2. MATERIAL EXAMINED

A composite sample of ore from the Moina deposit was prepared by combining appropriate samples representing ore intersections from four diamond drill holes within the deposit. A total of 148 samples comprising assay sample balances were included in the composite, the weight of each sample being adjusted to correspond with the footage represented.

An analysis of the composite sample is given below:

	%		ppm
CaF_2	16.5	Bi	450
Fe (acid sol.)	16.7	Mo	45
SiO_2 (total)	30.6	U	4
S (total)	0.33	Au	0.12
P_2O_5	0.06	Hg	0.35
Sn	0.13		
WO_3	0.11		

A qualitative spectrographic analysis is included in Table 1.

A mineralogical examination of the composite ore sample was carried out and the work is described in Appendix A. This work revealed the following information concerning the liberation characteristics of the minerals of economic interest:

Fluorite. In the size range minus 17 plus 9 μm liberation is about 80%. Unliberated fluorite is approximately equally locked with magnetite and silicates.

Tin. Approximately 45% of the tin is contained in solid solution in garnet. The remaining tin exists as cassiterite and less than 5% of this is liberated at sizes greater than 9 μm.

Tungsten. Tungsten occurs as scheelite. About half of the scheelite is well liberated in the size range minus 150 plus 75 μm (and perhaps at an even coarser size), the remaining scheelite requiring a grind finer than 75 μm for significant liberation to occur.

Magnetite. Magnetite is closely associated with silicates and fluorite and abundant composites of these minerals in the size range 7 to 33 μm were noted.