

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

NM-0606

6. If Indian, Allottee or Trust Name

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ARCO Oil & Gas Company

3. Address and Telephone No.

P. O. Box 1610, Midland, TX 79702 915 688-5672

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

1162 FSL & 1612 FWL (Unit Letter N)

26-31N-10W

8. Well Name and No.

Atlantic Fruitland 26#2

9. API Well No.

30-045-27952

10. Field and Pool, or Exploratory Area

Basin-Fruitland Coal Gas

11. County or Parish, State Pool

San Juan

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

TYPE OF SUBMISSION

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Propose to change casing program from a cased hole completion to a open hole completion. Revised Drilling Plan attached.

RECEIVED

JUL 31 1990

OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed Ken C. Gosnell

Title Regulatory Coordinator

(This space for Federal or State office use)

Approved by

Concurrence of approval, if any:

Title

NMOCD

APPROVED

Date

JUL 23 1990

Ken C. Gosnell
AREA MANAGER
FARMINGTON DIST-1-1

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.

*See instruction on Reverse Side

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12/11/01
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DRILLING PLAN

Attach to Form 3160-3

ARCO Oil and Gas Company

Well: Atlantic Fruitland 26 #2

Section 26-T31N-R10W

1162' FSL & 1612' FWL

San Juan County, New Mexico

APPROVED
DATE: 11/11/05
BY: [Signature]
[Signature]

1. Estimated Tops of Geological Markers

Ojo Alamo	1714'
Kirtland	1765'
Fruitland	2750'
Pictured Cliffs	3084'

2. Estimated Tops of Possible Water, Oil, Gas or Minerals:

Sands above	1765'-Water
Fruitland	2750'-Gas

3. Minimum Specifications for Pressure Control

<u>Interval</u>	<u>Pressure Control Equipment</u>
250'-2800'	11", 3000 psi double ram preventer with Rotating Head (Exhibit 1 & 2).
2800'-3064'	2 - 7 1/16" double ram preventers with Stripping Head (Exhibit 1A & 2A).

Shown in Exhibits #1-3 are the BOP stack arrangements, choke manifold arrangements and the BOP specifications, respectively. This BOP stack conforms to API RP-53 (Figure 2.C.2) for a 2000 psi system. Maximum anticipated Fruitland pore pressure is 1500 psi. All ram type preventers and related control equipment will be hydraulically tested at nipple-up, after any use under pressure, and every 30 days, to 2000 psi. In addition, the blind ram will be operationally checked each time pipe is pulled out of the hole. All checks of BOPE will be noted on Daily Drilling Reports. Accessories to BOP equipment will include a kelly cock, floor safety valve, and choke manifold with pressure rating equivalent to the BOP stack.

4. Proposed Casing Program

	Hole <u>Size</u>	<u>Interval</u>	Casing <u>Size</u>	Weight & <u>Grade</u>
Surface	12-1/4"	0-250'	9-5/8"	36.0# K-55
Production	8-3/4"	0-2800'	7"	23# N-80
Open-Hole	6-1/4"	2800- 3064	NA	NA

Surface Casing cemented to surface with 200 sx (236 ft³) of Cl "B" containing 2% CaCl₂.

Production casing cemented to surface with \pm 400 sx (720 ft³) 65/35/6 Cl "B"/Poz/Gel w/ 1/4# CF lead and 100 sx (118 ft³) Cl "B" tail.

If hole stability is a problem, a 5-1/2" liner will be set uncemented across the open-hole section. The liner will overlap the 7" casing 100' and it will be perforated across the coal.

5. Type and Characteristics of Proposed Drilling Fluids

<u>Depth</u>	<u>Mud Type</u>	Weight <u>ppg</u>	Funnel <u>Viscosity</u>	Water <u>Loss</u>
0-250'	Spud Mud	9.0	35-45	NC
250'-2800'	Low Solids	8.7-9.5	32-45	<10
2800-3064'	Water/Air	8.4-1.0	28	NC

6. Testing, Coring and Logging Program

A. Drill Stem Testing - None Anticipated

B. Coring - None Anticipated

C. Logging-

Open Hole
Mud Logger from 7" casing point to TD.

