

4. GEOCHEMISTRY

Stream sediment samples were collected every 500 ft. along the major streams and tributaries.

The following table outlines the statistics:

Element:	Cu	Pb	Zn	Ni	Sn
High	150	4080	2400	260	200
Low	BLD	BLD	2	BLD	BLD
Mean	16.21	66.45	93.39	45.52	7.41
S.D.	16.75	218.02	93.29	42.66	10.44
Samples	947	388	942	652	662
Pop. 1	<52	<23	<100	<50	<12
Pop. 2	52-71	23-59	100-319	50-104	12-21
Pop. 3	72-104	60-199	>319	105-194	22-31
Pop. 4	>104	>199		>194	>31

As the above table illustrates, there was no consistency in the elements analysed. Only one third of the samples were analysed for lead, and only two thirds of the samples were analysed for tin and nickel. The attached plans show the reliability of the areas sampled.

The streams draining the Tertiary gravels and basalts have high values for nickel, tin and zinc. The tin is probably derived from the gravels and the nickel and zinc from the basalt.

Seven areas have been outlined for further work:

Anomaly R5

This is a zinc anomaly draining the Will O'Wisp grid area; the samples were not analysed for lead.

Anomalies H1 and H2

These are zinc anomalies which occur in streams draining the contact of the Crimson Creek Group and the Dundas Group. Anomaly H2 has a coincident high lead content, but the samples in anomaly H1 were not assayed for lead.

Anomaly Q1

This is a multi-element anomaly and may be due to contamination from the Emu Bay Railway. However, it occurs at the contact of the Mount Read Volcanics with sediments and is, therefore, a favourable geological horizon.