

**ATTACHMENT TO FORM 3160-3
RED CLOUD 4 FEDERAL #1
SECTION 4, T19S, R31E
EDDY COUNTY, NEW MEXICO**

DRILLING PROGRAM

1. GEOLOGIC NAME OF SURFACE FORMATION

Red Bed

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

| | | | |
|-------------------------------|-------|----------|---------|
| Rustles | 750' | Wolfcamp | 9900' |
| Yates | 2700' | Strawn | 10,850' |
| Queen | 3350' | Atoka | 11,200' |
| Delaware | 4920' | Morrow | 11,400' |
| Bone Spring | 6500' | TD | 12,300' |
| T/1 st Bone Spring | 7950' | | |

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

| | | |
|-------------|-----|---------|
| Bone Spring | Oil | 8000' |
| Morrow | Gas | 12,000' |

4. CASING AND CEMENTING PROGRAM

| <u>Casing Size</u> | <u>From</u> | <u>To</u> | <u>Weight</u> | <u>Grade</u> | <u>Joint</u> |
|--------------------|-------------|-----------|---------------|--------------|--------------|
| 13-3/8" | 0' | 650' | 48# | H40 | STC |
| 8-5/8" | 0' | 3,200' | 32# | J55 | STC |
| 5-1/2" | 3,200' | 12,700' | 17# | K55,N80 | LTC&BTC |

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

We plan to drill a 17-1/2" hole to equal 1300'. 13-3/8" casing will be cemented with 800 sxs Class "C" or volume necessary to bring cement back to surface.

12-1/4" hole will be drilled to 3,200' and 9-5/8" casing will be cemented with 1,200 sxs Class "C" or volume necessary to bring cement back to surface.

7-7/8" hole will be drilled to 12,700' and 5-1/2" production casing will be cemented with approximately 1000 sxs of Class "H" cement covering productive zones.