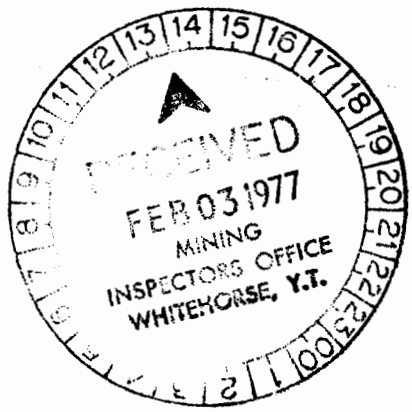
GEOLOGICAL REPORT

ON THE

REA 1-16
MINERAL CLAIMS

WATSON LAKE MINING DISTRICT
YUKON TERRITORIES
61°40'N, 128°42'W
N.T.S. 105-H-10



for

MOUNTAINEER MINES LTD.

by

C. K. IKONA, P.Eng.

December 1976

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $ 8000.00

W D Sinclair
Resident Geologist or
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

B.R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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INTRODUCTION

The Rea 1-16 mineral claims cover some Pb-Zn-Cu showings near Anderson Lake in the Yukon Territories.

Mountaineer Mines did some trenching and evaluation on these claims during the 1975 and 1976 field seasons. This report is based on this work and on the authors examination of the property in September of 1975.

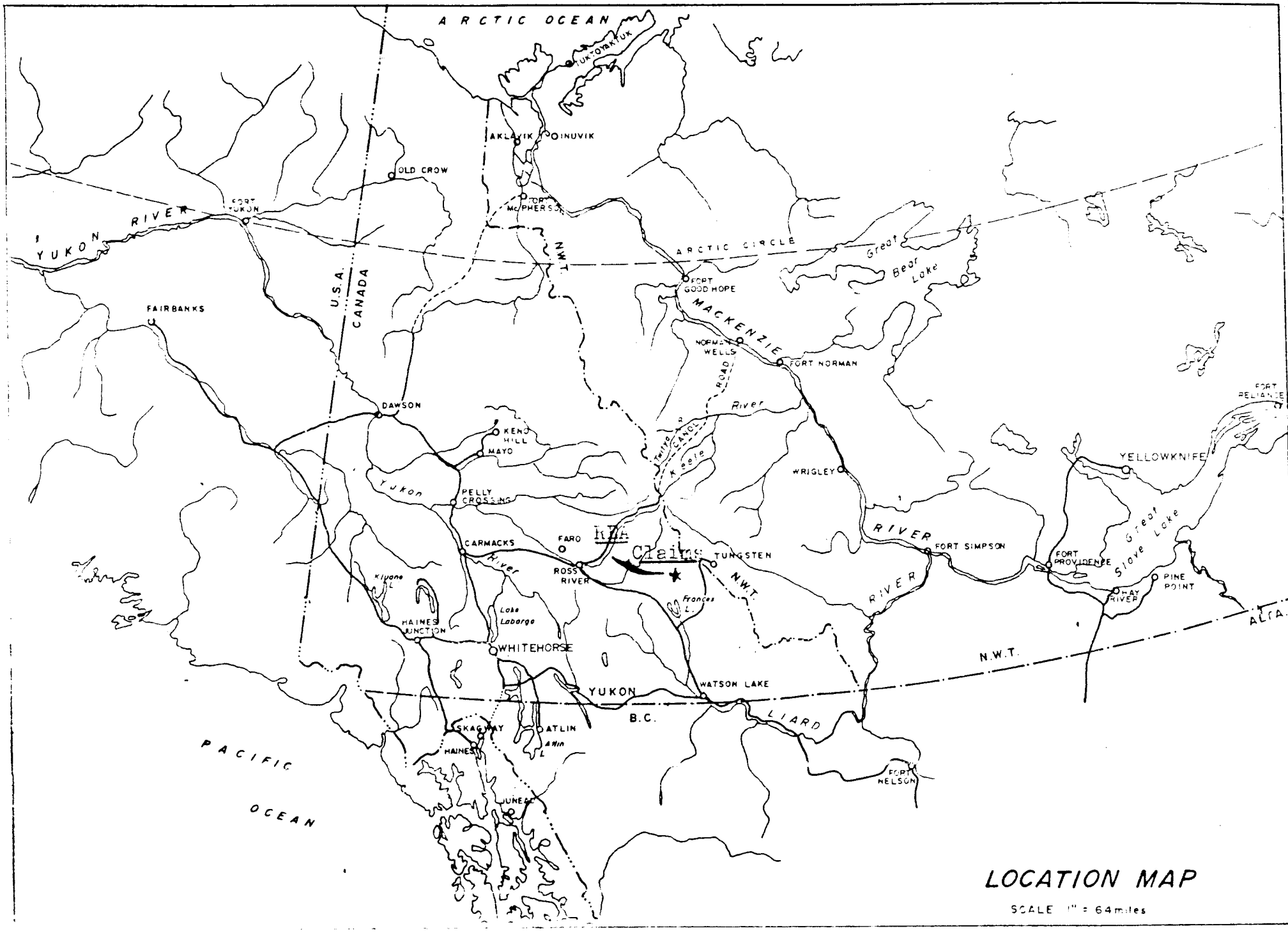
LOCATION AND ACCESS

The Rea group is located in the eastern Yukon at Lat. 61°40'N and Long. 128°42'W on NTS sheet 105-H. The claims cover the north slope of a easterly flowing creek some four miles east of its entry into Anderson Lake.

