POGO PRODUCING COMPANY SHUGART "6" FEDERAL # 1 UNIT "H" SECTION 6 T18S-R31E EDDY CO. NM

9. CEMENTING CASING & SETTING DEPTH:

- 20" Conductor Set 40' of 20" conductor pipe and cement to surface with Redi-mix. 13 3/8" surface Set 500' of 13 3/8" H-40 48# ST&C casing. Cement with 550 Sx. of Class "C" cement + additives, circulate cement to surface. 8 5/8" Set 4500' of 8 5/8" J-55 32 & 24# ST&C casing. Cement Intermediate with 1500 Sx. of Class "C" cement, circulate cement to surface. 5½" Production Set 12,500' of 51/2" casing as follows: 1700' of of 51/2" N-80 20# LT&C, 9800' of 51/2" 17# N-80 LT&C, 1000' of 5½" 20# N-80 LT&C. Cement in two stages with 1500 Sx. of Class "H" + additives, place DV Tool at 6500'±. Estimate top of cement 3500' from surface.
- 10. <u>PRESSURE CONTROL EQUIPMENT:</u> Exhibit "E" A 1500 Series 5000 PSI working pressure B.O.P. consisting of a double ram type prefentor with a bag type annular preventor. B.O.P. will be hydraulically operated. Exhibit "E-1" shows choke manifold & closing unit. B.O.P. will be nippled up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be worked when out of hole on 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
40~500 '	8.6-8.8	29-34	NC	Fresh water use paper to control seepage.
500-4500'	10.1-10.5	29-38	NC	Brine water use paper to control seepage, lime for pH control & high viscosity sweeps to clean hole.
4500-10,500'	9.8-10	30-38	NC	Fresh water going to cut brine use paper to control seepage fresh water Gel for viscosity & lime for pH control.
10,500-12,500'	9.8-10.1	32-38	10 cc or less	Same as above using a Dris- Pac system.

Sufficient mud materis 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 run casing water loss & viscosity may have to be adjusted to meet these conditions.