

September 20, 1985

TO: J. E. CRUM

FROM: M. KRUEPELMAN
Marbeth

ANALYSIS OF RIVER WATER FOR C-8

- REF. 1: Letter, J. F. Doughty to S. R. Laas,
"C-8 in Water and Mud", dated 10/15/84
- REF. 2: Letter, M. Kruempelman to S. R. Laas/M. J.
Vilone, "C-8 in Water and Mud", dated 7/16/85

In the analysis of the initial water samples (Ref. 1) interferences were detected in the GC scans in the region where C-8 elutes. In July (Ref. 2) three water samples were sent to the Experimental Station to determine if the cause of the interferences was in the sample container and/or the depth sampler. The analysis of these samples has been completed. Of these samples only the sample from the depth sampler showed a small interference in the area where C-8 elutes. While there was an interference in the area of C-8, it did not solve the problem that there are a significant number of organic contaminants in the river water that interfere with the C-8 analysis.

The question arises as to what we should do next with the river water samples. The Experimental Station could test the river water samples they have for C-8. I question the validity of doing this considering the time lapse between sampling and analysis (now 11 months). If appropriate, additional samples could be obtained and sent to the station for analysis.

Before we decide to take fresh samples we must consider another problem. At present, the Experimental Station has a method for determining C-8 in drinking water. Analyzing river water for C-8 is extremely difficult considering the large number of organic impurities present. The Experimental Station does not have a method for determining C-8 in river water, or in mud. The Station has indicated that it will take a considerable period of time and money to develop a method to determine C-8 in river water alone. Additional time will be required for developing a method for C-8 in mud.

0188T - MK:kst

717600731