Access to the property can be made by float equipped aircraft to Anderson Lake some 106 miles north of the Village of Watson Lake and from there either by foot or helicopter to the claims. An alternate route would be by road to approximately Mile 60 on the Watson Lake, Cantung Highway and then by helicopter 12 miles west to the property.

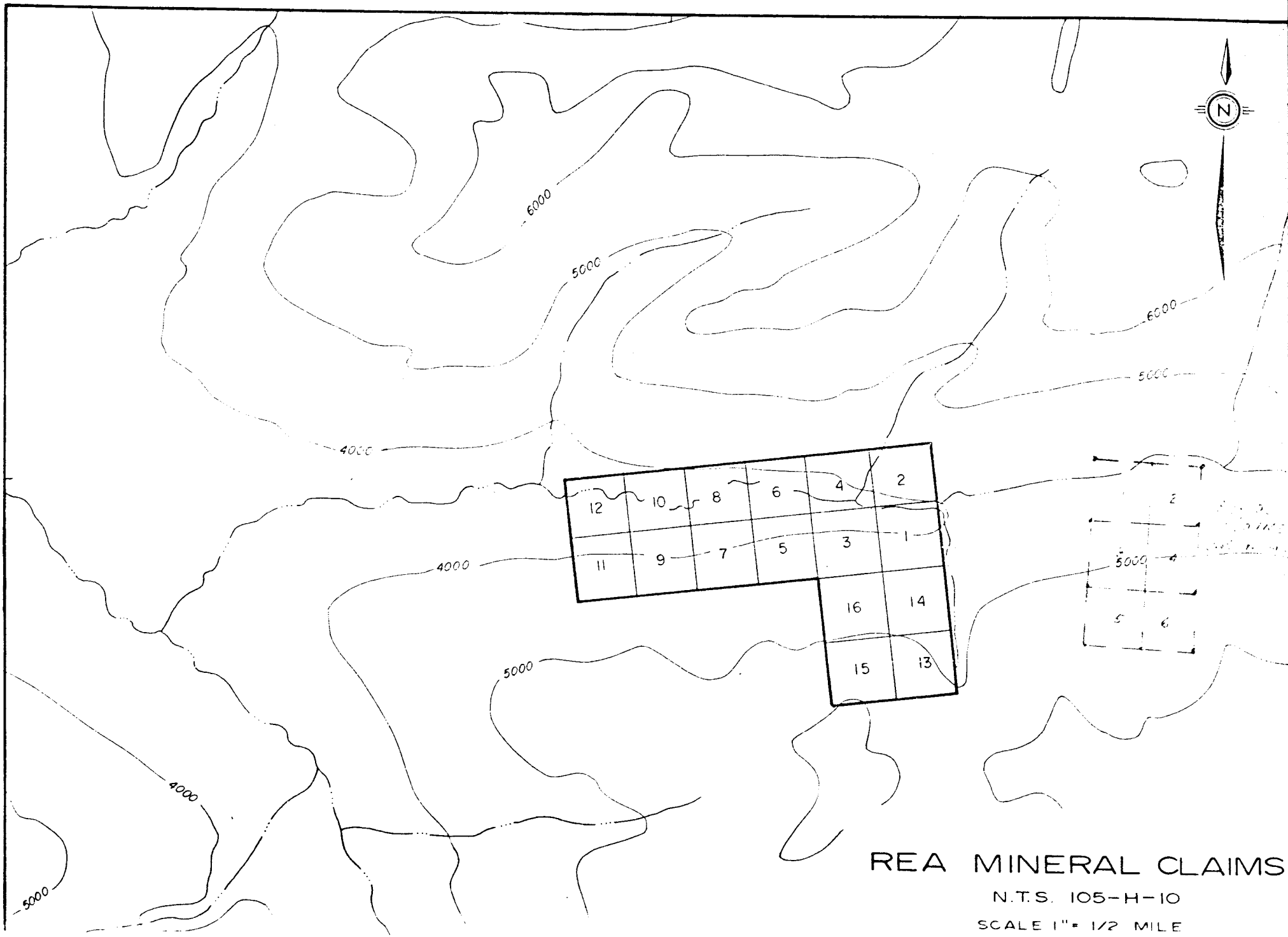
HISTORY

The occurrence of lead-zinc-copper mineralization in the area was discovered by Watson Lake prospector Hugo Brodell. Atlas Explorations optioned the property in 1966 and did some preliminary exploration in the 1967 field season under the direction of Dr. C. L. Smith.



