

B. Production String:

Cement the long string with approximately 450 sacks (or as required) of API Class-C cement containing 3% Halliburton Econolite, 5 lbs/sx Gilsonite and 1/2 lb/sx Floseal mixed to a slurry weight of 11.2 lb/gal followed by 300 sacks of a 50-50 blend of Pozmix "A" and API Class-C cement containing 18% salt, 2% gel, 1/4 lb/gal floseal and a slurry weight of 14.1 lb/gal. Pump 30 barrels of water ahead of the cement to help remove the mud filter cake.

Once the plug has been bumped and latched, pressure test the casing to 1500 psig.

The total estimated cement volume of 750 sacks provides for an excess that should be sufficient to bring the cement top back to the surface. Before the cement job is actually performed, the required cement volume shall be checked against the open hole caliper log to determine the actual amount of cement necessary to bring the cement back to the surface.

VIII. FORMATION EVALUATION

A. Drilling Rate:

1. The drilling rate shall be monitored with a geolograph from the surface to total depth.
2. Doyle Hartman requires that the penetration rate be tabulated in 10 feet increments over the entire hole.

B. Well Cutting Samples:

Two sets of well cutting samples shall be gathered every 10 feet from the base of the surface casing to total depth. Five foot (5') samples may be required during the Queen-Penrose interval as specified. Each sample is to be cleaned, bagged, tagged, and then grouped into bundles of ten samples per bundle with one bundle representing each 100 feet drilled.

After the drill cuttings have been reviewed by the well site geologist, they shall be delivered to the Midland Sample Cut, 704 S. Pecos Street, Midland, Texas with the second set going to Phillips Petroleum, Attn: J.S. Chimahusky, 4001 Penbrook, Odessa, Texas 79762.

If required by the well site geologist, a third set of samples shall be gathered over the entire Lower Yates, Seven Rivers-Queen-Penrose, and Grayburg San Andres.