

Flotation Test Procedures and Results on Ore Sample No. 1Tests 5 + 6 (Continuing on from Stage 1):

Stage grind to 100% -75  $\mu$ m at 60% solids (7½ min., 500 g charge); sulphide pre-float; stage tin rougher floats using PTAA as collector.

(a) Flotation Conditions and Reagents

Stage	Conditions		Reagent Addition kg/t				
	Time (min.)	pH	PAX	PTAA	H <sub>2</sub> SO <sub>4</sub>	MIBC	
<u>Conditioning Flotation</u>							
Sulphide Rougher Float 1	2	5	6.3	0.01	-	-	0.04
Sulphide Rougher Float 2	2	5	6.3	0.01	-	-	0.02
Tin Rougher Float 1	5	5	5.0	-	0.10	0.14	0.01
Tin Rougher Float 2	5	5	5.0	-	0.10	0.04	0.01
Tin Rougher Float 3	5	5	5.0	-	0.10	0.05	0.01
Tin Rougher Float 4	5	5	5.0	-	0.10	0.04	0.01
Tin Rougher Float 5	5	5	5.0	-	0.10	0.04	0.01
Tin Rougher Float 6	5	5	5.0	-	0.20	0.06	0.01
Tin Rougher Float 7	5	5	5.0	-	0.20	0.06	0.01
Tin Rougher Float 8	5	5	5.0	-	0.30	0.07	0.01
Tin Rougher Float 9	5	5	5.0	-	0.30	0.07	0.01

Notes: PAX = Potassium Amyl Xanthate (Union Carbide)  
 PTAA = p-Tolyl Arsonic Acid (I.C.I.)  
 MIBC = Methyl Isobutyl Carbinol (Shell)  
 H<sub>2</sub>SO<sub>4</sub> = Sulphuric Acid (Analab)

Adelaide tap water was used in all tests.

Flotation pulp density was maintained nominally at 35% solids in all tests.

Agitair LA500 equipment was used for conducting all flotation tests.

Stainless steel rod mill was used for grinding test charges.

British standard screens and a Warman cyclosizer were used for sizing analysis.