LOGISTICAL REPORT

INDUCED POLARIZATION and MAGNETOMETER SURVEYS

MOUNT SICKER PROPERTY VANCOUVER ISLAND, B.C.

on behalf of

CORPORATION FALCONBRIDGE COPPER 6415 - 64th Street Delta, B.C. V4K 4E2

contact: Mr. Alex Davidson (604) 946 5451

Field work completed: February 18 - April 1, 1986

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April 2, 1986

TABLE OF CONTENTS

		page
1	Introduction	1
2	Survey Location	1
3	Survey Grid and Survey Coverage	1
4	Personnel	2
5	Instrumentation	2
6	Recommendations	3

1. INTRODUCTION

Induced polarization and apparent resistivity surveys were conducted over portions of the Mount Sicker Property, Vancouver Island, B.C. on behalf of Corporation Falconbridge Copper, within the periods March 3-21, and March 28-April 2, 1986. Magnetometer surveying was conducted in the periods February 18-21 and March 24-27, 1986. The work was performed by Alan Scott, Geophysicist.

The pole dipole electrode array at an "a" spacing of 25 meters, and "n" separations of 1, 2, 3, 4, and 5, was used on the induced polarization survey. The current electrode was to the south of the receiving electrodes on the South Grid and the East Grid, and to the north on the North Grid.

Magnetometer readings were taken at 25 meter intervals.

2. SURVEY LOCATION

The Mount Sicker Property is located about 8 kilometers west of the village of Crofton, B.C. Access is via a network of old logging and mining roads from the Mount Sicker Road.

3. SURVEY GRID AND SURVEY COVERAGE

The induced polarization survey was conducted over three separate portions of the grid, and were defined as follows:

Grid 1 - South Grid: Lines 5E to 12W (18 lines)

Grid 2 - North Grid: Lines 3E to 20E (18 lines)

Grid 3 - East Grid: Lines 43E to 50E plus repeat L38E (9 lines)

A total of 36.5 line kilometers of induced polarization survey was completed. Details of survey coverage are given in the previously submitted production reports.

A total of 38.0 line kilometers of magnetometer survey was completed over the property, mostly on different lines than the induced polarization survey.

4. PERSONNEL

Alan Scott operated the IPR-11 receiver and produced the accompanying data summaries and pseudosections using the Soft II program.

Dave Carr operated the transmitter and performed the magnetometer survey.

Jim Walker, Ken Moir, Bob Grant, and Brad Scott were at various times field assistants on the survey.

Dave Lefebure was the project geologist on site on behalf of Corporation Falconbridge Copper.

5. INSTRUMENTATION

A Scintrex IPR-11 time domain microprocessor based induced polarization receiver was used on the survey. This instrument operates on an alternating square wave transmitted current pulse train, and samples the decay curve at ten semilogarithmically spaced times after cessation of each pulse. A 2 second on/2 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 shutoff: midpoint at 870 milliseconds) is the value that has been plotted on the plans and pseudosections.

A Scintrex IPC-7 2.5 kw time domain transmitter was used for the survey on March 3 and from March 27 to April 1. While it was being repaired, a Huntec LOPO transmitter was used on the survey. This transmitter did not give as clean a waveform as the Scintrex unit and did not give clean spectral IP parameters. The basic (M7) chargeability values are, however, consistant and accurate.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running the Scintrex Soft II software. All decay curves were submitted to spectral analysis by a curve matching procedure.

Two Scintrex IGS MP4 magnetometers were used on the magnetometer survey, one surving as the base station and the other as the field survey unit. All data was corrected for diurnal drift and was tied into a previous survey by resurveying line 14E.

6. RECOMMENDATIONS

A preliminary examination of the results from the IPR11 survey on the Mount Sicker Property indicates that several moderate to strong chargeability anomalies were detected that merit diamond drilling and/or trenching work. A detailed interpretation of these survey results, and correlation to the geological and geochemical data bases, is recommended to select specific targets.

Respectfully Submitted,

Alan Scott, Geophysicist

TABLE OF CONTENTS OF FOLDER

	folder
Logistical Report:	1
Receiver field notes:	2
South Grid: Lines 500E to 1200W	
Raw data dumps Edit files Data Summary Spectral Analysis Summary	5 6 7 8
North Grid: Lines 300E to 2000E	
Raw data dumps Edit files Data Summary Spectral Analysis Summary	10 11 12 13
East Grid: Lines 4300E to 5000E, Line 3800E	
Raw data dumps Edit files Data Summary Spectral Analysis Summary Line 38E: pseudosection M7 and resistivity Line 38E: pseudosection Spectral M and tau	15 16 17 18 19 20
six (6) floppy discs containing all data from the survey and listing of files. CAUTION: do not expose to strong magnetic fields	25
Uncorrected magnetometer survey data listings Corrected magnetometer survey data listings	29 30
PONTENTE DE MAD TIDE	

CONTENTS OF MAP TUBE

Contoured chargeability and resistivity pseudosections

Chargeability Contour Plan (n=1)

Apparent Resistivity Contour Plan (n=1)

Magnetometer Survey Contour Plan