

APPLICATION TO DRILL

GRUY PETROLEUM MANAGEMENT CO.
 RHODES FEDERAL UNIT # 159
 UNIT "H" SECTION 15
 T26S-R37E LEA CO. NM

9. Cementing & Setting Depth:

8 5/8"	Surface	Set 750' of 8 5/8" J-55 24# ST&C casing. Cement with 600 Sx. of Class "C" cement + additives, circulate cement to surface.
4 1/2"	Production	Set 3380' of 4 1/2" J-55 11.6# ST&C casing. Cement in two stages, first stage cement with 400 Sx. of Class "C" Cement + additives, second stage cement with 600 Sx. of Class "C" Halco Light + additives, circulate cement to surface.

10. Pressure Control Equipment: Exhibit "E". A series 900 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" is a Choke manifold and closing unit. BOP will be nipped up on the 8 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. Flo 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.	Viscosity	Fluid Loss	Type Mud
0-750'	8.6-8.9	29-36	NC	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
750-3380'	10-10-3	29-38	NC	Brine water add paper as needed to control seepage and add lime to control pH, Use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and water loss may have to be adjusted in order to meet these needs.