

GEOCHRONOLOGY

GEOLOGICAL SURVEY OF CANADA

DATE: October 23/90 PROJECT OFFICER: R.V. Kirkham

DIVISION: MR FIELD PROJECT NUMBER: 700059

GEOCHRONOLOGY STAFF MEMBER THIS PROJECT DISCUSSED WITH: J.K. Mortensen

ISOTOPE SYSTEM REQUESTED:

Rb-Sr  K-Ar  U-Pb  Pb-Pb  Sm-Nd  Other

MINERAL (S) (ie. zircon, w.r. etc.): zircon and hornblende

FIELD OR SAMPLE NUMBER: KQ-90-154C

AMOUNT OF SAMPLE SUBMITTED: about 50 kg?

LOCATION: PROVINCE B.C. DISTRICT Iskut NTS 104B/B

<sup>mt</sup> LAT ~56 29' 58" <sup>1172</sup>N LONG ~130° 14' W or UTM 62 61100N 423900E

TOPOGRAPHIC LOCATION: About 250m north of Sulphurets

Glacier along southeast creek from Hanging (Freegold)

GEOLOGICAL INFORMATION: (Please include geological setting, rock name, type, grain size, texture, mineral composition, etc.) Glacier.

"From Sulphurets Porphyry" (new name for porphyry  
in small stock) a <sup>pale grey</sup> crowded sodic plagioclase - hornblende  
porphyry.

AGE PROBLEM: (Please be specific in the objective of this study and specify accuracy required.)

Date porphyry and thermal cooling history.  
It is probably Lower Jurassic subvolcanic to  
the upper part of the Hazelton Group volcanic  
pile. This intrusion might have a specific  
metallogenetic suite (Au, As, Cu) around it.

Geochronology Section Comments: \_\_\_\_\_

## AGE DETERMINATION SUBMISSION FORM

## GEOCHRONOLOGY

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## ISOTOPE SYSTEM REQUESTED:

Rb-Sr  K-Ar  U-Pb  Pb-Pb  Sm-Nd  Other MINERAL (S) (ie. zircon, w.r. etc.): muscovite (e.g. "sericite")FIELD OR SAMPLE NUMBER: Esso hole #13 -487-587'AMOUNT OF SAMPLE SUBMITTED: ~3-4 kg?LOCATION: PROVINCE B.C. DISTRICT Iskut NTS 104B/9LAT 56° 32'?? N LONG ~130° 14' W or UTM 6265000 N 4240000 ETOPOGRAPHIC LOCATION: South of Mitchell Glacier

## GEOLOGICAL INFORMATION: (Please include geological setting, rock name, type, grain size, texture, mineral composition, etc.)

Quartz-sericite(muscovite)-pyrite schist - probably low greenschist facies dynamic-metamorphic product after a phyllic alteration zone in a Lower Jurassic porphyry Cu-Mo-Au system

## AGE PROBLEM: (Please be specific in the objective of this study and specify accuracy required.)

To determine the age of metamorphism and the cooling and uplift history of the area. First K/Ar age for the muscovite(sericite) should be obtained possibly followed by Ar<sup>39</sup>/40 determinations (to be decided by J. K. Mortensen).

Geochronology Section Comments: \_\_\_\_\_