

YATES PETROLEUM CORPORATION
Adeline "ALN" Federal #3
660' FNL and 1980' FEL
Section 6-T24S-R31E
Eddy County, New Mexico

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

Rustler	477'
Top of Salt	863'
Bottom of Salt	3,932'
Bell Canyon	4,150'
Cherry Canyon	5,129'
Brushy Canyon	6,810'
Bone Spring	8,010'
TD	8,200'

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

Water:	150'
Oil or Gas:	Canyon 5129' and Bone Springs 8010'

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 preventer 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.

4. Auxiliary Equipment and Proposed Casing Program:

- 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.
- B. Casing and Cementing Program:

Hole Size: <u>17 1/2"</u>	Total Depth: <u>500'</u>	Casing Size: <u>13 3/8"</u>
Setting Depth: <u>500'</u>	Mud Weight: <u>8.8 ppg</u>	

Casing Design:

<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
13 3/8	54.50#	J-55	8R	ST & C	0 - 500'	500'

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

Cement Program: Slurry 500 sacks "Class C" with 2% CaCl₂

Expected Linear Fill: Circulate to surface.

Slurry Properties: Weight: 14.8 ppg Yield 1.32 cu.ft/sack

Hole Size: <u>11 "</u>	Total Depth: <u>4200'</u>	Casing Size: <u>8 5/8"</u>
Setting Depth: <u>4200'</u>	Mud Weight: <u>10.0 ppg</u>	