

**DRILLING PROGNOSIS**  
**Medallion Production Company**  
**Artesia Prospect**  
**Lewis "19" Well No. 1**  
**1980' FSL 1980' FWL**  
**Section 19 - T17S - R26E**  
**Eddy County, New Mexico**

**I. Geological Information**

A. Ground Elevation: 3427'

B. Estimated Formation Tops:

San Andres	800'
Abo	4000'
Penn	6500'
Atoka	7850'
Morrow Fm	8000'
Morrow Sand	8125'
PTD	8300'

**II. Hole Size and Casing**

<u>Hole Size</u>	<u>Casing Size</u>	<u>Depth</u>
17½"	13-3/8"	400'
12¼"	8-5/8"	1500'
77/8"	4½"	8300'

**III. Mud Program**

<u>Depth</u>	<u>MW (PPG)</u>	<u>Viscosity (Sec)</u>	<u>Fluid Loss (ml)</u>
Surf-400'	8.4-9.0	34-36	NC
400'-1500'	8.4- 9.4	32-34	NC
1500-7800'	8.4-8.6	28	NC
7800'-8300'	8.6-10.0	20-40	15-8

**Adequate stocks of LCM and weighting materials will be kept on location to meet the usual range of circulation and pressure control problems.**

**IV. Pressure Control**

The well will be drilled with conventional rotary tools of adequate size and power for the depths involved. At present the choice of contractor is pending. Subsurface pressures will be controlled by

1. Sufficient weight mud to control expected subsurface pressures, and
  2. By use of a 5000 psi, double ram BOP stack with a 5000 psi annular preventer installed on the Intermediate Casing.
- BOP's, chokes, manifolding, and accessory equipment as is customary to the area will be installed. The BOP stack will be tested to the rated pressure upon installation and the annular to 2500 psi. All pipe rams and the annular will be cycled daily. The intermediate casing will be tested to 1500 psi prior to drilling out.

**V. Formation Evaluation**

- A. 10' drilling samples will be bagged from 4000' to TD.
- B. A one-man mud logging unit will be in use from 4000' to TD.
- C. A drill stem test is possible in the morrow sand (8125'.)
- D. DLL & CNL/LD logs will be run from TD to intermediate casing. GR log will be run from TD to surface.