

# **BACON & CROWHURST LTD.**

1720–1055 West Hastings Street Vancouver 1, B.C.

REPORT

on the

D.O.C. CLAIMS

UNUK RIVER AREA, B.C.

for

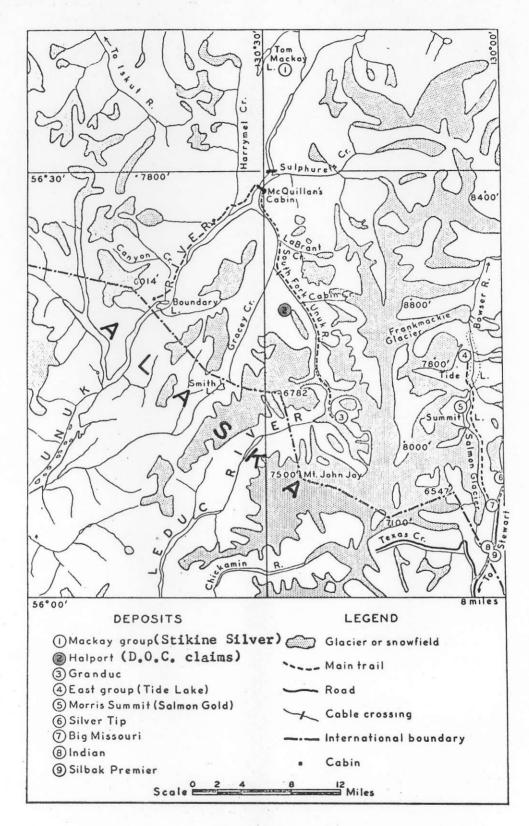
ALAKON METALS LTD.

by

W.R. BACON, Ph.D. P.Eng.

Vancouver, B.C.

October 25th, 1973



## Frontispiece

Location of mineral deposits in the Unuk River-Stewart area (1953)

# TABLE OF CONTENTS

		rage
INTRODUCTION		1
PROPERTY		2
LOCATION AND ACCESSIBILITY		2
GENERAL FEATURES		3
HISTORY		3
GEOLOGY		4
MINERALIZATION		5
CONCLUSIONS		6
RECOMMENDATIONS		6
COST ESTIMATE		7
CERTIFICATE		8

## ILLUSTRATIONS

Location of mineral deposits in the Unuk River-Stewart area (1953)

# Frontispiece

Fig. 1 - Part of claim map 75-M-3, Oct. 25, 1973

In envelope at back of report

Fig. 2 - Vertical section approx. along plane of vein Q17 & Q17W (by R.H. Seraphim)

88

### INTRODUCTION

1

In 1946, Tom McQuillan, veteran prospector of the Unuk River area, and his partner Pat Onhasy staked the Gracey group of claims on the South Fork of the Unuk River. Eight quartz veins were sampled and five of these returned assays of more than 0.5 ounces gold per ton.

Following the discovery, Halport Mines Limited was formed to develop the showings and considerable work, including diamond drilling, was carried out during 1947-1949.

Work was eventually suspended because of a continuing and universal lack of interest in gold mining that, in fact, had manifested itself in Canada as early as the summer of 1947.

The writer examined the showings on the Gracey claims during the summer of 1953.

#### PROPERTY

The showings are now covered by the 23 D.O.C. claims, D.O.C. 1 and D.O.C. 3-24. D.O.C. 12-24 were recorded on September 20th, 1973. (See Fig. 1)

#### LOCATION AND ACCESSIBILITY

The D.O.C. claims are at a general elevation of 4000 feet on the steep ridge between the South Fork of the Unuk River and its principal tributary, Gracey Creek. This is in the Coast Mountains, some 35 miles northwest of Stewart, B.C.

The property is accessible from tidewater at Burroughs Bay, Alaska by a 50 mile hike up the Unuk River and the South Fork. However, the only practical way to service the property at present is by helicopter from Stewart.

It is of considerable historical interest that, in May, 1948, sixteen tons of supplies and equipment were flown in by aeroplane from Stewart and air-dropped at the work site, without benefit of parachute, sustaining negligible damage.

#### GENERAL FEATIRES

The property is about 10 miles north of Granduc and is part of the same rugged terrain. It is steep and treeless; snow generally persists in sufficient quantity until August to make geological mapping before this month impractical.

As the snow melts, water for diamond drilling is no problem.

### HISTORY

Surface trenching was done on several quartz veins in 1947 and 1948. In 1948 two of these veins were diamond drilled and this work plus further trenching appeared to indicate that the two veins were actually the same, being separated by a minor fault. In all, 19 EX holes were drilled for a total footage of 4,230 feet. This work was stated to prove the persistence of the Q17 lode for a strike length of 1250 feet and to a depth of 230 feet.

