

Test SC2/F4 - Stage grind to 100% -150  $\mu$ m at 60% solids (4 min., 500 g charge); deslime at 7  $\mu$ m; talc and sulphide pre-floats; stage tin rougher floats with S-3903 as collector.

(a) Flotation Conditions and Reagents

Stage	Conditions			Reagent Addition kg/t			
	Time (min.)		pH	SSBX	S-3903	H <sub>2</sub> SO <sub>4</sub>	MIBC
	Conditioning	Flotation					
Talc Pre-float	2	5	7.3	-	-	-	0.04
Sulphide Ro Float 1	2	5	7.6	0.01	-	-	0.02
Sulphide Ro Float 2	2	5	7.7	0.01	-	-	0.02
Tin Ro Float 1	5	5	4.5	-	0.01	0.70	0.02
Tin Ro Float 2	5	5	4.5	-	0.01	0.50	0.01
Tin Ro Float 3	5	5	4.5	-	0.01	0.30	0.01
Tin Ro Float 4	5	5	5.5	-	0.02	0.20	0.01

(b) Results

Test Product	Weight %	Assay % Sn	Distribution % Sn
Talc Ro Conc	15.40	0.86	11.65
Sulphide Ro Conc	25.71	0.28	6.33
Tin Ro Conc 1	6.30	0.16	0.89
Tin Ro Conc 2	1.40	0.43	0.53
Tin Ro Conc 3	1.57	0.55	0.76
Tin Ro Conc 4	3.53	0.86	2.67
(Tin Ro Conc 1 to 4)	(12.80)	(0.43)	(4.85)
Tin Ro Tail	44.21	1.97	76.62
Slime -7 $\mu$ m	1.88	0.33	0.55
Calc Head	100.00	1.14	100.00
Assay Head		1.20	

(c) Comments

- (i) Results obtained in this test indicated that tin collector S-3903 did not appear to be effective in flotation treatment of Composite SC2 (in contrast to SC1 as in Test SC1/F5 in which a reasonable extraction was obtained). It may be the fact that a different set of flotation conditions are required for collector S-3903 to be effectively used in tin flotation of Composite SC2.