

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

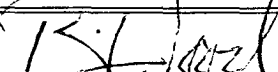
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-112957	
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 ROSETTA RESOURCES INC.		7. If Unit or CA Agreement, Name and No. N/A	
3a. Address 1200 17TH ST., SUITE 770 DENVER, CO 80202		8. Lease Name and Well No. TSAH TAH 33 #1	
3b. Phone No. (include area code) (720) 359-9144		9. API Well No. 30-045- 3 3608	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1378' FNL & 1620' FEL At proposed prod. zone SAME		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL	
14. Distance in miles and direction from nearest town or post office* 25 AIR MILES SSW OF BLOOMFIELD		11. Sec., T. R. M. or Blk. and Survey or Area 33-25N-10W NMPM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,378'	16. No. of acres in lease 1,600.00	17. Spacing Unit dedicated to this well E2 / 320 AC	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,078' (33 #4)	19. Proposed Depth 1,900'	20. BLM/BIA Bond No. on file NM/ 00371 BLM STATE-WIDE REB0008313	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,808' GL	22. Approximate date work will start* 04/01/2006	23. Estimated duration 2 WEEKS	

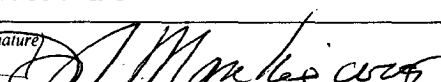
24. Attachments

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 	Name (Printed/Typed) BRIAN WOOD	Date 02/18/2006
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Title CONSULTANT PHONE: (505) 466-8120 FAX: (505) 466-9682

Approved by (Signature) 	Name (Printed/Typed) AFM	Date 4/18/06
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Title	Office FFO
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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)



State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C - 102

RECEIVED

070 FARMINGTON NM AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-145-33608	Pool Code 71629	Pool Name BASIN FRUITLAND COAL
Property Code 35624	Property Name TSAH TAH 33	Well Number 1
OGRD No. 239235	Operator Name ROSETTA RESOURCES, INC.	Elevation 6808

Surface Location

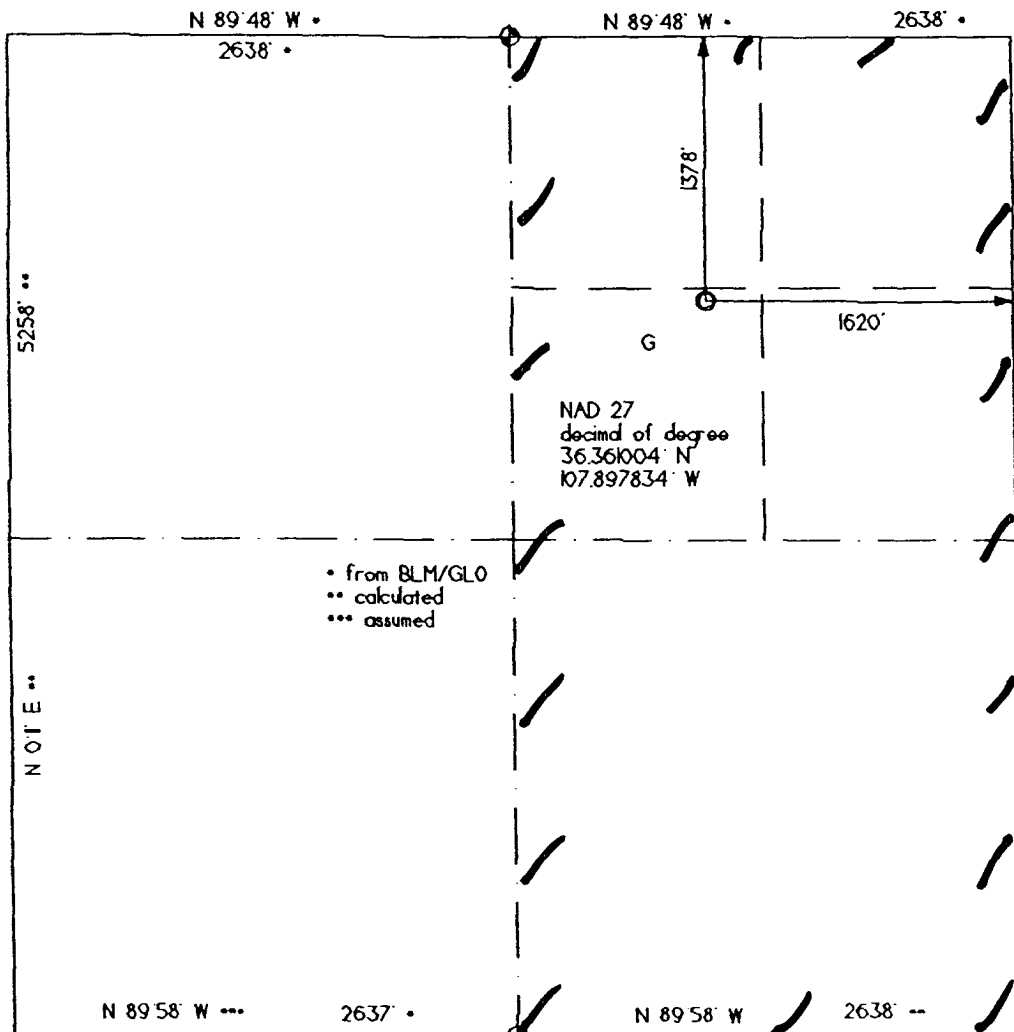
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
G	33	25 N.	10 W.		1378'	NORTH	1620'	EAST	SAN JUAN

