

DRILLING PROGRAM

Attachment to Form 3160-3

Collins & Ware, Inc.

Quahada Ridge "31" Federal #1

Surface Location: 2310' FSL & 330' FWL, Section 31, T-22S, R-29E

Bottom Hole Location: 1970' FNL & 330' FWL, Section 31, T-22S, R-29E

Eddy County, New Mexico

1. Geologic Name of Producing Formation:

Delaware

2. Existing Casing:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Casing</u>	<u>Weight, Grade, Jt Cond</u>
17 1/2"	0- 376'	13 3/8"	54.5#, K55, ST&C, Used
11"	0-2714'	8 5/8"	24 & 32#, J55, ST&C, New
7 7/8"	0-6500'	5 1/2"	15.5#, J55, LT&C, New

All casing was cemented in accordance with BLM requirements.

3. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in attachments will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and drill pipe rams on bottom. Both BOP's will be nipped up on the 5 1/2" casing and used continuously until TD is reached. Ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi) prior to drilling. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.