

## SUGGEL, FED MUD PROGRAM

January 30, 1975

Mr. Cecil Evans Maralo, Incorporated P. O. Box 832 Midland, Texas 79701

Dear Mr. Evans:

The following is a suggested drilling fluid and casing program with estimated mud cost for your Hanson Federal #2 to be drilled 660' FSL & 1980' FEL in Section 28, T-20-S, R-27-E, Eddy County, New Mexico.

SURFACE: 400' of 13 3/8"

Suggest spudding with a fresh water, Magcogel and Lime type drilling fluid with a 40 to 60 sec/1000 cc viscosity.

This type drilling fluid should be sufficient to drill to 400' and run casing.

COMMENT:

 There is a possibility you may encounter a seepage to complete loss circulation in the Gravel Bed and Water Sand sections
from 50' to 200'. Normally a few sacks of Dicks Mud Seal added to the drilling fluid system is sufficient to control seepage. For complete loss suggest adding Cottonseed Hulls and Chip Seal.

INTERMEDIATE: 2,300' of 8 5/8"

Suggest drilling out below surface with fresh water, using Lime for pH control.

It is possible to drill to 2,300' and run 85/8'' casing. However, complete loss circulation can be expected at any depth.

In the event you encounter complete loss circulation, suggest dry drilling with fresh water to casing point.

Prior to running 8 5/8" casing, suggest spotting a 300 barrel viscous fresh water, Magcogel type drilling fluid on bottom to insure a good cement bond around bottom joint of casing.