

Page 2

Bill Hill and Joe Kandle  
October 30, 1974

mud up with a Drispac-Flosal (S. W. CMC & Asbestos) type system. Maintain viscosity 32-34 sec/1000cc with Asbestos while drilling. To test, log, and run casing raise viscosity to 36-38 sec/1000cc. Keep water loss to 6-8cc/30 min. with S. W. CMC and starch (2 starch to one S. W. CMC). The starch is used to stabilize the S. W. CMC. Keep weight 8.6-8.8#/gal. Alter the aforementioned properties as hole conditions dictate. The weight may be raised to 10.2#/gal. with salt if necessary. Desired weight above that point may be attained with Barite.

Third Intermediate (12,500'-14,500')

Drill out with the S. W. CMC - Asbestos system previously used. Raise weight to 10.1-10.2#/gal. with salt, unless this procedure has already been followed. Before drilling more than 50 feet, raise weight to 13.0#/gal. with Barite and add 4 to 5% Potassium Chloride. Maintain viscosity 40-42 sec/1000cc with Asbestos, water loss 4-6cc/30 min. with Starch and S. W. CMC in the ratio of two to one. Also hold a yield point of 10-14. All properties may need to be altered as hole conditions dictate.

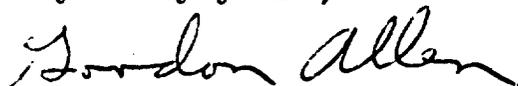
Production Liner (14,500'-18,500')

Drill out with the weighted S. W. CMC -Asbestos system. Reduce weight as low as possible with fresh water in conjunction with a desander and desilter. Maintain a 34-36 sec/1000cc viscosity with Asbestos and control water loss 4-6cc/30 min. with Starch and S. W. CMC. Continue the Potassium Chloride Treatment to T. D. As before, alter mud properties dependent on existing hole conditions.

Excluding unexpected problems of a critical nature, your total mud cost should be in the range of \$100,000.00 to \$125,000.00.

Thank you for the privilege of submitting this proposal.

Very truly yours,



Gordon Allen  
GA/sm

Enclosures  
cc: Joe Henderson