## YATES PETROLEUM CORPORAL ON

Cotton Place "ANG" Federal #1 990' FNL and 990' FEL Sec. 10-T24S-R32E Lea County, New Mexico

1. The estimated tops of geologic markers are as follows:

Rustler	1210'
Base of Salt	4750'
Bell Canyon	4995'
Cherry Canyon	5955'
Brushy Canyon	7786'
Bone Spring	8866'
TD	9200'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: 250'-750'

Oil or Gas: 7590' and 8720'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

## Auxiliary Equipment:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.
- 4. THE PROPOSED CASING AND CEMENTING PROGRAM:
  - A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	<u>Grade</u>	<u>Thread</u>	Coupling	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8	54.50#	J55	8R	ST&C	0-1200'	1200'
11"	8 5/8"	32#	J55	8R	ST&C	0-4200'	4200'
11"	8 5/8"	32#	HC80	8R	LT&C	4200-4750'	550'
7 7/8"	5 1/2"	17#	K55	8R	LT&C	0-1500'	1500'
7 7/8"	5 1/2"	15.50#	J55	8R	LT&C	1500'-6700	5200'
7 7/8"	5 1/2"	17#	J55	8R	LT&C	6700-9200	' 2500'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Joint Strength 1.8

## B. CEMENTING PROGRAM:

Surface casing: 700 sx. Pacesetter Lite "C" w/ 1/4# Cellocel & 3% CaCl2 (wt. 12.7 ppg. Yield 1-84 ft3) + 250 sx. Class "C" w/ 2% CaCl2. (wt. 14.8 ppg., Yield 1.32 ft3) Cement calculated to circulate to surface.