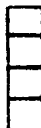


MAP No.

105 D 6 West Half

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILE



TYPE OF


WORK: GEOLOGICAL, GEOCHEMICAL

REPORT FILED UNDER	Rockridge Mining Corp.	DOCUMENT NO. 091656
DATE PERFORMED	August 16-22, 1985	DATE FILED: October 21, 1985
LOCATION - LAT. LONG.	60°02'N	AREA:
	135°28'W	
CLAIM NO.	BOTWAT 1-64 YA82841-YA82904	
VALUE \$		
WORK DONE BY	C.A. Main (Archer, Cathro and Associates (1981) Ltd.).	
WORK DONE FOR	Rockridge Mining Corp.	
REMARKS	<p>The BOTWAT claims overlie Eocene volcanic rocks of the Mount Skukum Volcanic Complex.</p>	

091656

40x85 p. 103

The 1985 work program consisted of geological and geochemical reconnaissance sampling. Twenty rock chips or float specimens of quartz-carbonate vein material and 83 soil samples were analyzed. One rock chip assayed 0.86 g/t Au and two soil samples 38 and 194 ppb Au. All other samples returned gold values in the background range.

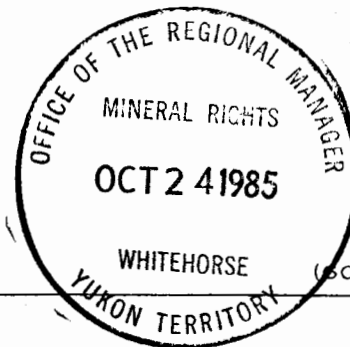


ARCHER, CATIRO

A ASSOCIATES (1981) LIMITED

CONSULTING GEOLOGICAL ENGINEERS

1016-510 WEST HASTINGS STREET
VANCOUVER, B. C. V6B 1L8



GEOLOGY AND GEOCHEMICAL SURVEY

BOTWAT 1-64 CLAIMS

WHITEHORSE MINING DISTRICT
YUKON
105D/6W

for

ROCKRIDGE MINING CORPORATION



CHARLES A. MAIN, B.Sc.

OCTOBER 4, 1985

091656

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 2400.00.

for *DAEmond*
Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

TABLE OF CONTENTS

	<u>Page</u>
Summary	1
Introduction	2
Property, Location and Access	2
Geology	3
Mt. Skukum Deposit	4
Geochemical Sampling	5
Conclusions and Recommendations	6

LIST OF TABLES

	<u>Following Page</u>
Table One Table of Formations	3

LIST OF FIGURES

	<u>Following Page</u>
Figure 1 Property Location	2
Figure 2 Geology	3
Figure 3 Geochemistry and Rock Assay	5

SUMMARY

The Botwat claims are partially underlain by Early Tertiary rocks of the Mt. Skukum Volcanic Complex, which host the Mt. Skukum gold deposit 5 km to the south. This survey was a preliminary examination of the property to confirm the presence of favourable rocks and determine that soil conditions are suitable for geochemical surveys. No mineralization was located although three samples from a total of 103 contained anomalous amounts of gold.

Mt. Skukum mineralization consists of inconspicuous quartz/carbonate vein material with no associated distinctive sulphide or alteration minerals. It is virtually impossible to recognize these rocks by prospecting alone and hence a complete evaluation of this property is not possible without a systematic and detailed sampling survey. Considering the proximity of the property to the Mt. Skukum deposit and the similarity of the volcanic formations on the property to those hosting the gold mineralization, a thorough evaluation using soil and rock geochemistry and prospecting is warranted.

Such a program would require a crew of three men for four weeks in the field and is estimated to cost approximately \$75,000.

Respectfully submitted

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED



Charles A. Main, B.Sc.

INTRODUCTION

The Botwat claims were staked in August, 1984 by Rockridge Mining Corporation to cover volcanic rocks similar to those hosting the Mt. Skukum gold deposit as mapped by the Geological Survey of Canada (GSC) and by the Department of Indian Affairs and Northern Development (DIAND). The purpose of this survey, conducted by Archer, Cathro & Associates (1981) Limited, was to confirm that the favourable lithologies were present on the Botwat claims. In the course of this examination, wide-spaced soil samples were collected to determine geochemical backgrounds and to locate areas of mineralization. Traverse routes were also prospected for Mt Skukum-type quartz vein float.

