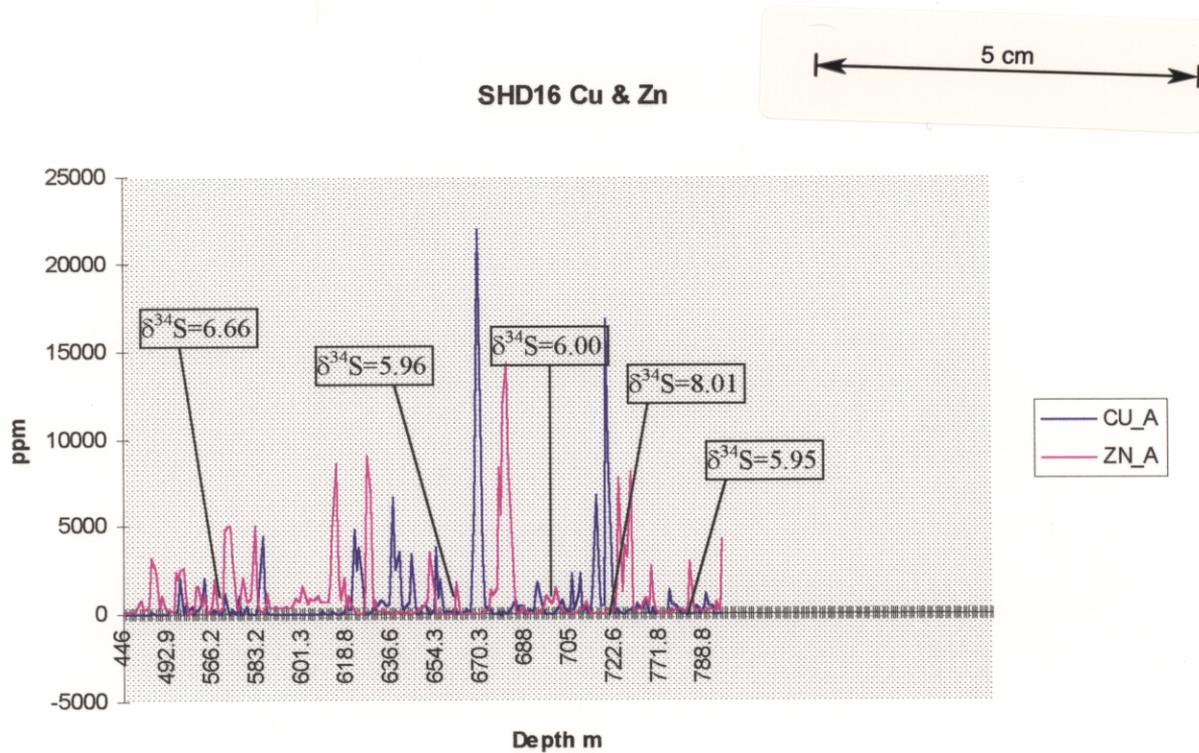
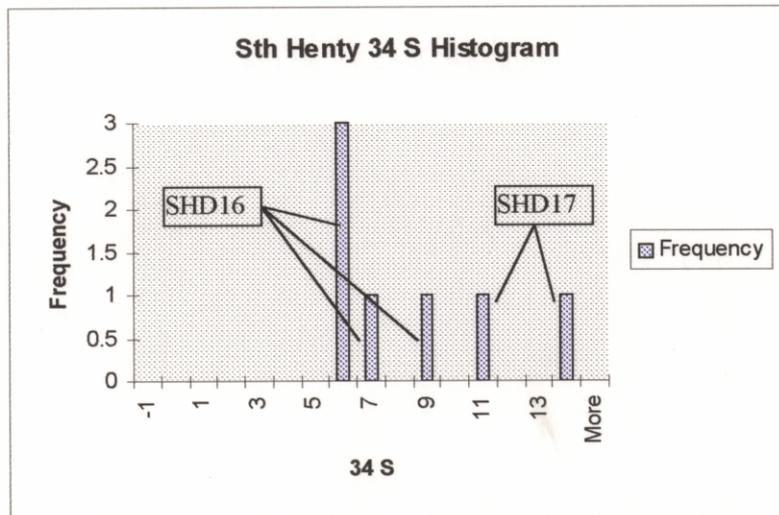


The sulphur isotope samples associated with the outer halo were obtained from pyrite samples in drillhole SHD17. A barite sample from the outer halo was taken from SHD1. Samples from the inner zone were obtained from pyrites in SHD16.



**Figure 2** Antipathetic relationship between Cu and Zn sulphides in SHD16. Sphalerite occurs with carbonate-sericite-chlorite alteration and chalcopyrite is associated with silica-sericite-pyrite alteration.

The alteration system crosscuts the stratigraphy of the CVC but is mainly concentrated in dacitic pumice breccias and coherent dacites of the Newton Creek Dacites.



**Figure 3.** Histogram of  $\delta^{34}\text{S}$  from Lake Newton Prospect alteration.

The sulphur isotopes sampled vary from  $\delta^{34}\text{S}$  of 5.95 to 13.79. The copper-gold zone has distinctly lighter  $\delta^{34}\text{S}$  (~6) than the outer carbonate basemetal zone (~12). Only one sample of heavier  $\delta^{34}\text{S}$  (8) was obtained from SHD16. This sample was associated with the blebby carbonate alteration more commonly developed in the outer halo.

There are two possible explanations for the zonation of  $\delta^{34}\text{S}$  in the Lake Newton mineralisation: