APPLICAION TO DRILL

POGO PRODUCING COMPANY
GETTY "24" FEDERAL # 13
UNIT "O" SECTION 24
T22S-R31E LEA CO. NM

9. Cementing & Setting Depth:

| 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, |
| 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 |
| 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. Pressure Control Equipment: 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. unit will be hydraulically operated. Exhibit "E-1" is a Choke manifold and closing a day while drilling and the blind rams will be operated when out of hole during trips. abnormal pressure or temperature is expected while drilling.

11. Proposed Mud Circulating System:

| Depth | Mud Wt. | Viscosity | Fluid Loss | Type Mud |
|--------------------|---------|-----------|---|--|
| 40-800' | 8.6-8.8 | 29-36 | NC | Fresh water Spud 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 Fresh water use free Gel for viscosity of the same | 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.