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GEORGE R. LOCKER  
PRESIDENT

April 12, 1973

Mr. Michael P. Grace III  
P. O. Box 1118  
Carlsbad, New Mexico 88220

Dear Juanita;

The following is a proposed drilling mud program for your #2 Indian Hills Morrow prospect, Eddy County, New Mexico.

Surface

Spud with Bentonite and Lime. It is very likely you will experience some degree of lost circulation. The addition of fiber and paper should suffice. If loss is critical it may be advisable to "blind drill" and set surface.

Intermediate

Drill out with fresh water. Maintain a constant ph of 10.0 to 11.0 for corrosion control with lime and caustic soda in the ratio of 4 lime to 1 caustic soda.

There exists the possibility of mild to severe lost circulation through the Capitan Reef section in this area. If loss occurs, mix a "spud mud" type system with lime and bentonite loaded with 10-15#/bbl. of paper, fiber, and cotton seed hulls.

Production

Drill out with fresh water. Continue lime and caustic soda for corrosion control along with paper as needed for seepage. Circulate through reserve pits and use either Benex or Jet Jel or any comparable flocculent to maintain water as clean as possible. A mild drilling detergent is also helpful for increased penetration rate.