NTS 82H/4 SAM - Geophysics "MPH Data Analysis" (new)

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March 5, 1990

Mr. Ian Pirie
Minnova Inc.
4th Floor
311 Water Street
Vancouver, B.C.
V6B 1B8

Re: C-1235 - HLEM Data Processing

Dear Ian:

Enclosed please find two maps at a scale of 1:7500 of the HLEM data from the 1777 Hz datasets of the Rea Gold and Kamad Option grids. The postings are from the original dataset and the contours are of the ratio R calculated as follows:

$$R = \text{ABS}\left(\frac{\text{Inphase (1777 Hz)}}{\text{Quadrature (1777 Hz)}}\right) \times C$$

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The letter of January 12 further defines the ratios.

Also enclosed are the RTI plots for the same datasets. The background colour is again taken as blue with the blue/green cutoff at approximately 10.

The figures represent the same calculated ratios as found in the letter of January 16.

Figure 1	IP/Q	(444 Hz)	-	good bedrock conductors
Figure 2	IP/Q	(1777 Hz)	-	good bedrock conductors
Figure 3	Q/Q	(1777 Hz)/(444 Hz)	-	Genie equivalent
Figure 4	Q/IP	(444 Hz)	-	weak bedrock conductors
Figure 5	Q/IP	(1777 Hz)	-	weak bedrock conductors

Yours truly,

MPH CONSULTING LIMITED

Jonathan Rudd, B.Sc.E
Geophysicist

JR/lds

Encl.

