DRILLING PROGRAM

COLLINS & WARE, INC. QUAHADA RIDGE FEDERAL 31 WELL NO. 2

1880' FSL & 330' FWL Sec. 31, T22S, R29E, Eddy County, NM

The following information is filed in accordance with New Mexico Oil Conservation Rules and Regulations:

- 1. <u>SURFACE FORMATION</u>: Quaternary
- 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Bell Canyon 2800' Brushy Canyon 4850' Cherry Canyon 3600' Bone Springs 6300'

3. ESTIMATED DEPTH TO FRESH WATER:

Possible fresh water 100'-300'.

ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware (below 2700') Oil

No other formations are anticipated to give up commercial quantities of hydrocarbons.

The fresh water sands will be protected by setting 8 5/8" casing at 600' and circulating cement back to surface. A 5 1/2" production string will be run to 6500' and cemented in two stages to circulate back to the surface.

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing:

<u> Hole Size</u>	Interval	Casing OD	Weight, Grade, Joint, Condition
12.25"	0-600'	8.625"	24#, J-55, ST&C, New
7.875"	0-6500'	5.5"	15.5#, J-55, ST& C, U sed
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Cement:

8 5/8" Surface: Cemented with 450 sacks of Premium Plus cement with 2% CaCl2 to circulate.

5 1/2" Production Casing: Cement with 475 sacks of Premium Plus ce-

ment, 2.4# salt/sk, .6% Halad 322, 8# Sil-icalite/sk, in first stage with DV tool set at 4200' circulate to surface; cement with 750 sacks of Howco Lite with 6# salt/sk & 6% gel; tail in with 275 sks Premium Plus with 8# Silicalite/sk, .6% Halad 322 and 3% salt, circulate to surface.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below surface casing will be a 3000 psi working pressure BOP stack. The BOP sketch is shown as Exhibits 1.