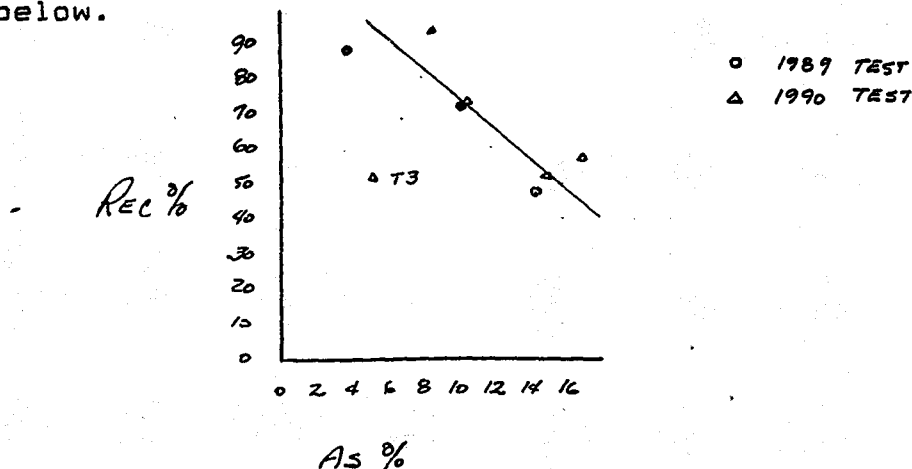


MEMORANDUM

TO: S. McAlpine
CC: K. Blower, G. Halverson
FROM: K. Morton
DATE: April 23, 1990
SUBJECT: GOLD EXTRACTION FROM HOT FILTER RESIDUES

The results of the latest Lakefield program to test gold extraction from hot filter residues has been received, but the results are still not conclusive and a positive determination cannot be made until the pilot plant testwork is completed.

The latest results, based upon 5 samples of hot filter residue sent to Lakefield by RPC, tend to corroborate earlier testing, which showed the best gold extractions occurred at lower arsenic concentrations. Though the sample population is too small to arrive at a definite conclusion, it appears that gold recovery may be as low as 50% at arsenic levels exceeding 14%, 72% recovery at 11% arsenic, and perhaps 90% recovery at 6% arsenic. There were one or two anomalous results out of 8 samples tested, and this has obscured the definition of the results, as shown on the graph below.



Interestingly, the sample marked T3 on the graph contained only 5.4% arsenic, but only 3% of this was soluble, as compared to the others, which ranged from 16.7% to 53.7% solubility over 48 hours. This must be related to fuming conditions at the time the sample was produced, but it is not now possible to determine what these conditions were.


Kent Morton