PROPERTY, LOCATION AND ACCESS

The property consists of 64 contiguous mineral claims recorded at the Whitehorse, Yukon Mining Recorder's office as shown below. Subsequent to the survey described in this report, an additional 20 mineral claims (Botwat 65 to 84) were staked.

<u>CLAIM NAME</u>	<u>NO. OF CLAIMS</u>	<u>RECORD NO.</u>	<u>NTS</u>	<u>EXPIRY DATE</u>
Botwat 1-64	64	YA82841-YA82904	105D/6W	August 26, 1986
Botwat 65-84	20	YA93356-YA93375	105D/6W	August 23, 1986

The property is located on the north side of Mt. Skukum and south of Watson River, as shown in Figure One on the following page. Although the main part of Mt. Skukum reaches elevations of 2350 m and is quite precipitous, the Botwat property ranges from 1500 to 2000 m and has generally moderate slopes. All the property is above treeline.

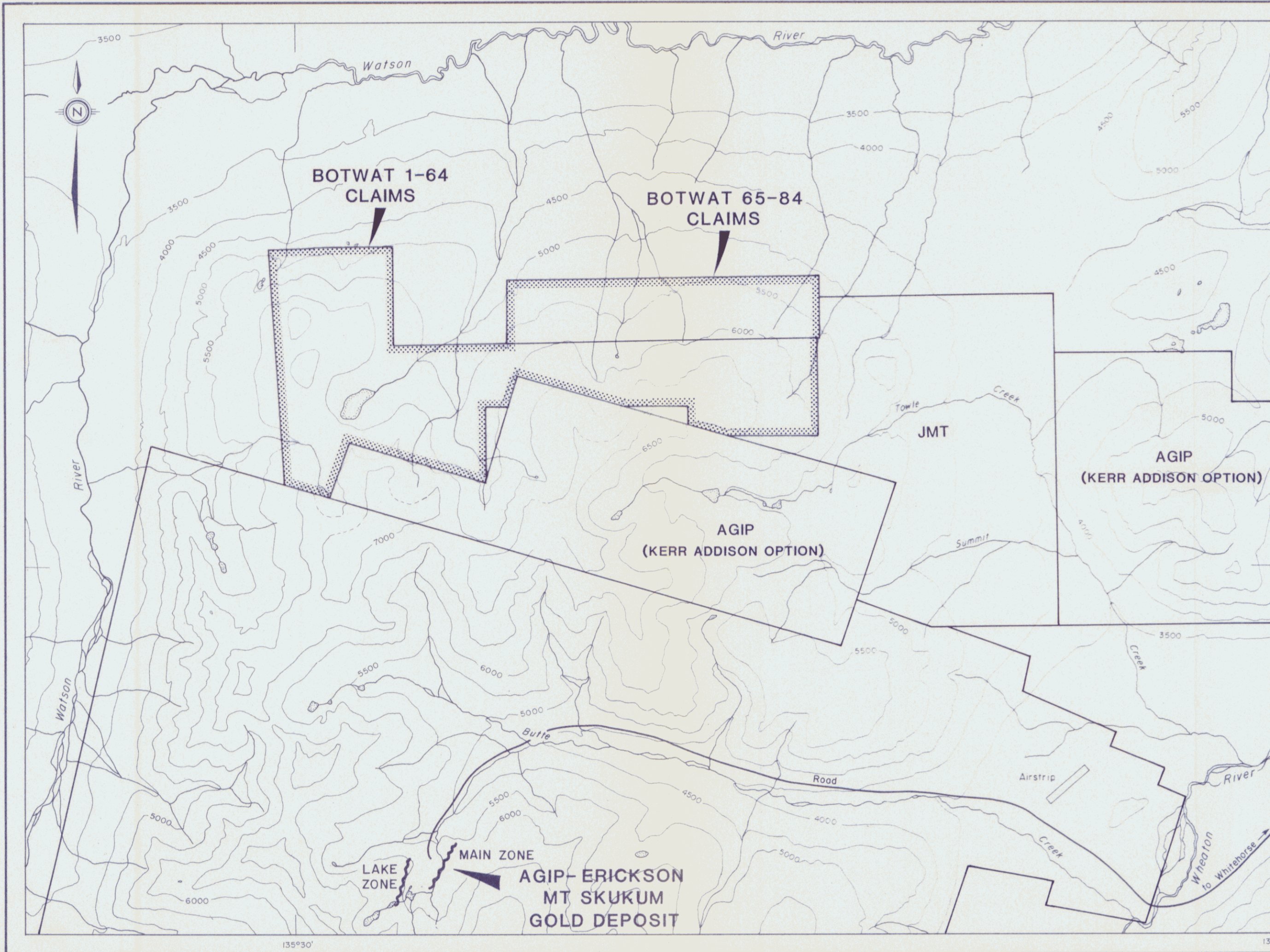
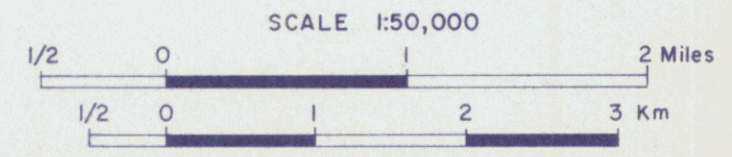


