## **DRILLING PROGRAM**

## M. K. STEWART #10 Arch Petroleum Inc. Sections 28, T23S, R37E Lea County., New Mexico

# 1. <u>Geologic Name of Surface Formation</u>: Quaternary

#### 2. Estimated Tops of Geologic Markers:

| Rustler 1,030'   | 7 Rivers 2,780'   | Paddock 4,950'    |
|------------------|-------------------|-------------------|
| Top Salt 1,130'  | Penrose 3,375'    | T/Blinebry 5,290' |
| Base Salt 2,365' | Grayburg 3,555'   | B/Blinebry 5,850' |
| Yates 2,535'     | San Andres 3,800' | Tubb 5,950'       |

# 3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Fresh Water 300'-500' Penrose 3,375'-3,550' Paddock 4,950'-5,290' Blinebry 5,290'-5,950'

## 4. Casing Program:

| Casing     | Hole Size | <u>Weight</u> | Grade | Setting Depth |
|------------|-----------|---------------|-------|---------------|
| Surface    | 8 5/8"    | 24#           | K-55  | 1,075'        |
| Production | 5 1/2"    | 15.5#         | J-55  | 6,000'        |

#### Cement Program:

- (a) Surface casing will be 8-5/8" set at 1075' and cemented with 400 sacks of Class 'C' lead cement and 200 sacks of Class 'C' tail cement.
- (b) Production casing will be 5-1/2" set at approximately 6,000' and cemented in one stage with approximately 1150 sacks of Class 'C' lead cement and 500 sacks of tail cement. Exact volumes to circulate to surface to be determined by caliper log.

### 5. <u>Pressure Control Equipment:</u>

The minimum specifications for pressure control equipment can be seen on the attached Exhibit 1 for a blowout preventer hook-up for 3,000 psi working pressure.