OPERATIONS SUMMARY for 8 5/8" SURFACE CASING

Drilling: 0 to 631 ft.

1. Drilled 12 1/4" hole with 22 hours rotating time as follows:
   - RPM: 110
   - WT (1000 lbs): 3-5
   - GPM: 500
   - PRESSURE: 1000
   - DEVIATION: 3/4 DEG.

2. Number of bits used: 1 Used

3. BHA:
   - Bit/Bit Sub/6 x 6 1/2" DC's/XO/6 x 6" DC's

Casing:

1. Ran 8 5/8" casing to 629 ft. (KB) as follows:
   - Guide Shoe + Short Jt. 15.00 (Shoe Welded)
   - 0"c Joint 37.65
   - Float Collar 1.03
   - 10 jts. 24#/ft. K-55 579.72

2. Ran 3 Centralizers on collars.
   (second centralizer just below float collar).

Cement:

1. Cemented down casing with 300 sacks class "G" neat cement plus 2% CaCl₂.

2. Displaced with water, lost returns after top plug dropped.

3. Bumped plug with 400 PSI for 5 minutes - no backflow.

4. Estimated top of cement at 280 ft.
OPERATIONS SUMMARY FOR 7 7/8" HOLE

Drilling: 629 to 3506 ft.

1. Drilled 7 7/8" hole with 192.25 hours rotating time as follows:
   
   RPM  60-110  
   WT (1000 lbs)  5-28  
   GPM  136-246  
   PRESSURE  200-1500  
   DEVIATION  2 DEG. (MAX)  

2. Number of bits used: 1 Used, 5 New

3. Final BHA:
   
   Bit/Bit Sub/12 x 6 1/2" DC's/Crossover/3 x 6" DC's

4. Three hour delay due to broken pin in 6" drillcollar.

5. Approximately 5 day delay due to multiple lost circulation zones from 986-1822 ft.

Logs: None run except mud log.