## APPLICATION TO DRILL

COBRA OIL & GAS CORPORATION
BRONCO FARMS "5" FEDERAL # 5
1034' FNL & 2189' FEL SEC. 5
T10S-R38E LEA CO. NM

## 9. Cementing and setting depth:

13 3/8"	Surface Casing	Set @ 400' Cement with 340 Sx. of Premium Plus cement + 2% CaCl circulate cement to surface.
9 5/8"	Intermediate Casing	Set 4500' Cement with 1645 Sx. of Halliburton Light Premium + 5# salt/Sx. + ½# Flocele Tail in 310 Sx Premium cement +2%CaCl Circulate cement to surface.
5½"	Production Casing	Set@ 12500' Cement with 910 Sx.of 50/50 POZ + 3# salt/Sx + .4% CFR-3 + .6% Halad 9. Estimated top of cement 9200'.

Pressure Control Equipment: Exhibit "E". A Blow-out Preventer ( no less than 1500 Series 5000 PSI working pressure) consisting of double ram type preventer with bag type preventer. Units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nippled up on 13-3/8" casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized. Anticipated BHP 4500 PSI and 190° BHT.

## 11. Proposed Mud Circulating System:

DEPTH	MUD. WT.	MUD VISC.	FLUID LOSS	TYPE MUD
0-400*	8.3-8.8	32-36	NC	FW spud mud
<b>400-</b> 4500 <b>'</b>	8.4-10.1	32-33	25-40 cc	FW going to brineuse brine for make up + 3-8% oil Paper for seepage strach for water loss control
4500 <b>'-8900'</b>	9.1-9.3	28-29	NC	Cut Brine
8900-11000'	9.1-9.3	38-30		Cut Brine start reducing water loss to 6 or 10 cc when 11000' is reached
11000-12500'	9.1-9.3	29–45	6-10cc	Cut Brine with starch for WL control bentonite for Visa

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirments will be kept at wellsite at all times. In order to run casing and log well viscosity may have to be raised and water loss may have to be lowered.

