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In contrast the isotopic compositions of vein style deposits typically:

- i) exhibit a similar or larger dispersion than the massive sulphide deposits.
- ii) may be different from one locality to another.
- iii) are more radiogenic (higher 206/204, lower 207/206 and 208/206) than the massive sulphides.

A comparison of the different isotopic characteristics is given in Table 4.

Lists of isotopic analyses for the twenty five sample groups are given in Appendix V.

In an attempt to take an overview of the amassed raw Pb isotope data and to assess its usefulness in discriminating styles of mineralization graphical plots of Pb 206/Pb 204 vs. Std. Deviation and Range of values within groups of samples were prepared. Similar plots for Pb207/Pb206 against Std. Deviation were also compiled.

Mean and Std. Deviation of Pb isotopic ratios for known deposits (from Table 1, Gulson et al 1982) were plotted in the same fashion to provide comparisons and 'target' isotopic characteristics.

The following empirical observations are apparent, (but do not necessarily concur with the conclusions of Gulson et al).

1. In plots of both Pb206/Pb204 and Pb 207/206 the separation between known massive stratiform ores (Rosebery, Que River etc.) and vein style mineralization (Queen Hill, Murchinson etc.) is far more distinct in terms of the value of isotopic ratio (i.e. degree of radiogeneity) than with respect to the amount of variation (Std. Deviation) within sample groups.