

Feb 26/92

NELSON ISLAND

OFFICE VISIT. (TCS, RP, & BL attended)

SPENT $\frac{1}{2}$ HR. w PAUL Kleimeer in DISCUSSION
OVER USE OF HOT (WARM) SPRINGS FOR
DRYING FACILITIES

NOTES:

- his focus is "Bands" of limestone (T₂ age)
- wondered how deep limestone may go
- tested numerous lakes, streams on Van Is & determine 4 or 5 SW trend "anomalous" geothermal bands (ie. Misty Lake - 70-80° in April-May)
- other anomalous areas - Namint Valley, Upper & Lower Tsitika
- referred to development of heat pumps in Maritimes using ~ 60° water (where water flow is high enough)
- feels that this output of warm water is assoc. with occurrence of limestone
- would like to see updated mapping in Coast Atlas and "blanket" H₂O temp measurements
- is thinking of moving to Prime Report where a hot spring Frizzel(?) is hot enough (& close enough to power line) to supply a Kelp drying operation - also close to kelp supply!

Nelson Island:

- concern over unavailability of data
- we told him to expect it published by June or so

BRIEF DESCRIPTION OF ROCKS / SUBMITTED JUL 29 1991
 FOR CHEMICAL ANALYSES

Geologica Survey Branch
 M. M. P. R.

#	UNIT	DESCRIPTION
NI91-5	sk	Rock chip - across 0.75m of rusty weathering 'pod' of py(±ep) rich pod with epidote-garnet-lepidolite skarn zone
NI91-5B	sk	Grab sample of same
NI91-6B	sk	Grab - garnet-lepidolite ± marble skarn
NI91-7	mb	Grab - white marble with 1cm wide folded block (carbonaceous) bands with pyrite embedded at nose of folds.
NI91-8e	sk	Grab - py(±ep) rich rusty weathering 'pod' of fine-gr. dark grey rock (diorite?) on limestone-skarn contact.
NI91-9	sk	Grab - epidote-rich (w/ tenorite? or manganese? stain) skarn zone about 0.9m wide within limestone. trace malachite.
NI91-12A	sk	Grab/Float - near source - massive magnetite (-actinolite) skarn
NI91-12B	sk	Grab/Float - near source - malachite-stained + epq skarn
NI91-13	sk	Grab - massive magnetite (-actinolite) skarn
NI91-15, 15A		Grab, Rock chip - mineralized (hornfelsed) diorite (py ± ep)

To: Paul Wilton

MEMO

CONFIDENTIAL

Subject: B.C. FOREST SERVICE REQUEST - NELSON ISLAND

REQUEST: Examine proposed logging site to ascertain the potential for hazardous (possible contamination) elements (especially selenium, arsenic, and barium) in rocks/soils.

LOCATION: Nelson Island, NTS 92F/9E, Lat. $49^{\circ}45'$ Long. $124^{\circ}10'$
Situated on north slope of a ^{second growth} forested slope south of the west end of West Lake and Mackenzie Lake.

ACCESS: Site visit by helicopter from Sechart, approx. 15 min. one-way. Past and new logging roads would provide access.

DATE OF VISIT: June 19, 1991

SITE VISITORS: Jim Ehinger (BC Forest Service) ^{Sechart}; Tom Schroeter and Bob Lane (BC Geological Survey Branch - Vancouver)

PHYSIOGRAPHY/GEOLOGIC SETTING: The area is situated due east of the historic (and present) operation iron/gold/~~skarn~~ limestone skarns on Texada Island. Previous mapping by the Geological Survey of Canada (OF 611; 92G) indicates the area to be underlain by ~~quartz diorite~~ ^{granodiorite} of the Coast Plutonic Complex. The area is underlain by a heavily tree covered ^(second growth) prominent ridge. Newly constructed logging roads have created good rock exposures.

SITE GEOLOGY: The site is underlain by granodiorite, ~~hornblende diorite~~, limestone (marble), and skarn (see Fig. 1). Skarn varieties include: garnet (andradite)⁺

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To Paul Wilton
diopside ± epidote. Locally massive magnetite, disseminated
or fracture-controlled, pyrite and/or chalcopyrite exist.
Table 1 ~~shows~~ describes samples collected together with
relevant assay values.

Although the numerous skarn 'bands' observed were
relatively narrow in width (eg. 0.5 to 3 metres), the
potential "zone of interest" ~~is~~ striking N-S ~~and~~
with steep dips, may widen along strike or
at depth. Locally karsting was observed in the limestone
(^{in caves})

CONCLUSIONS/RECOMMENDATIONS: Concerns expressed do not
appear to be substantiated and it is recommended
that BC Forest Service proceed ~~without~~ with no concern
from the Ministry of Energy, Mines + Petroleum Resources.

- Attachments
1. Sketch Map - Fig. 1
 2. Sample description/analyses - Table 1
 3. Nine photographs

Reference: June Monthly Report

Yours sincerely,
etc.