Bottom Hole Location if Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

Dedication	Joint ?	Consolidation	Order No.
320			

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <i>Brian Wood</i>	
Printed Name	BRIAN WOOD
Title	CONSULTANT
Date	FEB. 18, 2006
<b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location 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 12/07/05	
Signature and Seal of Professional Surveyor 	

Submit 3 Copies To Appropriate District Office  
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

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

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.)		WELL API NO. 30-045- <b>33608</b>
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator <b>ROESTTA RESOURCES INC.</b>		6. <del>State</del> Oil & Gas Lease No. <b>NMMN-112957</b>
3. Address of Operator <b>1200 17TH ST., SUITE 770 DENVER, CO 80202</b>		7. Lease Name or Unit Agreement Name <b>TSAH TAH 33</b>
4. Well Location Unit Letter <b>G</b> : <b>1378</b> feet from the <b>NORTH</b> line and <b>1620</b> feet from the <b>EAST</b> line Section <b>33</b> Township <b>25N</b> Range <b>10W</b> NMPM County <b>SAN JUAN</b>		8. Well Number <b>#1</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>6,808' GL</b>		9. OGRID Number
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat <b>BASIN FRUITLAND COAL GAS</b>
Pit type <b>DRILLING</b> Depth to Groundwater <b>&gt;100'</b> Distance from nearest fresh water well <b>&gt;1000'</b> Distance from nearest surface water <b>&gt;1,000'</b>		
Pit Liner Thickness: <b>12 mil</b> Below-Grade Tank: Volume <b>_____</b> bbls Construction Material <b>_____</b>		

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

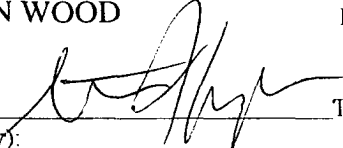
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <b>DRILLING PIT</b> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