Figure 1
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
PROPERTY LOCATION
MT SKUKUM PROPERTY
 ROCKRIDGE MINING CORPORATION



To accompany report dated October, 1985

Access is by helicopter from Whitehorse, 54 km to the north, or from an airstrip on the Wheaton River, 12 km to the southeast. An allweather road extends to the Mt. Skukum deposit 96 km from Whitehorse Y.T. and 170 km from tidewater at Skagway, Alaska. The 5 km distance between this road and the Botwat claims is not suitable for road development and the shortest route would be about 15 km around the east side of Mt. Skukum.

GEOLOGY

Above 1700 m, exposure is good and most formations can be readily identified. Below this elevation, an extensive but thin blanket of glacial till makes interpretation difficult.

GSC mapping (Map 1093A from Memoir 312 by J.O. Wheeler, 1946-51) shows the Early Tertiary Mt. Skukum Volcanic Complex underlies much of the northwest and easterly part of the property with the balance of the property underlain by Cretaceous Coast Range hornblende-biotite granodiorite. The 1985 DIAND Open File "Preliminary Geological Map of the Mt. Skukum Volcanic Complex" by M.J. Pride augmented by her earlier paper "Interlayered sedimentary-volcanic sequence, Mt. Skukum Volcanic Complex" in Yukon Exploration and Geology, 1983, confirms the distribution of the Mt. Skukum Volcanic Complex and differentiates the complex into a number of subunits. These are shown on the geology map of the property, Figure Two, and on the Table of Formations on the following pages.

The character and distribution of formations noted during this survey agree closely with Pride's mapping.

TABLE OF FORMATIONS
(From DIAND Open File by M.J. Pride)

MT. SKUKUM VOLCANIC COMPLEX

- 6 Porphyritic rhyolite
- 5(a) Intermediate monolithic breccia
- 5(b1) Heterolithic breccia
- 5(b2) Intermediate lava flows and associated lapilli tuff.

UNCONFORMITY

- 4(a) Altered felsic volcanic rocks
- 4(b) Felsic lapilli tuff and tuff (mostly welded pyroclastic flow).
- 4(c) Felsic flow banded, spherulitic and brecciated lava flows and intrusions(?).
- 4(d) Layered felsic volcanoclastic rocks.

UNCONFORMITY

- 3 Interlayered epiclastic rocks and intermediate lava flows.
- 2(a) Lapilli tuff, tuff and epiclastic rocks, mostly pyroclastic flows.
- 2(b) Interlayered tuff and lapilli tuff, epiclastic rocks and lava flows.
- 2(a) Interlayered primary felsic volcanics, epiclastic rocks and minor lava flows.
- 1 Non-volcanic conglomerate, minor sandstone and siltstone.

UNCONFORMITY

CRETACEOUS

COAST INTRUSIONS

- D Granitic rocks.