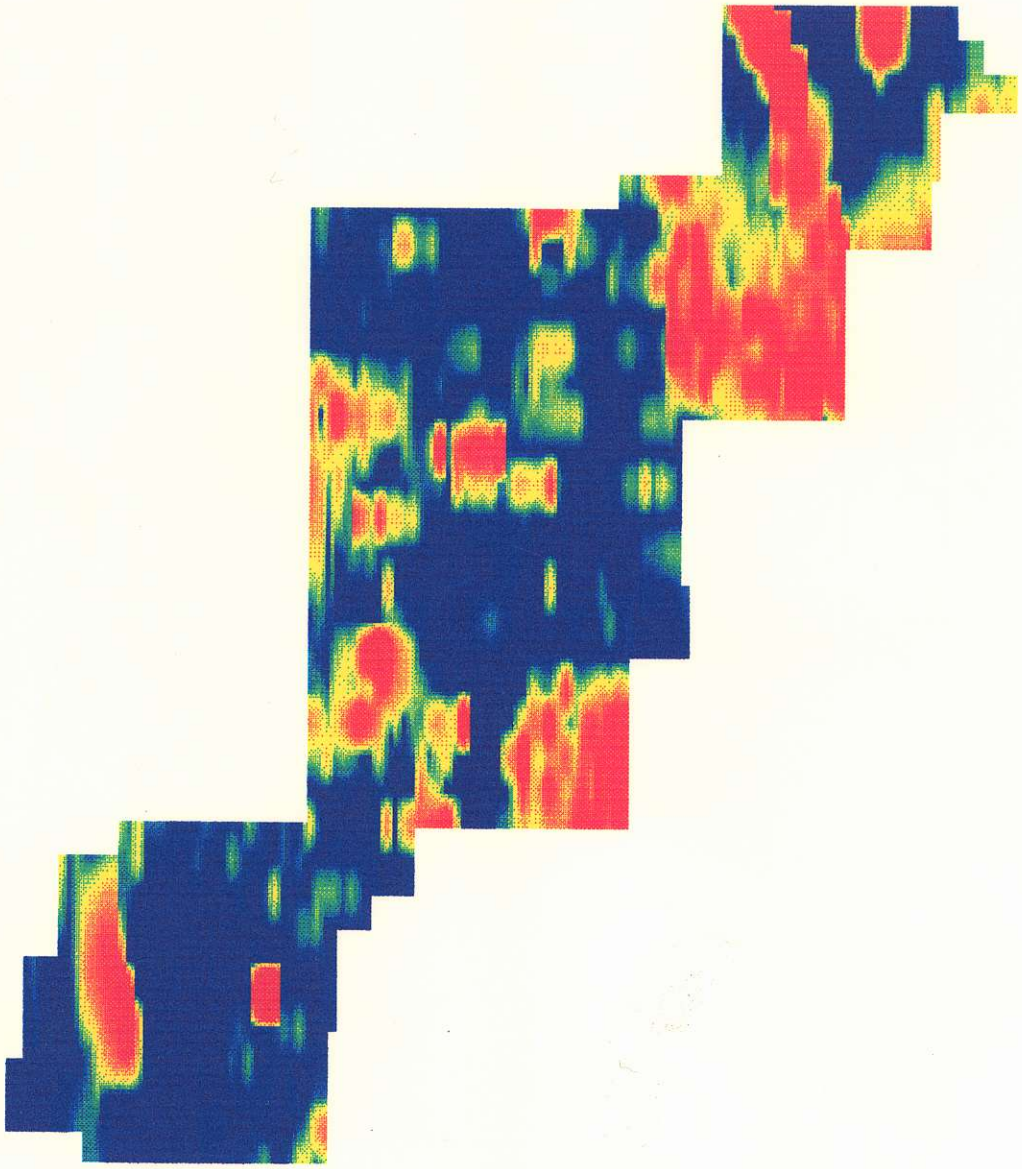


FIGURE 1: Inphase/Quadrature at 444Hz

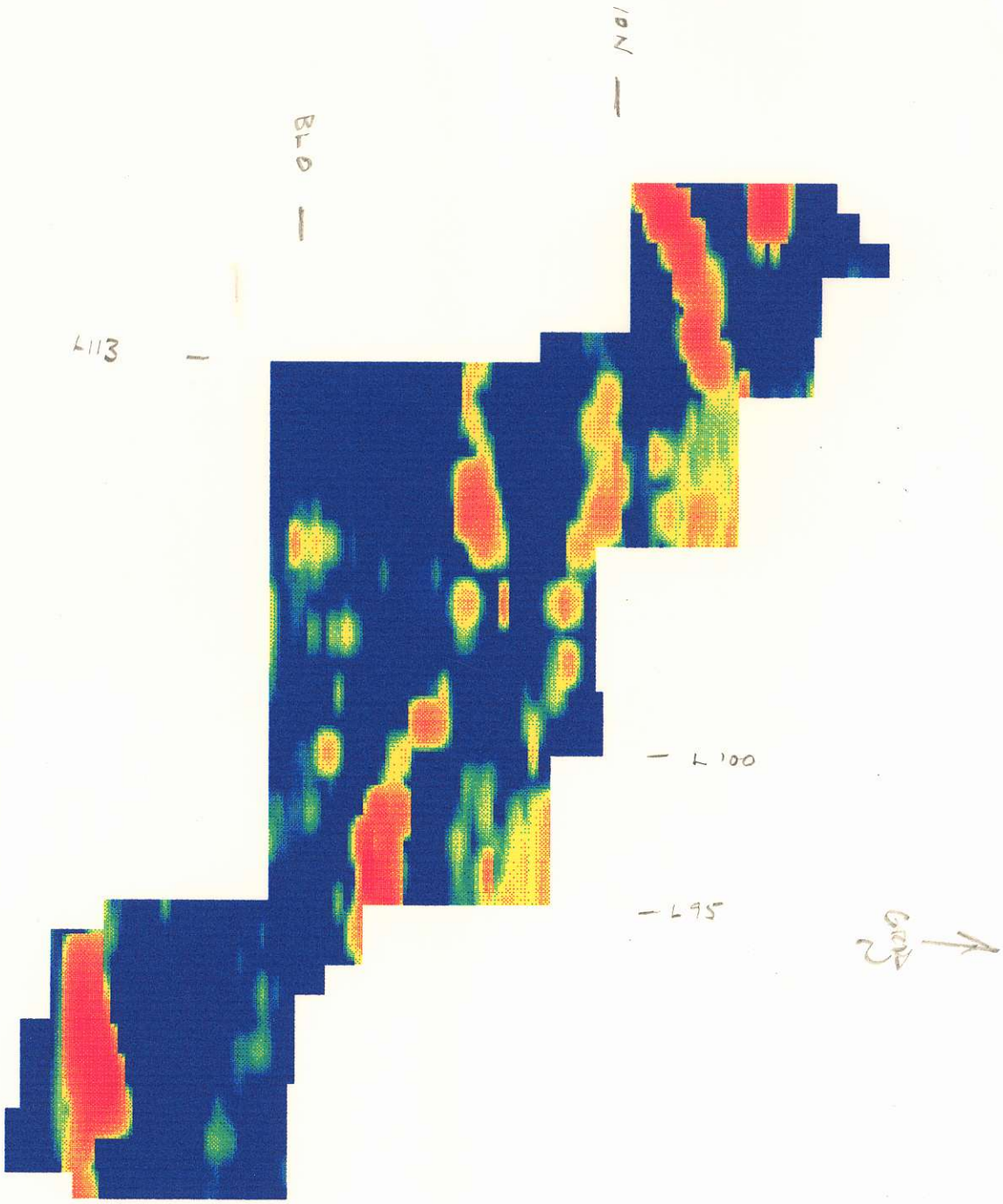


