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EL 7174 MOINA FLUORITE

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In reply quote: ME 3/1/470

15 December 1975

Mr A.H. Bartlett,
Divisional Manager - Expioration,
Comalco Limited,
95 Collins Street,
MELBOURNE. Vic. 3000

Dear Mr Bartlett,

Moina Fluorite

During his visit to your office on 28 October our Dr K.J. Henley discussed with you our Report MP887/76 in which the mineralogy of two specimens of fluorite ore from the Moina deposit was described.

It is evident that the Moina Fluorite is similar to the Lost River and Mount Garnet fluorites in that the fluorite is of very fine grain size, requiring grinding to 40 μ m for good liberation.

You will recall that we carried out a flotation investigation on Mount Garnet fluorite in 1973 (Project 3/1/4/12). In this work we were unable to match the results quoted for the Lost River fluorite and concluded that this was due to the fact that Mt Garnet fluorite contained gangue inclusions which were too fine to liberate and which were present in sufficient quantity to prevent the attainment of an acid grade product. Such gangue inclusions were not evident in the Lost River Fluorite.

Taking into consideration the gangue inclusions within the Mt Garnet fluorite it is considered that the results which we obtained were extremely good (Test AM25):

	<u>CaF₂ %</u>	
	<u>Cum. Assay</u>	<u>Cum. Recovery</u>
5th Cleaner Conc.	95.9	53.5
2nd Cl Conc. + Mags	84.8	80.1
(Feed)	(33.3)	

The mineralogical report indicates that there are no gangue inclusions within the Moina fluorite and for this reason we consider that Moina fluorite will respond to flotation more readily than the Mount Garnet fluorite.

You indicated to Dr Henley that you were not interested in undertaking an extensive metallurgical investigation on Moina fluorite because of the possibility that it would perform no better than the Mount Garnet material. However, for the reason stated above, we expect that the