827615

LOGISTICAL REPORT

MAGNETOMETER AND VLF-EM SURVEYS

CANAMERA OPTION

CHEMAINUS AREA, B.C.

on behalf of

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

contact: Mr. Harold Gibson
(604) 946 5451

Field work completed: April 16 and 17, 1987

by

SCOTT GEOPHYSICS LTD.
4013 West 14th Avenue
Vancouver, B.C. V6R 2X3

Contact: Mr. Alan Scott
(604) 228 0237

April 30, 1987

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ACCOMPANYING PLAN MAPS

Magnetometer values @ 1:2000 scale

Magnetometer contour plan @ 1:2000 scale (blackline)

Magnetometer contour plan @ 1:2000 scale (colour contours)

VLF Fraser filter contour plan @ 1:2000 scale

VLF Stacked profiles @ 1:2000 scale

1. INTRODUCTION

Magnetometer and VLF-EM surveys were conducted over portions of Corporation Falconbridge Copper's Camamera Option, Chemainus Area, B.C., within the period April 16 to 17, 1987.

Total field magnetometer and VLF readings (for station NLK, Seattle) were taken at 12.5 meter intervals on all survey lines.

2. SURVEY LOCATION

The Canamera Otion is located about 14 kilometers southwest of Chemainus, B.C. Access is via the main Chemainus River logging road from the Island Highway.

3. SURVEY GRID AND SURVEY COVERAGE

A total of 8.4 line kilometers (671 stations) were surveyed on the Canamera Option. The survey was conducted over two small grids located on either side of the main Chemainus logging road. The grids are referred to as the "east grid" and "west grid" respectively.

4. PERSONNEL

Ken Moir performed the IGS survey and edited the results on site using Scintrex IGS applications software.

5. INSTRUMENTATION AND PROCEDURES

A Scintrex IGS-2 magnetometer/VLF receiver, along with a Scintrex MP3 configured as a base station magnetometer, were used for the survey on the Canamera Otion. All magnetometer readings were corrected for diurnal drift with reference to the base station, which cycled at 6 second intervals.

Station NLK (Seattle, Washington at 24.8 kHz) was used for the VLF survey. All readings were taken with the operator facing the transmitter site, so that conductive features give "right-wave" inflection points. The In Phase values were Fraser filtered with a filter interval of 15 meters.

The survey data was archived and edited on site with a Sharp PC 7000 microcomputer. Final plotting was done on a DMP 42 plotter using software written by D. Muir and Associates.