LOWER JURASSIC AND LATER

LABERGE GROUP

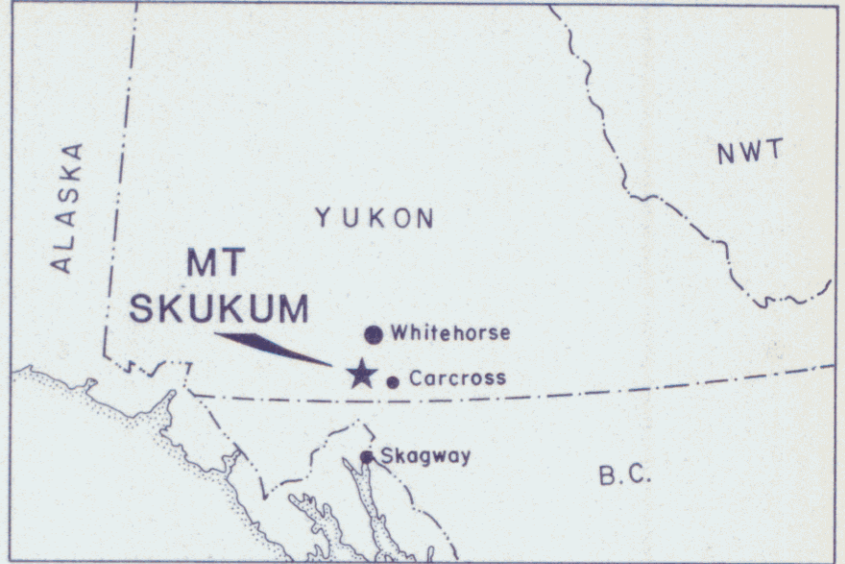
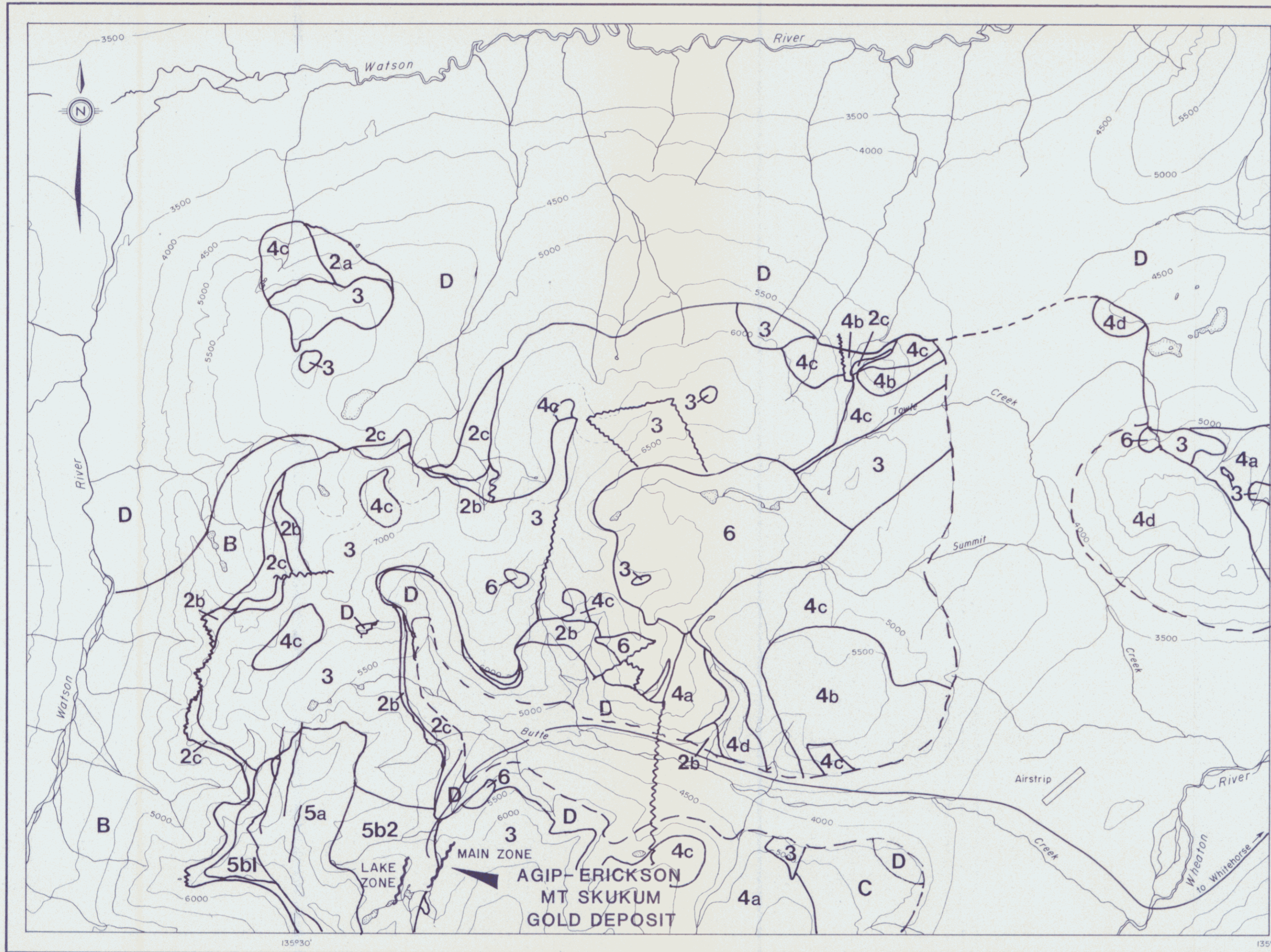
- C Mainly conglomerate.

