## Surface Casing - 20"

1. One 20", 2000 psi, Type MSP Hydrill preventer.

## Intermediate Casing - 13 3/8"

- 1. One 12", 3000 psi, double Shaffer preventer.
- 2. One 12", 3000 psi, Type GK Hydrill preventer.
  - 3. One 5000 psi, choke manifold.
  - 4. One rotating head.

## Intermediate Casing - 9 5/8"

- 1. One 11", 10,000 psi, Cameron Type U double preventer.
- 2. One 11", 10,000 psi, Cameron Type U single preventer.
- 3. One 11", 10,000 psi, Type GK Hydrill preventer.
- 4. One rotating head.

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- 5. One 4 1/16", 10,000 psi, choke manifold with two 10,000 psi Swaco chokes.
- 6. One 4 1/16", 10,000 psi, manual and one 4 1/16", 10,000 psi, hydraulic valve between choke spool and choke manifold.
- 7. One 2 1/16", 10,000 psi, manual and one 2 1/16", 10,000 psi hydraulic valve between casing head spool and choke manifold.

Blowout preventer equipment will be hydraulically actuated with a six station, 3000 psi Payne accumulator with remote control station on the rig floor. Accumulator is to have sufficient capacity to close all pressure operated devices at one time and maintain a 25% reserve.

After each BOP stack is assembled a plug will be set in the casinghead and the stack tested to rated working pressure.

All BOP equipment shall be checked for proper working order on each trip. Choke manifold and lines should be flushed periodically with water. Swaco chokes are to be checked on each tour by driller.

Blowout preventer drills are to be held not less than twice weekly by each drilling crew. <u>All</u> crew members are to be familiar with BOP and choke manifold operation and their respective duties in the event of a kick.

Ex. B