87-55-15556

1/88

Geophysical Report

Mt. Sicker Property

Victoria Mining Division

NTS 92B/13W, 13E

48° ~~51~~ 51.7' Latitude 123° ~~50~~ 44.8' Longitude

Owner: Corporation Falconbridge Copper

Operator: Corporation Falconbridge Copper

Applied to Claims:

Rocky Group

Peach 1623

Apple 1624

January 23, 1986

Colin Burge

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LIST OF FIGURES

1. INTRODUCTION

Corporation Falconbridge Copper has acquired mineral rights to a group of claims covering much of Mt. Sicker. An exploration program for polymetallic massive sulphide is currently in progress on these claims. This report summarizes a 23.3km Induced Polarization and Resistivity Survey conducted as part of the 1986 work program.

1.1 Location and Access

The Mt. Sicker property is located approximately 13 kilometres north of Duncan, British Columbia (Figure 1). A network of dirt and gravel roads provide access for 2-wheel drive vehicles to the claims from the Trans Canada Highway.

1.2 Property Definition

Work completed by Corporation Falconbridge Copper described in this report will be applied to the following claims, members of the Rocky Group (see Figure 2).

Claim Name	Record No.	No. of Units	Record Date
Apple	1624	12	January 30, 1986
Peach	1623	12	January 30, 1986

2. MT. SICKER AREA GEOLOGY

The Mt. Sicker area is underlain by Paleozoic Sicker Group volcanic rocks and Cretaceous Nanaimo Group sediments. These rocks are cut by the Paleozoic Saltspring intrusions, Jurassic Island intrusions and diorite/ gabbro bodies. Muller (1980) has divided the Sicker Group as follows:

i) Buttle Lake Formation
ii) Sediment - Sill Unit
iii) Myra Formation
iv) Nitinat Formation