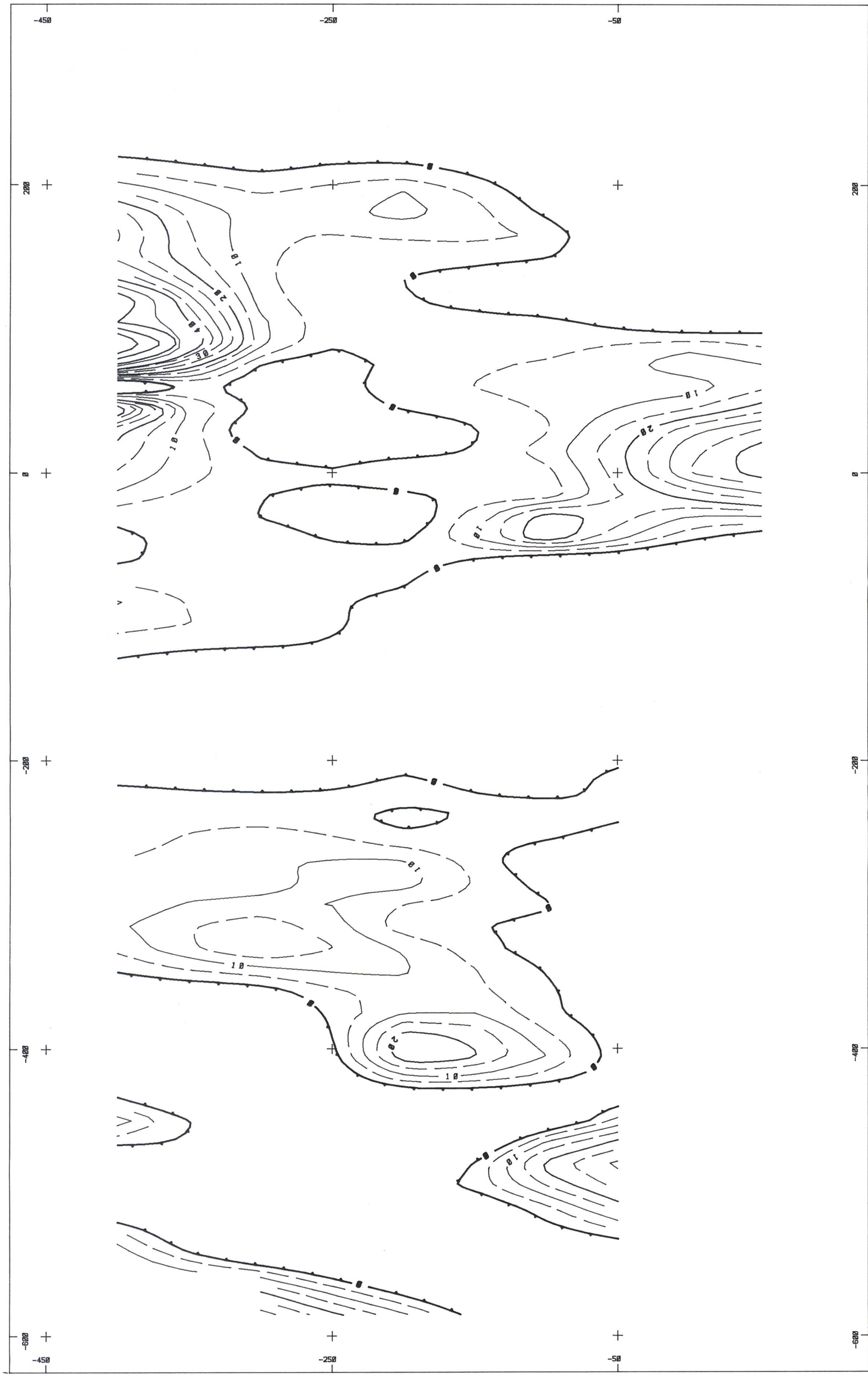
6. RECOMMENDATIONS

Detailed correlation of the results of these surveys to the geological and geochemical data bases results is recommended in order to select specific targets for further work.

A buried telephone cable is suspected as the probable cause for the VLF anomaly located at line 400W/station 75N on the east grid, and at line 500W/station 25S on the west grid.

Respectfully Submitted,

Alan Scott,
Geophysicist



LEGEND:

