

FALCONBRIDGE NICKEL MINES LIMITED

INTER-OFFICE MEMORANDUM

DATE: February 22, 1980

TO: D. J. Emery

FEB 22 1980

COPIES TO: HTB, W. A. Moore, PJR, LJP, FGTP

FROM: J. F. Jackson

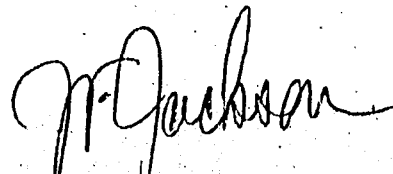
SUBJECT: Production of a high purity arsenic trioxide by fuming

The opportunity exists to produce a saleable arsenic trioxide product by using a high temperature fuming process and this should be pursued. The capital and operating costs for this process are indicated to be considerably lower than the hot water leach process. It should be possible to fume the arsenic from the current bag house dust, the dust which has been stored underground and possibly the Con material. The contained gold could be recovered from the residue.

A program is necessary to test these materials in the laboratory to determine the conditions under which arsenic can be fumed, how best to perform the operation and to provide the necessary data to evaluate the process. This testwork would also provide information for the design of a large scale demonstration pilot plant.

This work would be carried out at Falconbridge Metallurgical Laboratories at a total cost that should not exceed \$50,000. After an expenditure of about \$10,000 over a one to two month period it should be possible to determine whether the concept has potential or whether it will not work. A go - no go decision on further testwork could be made at that time.

JFJ:lp


J. F. Jackson