

ARCHER, CATHRO

AND ASSOCIATES LTD.

CONSULTING GEOLOGICAL ENGINEERS

WHITEHORSE, Y.T. 667-4415

6TH FLOOR, TWO BENTALL CENTRE, VANCOUVER, B.C. 688-2568

POST OFFICE BOX 4127
WHITEHORSE, Y.T.

GEOLOGICAL REPORT

for

CALTOR SYNDICATE

Kart 1-16 Claim Group

105-E/3

Latitude- 61°04'N
Longitude-135°03'W



This report has been obtained by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$1107.50

J B Craig

Resident Geologist or
Resident Mining Engineer

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

August, 1972

Arthur J. ...
Commissioner of Yukon Territory
Administrator

Whitehorse, Y.T.

M.P. Phillips

SUMMARY AND CONCLUSIONS

Minor copper mineralization is found in narrow and irregular, weakly developed skarn zones within Triassic Lewes River limestone and in a quartz veined, weakly altered feldspar porphyry intrusion. The limited extent and irregular nature of the mineralization and alteration do not make this area attractive and no further work is recommended.

INTRODUCTION

This report describes geological mapping conducted by M.P. Phillips during the period August 7-9, 1972. Field assistance was provided by John Byrne.

PROPERTY

The Kart 1-16 claims, Y62325-Y62340, are registered at Whitehorse, Yukon Territory and are owned by Mr. J.C. Byrne. They expire on September 22, 1972.

LOCATION AND ACCESS (FIGURE 1)

The property is located 25 miles north of Whitehorse and one mile east of Lake Laberge.

A 27 mile road constructed by Pine Lake Mining Co. Ltd. in 1967 provides access for four wheel drive vehicles only.

Float equipped aircraft can land on Dirty Dick Lake. In mid summer, aircraft are restricted to light loads due to low water levels.

LOCATION & ACCESS CALTOR SYNDICATE KART CLAIMS

SCALE 1:500,000



KART CLAIMS

TOTE TRAIL

ALASKA

HIGHWAY

YUKON RIVER

LAKES

Coglian Lake

Fox Lake

Dirty Dick Lake

Takhini Hot Spring

Whitewhorse

Marsh Lake

Golden Horn Mtn. 5620

Double Mtn 9790

Cap Mtn 6050

Monkey

McConnell L 2495

McIntyre 5250

Granger 6850

McIntyre 5250

Friday Cr

McIntyre 5250

Wolf

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

Granger 6850

McIntyre 5250

TOPOGRAPHY

The claims cover an area of low, gentle moderate relief with elevations ranging between 2500 and 3100 feet. The topography is characterized by a gentle slope to the west which is cut by north-south trending, steep-walled ravines and canyons.

A light vegetation cover of spruce and poplar up to four inch diameter and buckbrush occupy the flat and east-facing slopes. West facing slopes are open and lightly covered by grass and poplar.

HISTORY

A number of old pits and hand trenches found on the claims probably date back to the gold rush days.

During 1966, R. Granger discovered mineralization in the old pits while ground checking a government aeromag anomaly and staked the area as the Jac, Tea and MTC claim group. These were optioned to Pine Lake Mining Co. Ltd., which carried out air and ground magnetic surveys, constructed a 27 mile tote trail from Whitehorse to Dirty Dick Lake, performed limited bulldozer trenching and diamond drilled 2391 feet in six holes on the magnetic anomaly near Dirty Dick Lake and 322 feet in three holes on the copper showings now covered by the Kart claims. In September 1974 Caltor Syndicate staked the old copper showings as the Kart claims.

In June 1972, an 8200 foot baseline was cut and picketed at 100 foot intervals. Cross lines were flagged at 100 foot intervals using pace and compass for control. The cross lines were flagged at 200 foot intervals over the copper showings and at 400 foot intervals elsewhere. Geochemical and EM 16 geophysical surveys were carried out in June, 1972.

GEOLOGY

General

Outcrop covers about 5-10 per cent of the claims. Large outcrops are limited to ridges and around north-south trending ravines and canyons. Only small isolated outcrops occur on gentle slopes and in flat lying areas. A thin mantle of glacial till and weathered bedrock covers the area.

The claims cover a Jurassic feldspar porphyry stock that has intruded the north-south trending, east dipping Triassic Lewes River limestone and argillite. Tertiary quartz porphyry and andesite dykes cut the feldspar porphyry and Lewes River limestone and feldspar porphyry. The feldspar porphyry stock is probably Tertiary in age. The rocks are described as follows:-

Triassic - G.S.C.

Unit 5C - Hornfels - The hornfels is characterized by a dark brown to purple color, massive to slaty outcrops, and disseminated and fracture pyrite which weathers to a brown gossan. The hornfels has a north-south trend, dip steeply to the east and occur where the feldspar porphyry has metamorphosed the argillite.