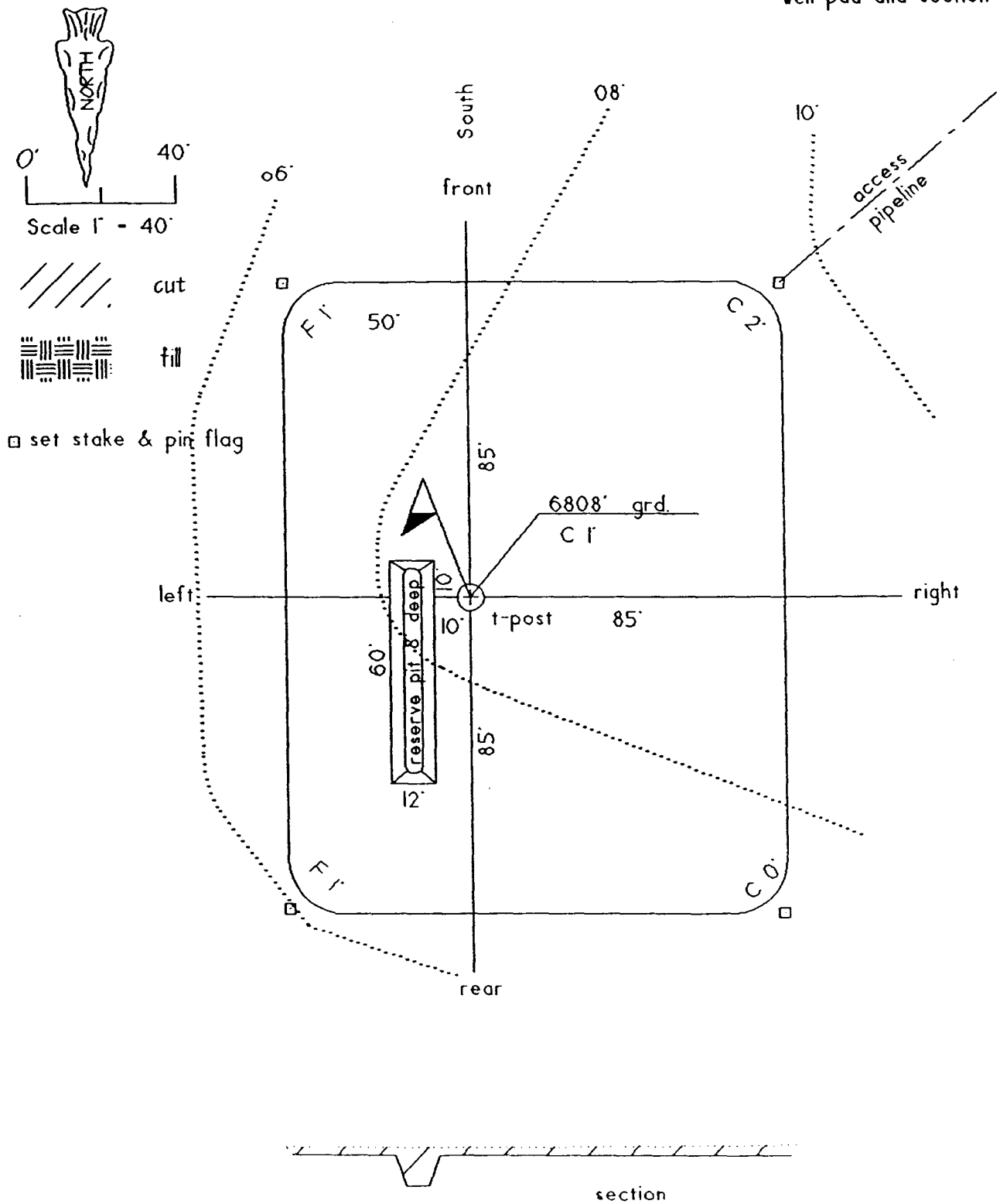
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE  TITLE **CONSULTANT** DATE **2-18-06**

Type or print name **BRIAN WOOD** E-mail address: **brian@permitswest.com** Telephone No. **(505) 466-8120**  
**For State Use Only**

APPROVED BY:  TITLE **DEPUTY OIL & GAS INSPECTOR, DIST. 43** DATE **APR 20 2006**  
Conditions of Approval (if any):

Tsah Tah 33 # 1  
well pad and section



Rosetta Resources Inc.  
Tsah Tah 33 #1  
1378' FNL & 1620' FEL  
Sec. 33, T. 25 N., R. 10 W.  
San Juan County, New Mexico

PAGE 1

## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimientos	000'	5'	+6,808'
Fruitland	1,608'	1,608'	+5,200'
Pictured Cliffs	1,708'	1,708'	+5,100'
Lewis Shale	1,808'	1,808'	+5,000'
Total Depth (TD)*	1,900'	1,905'	+4,908'

### 2. NOTABLE ZONES

#### Oil & Gas Zones

Fruitland  
Pictured Cliffs

#### Water Zones

Nacimientos

#### Coal Zones

Fruitland

Water zones will be protected with casing, cement, and fresh water weighted mud. Fresh water encountered while drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

### 3. PRESSURE CONTROL

The drilling contract has not yet been awarded. Thus, the exact BOP model to be used is not now known. (A typical 2,000 psi model is on PAGE 3.) BOP and choke manifold system will be installed and tested to  $\approx 500$  psi before drilling out the surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

Tsah Tah 33 #1

1378' FNL &amp; 1620' FEL

Sec. 33, T. 25 N., R. 10 W.

San Juan County, New Mexico

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to check mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Pounds/Foot</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-5/8"	7"	23	K-55	S T & C	New	120'
6-3/4"	4-1/2"	10.5	J-55	L T & C	New	1,900'

Surface casing will be cemented to the surface with  $\approx 35$  cubic feet ( $\approx 30$  sacks) Class B with 1/4 pound per sack Flocele + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Will use API casing dope.

