CONCHO OIL & GAS CORP. FEDERAL USA "L" # 10 UNIT "D" SECTION 14 T19S-R33E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
8 5/8"	Surface	Set 1500' of 8 5/8" 32# J-55 ST&C casing. Cement 650 Sx. of 35/65 POZ Class "C" cement + 6% Gel, + 2% CaCl, + ½# Celoflakes/Sx. tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
5½"	Production	Set 3900' of 5½" 15.5# J-55 ST&C casing. Cement with 400 Sx. of 50/50 POZ Class "C" cement + fluid loss additive + 5% Salt + dispersant. Circulate cement to surface or at least 200' up into 8 5/8" surface casing.

- 10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nippled up on the 8 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.
- 11. PROPOSED MUD CIRCULATING SYSTEM:

MUD WT.	VISC.	VISC. FLUID LOSS TYPE MUD SYSTEM		
8.4-8.6	29-36	NC	Fresh water spud mud, add paper to control seepage. use high viscosity sweeps to clean hole.	
9.9-10.2	29-36	NC	Brine water using paper to co control seepage.	
9.9-10.2	32–38	15 cc or less	Brine water use Salt Gel for viscosity control and Starch to control water loss.	
	8.4-8.6 9.9-10.2	8.4-8.6 29-36 9.9-10.2 29-36	8.4-8.6 29-36 NC 9.9-10.2 29-36 NC 9.9-10.2 32-38 15 cc or	

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