

SOUTHWESTERN NATURAL GAS, INC.

Drilling Prognosis

RE: Dozier Federal #1  
NM-0554775  
1980' FS&WL Sec. 14, T-19-S, R-31-E  
Eddy County, New Mexico  
Lusk (Strawn) Field

Drilling, Casing and Cementing Program

1. Drill 17 1/2" hole to 700' (into Anhydrite). Cement 13 3/8", 48# casing to surface (circulate.)
2. Test Casing to 1000 psi for 30 minutes.
3. Drill 11" hole to 4200'. Run 8-5/8", 32# casing to 4200' with DV packer above possible lost circulation zone at 2600-2700'; two stage cement with sufficient cement on second stage to fill above DV packer to base of salt section at 2100'.
4. Run temperature survey. Pressure test DV tool to 1000 psi for 30 minutes; drill out and test 8 5/8" casing to 1000 psi for 30 minutes.
5. Drill 7 7/8" hole to TD approximately 11,500'. Run and cement 4 1/2", 11.6# casing with sufficient cement to fill annulus 1000' above Strawn.

Mud Program

1. Surface 0 - 700': Spud mud with lost circulation material if needed.
2. Intermediate 700' - 4200': Fresh water with possibility of dry-drilling below 2600'.
3. Long 4200' - 11,500': fresh water with surfactant and lost circulation material if needed. Mud-up at approximately 11,100', low solids, weight 8.6 - 9.0, viscosity 38-42 seconds, water loss 10-15 cc.

Miscellaneous

1. Proper blow-out preventers will be used of sufficient capacity to meet all normal down-hole conditions to be expected.
2. Deviation surveys will be made on every trip or 500' whichever is first. Maximum deviation allowed 6°.
3. Record 1' drilling time from surface to total depth.
4. Two sets of 10' samples will be taken from 4200' to total depth.