

395



THE AUSTRALIAN MINERAL DEVELOPMENT LABORATORIES

TREATMENT OF MOINA FLUORITE

B1 PROPOSED TECHNICAL PROGRAMME

Part A (1) Mineralogical Examination

The objectives of the mineralogical work will be:

- a. To confirm that the ore sample has similar mineralogical composition and characteristics to the ore specimens previously examined and to note any variations which may occur.
- b. To determine liberation characteristics of the economic minerals.

Mineralogical examination of test products may also be undertaken as required to aid evaluation of beneficiation processes.

(2) Magnetic Separation

Magnetic separation will be used for the production of a magnetite concentrate. It will also be used as required to remove iron from flotation concentrates.

Magnetic separation will be investigated initially on ground flotation feed. Subsequently magnetic separation may be applied to flotation products in addition to or as an alternative to primary magnetic separation.

(3) Flotation

Initial flotation testing will examine the feasibility of producing a bulk fluorite/scheelite concentrate. An initial sulphide float would be carried out followed by rougher flotation of the non-sulphides to produce the fluorite/scheelite concentrate. It is anticipated that magnetite and cassiterite will report to the flotation tailing.

A limited study will be made of the flotation cleaning of the rougher fluorite/scheelite concentrate to establish the grade-recovery relationship. From the results of this work appropriate conditions will be selected for producing 1 kg of fluorite/scheelite concentrate for leaching studies.