

TR17-195

R.640. Tin distribution, North Valley alluvium, Waratah.

The Ringarooma Mining Company supplied a sample, stated to have come from a test pit in the North Valley alluvial, Waratah, for tin distribution determination.

METHOD

The sample was wet then dry screened with individual fractions being assayed for tin. The + $\frac{1}{8}$ inch barren fractions were not assayed for tin, the only exception being the - $\frac{3}{4}$ inch + $\frac{3}{8}$ inch fraction, where verification of barren material was carried out by tin analysis.

RESULTS

The tin size distribution is shown below.

Fraction	% Wt	% Sn	% Sn Distn	Cum. % Sn Distn
3 in	18.5			
1½ in	16.2			
¾ in	12.0			
⅜ in	9.1	0.04		
⅛ in	6.7			
2.36 mm	4.8	0.07		
1.18 mm	4.7	0.08		
600 µm	4.4	0.51	21.6	21.6
300 µm	3.9	0.67	25.1	46.7
150 µm	3.6	0.67	23.2	69.9
75 µm	4.2	0.39	15.7	85.6
38 µm	2.7	0.36	9.3	94.9
C/S1	0.1	4.63	4.4	99.3
C/S2	0.3	0.25	0.7	100.0
C/S3	1.0	0.07		
C/S4	1.1	0.06		
C/S5	0.5	0.05		
O/F	6.2	(0.01)		
Head	100.0	0.10		
-1.18 mm, +C/S2	19.2	(0.54)	100.0	

No nuggets of tin were found in the coarse fractions.

CONCLUSION

From the screen analysis, it can be seen that by screening and desliming, approximately 80% of the initial weight can be removed without loss of recoverable tin. This fraction (20% by weight) assayed approximately 0.5% Sn.

The overall recoverable head value was 0.10% tin.