LOCATION MAP

SCALE 1" = 64 miles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REA MINERAL CLAIMS
N.T.S. 105-H-10
SCALE 1" = 1/2 MILE

The claims were allowed to lapse and were restaked by Mr. T. Brock as the Rea group in 1975 and subsequently acquired by Mountaineer.

LIST OF CLAIMS

NAME	RECORD NO.	EXPIRY DATE
Rea 1-16	Y83971 - 83986 inclusive	Feb. 26, 1977
Pika 1-6	Not recorded after geological examination.	

Claim posts and affidavits inspected by the author were in accordance with the Yukon Quartz Mining Act.

REGIONAL GEOLOGY

The area is underlain primarily by a thick northwesterly trending succession of Upper Proterozoic shales, phyllites, quartzites and quartz pebble conglomerates with minor interbedded carbonates. The Proterozoic section has subsequently been intruded over a large area by biotite-quartz monzonites and granodiorites of the Logan batholith. Intrusive contacts are normally sharp but metamorphism has resulted in an irregular halo, locally up to 4 miles in width, of gneissic and schistose rocks along much of the eastern border of the batholith. It is felt that much of this gneissic band is a result of metamorphism of the quartz-pebble conglomerates and shales of the Proterozoic section (Unit 1, G.S.C. Map 6-1966 by Roots, Green, Roddick and Blusson).

Much of the Schist-gweiss band was explored in the late 1950's and early 1960's by individual prospectors and

members of the Norquest Joint Venture. These efforts resulted in the discovery of several lead, zinc and and silver occurrences normally within carbonate rich bands in the quartz-mica gneiss series.

CLAIM GEOLOGY

Within the claim group an intrusive-metasediment contact strikes approximately ENE near the initial posts of Rea 15 and 16 claims. The intrusive lies to the north and appears to be a cretaceous monzonite-granodiorite fairly typical for the area. To the south is a well-bedded sequence of metasediments with individual units varying from several inches to several tens of feet in thickness. The metasediments consist of biotite-hornblende schists and gneisses with minor sandstones and quartzites, locally calcareous. Intrusive sills and dykes become numerous close to the contact. Silicification of the metasediments is apparent adjacent to the contact and associated with the sills and dykes.

Attitudes of bedding vary locally but in general appear to dip away from the contact at 25° to 30°.

Near the southeast showings moderate shearing in several directions can be noted along a steeply dipping normal fault trending NW - SE. Some minor folding along a 320° axis plunging 30°S has occurred within the area.

LEGEND

- 1 — Thin to moderately thick well bedded Metasediments biotite-hornblende schists and gneisses, minor sandstone and quartzites
- 2 — Quartz Monzonite and Granodiorite
- 3 — Silicified contact area
- X — Mineralization
- Bedding attitudes
- Fold (plunging)
- Fault
- Fault (assumed)
- Geological contact
- Outcrop boundary
- Claim post and number

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GEOLOGY

REA CLAIMS - SHOWING AREA

FEET 0 100 200 400 800 FEET

JAN. 1977

MINERALIZATION

Local zones within the silicified portions of some units are heavily pyrrhotized and contain minor chalcopyrite, sphalerite and galena. These showings are generally heavily oxidized. Other areas of intensive limonite appear to be attributable to iron from mafic minerals altered by the intrusive phases.

Several of the small local fold crests contain silicified and oxidized zones of pyrrhotite but no economic minerals were noted.

The general tenure of the mineralization appears to consist of small erratically distributed zones with little likelihood of size. This was demonstrated by some of the trenching where blasting completely removed the mineralized zone.

A showing consisting of shear controlled pyrrhotite (to 15%) and the occasional grain of chalcopyrite within an area of greenish colored silicified schist was located by Mountaineer prospectors approximately 3/4 mile east of the Rea group. This was staked as the Pika 1-6 claims but was not recorded after geologic examination.

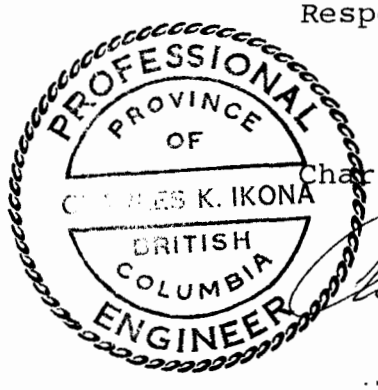
GEOCHEMISTRY

Some geochemical soil samples were collected on the Rea 14 claim to test its applicability in the area. This program was hindered by the poor soil development and extensive talus cover in the area. Results were not felt to warrant continuation of the survey.

CONCLUSIONS AND RECOMMENDATIONS

Numerous small mineral occurrences are present on the REA claim groups. It is considered that these have little size potential and consequently no further work is warranted on the claims.

Respectfully submitted,



Charles K. Ikona, P.Eng.