In 1949 ten holes were diamond drilled for a total footage of 2044 feat on the Q25 lode.

Coring of the vein material was somewhat less than satisfactory. The quartz cored reasonably well but the sheared margins of the veins (where the values are apparently concentrated) cored poorly. In addition, sludges were not recovered and thus the diamond drilling results to date are not quantitatively conclusive. They did indicate economically (at \$35 gold) interesting gold (plus silver) values across widths up to 5.8 feet.

#### CEOLOGY

The D.O.C. claims are on the eastern flank of the intrusive core of the Coast Mountains. This area has been mapped by the E.C. Department of Mines and Petroleum Resources but the data are not yet published.

The mountain on which the claims are located is composed mainly of limestone, tuff, siltstone and argillite. There is extensive intercalation of the clastic beds which range in thickness from a fraction of an inch to several fest. There is a 'main' band of limestone and it has an apparent thickness of well over 1000 feet.

The layered rocks trend northwesterly and dip 40 to 60 degrees northeast. They are intruded by dioritic gnaiss, in irregular and sill-like form, as well as by dykes of aplite, symmite and lamprophyre.

The sills of dioritic gneiss trend northwesterly, are about one thousand feet apart, and are each several hundred feet wide. The sediments between these sills contain the gold-bearing quartz veins of economic interest. Veins also occur in the sediments beyond the sills but appear to be narrower and generally less premising than those found between the sills.

#### MINERALIZATION

The quartz veins contain about 10 per cent metallics. In order of abundance, these are galena, pyrite, specularite, chalcopyrite, sphalerite, magnetite and gold.<sup>1</sup>

There is a 'main' vein, the Q17-22, and the Q25 vein which are at the north end of the property. These have been partially explored by drilling whereas several other veins have only been sampled thus far. (See Fig. 2)

The quartz veine occur in sheared rocks; they have a definite preferred orientation, striking N65°W and dipping northeastward, generally at steep angles.

The walls on either side of the veine, for a few feet, have been hydrothermally altered and contain sericite, kaolin, chlorite, pyrite, albite and quartz.

For obvious reasons, more is known concerning the Q17 vein than the others. It is the only vein found thus far containing abundant specularite, and specularite is the only metallic, except for gold, in the Q17 vein. The Q22 segment of the Q17-22 vein contains both specularite and sulphides but neither in abundance.

Microscopic work by Seraphim indicated that the gold in Q17 vein occurs in open spaces or weaknesses between the twisted, folded, cleavage flakes of specularite.

 A Gold Spacularite Deposit, Unuk River, B.C. M.A.Sc. thesis, U.B.C., by R.H. Seraphim, 1948.

## CONCLUSIONS

The gold-quartz veins on the D.O.C. claims were interesting enough in the 1940's, when gold was \$35 per ounce, to justify careful scrutiny. In 1973, with the price of gold in excess of \$100 per ounce, the time has come to ascertain whether there is sufficient quantity and value in the property to sustain an economic mining operation.

## RECOMMENDATIONS

The Q17 vein should be tested by diamond drilling in order to establish its probable grade. This is because the 1948 drilling was done using EX equipment with generally unsatisfactory core recovery.

Even with modern equipment, it will not be easy to recover 90 per cent of the core, particularly at the margins of the vein. However, by drilling carefully with NQ wireline equipment and utilizing special core barrels, better results (than in 1948) can reasonably be anticipated.

# COST ESTIMATE

Move-in expenses - equipment, material, etc.	\$4 <b>,000</b>
2500' of NQ wireline drilling @ \$14/ft.	35,000
Camp costs including continuous helicopter support	6,000
Supervision, geology, engineering	2,500
Move-out	4,000
	\$51,500
Contingencies © 10%	5,150
	\$56,650

Respectfully submitted,

BACON & CROWHURST LTD.

baser

W.R. Bacon, Ph.D. P.Eng.

### CERTIFICATE

I, William R. Bacon, with business address at 1720 - 1055 W. Hastings St., Vancouver, 1, British Columbia, DO HEREEY CERTIFY THAT:

- 1. I am a consulting geological engineer.
- 2. I am a graduate of the University of British Columbia with B.A.Sc. (1939) and M.A.Sc. (1942) degrees in Geological Engineering.
- 3. I am a graduate of the University of Toronto with a Ph.D (1952) degree in Economic Geology.
- 4. I have practised my profession for thirty years in Canada, South America and Australia. During the past twenty years, the majority of my time has been spent in British Columbia; it includes seven years (1949-56) as geologist with the B.C. Department of Mines.
- 5. In 1953 I examined the ground now covered by the D.O.C. claims.
- I have no interest, direct or indirect, in the property or the securities of Alakon Metals Ltd., nor do I expect to acquire any such interest.

