

3605

RECONNAISSANCE GEOLOGICAL REPORT
OF
APRIL AND RABBIT CLAIMS
SIMILKAMEEN MINING DIVISION
PRINCETON, B.C.

Latitude 120° 30'W

Longitude 49° 40'N

92 H / 9W

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3605 MAP

By

PHILLIP ANDERSON, B.Sc.
Geologist

R.B. STOKES, P.ENG
Mining Engineer

*All Air-photo Structures
2 Reconnaissance Geology*

STOKES EXPLORATION MANAGEMENT CO. LTD.

April 26, 1972.

INTRODUCTION

Nine Rabbit full size claims and fractions and 14 April full size claims and fractions occupy an area around Rampart Lake, near Summers Creek, approximately 17 miles north-northwest of Princeton, British Columbia.

This report summarizes preliminary reconnaissance investigation of the property by the writer. Most of the ground at this time was snow covered. Results of an airphoto study of the property in 1972 and an investigation by J.C.Lund, geologist for Kerr Addison Mines Ltd. are also incorporated.

The April and Rabbit claims are owned by Mr. R.B. Stokes, of Stokes Exploration Management Co. Ltd., #713 - 744 West Hastings Street, Vancouver 1, B.C., who accompanied the writer on the property.

GENERAL GEOLOGY

The April and Rabbit claims are underlain by altered volcanic rocks of the Nicola Group but are only about 5000 feet west of the contact of the large Okanagan Batholith. In the Princeton area, it has long been known that this environment is highly favourable for localization of disseminated copper mineralization.

The April and Rabbit claims are surrounded by Amax claims and options. In 1971 Amax Exploration Inc. completed an extensive program of diamond drilling in which approximately 50 million tons of 0.48% copper was delineated near Masezula Mountain.

Their ore zone lies adjacent to the April and Rabbit claims on the other side of Summers Creek fault in highly shattered and faulted Nicola rocks. One of their drill holes was located in the southern corner of the Rabbit claims where there is visible copper mineralization.

PROPERTY GEOLOGY

A ridge of outcrop runs along the western edge of the claim block where relatively massive poorly fractured fine to coarse grained andesites, feldspathic tuffs and flow breccias outcrop. These rocks occur over the rest of the property with the addition of coarse volcanic agglomerate which in places bear granitic fragments. A greenschist grade alteration of epidote, chlorite, calcite, pyrite and albite has affected the rocks. Bedding is not evident.

On the southern part of the claim block, rocks are much more highly fractured and mineralized sparsely with chalcopyrite (see Reconnaissance Geology Map). In particular, chalcopyrite has been introduced by quartz-calcite veins, a small syenite or monzonite intrusive body and in areas of high fracture density. Alteration in these areas is carbonate, propylitic and limited quartz-sericite.

J. Lund has reported an important volcanic agglomerate containing granitic fragments which are mineralized with disseminated chalcopyrite.

Most of the rest of the property is drift covered with the occasional outcrop and regolith boulders of volcanic rock.

MINERALIZATION AND
FRACTURING

The long north-south Summers Creek Fault has an intense zone of shearing and fracturing either side of it. Evidently this has been the localizing factor for disseminated copper mineralization on Amax property. It is quite possible that a similar situation exists on the eastern side of the fault. An airphoto study shows (see Airphoto Structures Map) several long northerly trending lineaments traversing the April and Rabbit claims which appear to be part of the Summers Creek Fault System.

Elongate Rampart Lake is an important feature because it occupies the intersection of several long fracture traces which may very likely be major faults. Outcrop examination does not give a true picture of fracture intensity because glaciation has deeply scoured any highly fractured areas and covered them with drift.

A domal feature on the southern Rabbit claims has accompanying radial fracturing both of which could be caused by an intrusion at depth giving rise to copper mineralization. Such mineralization can be seen on the south facing slope because highly fractured rocks have not been scoured. The domal centre, where best mineralization is to be expected, is drift covered and swampy.

Since the Summers Creek fault system and related faults or fractures on the April and Rabbit claims probably existed at or before the time of mineralization (Fice, 1947), they may have acted as channelways for copper bearing solutions. Later movement on the faults could also remobilize mineralization.