FIGURE 2: Inphase/Quadrature at 1777 Hz

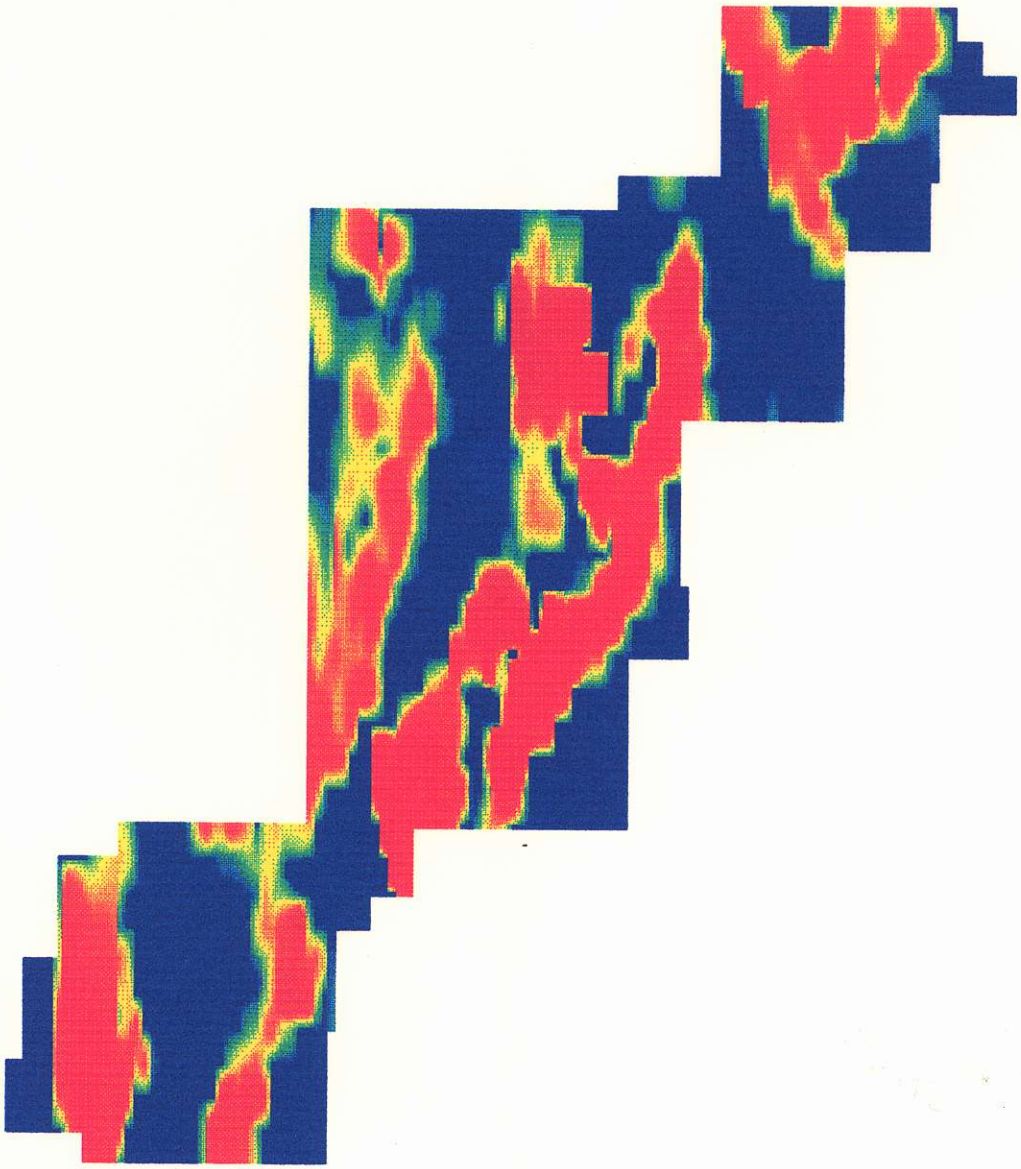


FIGURE 3: Quadrature (1777Hz)/Quadrature (444Hz)