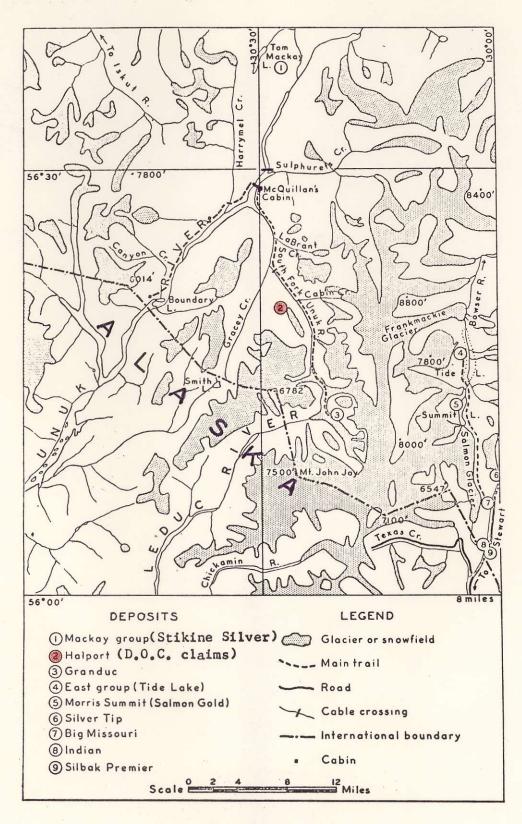
W.R. Bacon, Ph.D. P.Eng.

Vancouver, Canada. Oct. 25th, 1973.

APPROX . TRUE NIA 10 5 The Pare 0 0 10 1083 .02 MINEX DEVISOPMENT LA 4M 13 DOC #12-24 CLAINS 20 2 1262 SKEENA M.D. 0x Aust 20/13

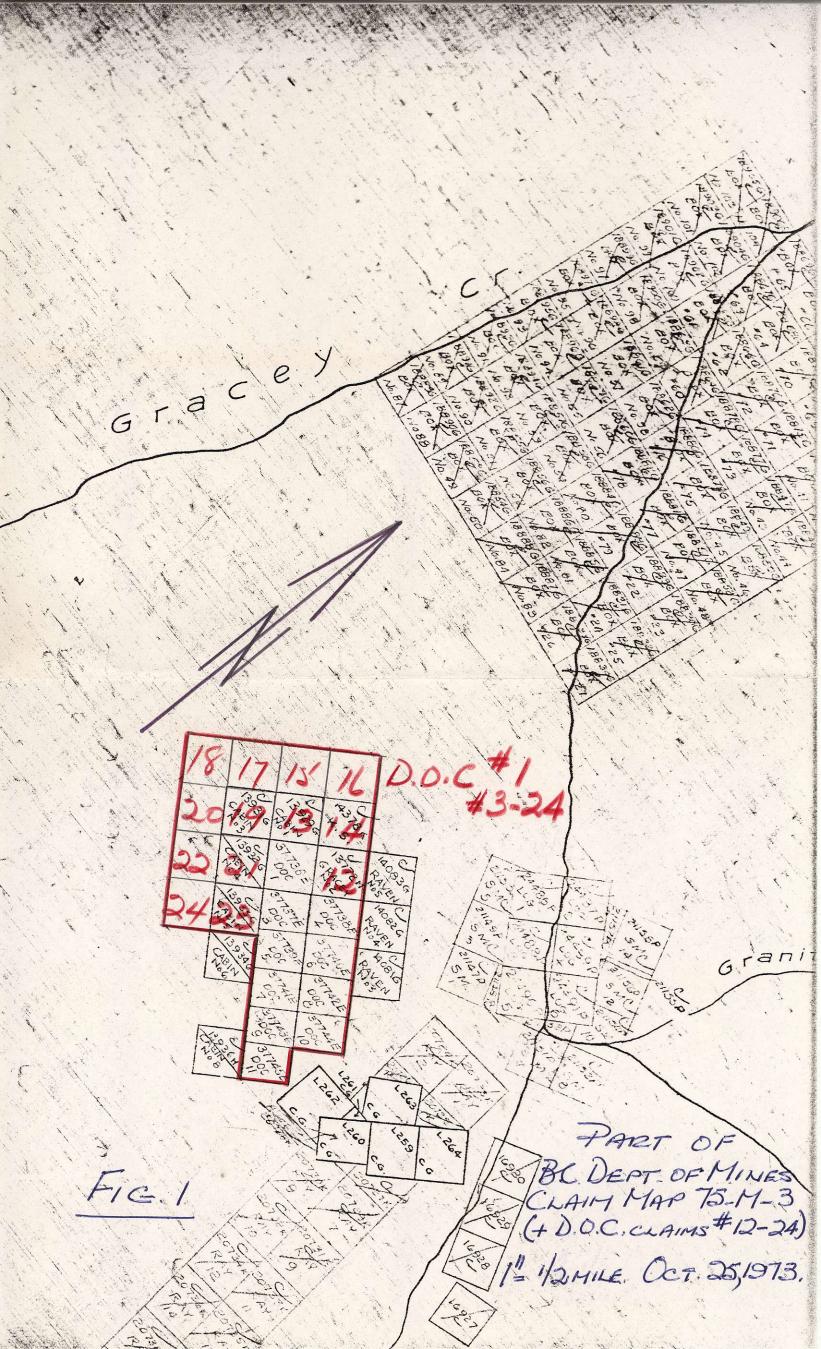
Gee. Y r a G Berbisha Mi Quillou 1972 STuky 2 ATEN C Granite 1408 12 on 0 1260 1259 1-26R C G 100 0000 1692