Cased Hole
Temperature Survey if cement does not circulate

D. The well is planned to be completed Open-Hole style. The Fruitland will be drilled out from under 7" Casing using a Completion Rig and utilizing water as the drill fluid. After reaching TD, air will be added to the water to induce gas/water flow from the coal. Should wellbore stability be a problem, a 5-1/2" liner will be run to TD with 100' overlap across the 7" casing. The liner will not be cemented but will be perforated.

7. Anticipated Abnormal Temperature, Pressure, or Hazards

The maximum anticipated Fruitland pore pressure is 1500 psi. The Fruitland will be drilled out under balanced approximately 300 psi. A completion rig will be utilized for this operation using the BOP equipment specified in Exhibit #1A & #2A. There are no other abnormal pressures, temperatures or potential hazards in the area.

8. Anticipated Starting Date and Duration of Operations

Pending favorable weather and permit approval, construction work for this location is planned to begin in July 1990. Construction work will require 5-7 days, moving-in and rigging-up rotary tools, 1 day, drilling and completion, 14 days. It is planned to spud the well in July 1990.

Exhibit #1
BOP Stack Arrangement
Drilling Rig Operations

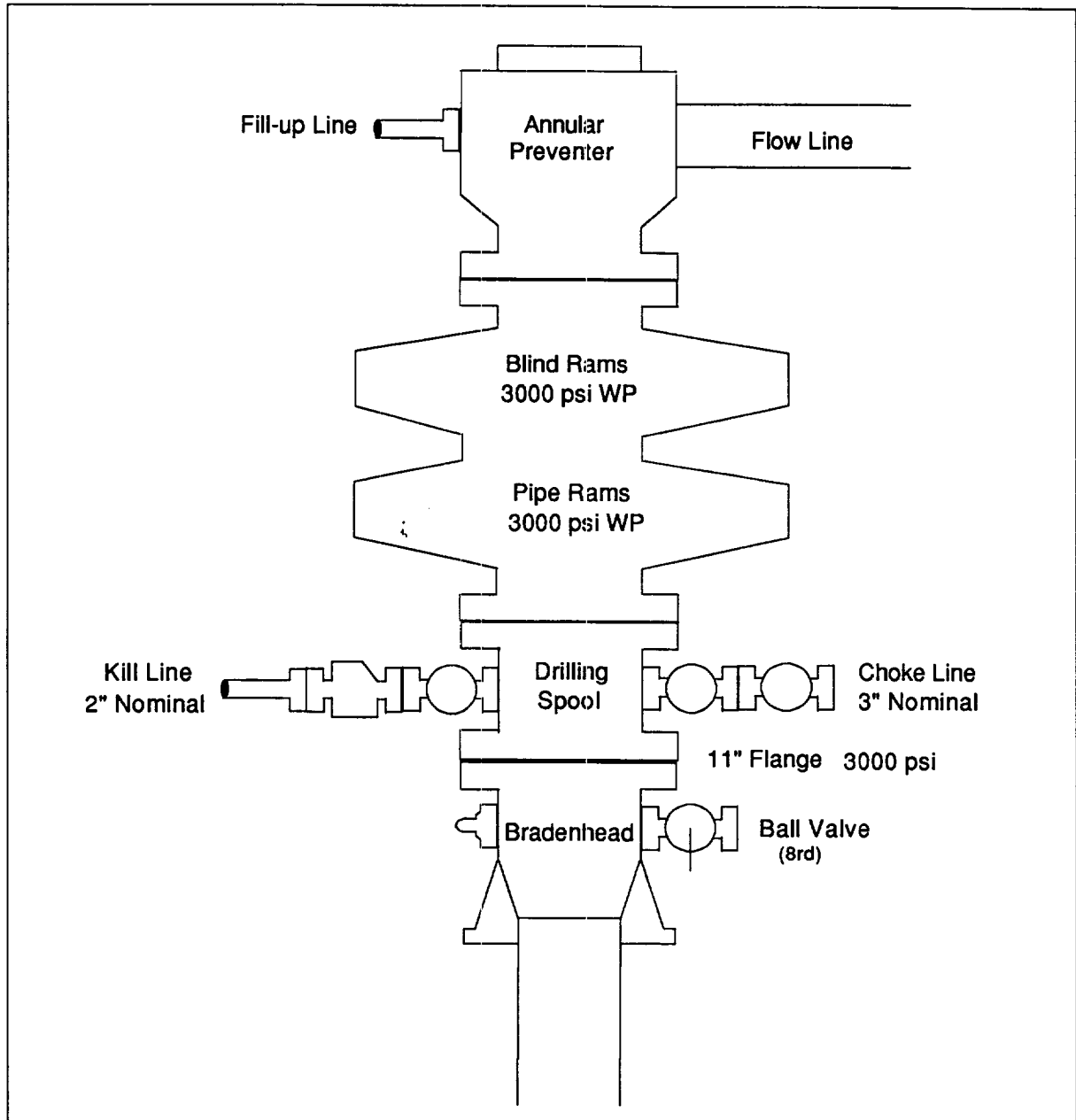


Exhibit #1A
BOP Stack Arrangement
