POGO PRODUCING COMPANY GETTY "24" FEDERAL # 14 UNIT "P" SECTION 24 T22S-R31E LEA CO. NM

9. <u>Cementing & Setting Depth:</u>

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 800' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + 1/4# Flocele/Sx + 2% CaCl, circulate cement to surface.
8 5/8"	Intermediate	Set 4400' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx of Class "C" cement + 1/4# Flocele/Sx., circulate cement to surface.
5½"	Production	Set 8600' of 5½" casing as follows: 2500' of 17# J-55 LT&C, 5000' of 15.5# J-55 LT&C, 1100' of 17# J-55 LT&C. Cement in 3 stages with DV tools at 6100'± & 3700'±. lst stage cement with 650 Sx. of Class "H" Premium + additives, 2nd stage cement with 600 Sx. of Class "C" + additives, 3rd stage cement with 400 Sx. of Class "C" + additives, circulate cement to surface.

- 10. <u>Pressure Control Equipment:</u> Exhibit "E". A series 900 3000 PSI working pressure 3.0.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 nippled up on the 13 3/8" 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 We.	Viscosity	Fluid Loss	Ivpe Mud
40-800'	8.6-8.8	29-36	NC	Fresh water Soud Mud add
800-4400'	10-10.4	29-38	NC	paper to control seepage & lime for pH control. Brine water add paper to
4400-8600'	8.4-8.6	29-38	NC	control seepage and lime to control pH, use high viscosity sweeps to clean hole.
				Fresh water use fresh water Gel for viscosity control & 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.