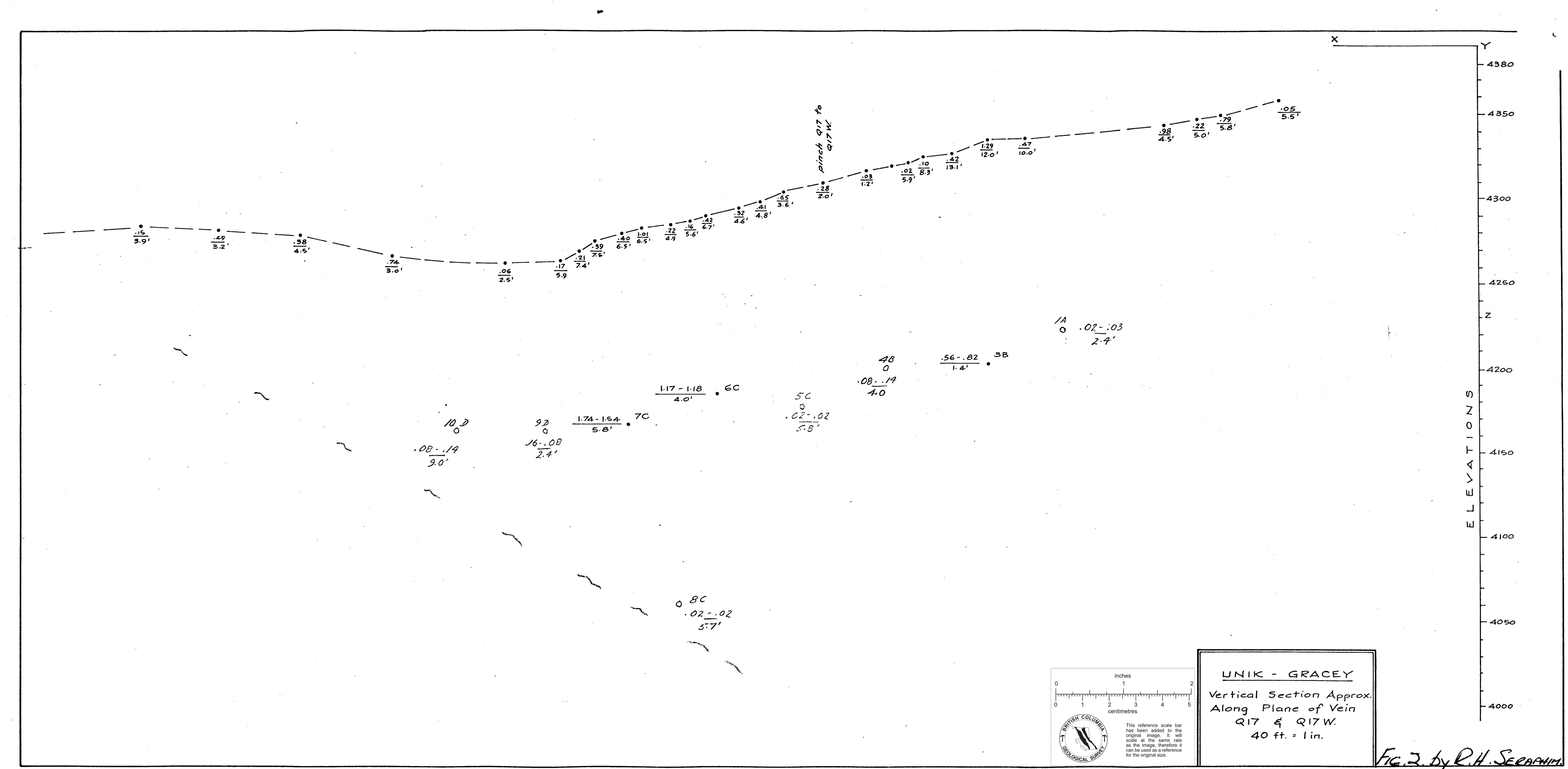
1048/8



Frontispiece

Location of mineral deposits in the Unuk River-Stewart area (1953)





.