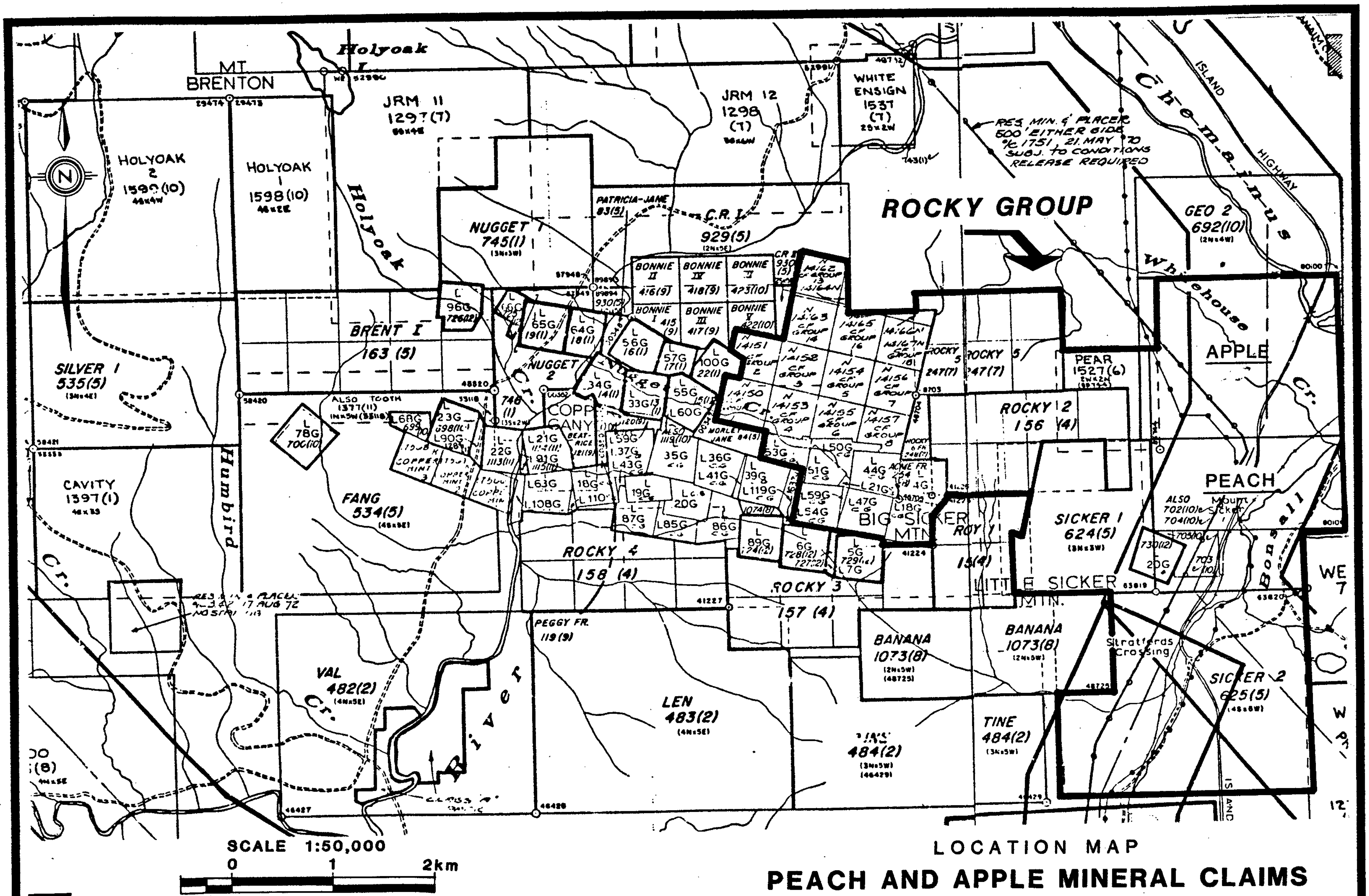
VANCOUVER ISLAND

GEOLOGY

SCALE: 1:2,000,000

CORPORATION FALCONBRIDGE COPPER

FIGURE 1



CORPORATION FALCONBRIDGE COPPER

LOCATION MAP

PEACH AND APPLE MINERAL CLAIMS

ROCKY GROUP

92B/13

FIGURE 2

In the Mount Sicker area the Myra Formation is represented by basic to rhyodacitic banded tuff, breccia and lava with interbedded argillite, siltstone and chert. The Lenora - Tyee volcanogenic massive sulphide deposits occur in Myra formation felsic rocks. The Nitinat Formation basaltic lavas and breccias with minor massive to banded tuff layers forms the base of the Sicker Group.

The Nanaimo Group conglomerate, sandstone and shale beds unconformably overly the Sicker Group rocks. The unconformity is commonly marked by a conglomerate containing fragments of Sicker Group volcanic rocks.

West to northwest and northeast striking faults divide the Mount Sicker area volcanic rocks into fault blocks. The majority of fault movement occurred in Tertiary time. Within the fault blocks the conformable units are folded and exhibit a penetrative deformation. These folds, possibly of Jurassic age, are assymmetrical with northwest-trending axes.

3. GEOPHYSICAL SURVEY

3.1 Technical Specifications

A Scintrex IPC-7 2.5 kw time domain transmitter was used for this survey. Data was received on a Scintrex IPR-11 time domain micro processor based induced polarization receiver. This instrument operates on an alternating square wave transmitted current pulse train, and sample the decay curve at ten semilogarithmically spaced times after cessation of each pulse. A two second on/ two second off pulse was used on the survey. The data is continually averaged until the operator is satisfied convergence has occurred, and is filed into solid state memory. The eighth slice (from 690 to 1050 milliseconds after shut off: midpoint at 870 milliseconds) is the value that has been plotted on the plans and pseudosections.

A pole dipole electrode array at an "a" spacing of 50 meters was used on the survey with readings taken at "n" separations of 1, 2, 3, 4 and 5. the current electrode was to the south of the receiving electrodes on all survey lines.

Survey data for both chargeability (millivolts/volt) and resistivity (ohm-meters) are plotted on plan maps which display data for n=1. Figure 4 and 5.

3.2 Work Done

An additional 23.38km of slope-corrected grid lines were added to the existing Mt. Sicker grid system. These lines currently form the southeast extension of the Mt. Sicker grid. The lines are 100 metres apart and were picketed every 25 metres.

The induced polarization and resistivity survey (Alan Scott Geophysics) covered 23.3 kilometres of grid line all south of the Mount Sicker grid system baseline. The survey covered from Line 22+00E to Line 38+00E (Figure 3).

4. INTERPRETATIONS AND CONCLUSIONS

Figure 4 displays several chargeability highs (greater than 30 millivolts/volt) associated with resistivity lows plotted on Figure 5. These coincident anomalous zones cluster along the length of line 26+00E. These results indicate a high sulphide content in the underlying unit. Surface mapping suggests this is a flat-lying volcanic unit. In Figures 4 and 5 a creek is shown which may be the surface expression of a north-south trending fault which also may have contributed to the mineralization in the vicinity of line 26+00E.

The strongest anomalies produced during this survey were centered around the following stations:

Line 26+00E	12+50S
Line 26+50E	14+50S
Line 26+00E	17+00S
Line 27+00E	18+50S
Line 25+00E	21+50S
Line 23+00E	20+50S

These areas represent priority targets and should be trenched and subsequently drilled. Chalcopyrite-pyrite mineralized volcanic rocks were discovered in the tailings pile of an old shaft located at Line 27+00E and 18+40S. This represents our best exploration target.

Moderate chargeability highs were obtained at the following locations:

Line 31+00E   6+00S

Line 33+00E   15+50S to Line 37+00E   14+00S

Very high resistivity values encountered in the northwest of the survey area (Figure 5) are the result of a very large quartz vein system with little or no mineralization observed.