Open-Hole Completion Rig Operations

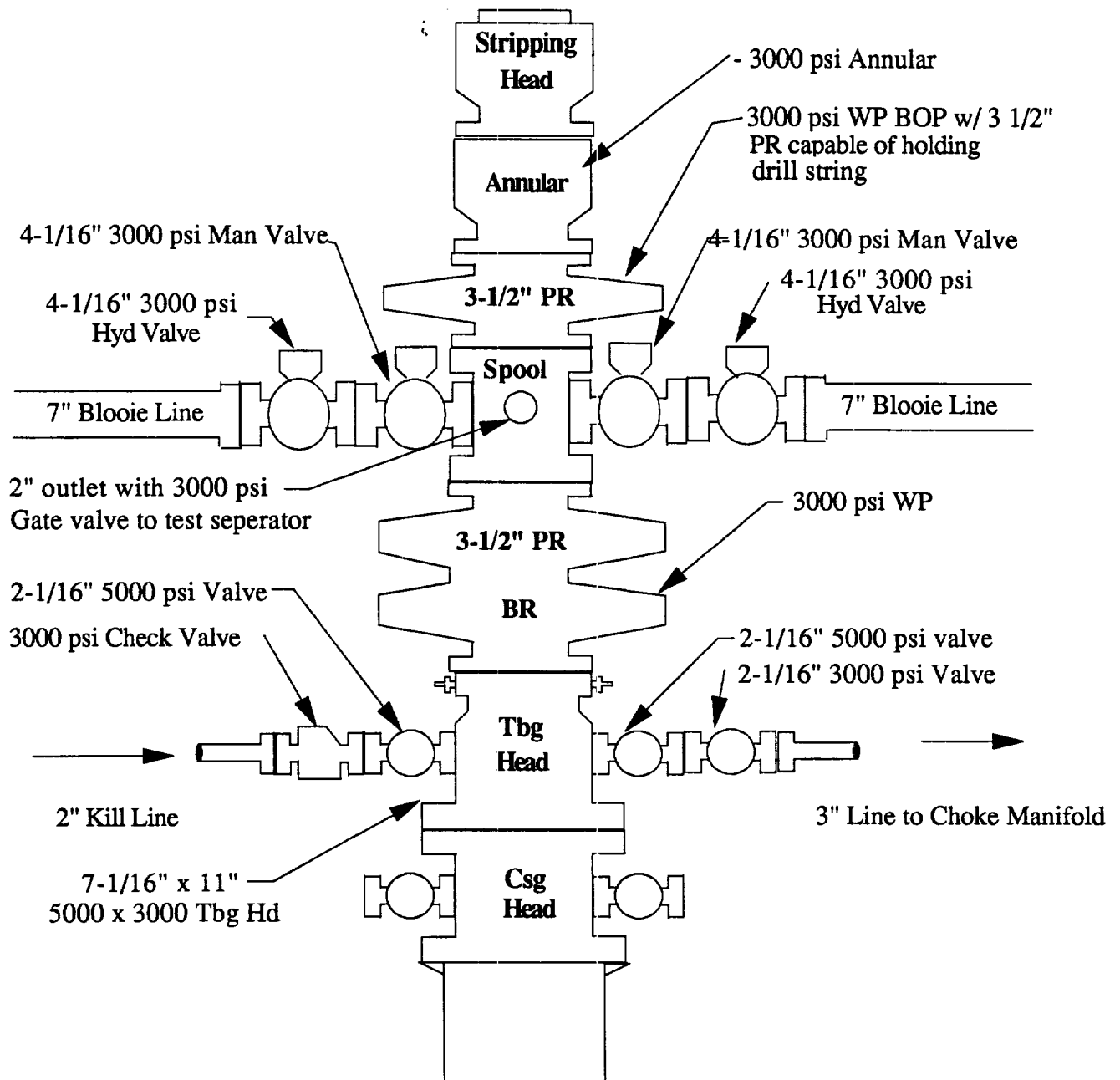


Exhibit #2
Choke Manifold & Accumulator Schematic
Drilling Rig Operations

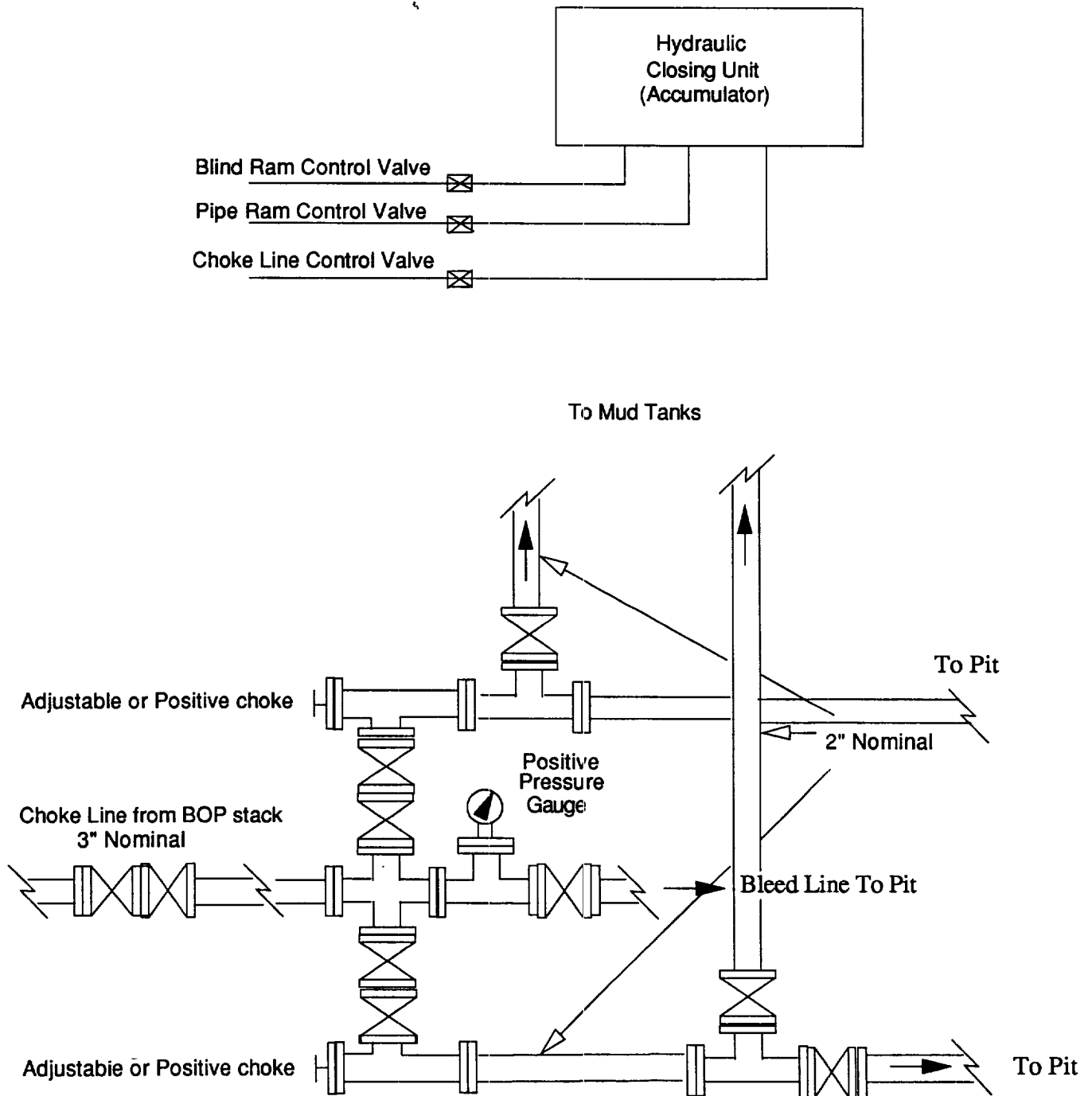
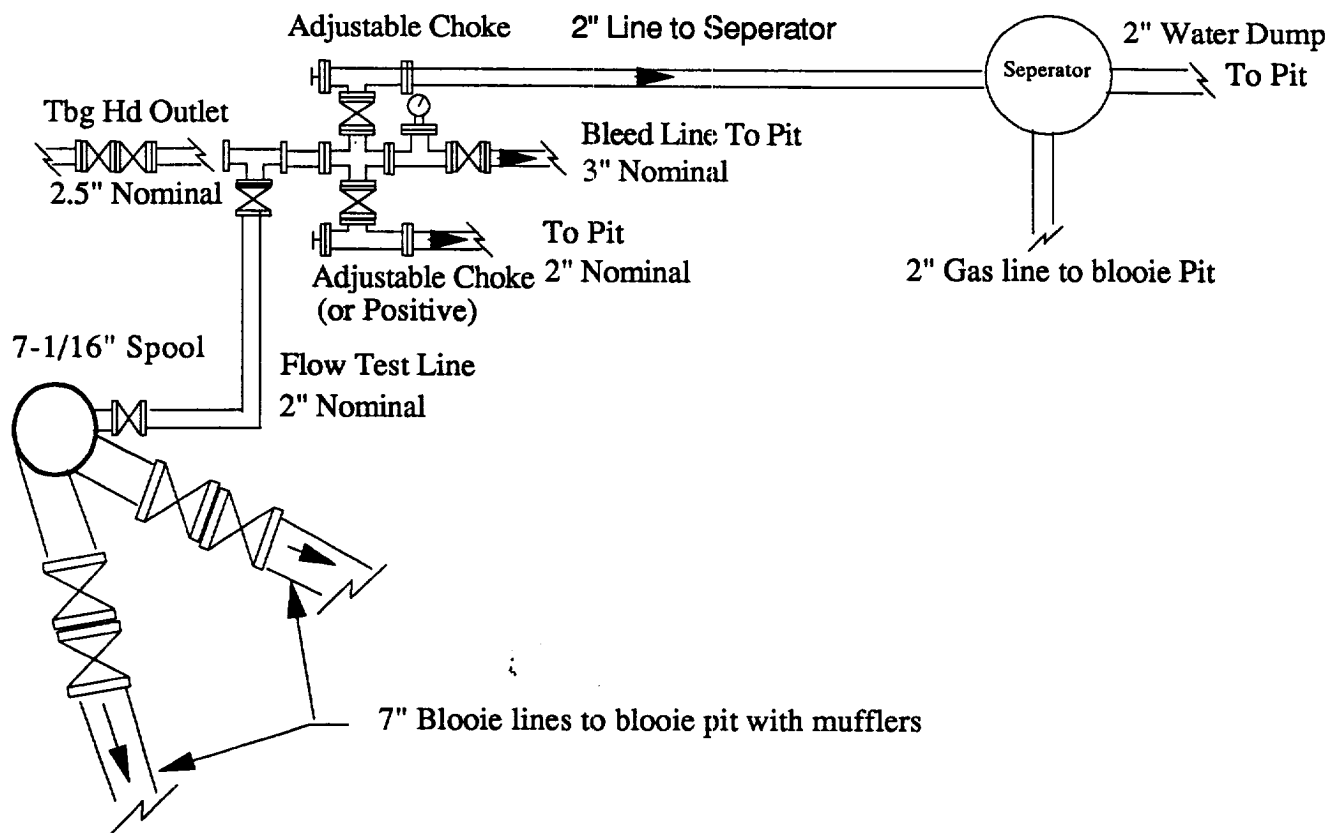


Exhibit #2A **Surface Manifold Schematic** **Completion Rig Operations**



All manifold valves to be rated for 3000 psi WP

Exhibit #3
Blowout Prevention Equipment Specifications

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

