

| <u>Property</u>  | <u>Programmed</u>               | <u>Achieved</u> |
|------------------|---------------------------------|-----------------|
| Density          | 8.9 - 12.5 ppg                  | 8.9 - 9.8       |
| Funnel Viscosity | 40 - 50 sec/qt                  | 40 - 60         |
| Yield Point      | 8 - 20 lbs/100 ft <sup>2</sup>  | 8 - 20          |
| 10 Sec Gel       | 6 - 15 lbs/100 ft <sup>2</sup>  | 2 - 10          |
| 10 Min Gel       | 15 - 30 lbs/100 ft <sup>2</sup> | 15 - 35         |
| API Fluid Loss   | < 10 cc/30 min                  | 5 - 10          |
| HP - HT          | 10.5 - 11.0                     | 10.5 - 12       |
| MBT              | 20 - 30 ppb                     | 17.5 - 30       |

### Hole Conditions

Hole condition was good considering many days were lost while waiting on weather. Even with drill pipe and casing left in the open hole while waiting on weather, no cases of stuck pipe occurred.

At 6504 ft there was 90 ft of fill after W.O.W., but after cleaning this out, no problems were experienced during logging.

There was tight hole on P.O.H. at 6610 ft - 6579 ft. After W.O.W., there was 11 ft of fill.

After W.O.W. at 7726 ft, there was 8 ft of fill and 20% gas.  
After W.O.W. at 8902 ft, there was a bridge at 8526 ft, and some washing at 8526 ft - 8628 ft. No fill.

### Conclusions

The mud system performed well despite many days downtime for weather. It proved relatively trouble free to maintain, once the carbonate/bicarbonate contamination was recognized, and treated.

For future wells in this area, the presence of CO<sub>2</sub> must be expected, and lime additions may be made as a preventative measure even before the effect of CO<sub>2</sub> contamination is seen. A low lime mud below the 13-3/8" casing would prove a good alternative for CO<sub>2</sub> problems.

Water/drilled, consumed by intervals

|                       |             |
|-----------------------|-------------|
| 20" hole section:     | 2,000 bbls  |
| 13-3/8" hole section: | 6,000 bbls  |
| 12-1/4" hole section: | 32,332 bbls |