5. ITEMIZED COST STATEMENT

Linecutting and IP Survey

1.	Linecutting (23.38km)	
	Contractor: Quest Canada Exploration Services Inc.	
	13.45km at $350.00 per km	4,707.50
	9.93km cost plus linecutting	6,625.00
		11,332.50
2.	IP Survey (23.30km)	
	Contractor: Alan Scott	8,930.00
	3 assistants for 9 days @ $110/day	2,970.00
	Field expenses, food, accommodation	1,354.71
		13,254.71
3.	Supervision	
	C. Burge 2 days @ $300/day	600.00
4.	Report Preparation and Interpretation	
	C. Burge 3 days @ $300/day	900.00
5.	Drafting and Typing etc.	400.00
	TOTAL	$26,487.21

STATEMENT OF QUALIFICATIONS

I, Colin M. Burge hereby certify that:

1) I hold a Bachelor of Science from the University of Waterloo

2) I have practised my profession continuously since graduation in 1981

3) I personally supervised the work reported herein.

15/2/87
Date

Colin M. Burge

Induced Polarization and Resistivity Surveys

Field Work Completed: June 24 to July 2, 1986

Mt. Sicker Project, Vancouver Island, B. C.

STATEMENT OF QUALIFICATIONS OF PERSONNEL RESPONSIBLE FOR SURVEY

Alan Scott: B.Sc. (Geophysics) 1970, University of British Columbia 15 years experience in mining geophysics
4013 West 14th Avenue, Vancouver, B. C. 228-0237.


ROCKY 5
ROCKY 2
ROCKY 5
CF GROUP 7
CF GROUP 8
BC TEL
RELAY TOWER
ROCKY 2
PEAR
PEAR
PEACH
PEACH
BASELINE 1+83S
L20+00E
L25+00E
L30+00E
L35+00E
L40+00E
L45+00
L50+00E
PEACH
APPLE
Whitehouse Creek
SICKER 1
APPLE
APPLE
LAWARANCE
SICKER 1
TIELINE 20+00S
SICKER 2
LITTLE SICKER
MOUNTAIN
SICKER 2
STRATFORD'S
CROSSING
MINES ROAD
Bonsall Creek
GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,556
LEGEND
CLAIM BOUNDARIES
NOTE: CLAIM BOUNDARIES ARE APPROXIMATE
(FROM 1:50,000 GOVERNMENT CLAIM MAPS)
LOCATION MAP
RIVER
CHEMAINUS
VANCOUVER ISLAND
Crofton
STUART CHANNEL
SALTSPRING
ISLAND
Quamichan
Lake
DUNCAN
SCALE 1:250,000
MAJOR ROADS
SECONDARY ROADS
1986 LINECUTTING
EXISTING CUT GRID
CORPORATION FALCONBRIDGE COPPER
MT. SICKER PROPERTY
ROCKY CLAIM GROUP
0 100 200 500
SCALE: 1:5000 METRES
DRAWN BY. C.B.
DATE: JAN. 1987
N.T.S. 92B/13
FIG. NO.:
3

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,556

LEGEND

Contour of chargeability (millivolts/volt)

chargeability in millivolts/volt

LOCATION MAP

MAJOR ROADS

SECONDARY ROADS

1986 LINECUTTING

EXISTING CUT GRID

CORPORATION FALCONBRIDGE COPPER

MT. SICKER PROPERTY
I.P. SURVEY
TOTAL CHARGEABILITY
SCINTREX IPR-11
POLE-DIPOLE

FIELD M7 SEP:50 metres

0 100 200 500

SCALE: 1:5000 METRES

DRAWN BY: C.B.

DATE: JAN 1987 N.T.S. 92B/13

FIG. NO.: 4

BASELINE 1+83S
L20+00E
L25+00E
L30+00E
L35+00E
L40+00E
L45+00
L50+00E
TIELINE 20+00S
BC TEL
RELAY TOWER
LITTLE SICKER
MOUNTAIN
MINES ROAD
Whitehouse Creek
Bonsall Creek
STRATFORD'S
CROSSING
LEGEND
Contour of resistivity (ohm-meters)
resistivity value in ohm-meters
MAJOR ROADS
SECONDARY ROADS
1986 LINECUTTING
EXISTING CUT GRID
LOCATION MAP
VANCOUVER ISLAND
CHEMAINUS
DUNCAN
GEOLOGICAL BRANCH
ASSESSMENT REPORT
15,556
CORPORATION FALCONBRIDGE COPPER
MT. SICKER PROPERTY
I.P. SURVEY
RESISTIVITY
SCINTREX IPR-11
POLE-DIPOLE
FIELD:RES.
SEP:50 metres
0 100 200
SCALE: 1:5000
METRES
DRAWN BY: CB
DATE: JAN 1987
N.T.S. 92B13
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