5B Argillite - The argillite is characterized by reddish brown color, contains minor pyrite and has been partially altered to a hornfels.

5A Limestone - The limestone is massive, light to blue grey in color, and traversed by calcite veining. Next to the intrusions, the limestone is white and crystalline. Dolomitization of the limestone is irregularly developed. A number of outcrops consist of collapsed breccias.

Jurassic ^{or} of Later

12B Diorite - The diorite is characterized by grey color, fine grained texture, crossed laths of hornblende and high magnetite content. This unit may be genetically related to the andesite.

12A Feldspar Porphyry - In outcrop, the feldspar porphyry is characterized by a highly fractured, rough, reddish appearance with distinct, white feldspar phenocrysts in a dark background. Moderate, fine to medium grained feldspar phenocrysts and up to ten per cent fine grained hornblende phenocrysts occur in a light to dark green aphanitic matrix. Fine grained quartz phenocrysts only become common to the north end of the property. Locally the feldspar phenocrysts become well packed and the rock becomes equigranular.

Tertiary

14B - Quartz Porphyry - Characterized by light yellow color, sugary aphanitic matrix containing minor fine

grained quartz phenocrysts from a north-south trending, steeply dipping dyke up to 100 feet wide which was traced the length of the property.

Andesite - The dark green andesite is characterized by aphanitic to very fine grained texture and high magnetite content. It is found as steep east dipping north-south trending dykes up to 50 feet wide. Some dykes contains minor quartz and feldspar phenocrysts.

Mineralization

Copper mineralization occurs in the feldspar porphyry as very weak disseminations and in narrow quartz veins. In the limestone unit, it occurs in a narrow, poorly developed diopside skarn.

Four showings have been found on the claim group and are plotted on Figure 2. Pine Lake Mines carried out trenching and diamond drilling on some of these showings. Poorly stored core is located near the diamond drill hole located on the east side of the pond. Core assays of the Pine Lake Mines drill core is not available. No new mineral showings were found in 1972.

The showings are described below:

Showing 1 - Chalcopyrite and bornite occur in closely spaced quartz veins from 1/8 to 1/4 inch in width, which are exposed in a hand trench. The quartz veining appears to be very local as the quartz veining weakens toward the bottom of the drill hole.

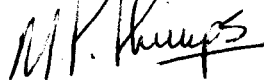
Showing 2 - A weakly developed diopside skarn zone one foot wide is exposed in a small pit. Patchy bornite and chalcopyrite mineralization occurs within the skarn.

Showing 3 - Patchy skarn alteration with occasional flecks of chalcopyrite is poorly exposed over a width of 15 feet in a hand trench.

Showing 4 - A poorly developed diopside zone two feet wide contains traces of bornite, chalcopyrite and pyrite. It is exposed in a bulldozer trench at the contact between feldspar porphyry and limestone. A few feet from the skarn an altered dyke of feldspar porphyry and limestone cuts the limestone. The dyke is three feet wide and has been brecciated.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES LTD.



M.P. Phillips

MPP:st

T
N
T



TRANS NORTH TURBO AIR LTD.



BOX 4338 PHONE 668-2177
WHITEHORSE, YUKON

TO: [

Caltor Syndicates
Box 4303
Whitehorse, Yukon

DATE August 18, 1972

INVOICE NO. A759-2

P.O. NO.

TO: Charge you with the charter of
 Bell 206B JetRanger Helicopter CF-CEH
 Pilot: D. Plaster

FLYING: August 7 & 9, 1972
 Daily Flight Report No. 212 & 215

1.0 hours at \$253.00 per hour
(Rate when carrier supplies fuel)

\$253.00

\$253.00

TERMS: ONE PERCENT INTEREST PER MONTH WILL BE CHARGED ON
ALL INVOICES NOT PAID WITHIN 30 DAYS OF DATE ISSUED.

ARCHER, CATHRO
AND ASSOCIATES LTD.
CONSULTING GEOLOGICAL ENGINEERS

WHITEHORSE, Y.T. 667-4415

6TH FLOOR, TWO BENTALL CENTRE, VANCOUVER, B.C. 688-2568

POST OFFICE BOX 4127
WHITEHORSE, Y.T.