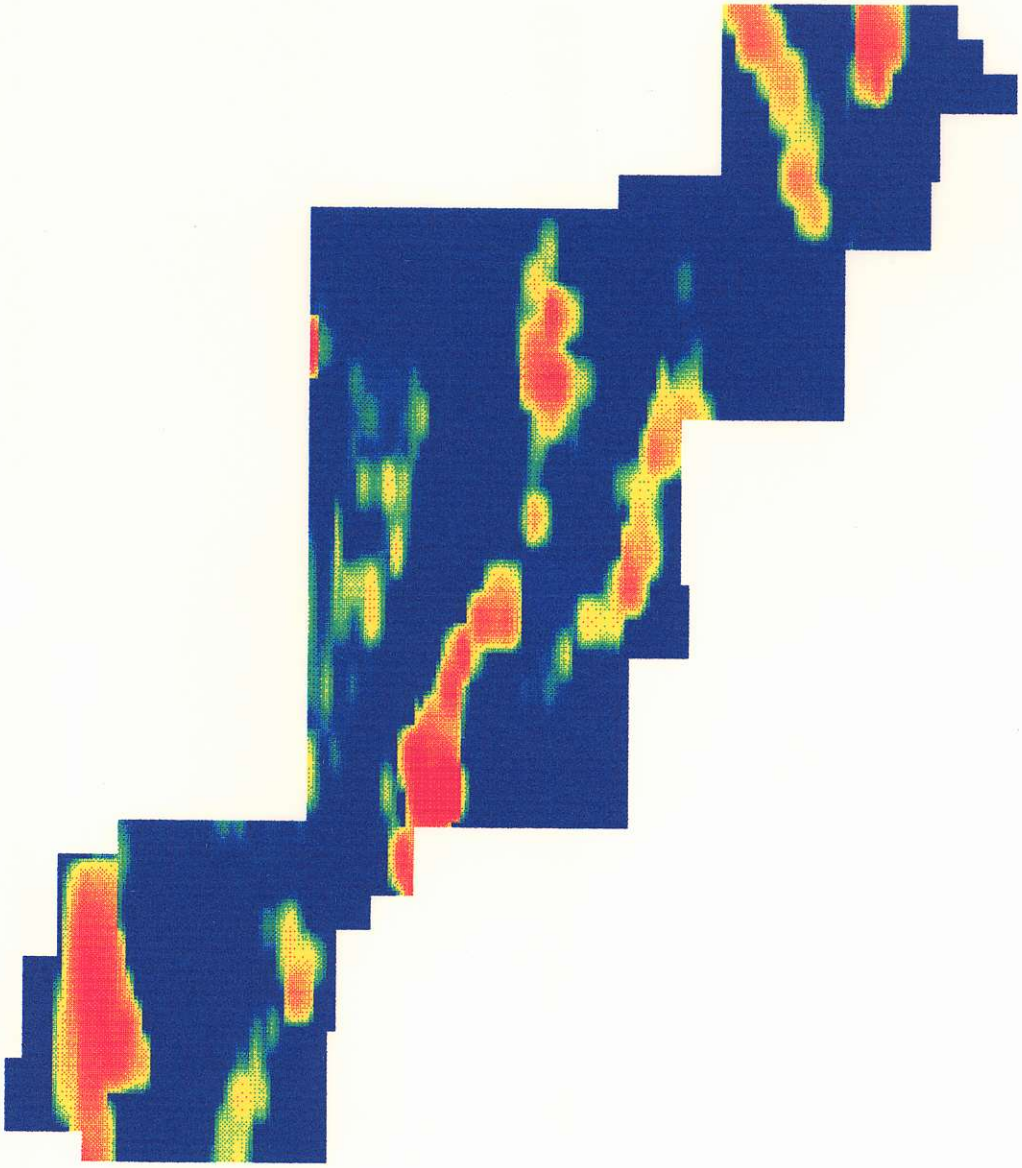


FIGURE 4: Quadrature/Inphase at 444Hz

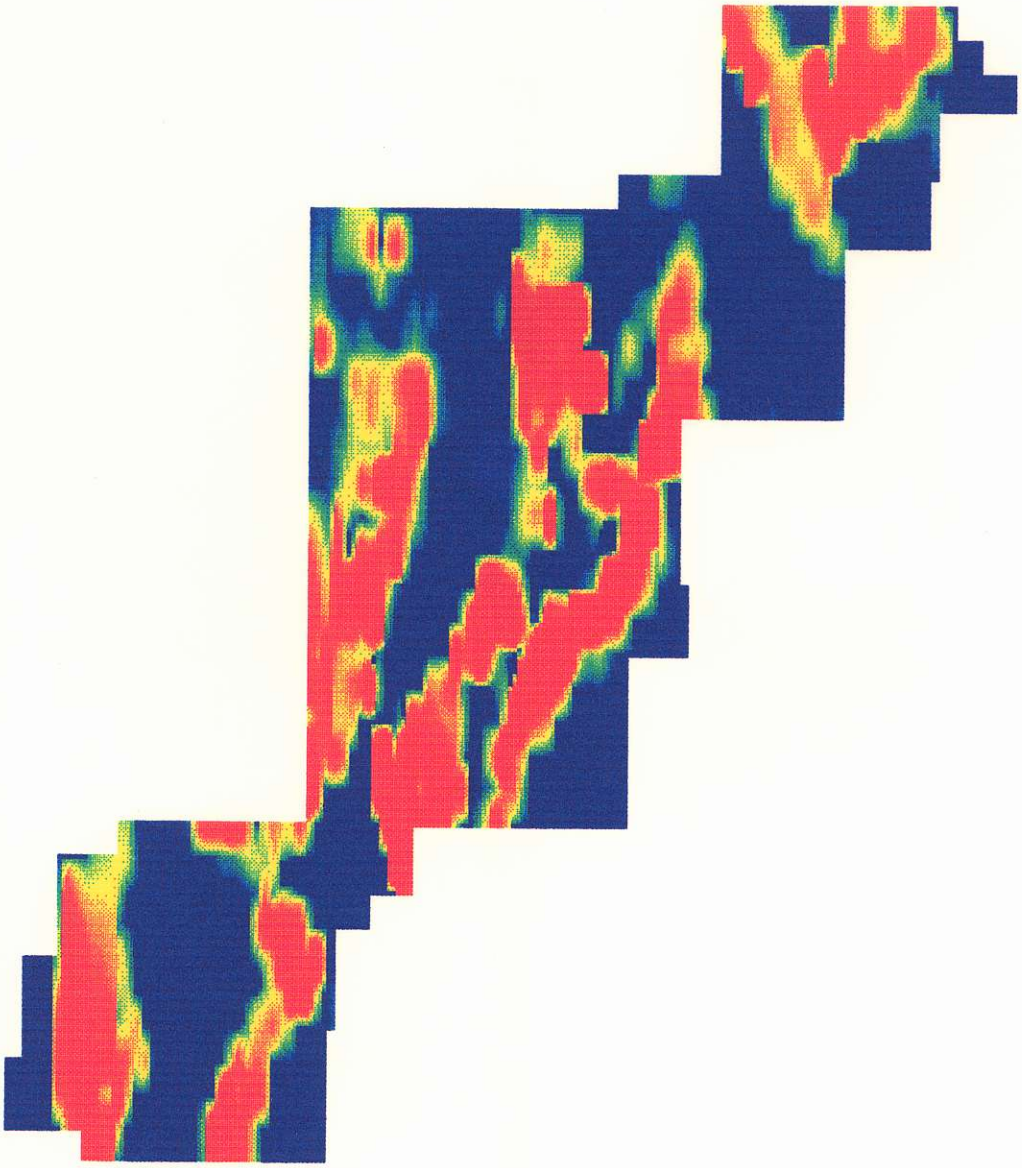