Station NLK (Seattle, Wash) 24.8 kHz

In Phase data - filtered using a 15

. meter sample interval

Contours: 0, 5, 10, 15, 20, 25, 30

. 35, 40, 50, 60, 80, 100

inches
0 1 2
0 1 2 3 4 5
centimetres

BRITISH COLUMBIA GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

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CANAMERA OPTION

Copper Canyon Grid

Fraser Filter Contour Plan

DRAWN BY:	jmt	DATE:	April 24, 1987

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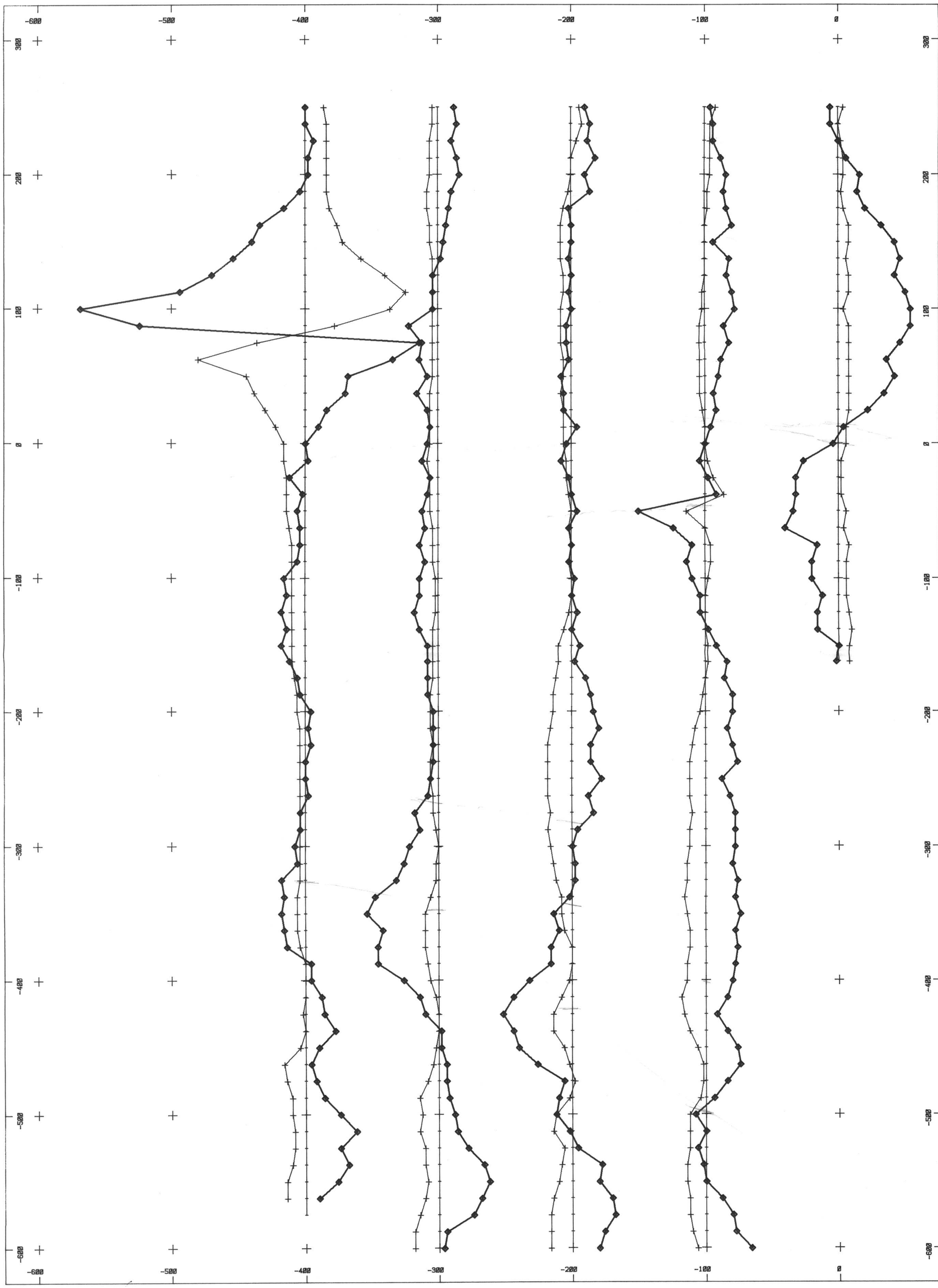
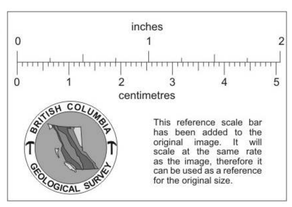


LEGEND:

Station NLK	- 24.8 kHz
In Phase	- 10% / cm
Quadrature	- 10% / cm
Zero %	on line
Positive/negative	west/east



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CANAMERA OPTION

Copper Canyon Grid

VLF Survey - Seattle, Wash.

