

APPLICATION TO DRILL

9. Cementing and Setting Depth:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 650' of 8 5/8" J-55 24# 8-R ST&C casing. Cement with 300 Sx. of Halco Light cement + additives, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
5 1/2"	Production	Set 7400' of 5 1/2" J-55 17 & 15.5# 8-R ST&C casing, 1000' of 17# & 6400' of 15.5#. Cement with 1000 Sx. of Halco Light + additives, tail in with 500 Sx. of Premium Plus cement + additives, circulate cement to surface.

10. Pressure Control Equipment: Exhibit "E". A 900 Series 3000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. BOP will be nipped up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be operated when out of hole during trips. Flow sensor, PVT, full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Visc,	Fluid Loss	Type Mud
40-650'	8.4-8.6	30-34	NC	Fresh water spud mud, add paper to control seepage.
650'-7400'	10-10.4	29-38	NC*	Brine water add paper for seepage control and Lime to control pH.

* In order to run logs and casing the viscosity may have to be raised in order to clean hole and the water loss may have to be lowered.

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at well site at all times. In order to log well and run casing the viscosity may have to be raised and the water loss lowered in order to do so.