

DRILLING PROGNOSIS
Appended to Application to Drill
Medallion Production Company
Elk Prospect
JJ State Com. No. 1
660' FSL & 1930' FWL
Section 26-T16S-R34E
Lea County, New Mexico

- 1.. Geological Information: Surface Elevation-4060' GL.
 Estimated Formation Tops:

Rustler	1650'
Yates	2900'
San Andres	4600'
Abo	8120'
Wolfcamp	9920'
Strawn	11,850'
Atoka	12,300'
Morrow	12,500'
PTD	12,750'

2. Hole size and casing:

<u>Casing Size</u>	<u>Setting Depth</u>	<u>Hole Size</u>
13-3/8"	400'	17-1/2"
9-5/8"	4600'	12-1/4"
5-1/2"	12,750'	7-7/8"

3. Mud Properties:

<u>Depth</u>	<u>MW (ppg)</u>	<u>Viscosity</u>	<u>Fluid Loss (ml)</u>
0'- 400'	8.4-9.0	34-36	NC
400'- 4600'	8.4-10.4	32-34	NC
4600'-9500'	8.4-8.6	28	NC
9500'-12,750'	8.6.-10.0	20-40	20-8

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

4. 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; (1) by mud of sufficient weight to control expected subsurface pressures and; (2) by a 5000 psig BOP double ram stack with a 5000 psig annular preventer installed on the 9-5/8" casing. BOPE chokes, manifolding, and accessory equipment as it customary to the area will be installed. The stack will be tested to rated pressure upon installation and the annular to 2500 psig. All pipe rams and the annular will be cycled daily. The 9-5/8" casing will be tested to 1500 psig prior to drill out.

5. Formation Evaluation:

- A. 10 ft drilling samples will be bagged from 8100' to TD.
- B. A one man mud logging unit will be installed and logging from 8100' to TD.
- C. A drill stem test is possible over the Atoka/Morrow zone expected at about 12,750'.
- D. A Gamma Ray log will be run from TD to surface with a DLL from TD to intermediate casing. A CNL/LD log will be run from TD to intermediate casing.

9/10/51
L. 2
L. 3
L. 4

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