YUKON GROUP

- B Metasedimentary rocks.

UNKNOWN AGE

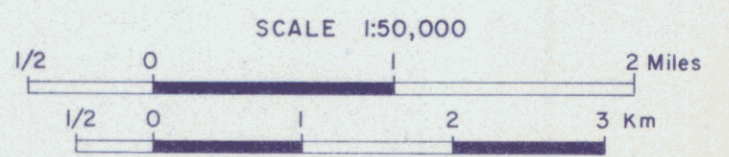
- A Metavolcanic rocks.



For description of Units see
Table of Formations, on following page.

Figure 2
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

GEOLOGY
MT SKUKUM PROPERTY
ROCKRIDGE MINING CORPORATION



The Mt. Skukum volcanic rocks on the property consist of a complex assemblage of felsic epiclastics and flows [units 2(a) and 3] intruded and/or overlain by spherulitic and brecciated felsic flows and intrusions [unit 4(c)]. This entire package has been intruded by later porphyritic rhyolite (unit 6) which outcrops near the eastern part of the property.

The Mt. Skukum gold deposit to the south is hosted in quartz-rich faults which cut felsic epiclastics and flows (unit 3), as well as andesitic flows and pyroclastics [unit 5(b2)].

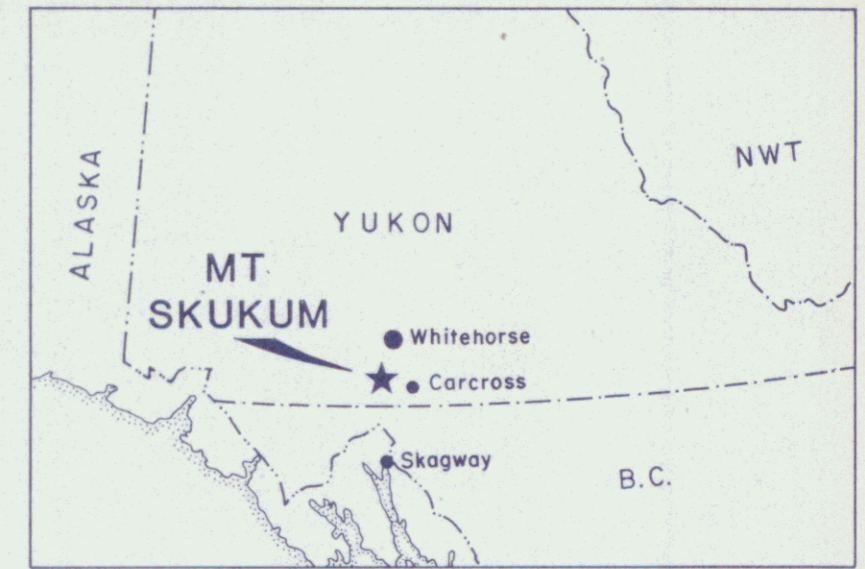
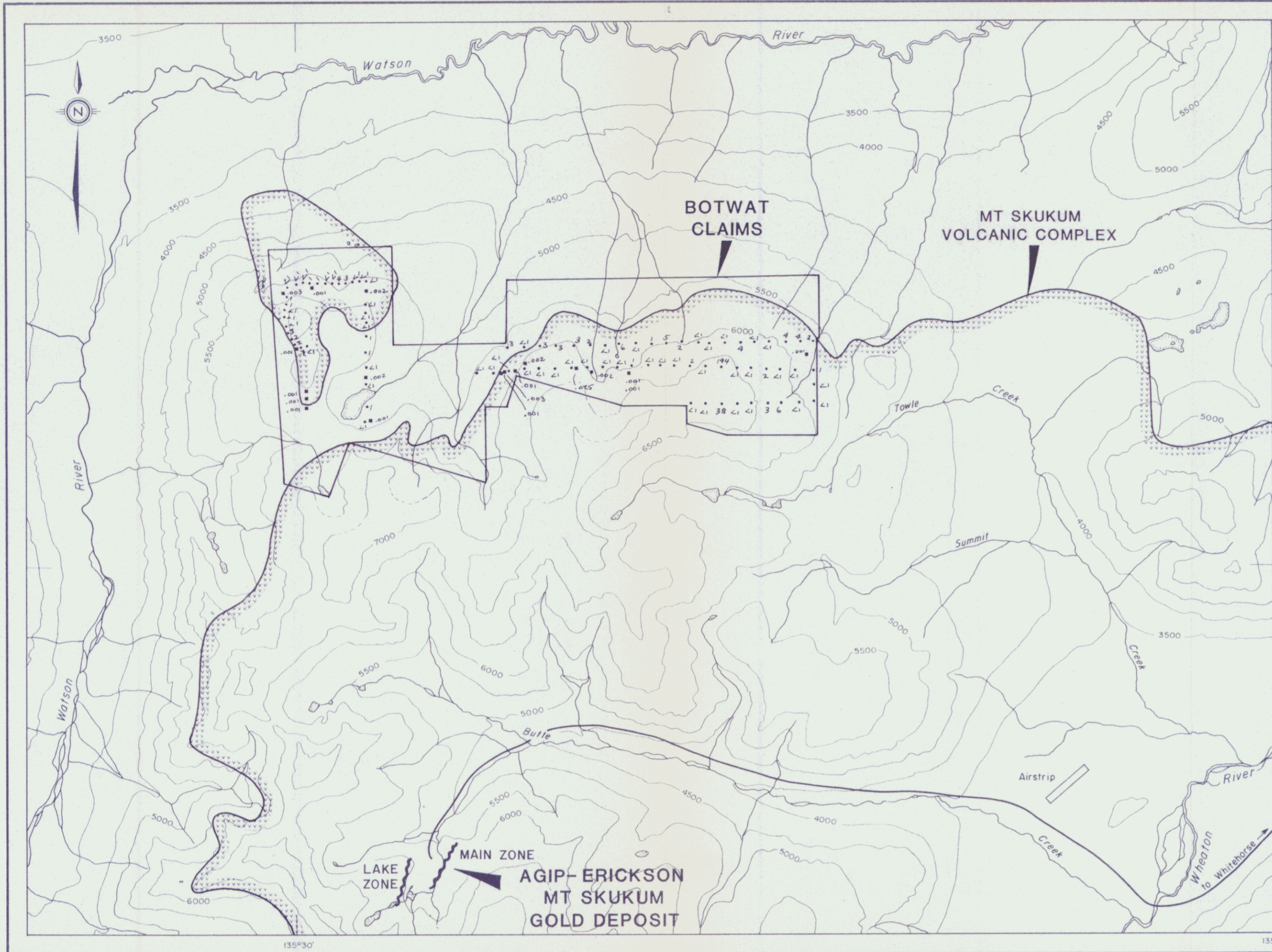
MT. SKUKUM DEPOSIT

