

ANVIL MINING CORPORATION LIMITED

MEMORANDUM

002155

TO: N. G. Cornish FROM: P. J. Brown
SUBJECT: METALLURGICAL INVESTIGATION OF THE DATE: March 1, 1973
LOW GRADE ORE STOCKPILES

As part of the test program to investigate the flotation response of the low grade stockpile ore, the Engineering Department has drilled four holes in the "red" stockpile and one in the "yellow" stockpile. Recovery from all holes in the red stockpile was excellent (only four were attempted), while recovery from holes in the yellow stockpile was poor - only one hole producing acceptable recovery of drill cuttings. Accordingly, the first phase of the metallurgical investigation has been directed at the "red" stockpile material - some 250 lbs. of sample in all. Work on the "yellow" stockpile will be delayed until some scheme is devised to obtain a fairly representative sample.

The laboratory test work will commence immediately with a total analysis of the "red" stockpile sample; special attention will be directed at determining the soluble oxide content of the sample and also its natural pH at normal flotation densities.

Since our preliminary work indicated that a lime circuit might prove more advantageous than the normal soda ash, I would expect an early start to some "locked cycle" lime cleaning tests. Provided these tests are successful, a metallurgical balance for the treatment of the stockpile ore will be constructed, and the net revenue estimated and compared with net revenue derived from treating normal ore.

Data from other mines treating oxidized massive sulphide ores is being collected now to assist the guidance of the test program. As a matter of interest you should note that "high lime" bulk sulphide flotation is quite popular in extreme cases of oxidation.

The Metallurgical group will coordinate testing activities with Engineering to ensure a continuous supply of samples during the test period. Reports detailing the progress of the project will be distributed to all those concerned.

P. J. Brown

P. J. Brown
Plant Metallurgist

cc. R. Haffner, P. Taggart (5), J. Keily, W. Krats (2), P. Dyas,
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