RECOMMENDATIONS

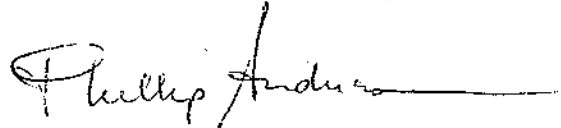
A good possibility of economic copper mineralization exists on the April and Rabbit claim groups. In a broad sense, the environment is highly favourable as it lies close to a major fault system and lies between the Amax ore zone and the Okanagan Batholith.

Reconnaissance examination has demonstrated the presence of local copper mineralization on the property, but the most favourable areas for a larger area of disseminated mineralization - namely, under Pampart Lake and around a swamp on the Rabbit claims -- are recessive, drift covered and not directly observable. Insufficient is known about the property to discount these two areas as exploration targets.

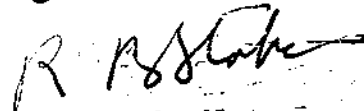
An indirect method of exploration is therefore suggested. It is recommended that a magnetometer survey be run first (in a boat over the lake), followed by an induced polarization survey best run in the winter on ice. A limited amount of exploratory deep-soil geochemistry is recommended adjacent to the lake and swamp where regolith begins to predominate, in order to detect any dispersion anomalies.

Respectfully submitted:

STOKES EXPLORATION
MANAGEMENT CO. LTD.



Phillip Anderson, B.Sc.
Geologist



R. B. Stokes, P.Eng.
Mining Engineer.

CERTIFICATION

I, RONALD B. STOKES, do hereby certify that:

1. I am a practicing Professional Mining Engineer with offices at Suite 713 - 744 West Hastings Street, Vancouver 1, British Columbia and resident of Vancouver.
2. I am a graduate of the Camborne School of Mines, Cornwall, England, 1952 in Mining Engineering.
3. I have practised Mining Engineering and Mining Exploration for nineteen years, sixteen of which were based in British Columbia.
4. I am a Member, in good standing, of the Association of Professional Engineers of the Province of British Columbia.
5. I am a Member of the Canadian Institute of Mining & Metallurgy and the Australasian Institute of Mining & Metallurgy, and Associate Member of the Institution of Mining & Metallurgy, England.
6. I am president of Stokes Exploration Management Co. Ltd. which carried out the program of exploration.

This report is based on study and interpretation of data assembled by Phillip Anderson and work carried out under my supervision.



R.B. STOKES, P.ENG

REFERENCES

1. Rice, H.M.A. 1947; Geology and Mineral Deposits on the Princeton Map Area, B.C., Geol. Surv. Canada Mem. 243.

2. British Columbia Department of Mines and Petroleum Resources, 1970; Geology, Exploration and Mining in British Columbia. p 389 (Axe, Bub, Bol.)

3. - - - - - 1971: Geology, Exploration and Mining in British Columbia In press.

CLAIMS LIST

<u>CLAIM</u>	<u>RECORD NO.</u>	<u>RECORD DATE</u>
Rabbit 67	27459	May 12, 1970
" 68	27460	"
" 69	27461	"
" 70	27462	"
" 71	27463	"
" 72	27464	"
" 73	27465	"
" 74	27466	"
" 75Fr	27467	"
April 73	27393	April 27, 1970
" 74	27394	"
" 75	27395	"
" 76	27396	"
" 77	27397	"
" 78	27398	"
" 79	27399	"
" 80	27400	"
" 81	27401	"
" 82Fr	27402	"
" 83	27403	"
" 84Fr	27404	"
" 85	27405	"
" 86Fr	27406	"



APRIL CLAIMS

RABBIT CLAIMS



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 3605 MAP #1

R. [Signature]

LEGEND

--- INFERRED FAULT

--- AIR PHOTO FRACTURES

3605

M-1

STOKES EXPLORATION MANAGEMENT CO LTD

APRIL & RABBIT CLAIMS

AIR-PHOTO STRUCTURES

PRINCETON AREA, B.C.

