

## N O T E G R A M

Odessa, Texas  
November 14, 1974

In re: Proposed Mud Program - Hat Mesa #2 "COM" -- 14,500' Morrow Test.  
Section 2, T-21-S, R-32-E, Lea County, New Mexico

### Surface 450' of 13-3/8" Casing:

Spud with lime, bentonite and Flosal\* mixed to a high viscosity to assure a clean hole for running casing.

### Intermediate Casing 5600' of 8-5/8"

Drill out with brine water while circulating through controlled section of the reserve pit. Prior to making trips, flush hole by mixing 5 or 6 sacks of Flosal rapidly in suction pit. In case of bad seepage or loss of returns, continue to dry drill. At 3000', add 100 bbls. crude oil and maintain 2 to 4% oil for lubrication. Prior to reaching casing point, raise viscosity to 34 to 36 sec. per quart out to assure a clean hole for running of casing. Use Flosal and salt water clay to raise viscosity.

### Below Intermediate to 10,800'

Drill out with fresh water and circulate through the reserve pit. Mix Flosal as needed for samples and to keep hole clean.

### From 10,800' to 14,500'

Return to steel pits. Displace hole with 10 lb. brine and maintain weight from 10 to 10.3 lbs. per gal. Mix Flosal as needed for good samples and to keep hole clean. Abnormal pressure may be encountered. Alert supervision to detect the presence of this pressured section at the earliest possible moment is very important to the economical and successful drilling of this formation.

### From 13,000' to 14,500' T.D.

Maintain the following mud properties: Mix Drispac and starch at optimum ratio to obtain a water loss of 5 cc, weight and viscosity as needed to suspend barite and clean hole as hole conditions dictate. Will run open hole logs at T.D.

\* A Trademark