

b) Blowout Preventers

Refer to attached drawing and list of equipment, titled "Type II-C" for description of BOP stack and choke manifold. The BOPs that will be installed on the lowermost casinghead after 13-3/8" casing is set will not be smaller than 12" FE API or less than 2000 psi WP. After the 9-5/8" casing is set the BOPs that will be installed will not be smaller than 10" FE API or less than 3000 psi WP.

c) BOP Control Unit

Unit will be hydraulically operated and have at least 3 control stations.

d) Testing

When installed on 13-3/8" casing the BOP stack will be tested at a low pressure (200-300 psi) and to at least 1000 psi. At approximately weekly intervals, the stack will be tested to 1000 psi. When installed on 9-5/8" casing the BOP stack will be tested at a low pressure (200-300 psi) and to at least 3000 psi. At approximately weekly intervals, the stack will be tested to 2000 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 preventer will be closed on drill pipe, and the blind rams will be closed while pipe is out of the stack.

6. Type and anticipated characteristics of Drilling Fluid:

Depth Interval Ft.	Mud Type	Weight ppg	Funnel Visc Sec/Qt	PV CP	WL (cc)	Solids %	YP #/100 ft <sup>2</sup>	pH
0 - 400	Fresh	Spud Mud	-	-	-	-	-	-
400 - 5150	Brine	10.0	28	-	-	-	-	10.5
5150 - 10400	Brine	9-10	28	-	-	-	-	10.5
10400 - TD	Brine	9-10	32-35	6-8	20	Min.	3-5	10.5

Mud weight and viscosity will be maintained at minimum levels compatible with operating conditions. Not less than 200 barrels of fluid will be in the pits and at least 200 sacks of barite will be stocked on location.

7. Auxiliary Control Equipment:

- a) Kelly Cocks: Upper and Lower installed on kelly.
- b) Safety Valve: Full-opening ball-type to fit each type and size of drill pipe in use available on rig floor, in open position for stabbing into drill pipe when kelly is not in string.
- c) Pit volume totalizer to monitor mud pits.
- d) Trip tank to insure that hole is full and takes proper amount of fluid on trips.
- e) A float at the bit will not be used unless conditions dictate.