In Account With

Caltor Syndicate
August 31, 1972

Kart Claim Project

Consulting Fees

M.P. Phillips - August 7-11, geological
mapping Kart claims plus preparation
of maps - final report - total 5 days
@ \$150.00 per day \$750.00

Expenses

Xerox copies, 16 @ .15\$ 2.40
Drafting, 11 hours @ \$8 88.00
Printing, 58.1 sq.ft. ozalid
@ .25 14.50

Total owing -- \$104.90
~~\$654.90~~

Respectfully submitted,

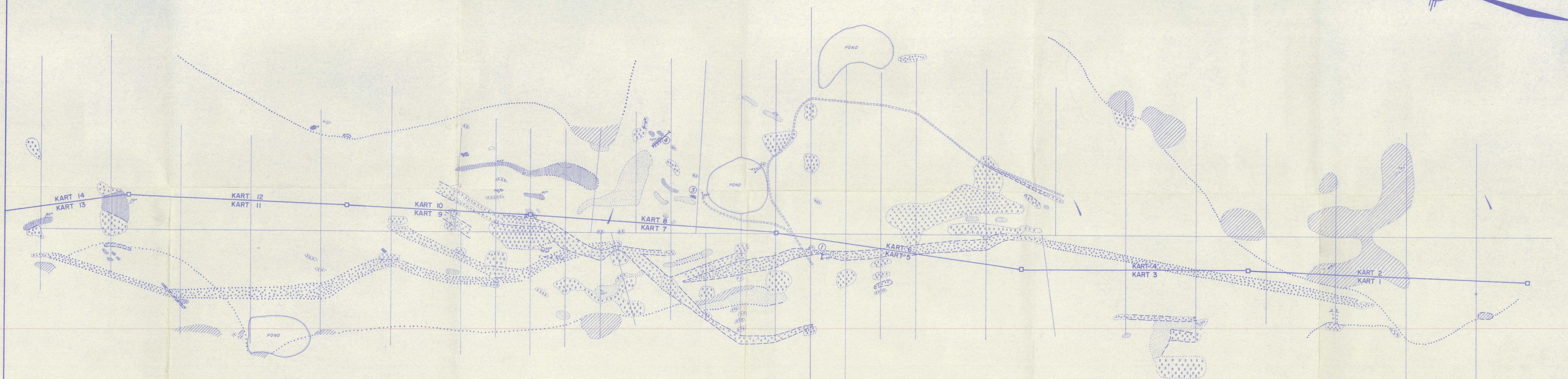
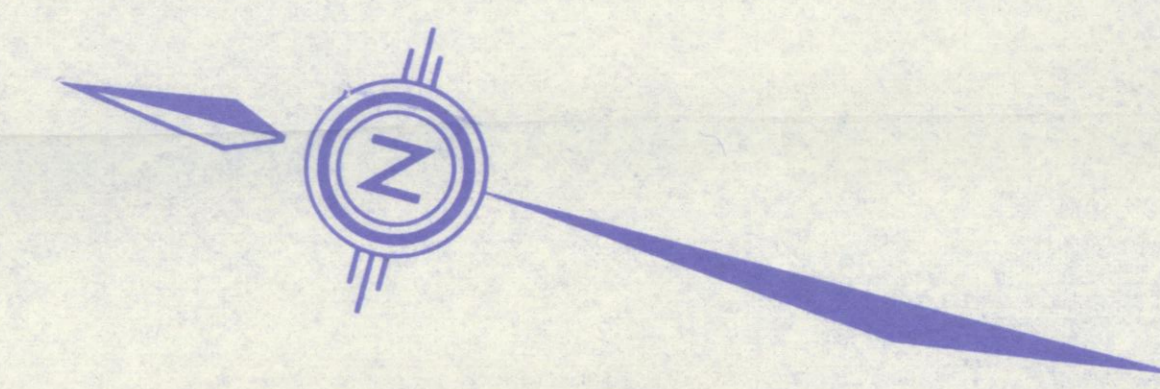
ARCHER, CATHRO & ASSOCIATES LTD.



A.R. Archer

ARA:st

42N 38N 34N 30N 26N 22N 18N 16N 14N 12N 10N 8N 6N 4N 2N 0100 2S 4S 6S 8S 12S 16S 20S 24S 28S 32S 36S 40S



AGE	UNIT	GEOLOGY
TERTIARY	14a	Andesite
	14b	Quartz porphyry
TRIASSIC or LATER	12a	Feldspar porphyry
	12b	Diorite
TRIASSIC (Lewes River)	5a	Limestone
	5b	Argillite
	5c	Hornfels- altered argillite

LEGEND	
	Outcrop
	Float
	Skarn alteration
	Strike & dip
	Dike-rock type & width
	Road
	Trench
	Pite Lake Mines DDH azimuth & dip
	Showing
CONTACTS	
	Defined
	Approximate
	Inferred

FIG. 2
 ARCHER CATHRO & ASSOCIATES LTD.
GEOLOGICAL PLAN
 CALTOR SYNDICATE
 KART CLAIMS
 SCALE IN FEET
 200 0 200 400 800
 To accompany report by M. Phillips dated Aug 25, 1972