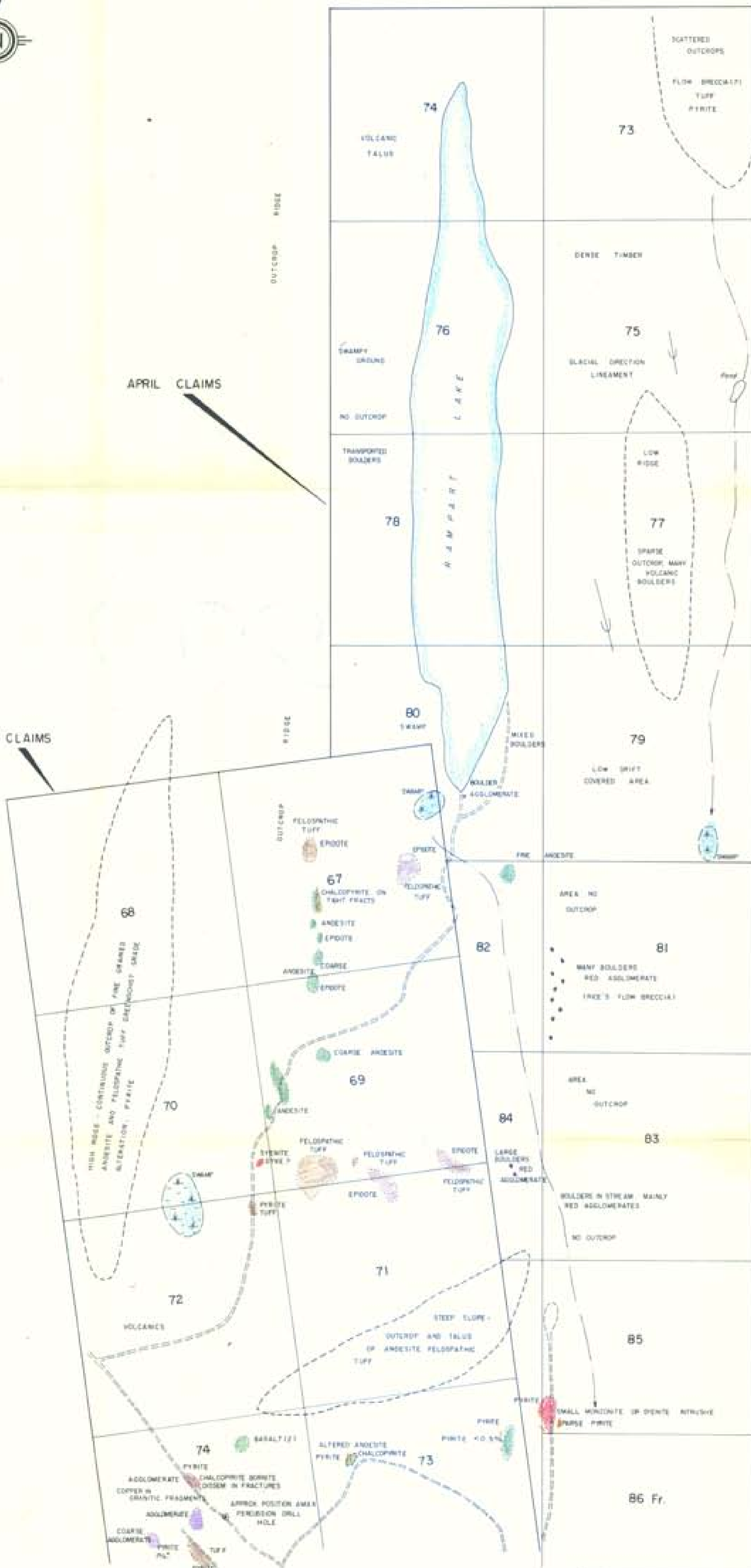
SCALE
1" = 1000 FT

PROJECT No. 302	DRAWN BY SA	DATE APRIL 26, 1972
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APRIL CLAIMS

RABBIT CLAIMS



Department of
 Mines and Petroleum Resources
 ASSURANCE REPORT
 NO 3605 M-2

R. B. White

3605 M-2

STOKES EXPLORATION MANAGEMENT CO. LTD

APRIL & RABBIT CLAIMS
 RECONNAISSANCE GEOLOGY
 PRINCETON AREA, B.C.

SCALE
 FT 1000 500 0 500 1000 FT

PROJECT NO 308	DATA AFTER J LUND	DATE APRIL 26, 1972
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