DRAWN BY:	jmt	DATE:	April 23, 1987

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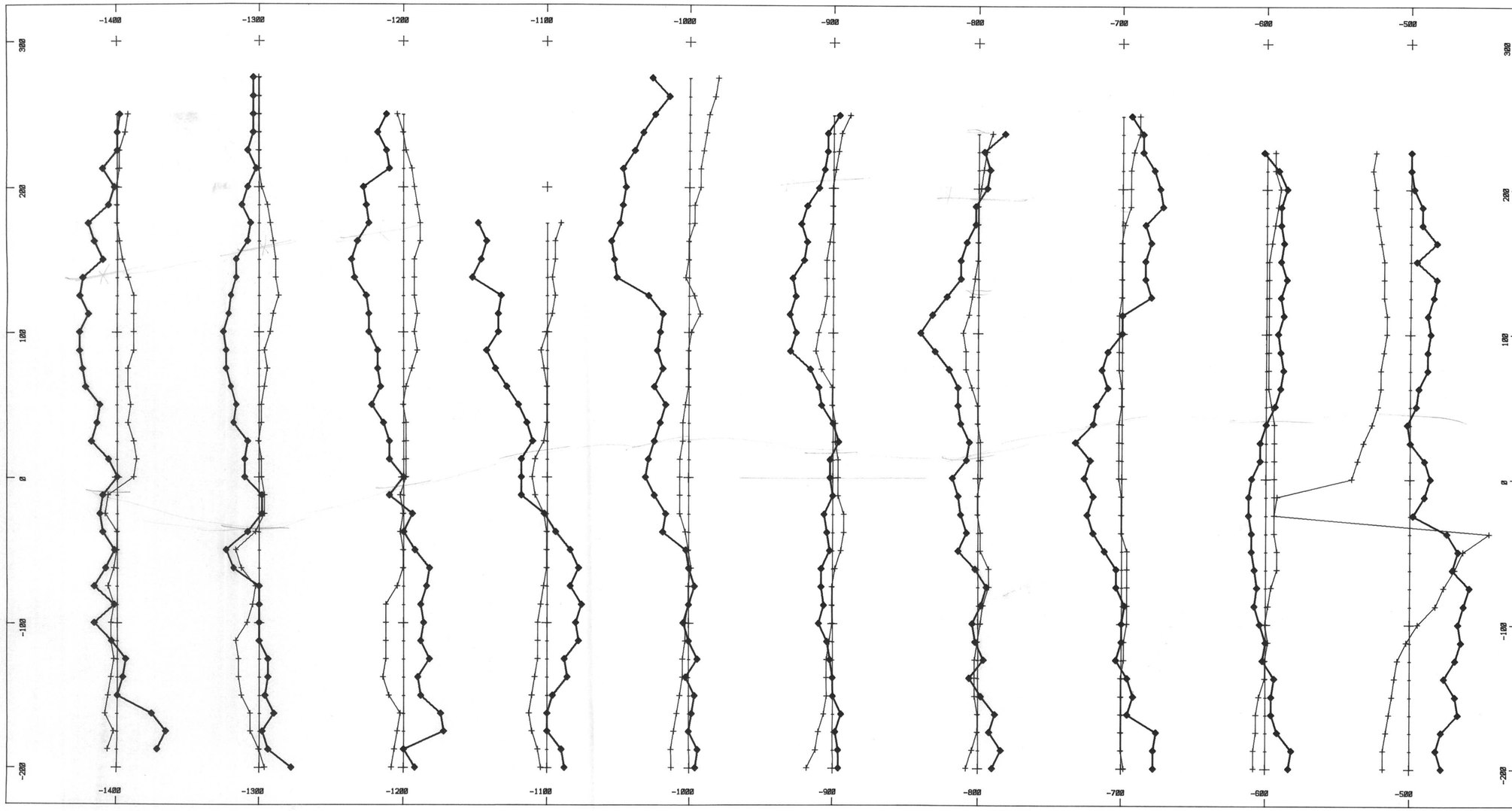
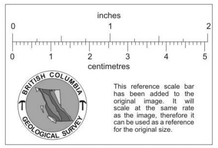


LEGEND:

Station NLK	- 24.8 kHz
. ◇ In Phase	- 10% / cm
. + Quadrature	- 10% / cm
Zero %	on line
Positive/negative	west/east



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Copper Canyon Grid

VLF Survey - Seattle, Wash.

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