FIGURE 5: Quadrature/Inphase at 1777 Hz

MINNOVA INC.

HLEM DATA PROCESSING
AREA OF QUADRATURE/INPHASE
1777 Hz

Project No: C-235
Scale: 1:1500
File: CMQ2-1PL.DAT
By: J. RUDD
Drawn: MPH
Date: MARCH/1990

MPH Consulting Limited

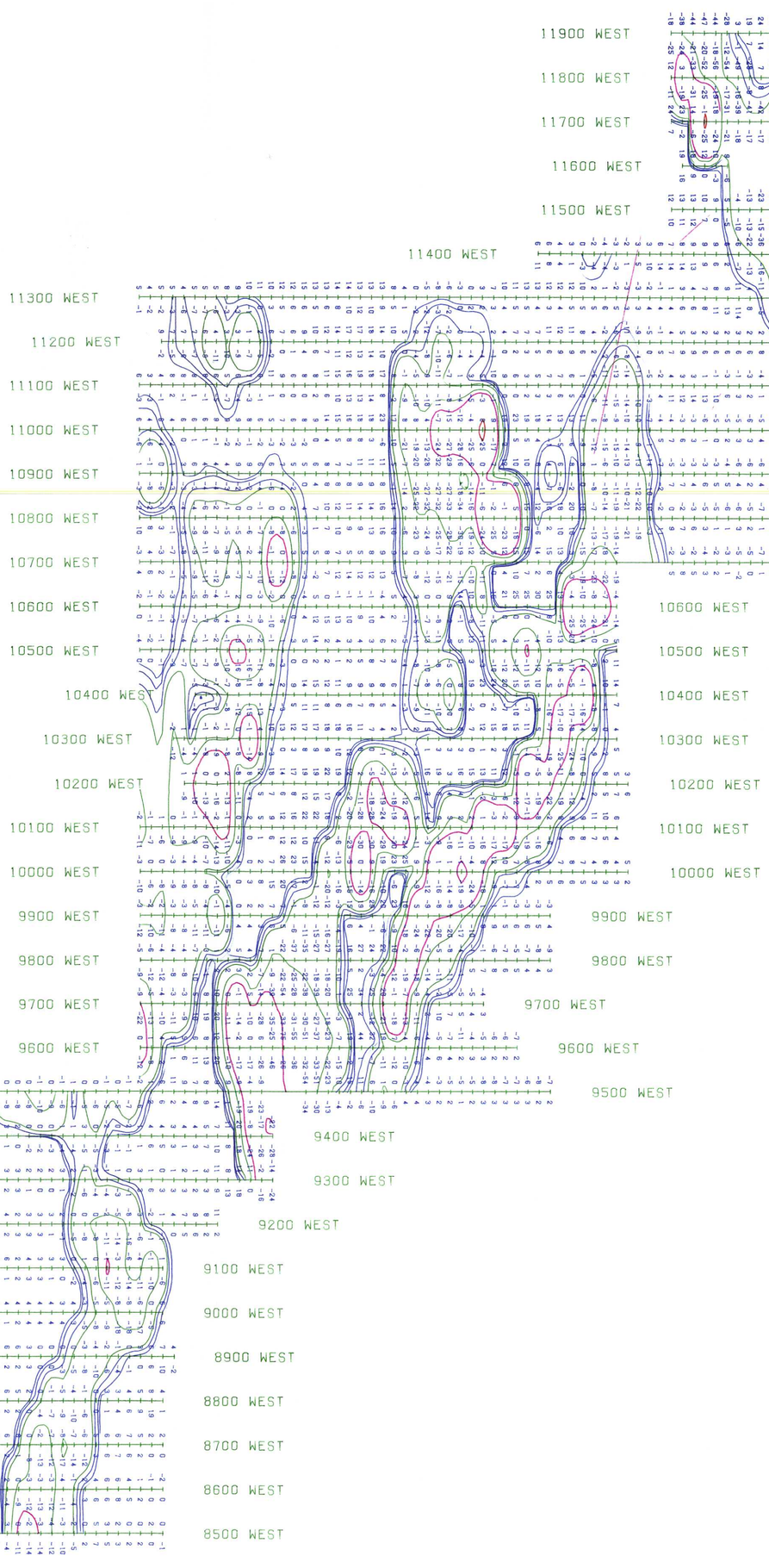
CONTOUR VALUES:

