- B. Blowout preventers: Refer to attached drawings and equipment listings for BOP stacks and choke manifolds titled Types IV and IIB.
- C. BOP control unit: Unit will be hydraulically operated and have at least three and as many as five control stations, as required for operation.
- D. Testing: When installed on 8-5/8" casings the BOP stack will be tested at a low pressure (200-300 psi) and to at least 2000 psi. At approximately weekly intervals, the stack will be tested to 1000 psi. An operational test of the BOPs is to be performed on each round trip (but not more than once each day); the annular and pipe ram preventers will be closed on drill pipe, and the blind rams will be closed while pipe is out of the stack.

5. The types and characteristics of the drilling fluids to be employed are:

Depth Interval (FT)	Mud Type	Mud* <u>Wt (ppg)</u>	Funnel Vis sec/qt	PV <u>cp</u> Uncon	WL $\frac{cc}{b}$	Solids	^{YP} #/100 ft ²	<u>pH</u>
0 - 400	FW spud mud			uncon	LLOIT	lea		
5	•		28					10.5+
400 - 5200	BW	10.0						10.5+
	BW	10.0	28					10.74
5200 - 11400	DW	10.0						

*Mud weight and viscosity will be maintained at levels compatible with operating conditions. Not less than 200 bbls of fluid will be in pits and adequate barite for weight control will be stocked on location.

- 7. Auxiliary control equipment will be available as follows:
 - A. Kelly cocks Upper and lower will be installed on the kelly.
 - B. Safety Valve Full opening ball type to fit each type and size of drill pipe in use will be available on the rig floor, in open position for stabbing into the drill pipe when the kelly is not in the string.
 - C. Pit volume totalizer to monitor mud pits Surface casing to TD.
 - D. Trip tank to insure that the hole is full and takes the proper amounts of fluid on trips Surface to TD.
 - E. A float at the bit will not be used unless conditions dictate.