

APPENDIX 35.

FINANCIAL ANALYSIS, MOINA WRIGGLITE:

SEPT. 1978 - (P. ASKINS)

ASSUMPTIONS:

1. 15 million tonnes 18% CaF₂, 0.1% WO₃, 0.1% Sn
2. Open pittable, ore : overburden 1 : 1
3. Thruput 1.5 million t/yr i.e. 10 yr mine life
4. Assume mill operates for 300 day/yr
5. Recoveries 60% CaF₂ as acid grade
 50% WO₃ as scheelite concentrate
 30% Sn₃ as cassiterite concentrate
 (WO₃ and Sn recoveries are very optimistic).
6. Realized prices (using approximate current prices)
 CaF₂ acid grade \$ 80/t
 WO₃ 65% WO₃ as scheelite conc. \$120/m.t.u.
 Sn₃ clean cassiterite conc. say \$ 90/m.t.u.
7. In-the-ground values, at quoted recoveries:

CaF ₂	$\frac{18}{100} \times \frac{60}{100} \times 80$	=	\$ 8.60
WO ₃	0.1 x 0.5 x 120	=	\$ 6.00
Sn ₃	0.1 x 0.3 x 90	=	<u>\$ 2.70</u>
			<u>\$17.30</u>
8. Concentrate freight costs:

for Sn, WO ₃	negligible
for CaF ₂	assume concentrate sold F.O.B. Devonport. trucking 100 km to coast at say \$12/tonne.
9. No smelter costs since products sold as concentrates.
10. State Government royalties. Tasmania royalties, Sept. 78, are 2.5% of the gross value of production, or 5% of before tax profit, whichever is less. In this case 5% of before tax profit is less.
11. Ore mining cost \$1.20/tonne
12. Overburden removal cost \$1.20/tonne
13. Milling cost \$10.00/tonne (inflated from Erskine (1975), also approximate Renison cost).
14. Overhead, indirect costs \$1.50/tonne
15. Reclamation costs negligible