

4.4 Soil Geochemistry - Cypress Creek Track

90 C-horizon soil samples were collected by power auger at approximately 50m intervals along the Cypress Creek track. Geochemical results for Cu, Pb and Zn are plotted in profile form and can be correlated with various lithotypes as shown in the accompanying geological section (plan 73).

Like the stream sediment values, the analytical results from the soil sampling exercise can be divided into two geological populations about A.M.G. 377000E:

Mainwaring Group (ss) W of 377000E (40 samples)

<u>Element</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>C.O.V.*</u>	<u>Anomalous Samples</u>
Cu	81.5	72	88	TS 7472, 7478
Pb	14	13.5	96	TS 7487
Zn	90	55	61	TS 7478
Fe	5.11%	2.75%	54	TS 7455
Mn	411	298	73	TS 7469

Acid Volcanic Sequence E of 377000E (50 samples)

Cu	41.4	111	268	TS 5874, 5892, 5880
Pb	21.3	35.7	168	TS 5870, 5900, 5898
Zn	77.9	137	176	TS 5898, 5900
Fe	1.66%	2.21%	133	TS 5874, 5876, 5892
Mn	156	198	127	TS 5876, 5892, 5894

C.O.V. Is the coefficient of variation which is the standard deviation expressed as a percentage of the mean. This figure allows comparison of sample variability for different populations.