

MISTY MOUNTAIN GOLD LIMITED

1020-800 West Pender Street
Vancouver, BC
Canada V6C 2V6
Tel: 604-684-6365
Toll Free: 1-800-667-2114

802798

FACSIMILE: (604) 684-8092

FAX TRANSMISSION:

FROM: RICHARD HASLINGER

DATE: _____ TIME: _____

TO: ROD KIRKHAM GSC

ATTN: _____

FACSIMILE NO: 666 1124

COMMENTS I WAS WRONG ABOUT THE DATES

I GAVE YOU YESTERDAY.

(1) DEPOSIT ALTERATION HAS BEEN DATED BY TWO
INDEPENDENT RESEARCHERS ONE @ 14.0 Ma ± 0.6
AND ONE @ 14.8 ± 0.3

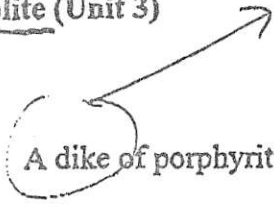
(2) RHYOLITE DIKES, CHEMICALLY DISTINCT AND DIFFERENT
FROM THE DACITE - ANDESITE DIKE IN THE DEPOSIT,
WEST OF THE FAULT IN OLDER HOST ROCKS - ARE
DATED AT 18.3 ± 0.4 AND ~~17.4~~ 17.4 ± 0.5

NUMBER OF PAGES (EXCLUDING THIS ONE): _____

sandy matrix-rich sections with sparse clasts, beds of apparently conformable stratified fine sediment and concentrations of bivalve mollusk shells. It is also distinguished from the lower mudflow breccia by the presence of quartz fragments and the near absence of plant debris.

Smaller horizons of mudflow breccia occur at depth within the Skonun unit. These are typically less than 2 metres thick and tend to become thicker and more numerous with increasing depth in the sediment section. They are similar to lower mudflow breccia in composition, typically containing 20 - 40% angular clasts up to 10 cm in size, mostly of creamy white rhyolite, floating in a brown mud matrix typically containing plant debris.

Rhyolite (Unit 3)



THIS ROCK IS WEST OF SANDSPIT FAULT AND IS NOT THE SAME AS THE (YOUNGER) DIKES TO ANDESITE DIKE IN THE DEPOSIT.

A dike of porphyritic rhyolite intrudes the Haida mudstone and Skonun sediments along the Specogna Fault. Potassium-argon age dates of 17.4 +/- 0.5 Ma and 18.3 +/- 0.4 Ma suggests a correlation with the rhyolitic rocks of the Masset Formation (Champigny, 1981, Kataoka, 1995). This rhyolite differs geochemically from other Masset rhyolites by its Nb/Zr and Y/Zr ratios (Madeisky, 1995). It may have contributed some of the heat required to sustain a hydrothermal cell for the epithermal system. Similar dikes and irregular bodies of rhyolite occur within the Haida mudstone west of the Sandspit Fault (eg.: Marino showing, rhyolite quarry), yet they appear to differ geochemically from the

REPORT IN PROGRESS

are strongly temperature dependent, with the smectite content of interlayered smectite-illite clays decreasing progressively with rising temperature over the 100 – 200°C range. Contouring the smectite content in illitic clays (as obtained by XRD) thus allows general palaeoisotherms to be constructed, which in turn, assists with locating conduits of palaeoflow within the fossil hydrothermal system.

IN CORPORATION OF
BENCH PLANS + NEW DATA FROM ANNE T.

Generalised palaeoisotherms for various levels within the hydrothermal system are shown in (PAGE SIZE FIGS ? OR REFERENCE ONLY TO MAIN 1:1500 SECTIONS?). They essentially define a laterally compressed funnel - shaped zone, elongated parallel to the Sandspit Fault and with a progressively hotter central core. Temperatures drop off sharply across the fault plane, truncating the western edge of the funnel which is focussed on a narrow 'feeder' at depth.

6.4 Dating of Alteration

DEPOSITAGE

Champigny and Sinclair (1982) placed the timing of alteration at 14.0 Ma¹, while Kataoka, (1995) reported an age of 14.8 ± 0.3 Ma for a sample of adularia altered Skonun Formation. The same author also reported an age of 18.3 ± 0.4 Ma for the rhyolite exposed at the Marino showing, west of the Sandspit Fault. This is comparable with the maximum age of intrusion reported by Champigny (1981), derived from a sample of silicified Haida Formation west of the fault, (i.e. 17.4 ± 0.5 Ma). Although he interpreted this as a possible incomplete reset of a late Cretaceous value by the 14.0 Ma. rhyodacites, (which is probably correct as the sample appears to have been taken from close to the Sandspit Fault) another possibility is that it is a 'true' age related to an episode of intrusion represented by the Marino and 'rhyolite quarry' rhyolites. These

¹ 14.0 ± 0.6 Ma and 14.1 ± 0.6 Ma K-Ar model ages of sericite from two samples of silicified - sericite altered

~~rhyolite dacite~~
01/07/98

