# **KUKUI** Operating Company

Goodnight '35' Federal #1 2180' FWL, 660' FSL Sec. 35 – T 23S – R 29E Eddy County, New Mexico Proposed Total Depth: 14,100' TVD

#### **DRILLING PROGRAM**

## 1.) Estimated Formation Tops:

| Formation                 | Est. Depth |
|---------------------------|------------|
| Salado Salts              | 600'       |
| Lamar                     | 3150'      |
| Bell Canyon               | 3200'      |
| Cherry Canyon (Manzanita) | 4200'      |
| Brushy Canyon             | 5600'      |
| Lower Brushy Canyon Shale | 6600'      |
| Bone Spring Formation     | 6900'      |
| First Bone Spring Sand    | 7900'      |
| Second Bone Spring Sand   | 8750'      |
| Third Bone Spring Sand    | 9800'      |
| Wolfcamp                  | 10500'     |
| Strawn                    | 12150'     |
| Atoka                     | 12400'     |
| Morrow                    | 13350'     |
| Lower Morrow              | 13850'     |
| Barnett                   | 13960'     |
|                           |            |

### 2.) Estimated Depths of Anticipated Minerals:

Fresh Water - Surface to 525'.

- Operator plans to set 13 3/8" surface casing to 575' and cement to surface.

Salt Section - 600' - 2,500'. Operator plans to set 9 5/8" salt protection string to 3,100' and cement to surface.

Hydrocarbons - Atoka and Morrow formations with depths ranging from 12,800' to 14,200'.

- Bone Spring and Delaware formations ranging from 4,000' to 8,200'.

 Operator plans to set 7" intermediate/production casing to approx. 10,550' (100' into top of Wolfcamp). Top of cement will be dictated by geology and hydrocarbons encountered from Delaware to top of Wolfcamp.

## 3.) Minimum Specifications for Pressure Control Equipment:

| Interval         | Depths         | Hole Size | BOP's            |
|------------------|----------------|-----------|------------------|
| Surface          | 0'-575'        | 17 1/2"   | Diverter head    |
| Salt Protection  | 575'-3,100'    | 12 1/4"   | 3M-13 5/8 – A    |
| Int./Production  | 3,100'-10,550' | 8 3/4"    | 5M-11 - SRRAG    |
| Production Liner | 10,550'        | 6 1/8"    | 10M-7 1/16-SRRAG |

The accumulator system will have three times the volume necessary to close everything on the BOP stack. A 10M choke manifold will be utilized with minimum 3" nominal diameter inlet line and 2" nominal diameter downstream lines. Manifold, lines, and BOP's will be tested to maximum working pressure of stack.