Production casing will be cemented to the surface with  $\approx 460$  cubic feet ( $\approx 390$  sacks) Class B with 1/4 pound per sack Flocele + 2%  $\text{CaCl}_2$ . Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. Five or more centralizers will be used.

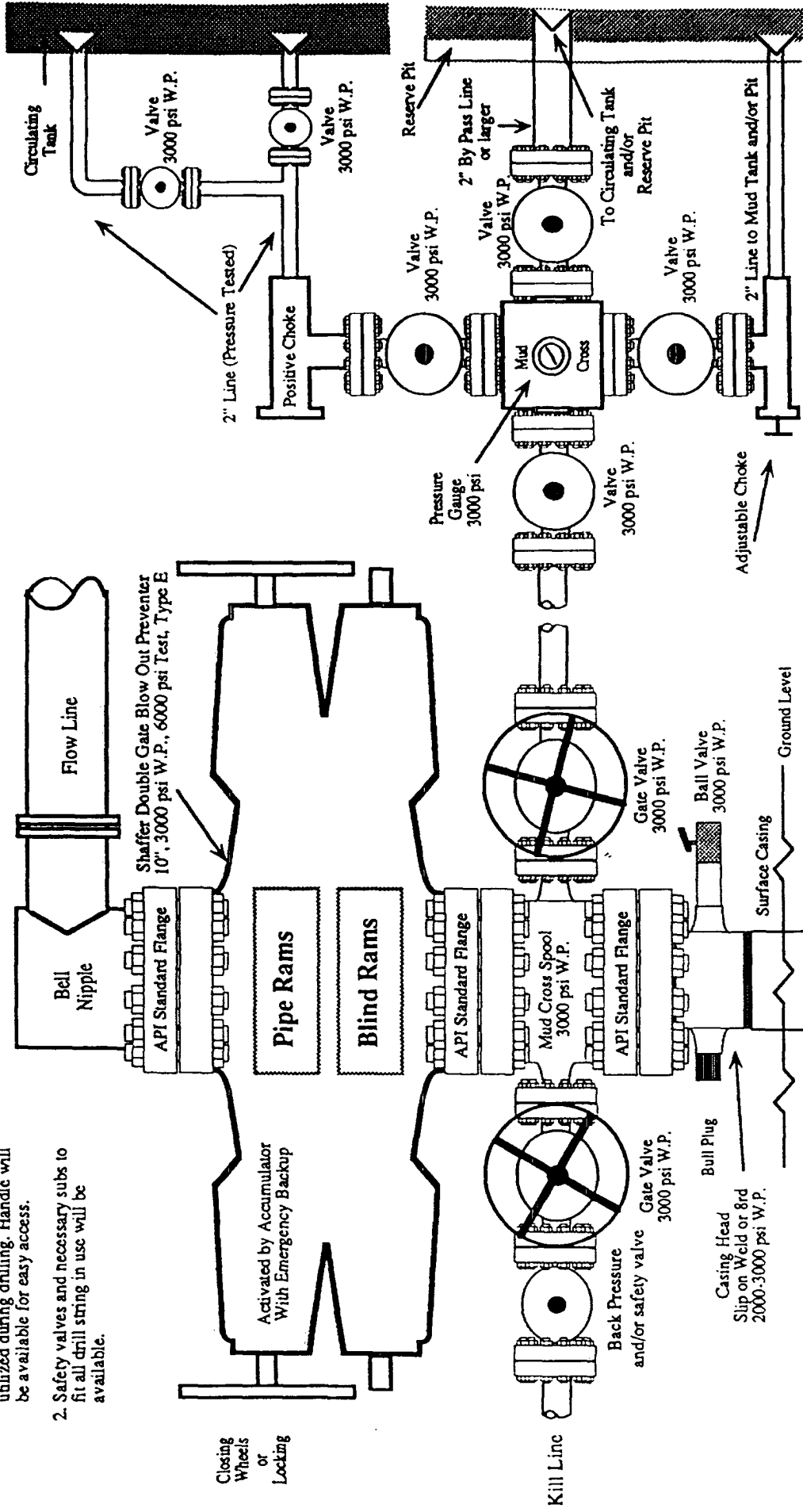
#### 5. MUD PROGRAM

A nine pound polymer and fresh water mud system with a viscosity of  $\approx 35$  will be used. Sufficient material to maintain mud qualities, control lost circulation, and contain a blowout will be available at the well while drilling.

# 2,000 PSI BOP SYSTEM

Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.

2. Safety valves and necessary subs to fit all drill string in use will be available.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.