IVAN - VMS INCLECT

Fronce Child's Latest Rosults. December 9 1994.

SUMMARY OF U-Pb AGE AND ISOTOPIC INFORMATION, KUTCHO CREEK, GRANDUC AND ANYOX DEPOSITS

KUTCHO CREEK:

UNIT: Quartz-eye schist, host to mineralization (Kutcho Formation) AGE: Permo-Triassic, 249 ±7 Ma (preliminary) SAMPLE NUMBER: KC-GC-01

UNIT: rhyolite intrusive, near the base of the Kutcho Formation AGE: Permo-Triassic, 249 ±13 Ma (preliminary) SAMPLE NUMBER: KC-GC-03

Pb ISOTOPES: ${}^{206}Pb/{}^{204}Pb = 18.43-18.51$ ${}^{207}Pb/{}^{204}Pb = 15.51-15.61$ ${}^{208}Pb/{}^{204}Pb = 37.87-38.04$

These values are more primitive than Mississippian to Jurassic VMS mineralization within the Stikine terrane (Childe, unpublished data) and Devonian mineralization of the Eagle Bay Formation of the Kooteney Terrane (Goutier, 1986), indicating that the Kutcho Formation formed in a more primitive tectonic setting than these island and continental arc terranes.

GRANDUC: ·

UNIT: basaltic-andesite flow, footwall series AGE: Upper Triassic, 223 ±5 Ma (final) SAMPLE NUMBER: GD-GC-04

UNIT: Diorite sill, intrusive into the basaltic-andesite flows, footwall series AGE: Upper Triassic, 223 ±3 Ma (final) SAMPLE NUMBER: GD-GC-01

UNIT: deformed andesite, mine series AGE: 223 ±1 Ma (final) SAMPLE NUMBER: GD-GC-08

Pb ISOTOPES: ²⁰⁶Pb/²⁰⁴Pb = 18.62-18.65 ²⁰⁷Pb/²⁰⁴Pb = 15.56-15.58 ²⁰⁸Pb/²⁰⁴Pb = 38.19-38.27

On the basis of these ages the deposit is inferred to be hosted by the Upper Triassic Stuhini Group. Pb isotopic compositions are markedly less radiogenic than for mineralization associated with the Jurassic Hazelton Group. Therefore it may be possible to distinguish between Jurassic and <u>Triassic mineralization</u> in Stikinia with the use of Pb isotopes.

ANYOX PENDANT:

UNIT: Granby Peninsula Turbidites AGE: Lower Jurassic, 200 to 206 Ma (detrital zircon - final) SAMPLE NUMBER: AX-GC-04a

UNIT: Mount Clashmore Trondhjemite(?) AGE: Devono-Mississippian, 364 ±4 Ma (preliminary) SAMPLE NUMBER: AX-GC-12

These two ages yield more information of the ages of rocks within the Anyox pendant but do not date the deposit itself.