

Test PC2/F9 - Stage grind to 100% -75  $\mu$ m at 60% solids (7 $\frac{1}{2}$  min., 500 g charge); sulphide pre-float; tin rougher float using CA540 as collector.

(a) Flotation Conditions and Reagents

Stage	Conditions		Reagent Addition kg/t				
	Time (min.)		pH	PAX	CA540	H <sub>2</sub> SO <sub>4</sub>	MIBC
	Conditioning	Flotation					
Sulphide Ro Float 1	2	5	5.75	0.01	-	-	0.04
Sulphide Ro Float 2	2	5	5.75	0.01	-	-	0.02
Tin Ro Float 1	5	5	6.10	-	0.10	-	0.02
Tin Ro Float 2	5	5	6.10	-	0.05	-	-

(b) Results

Test Product	Weight %	Assay % Sn	Distribution % Sn
Sulphide Ro Conc	11.29	0.32	11.99
Tin Ro Conc 1	57.33	0.48	81.78
Tin Ro Conc 2	25.20	0.06	5.02
(Tin Ro Conc)	(76.53)	(0.34)	(86.80)
Tin Ro Tail	12.18	0.03	1.21
Calc Head	100.00	0.30	100.00
Assay Head		0.29	

(c) Comments

- (i) Collector CA540 appeared very non-selective as compared to PTAA in tin flotation of Composite PC2.
- (ii) A high recovery of tin was obtained in this test but there was virtually no concentration achieved at all.
- (iii) Flotation conditions used were one of the two alternatives recommended by the manufacturer, i.e. at natural pH without the use of depressant in rougher flotation.