.1732 cu-ft/ft with 0% excess = 147 cu-ft

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breech "F" 16
1900' FNL & 890' FEL, Sec. 33, 27N, 6W
Rio Arriba County, New Mexico
Lease No. NM-03547

3rd stage Cement through shoe at approx. 5675' with 421 sacks
Type III premium lite FM + 1/4 # /sk cellohane flake
followed by 100 sacks Type III neat
+ 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 2.09 2826 ft x 0.1732 cu-ft/ft with 80% excess = 881 cu-ft

YIELD 1.47 849 ft x 0.1732 cu-ft/ft with 0% excess = 147 cu-ft

5. Operator's Minimum Specifications for Pressure Control:

EXHIBIT "C" is a schematic of a 2M blowout preventer system.
The BOP's will be hydraulically tested prior to drilling out
from under surface and operational checks will be made daily
thereafter and recorded in the drilling tour report.

Accessories to BOP will include the following:

- A. 2" minimum kill line and valve.
- B. Choke line and valve
- C. 2 Chokes
- D. Upper kelly cock valve with handle.
- E. Safety valve and subs to fit all drill strings.
- F. Pressure gauge on choke manifold.
- G. 2" minimum choke line.
- H. Fill-up line above uppermost preventer.

6. The type and Characteristics of the Proposed Circulating Mud's:

Mud system will be gel-chemical with adequate stocks of
absorbent agents on location to handle possible spills of fuel
and oil in the surface. Heavier mud's will be on location to be
added if pressure requires.

| Interval | Mud Wt | Vis | Fluid Loss | Ph | Additives |
|----------|--------|-------|---------------|----|-----------|
| 0- 350 | 9.0 | 50 | --- | 9 | Lime |
| 350-TD | 9.0 | 34-40 | 8cc | 9 | Chemicals |

7. Auxiliary equipment to be used is as follows:

- a. Float valve above bit.
- b. Monitoring of mud system will be visual.
- c. A sub with a full opening valve will be on the floor when
the kelly is not in use.

8. Testing, logging and coring will be as follows:

- a. Cores - none will be taken.
- b. Drill stem tests - none anticipated.
- c. Logging - Cased hole Gas Spectrum Log bottom of surface pipe to TD.

9. Anticipated Abnormal Pressures and Temperatures:

No abnormal pressure, temperatures or hydrogen sulfide gases
are anticipated during the course of drilling to TD. The
maximum bottom hole pressure to be expected is 1500 psi.

10. Anticipated Starting Date and Duration of the Operations:

The anticipated starting date is set for September 4, 2006,
or as soon as possible after examination and approval of
drilling requirements. Operations should be completed within 25
days.

EXHIBIT "C"

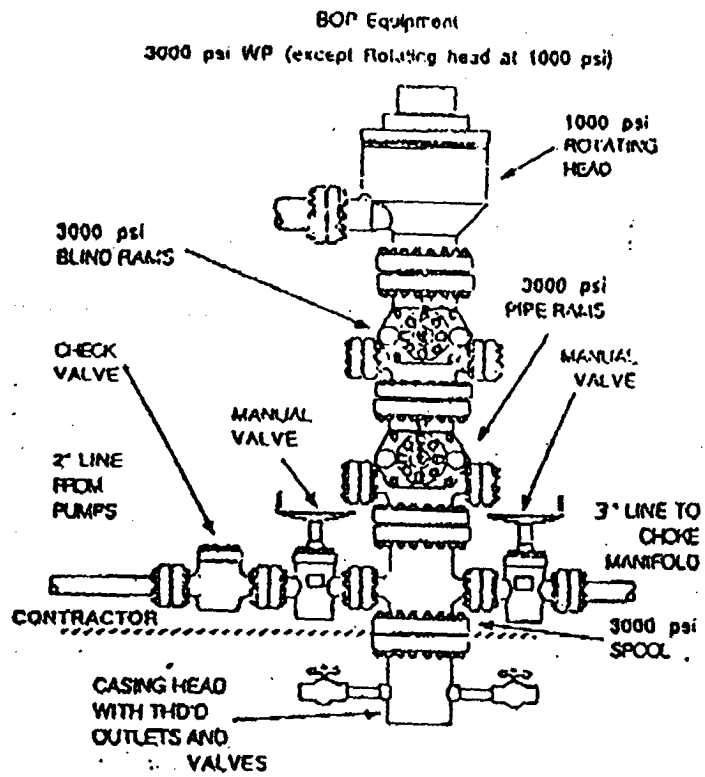


EXHIBIT "B" CHOKE MANIFOLD