10
20
50
100
500
1000

FORMULA FOR CONTOURING

$R = ASS\left|\frac{\text{ELEMENT } 1}{\text{ELEMENT } 2}\right| \times C$

WHERE $C = .001$ IF ELEMENT > 0, $C = (\text{ELEMENT})^2 \times -1$



1000 SOUTH
800 SOUTH
600 SOUTH
400 SOUTH
200 SOUTH
BASE LINE
200 NORTH
400 NORTH
600 NORTH
800 NORTH
1000 NORTH
1200 NORTH
1400 NORTH
1600 NORTH
1800 NORTH

11900 WEST
11800 WEST
11700 WEST
11600 WEST
11500 WEST
11400 WEST
11300 WEST
11200 WEST
11100 WEST
11000 WEST
10900 WEST
10800 WEST
10700 WEST
10600 WEST
10500 WEST
10400 WEST
10300 WEST
10200 WEST
10100 WEST
10000 WEST
9900 WEST
9800 WEST
9700 WEST
9600 WEST
9500 WEST
9400 WEST
9300 WEST
9200 WEST
9100 WEST
9000 WEST
8900 WEST
8800 WEST
8700 WEST
8600 WEST
8500 WEST

MINNOVA INC.

HLEM DATA PROCESSING
RATIO OF INPHASE/QUADRATURE
1777 Hz

Project No: C-1235	By: J Rupp
Scale: 1:1500	Drawn: MPH
Drawing No: CM1Plot.Grf	Date: MARCH/1990

MPH Consulting Limited

CONTOUR VALUES:
10
20
50
100
500
1000
5000
10000

FORMULA FOR CONTOURING:
$R = ABS\left|\frac{\text{ELEMENT}}{\text{EDGE}}\right| * C$
WHERE $C = .001$ IF ELEMENT > 0, $C = -(\text{ELEMENT})^2$ IF ELEMENT < -1

BRITISH GEOLOGICAL SURVEY

inches 0 1 2 3 4 5
centimetres 0 1 2

This reference scale bar should be used to ensure original images is see as the survey therefore is the correct reference for subsequent size.