The mineralization at the Mt. Skukum gold deposit has been well described in a paper "Epithermal Gold Veins of the Main Zone at Mt. Skukum" by B.W.R. McDonald and C.G. Godwin. The Main Fault Zone strikes 030 degrees, dips 80 degrees east and contains most of the gold. This fault system is up to 30 m wide, up to 1.5 km long, and consists of complex stockworks of gouge, felsic dykes (which generally predate the mineralization), thin calcedonic quartz veinlets with pyritic selvages (which are not gold-bearing) and white 'bull' quartz/carbonate veins which host the gold mineralization. These latter quartz veins are sucrosic to vuggy and contain no sulphides. Gold and silver are present as microscopic flakes of electrum. Published reserves in this deposit are 148,980 tonnes (164,222 tons) grading 24.98 g/t (0.80 OPT) gold and 20.5 g/t (0.66 OPT) silver.

GEOCHEMICAL SAMPLING

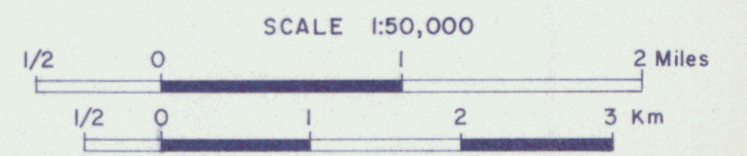
Prospecting was directed toward selecting and assaying quartz/carbonate vein float. The 20 specimens sampled were of vein material composed of quartz and calcite. Only one specimen with 0.025 OPT Au contained any appreciable amount of gold (see assays on Figure Three on following page). The 20 specimens are only a small percentage of the quartz and quartz/carbonate material present in float and outcrop on the property. Additional sampling was beyond the scope of the 1985 program.

Soil samples were collected at intervals of between 100 and 225 m (i.e. one-half a claim length) along traverses. In all, 83 samples were taken, usually from about 20 cm depth from an immature B, brown clay soil horizon over glacial till. The soil profile exposed in creek gullies indicates that till thickness is probably quite thin, less than 5 m at most sample sites. Samples were shipped in numbered kraft paper bags to Chemex Labs in North Vancouver, B.C. where they were sieved to -35 mesh, crushed to -100 mesh and assayed for gold content by a combination of fire assay and neutron activation analysis. The background gold content in these soil samples was very low, about 1 ppb Au. All but two of the samples returned values below 10 ppb Au and are probably not of interest. The other two assayed 38 and 194 ppb Au which is anomalous.



- soil sample location, assay in ppb Au
- rock sample location, assay in OPT Au

Figure 3
 ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
**GOLD GEOCHEMISTRY
 AND ROCK ASSAYS**
 MT SKUKUM PROPERTY
 ROCKRIDGE MINING CORPORATION



CONCLUSIONS AND RECOMMENDATIONS

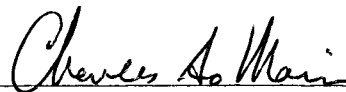
The Botwat claims are partially underlain by the Early Tertiary Mt. Skukum Volcanic Complex, which hosts the Mt. Skukum gold deposit 5 km to the south. A wide-spaced soil geochemical and prospecting survey did not locate any mineralization similar in grade to the Mt. Skukum deposit although two soil samples and one rock sample were anomalous.

A deposit similar to Mt. Skukum would be extremely difficult to recognize visually, even if outcrop were abundant, because even mineralized material is indistinctive. Thorough evaluation of this property will require systematic soil sampling over the favourable volcanic rocks at a sample density of 50 by 50 m. In addition, portions of the property that are not covered by thick glacial till should be carefully prospected and all quartz and quartz/carbonate rocks should be sampled. An adequate survey will consist of 3000 soil samples and 1000 rock samples and will require a crew of three men for about four weeks. This program is estimated to cost approximately \$75,000.

STATEMENT OF QUALIFICATIONS

I, Charles A. Main, geologist, with business addresses in Whitehorse, Yukon Territory and Vancouver, British Columbia and residential address in Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1971 with a B.Sc. majoring in Geological Sciences and Chemistry.
2. I have been actively engaged as a geologist in mineral exploration since 1971 and as a partner of Archer, Cathro & Associates (1981) Limited since June 1, 1981.
3. I have personally participated in or supervised the field work reported herein.



Charles A. Main, B.Sc.