028223

Test SC1/BF - Stage grind to 100% -401 µm at 60% solids (5 min., 16 kg charge); stage sulphide rougher floats in 40 litre cell followed by cleaner float at higher densities.

(a) Flotation Conditions and Reagents

Stage	Conditions			Reagent Addition kg/t	
	Time (min.)		pH	PAX	MIBC
	Conditioning	Flotation			
Rougher Float 1	2	5	6.8	0.01	0.03
Rougher Float 2	2	5	-	0.01	-
Rougher Float 3	2	5	-	0.01	-
Rougher Float 4	2	5	-	0.01	0.01
Rougher Float 5	2	5	-	0.01	-
Cleaner Float 1	-	5	6.4	-	-
Cleaner Float 2	2	5	-	0.01	-
Cleaner Float 3	2	5	-	0.05	0.01
Cleaner Float 4	2	5	-	0.05	0.01
Cleaner Float 5	2	5	-	0.05	0.01

(b) Results

Test Product	Weight %		Assay %				Distribution %			
			Sn	Acid Soluble Sn	Total S	Fe	Sn	Acid Soluble Sn	Total S	Fe
Sulphide Cl Conc	14.36	20.44	0.50	0.13	37.0	49.1	7.79	45.50	34.68	36.76
Sulphide Cl Tail	6.08									
Sulphide Ro Tail	79.56		1.52	0.04	17.9	21.7	92.21	54.50	65.32	63.24
Calc Head	100.00		1.31	0.058	21.8	27.3	100.00	100.00	100.00	100.00
Assay Head			1.40	0.05	22.5	27.4				

(c) Comments

Difficulties were experienced in floating coarse sulphide minerals in this composite sample; this happened particularly during the cleaning stage at higher pulp densities; thus sulphide cleaner concentrate and tail were recombined for assay purpose to assess the roughing performance instead.