

WHOLE ROCK ANALYSES - MOUNT WOODSIDE

| | <u>SiO₂</u> | <u>Al₂O₃</u> | <u>CaO</u> | <u>MgO</u> | <u>Na₂O</u> | <u>K₂O</u> | <u>Fe₂O₃</u> | <u>MnO</u> | <u>TiO₂</u> | <u>Cu</u> | <u>Zn</u> | <u>Ba</u> |
|--------|------------------------|------------------------------------|------------|------------|------------------------|-----------------------|------------------------------------|------------|------------------------|-----------|-----------|-----------|
| BCS 41 | 76.6 | 9.82 | 0.33 | 1.74 | 2.59 | 1.36 | 1.66 | 0.048 | 0.13 | 25 | 37 | NA |
| 43 | 71.7 | 13.0 | 0.54 | 2.14 | 4.72 | 0.96 | 3.89 | 0.114 | 0.35 | 4 | 64 | NA |
| 414 | 77.6 | 10.6 | 0.10 | 0.22 | 4.23 | 0.91 | 1.32 | 0.014 | 0.15 | 1 | 20 | NA |
| 459 | | | | | | | | | | | | |
| 42 | 48.8 | 16.4 | 2.71 | 11.1 | 2.52 | 0.47 | 9.19 | 0.294 | 0.60 | 45 | 400 | NA |
| 44 | 49.2 | 16.4 | 9.37 | 6.33 | 2.04 | 0.54 | 9.47 | 0.185 | 0.62 | 71 | 50 | NA |

414, 41 rhyolite, from N part of road.

43 frag^e rhyolite from microwave area

42, 44 of basaltic flows/dykes

Mount Woodside Area

- geologically interesting; interbedded felsic pyroclastics, some very coarse, local cherts with tuff component, thin basaltic flows ^{and} / or dykes, large dacitic Fp intrusion; numerous other diabase, diorite, Monzonite ~~intrusions~~ dykes & plugs.
- structurally, folded about a NW-SE axis
- alteration, strong Fe carbonate, sil-seriate with sulphides
- sulphides abundant on SW limb where fragments also occur but where frag size generally small (lapilli). Not recorded on NE limb where frag size locally very coarse.
- previous work; Fab, Ascot, Few claims

General.

Within ~~border~~ of Sericea. Fp intrusion relationship ⁱⁿ common. More pyroclastics than at Sericea (takes bx, lap tuff as opposed to debris flows)

July 21st

- have plotted Na, some local encouragement, Ba also looks interesting
- GET OTHER ELEMENTS PLOTTED, then ~~go~~ with up, positive!
- none of the low Na were poss. seeds. All worth rechecking. Consider completing WR analysis on samples of interest.

HARRISON LAKE FORMATION RECONNAISSANCE - HARRISON LAKE / MOUNT WOODSIDE AREA.

Introduction - bc access, topography

Previous work. (to be compiled)

1983 Program.

Geology

Mount Woodside area

Harrison River - Weaver Lake area

Lithogeochron.

~~Discussion of results~~

Conclusions & Rec.

- detail Severa geol with our lithogeochron superimposed

Fig 1 Location & extent of HLF.

Maps 1 & 2 Geol.

App. 1. Rock descriptions.

CONCLUSIONS & RECOMMENDATIONS

The following factors point to the Mount Woodside area as being favourable for the formation of volcanogenic massive sulphides: - ~~and~~

- a) underlain by a formation (Harrison Lake Formation) in which a massive sulphide deposit (the Seneca) is already known
- b) pyroclastic rocks of proximal nature and a plethora of intrusions indicate ~~the~~ proximity to a volcanic vent.
- c) widespread iron carbonate alteration combined with ^{locally} anomalous Na_2O , Ba, Zn and Cu values and numerous pyrite showings ^{strongly} suggest an active hydrothermal environment

Given these favourable indicators and its readily accessible position, this area definitely deserves our further consideration.

Harrison River to Weaver Lake Area - Geology

The geology of the area north of the Harrison River is shown on Maps 1 and 2. Because of the limited amount of work done (main roads only) much of the major interpretation is developed from work by Pearson (1973).

The area is effectively divided in two by the NW-SE trending Sakwi Creek Fault. To the west of this a very large area is underlain by a bimodal sequence ~~consisting mainly of~~ volcanic flows and related breccias. ^{or} Close to the fault these are basaltic in composition with classic "Hawaii-type" textures. ^{Individual units} ~~where individual units have a minor massive component accompanied by rubble made up of the disintegration products of the~~ consist ^{mainly} of rubble derived from aa flows, the disintegration of ^{this} lava flows and tubes, and local ejecta. Very little massive material is preserved. The finer rubble displays a characteristic mottled green texture not unlike doleritic, but here considered to be a pervasive feature not related to hydrothermal fluids.

Further west a large area of dacitic to rhyolitic volcanics is found. These consist of strongly reddish porphyritic flows, sills and possible domes with related rubble as described above.