EXCO RESOURCES, INC. Rose Federal #15 1980' FNL & 660' FWL Section 20, T05S-R25E Chaves County, New Mexico

## 1. The estimated tops of geologic markers are:

San Andres	583'
P1	1009'
P2	1055'
P3	1217'
Glorieta	1481'
Yeso	1590'
Tubbs	3055'
Abo	3608'

## 2. The depths at which fluid bearing formations are expected to be encountered are:

Water, 200' - 300' Oil or Gas, 3634' to 4150'

## 3. Pressure Control Equipment

A 2000 psi wp (API RP 53) blow-out preventer will be installed on the 11-3/4' casing. The controls will be installed and the preventer and well head will be pressure tested before drilling the shoe of any casing string. The preventer will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. A diagram of the blow-out prevention and control equipment is attached and labeled as exhibit B.

EXCO requests a variance be granted in requiring the casing and blow-out preventer to be tested to 2000 psi and instead allow testing to 500 psi. The rig pumps will be used for the test cannot safely test above 500 PSI. We would have to go to the greater expense of hiring an independent service company to do the testing. Also, the bottom hole pressure in this field is proven to be near 500 psi due to depletion. A shut in surface pressure would be less than 500 psi. The Abo formation usually requires stimulation before it can produce any significant amount of gas. We feel that a 500 psi test will demonstrate that the equipment is functioning properly, and in the unlikely event of a gas influx that the well could be controlled.

Auxiliary Equipment, a Kelly cock 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. Proposed Casing And Cementing Program

Hole Size	Casing Size	Weight, ppf	Grade	Coupling	Interval	Length
14-3/4"	11-3/4"	42	H-40	ST&C	0- 900'	900'
11"	8-5/8"	24	J-55	ST&C	0-1500'	1500'
7-7/8"	4-1/2"	10.5	J-55	ST&C	0-5300'	5300'

The 8 5/8" casing will be set only if lost circulation is encountered and otherwise the hole size will be reduced from 11" to 7-7/8" at 1500'.

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80