

86-867-15604

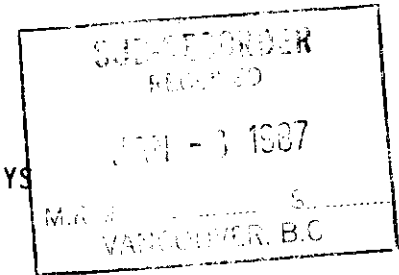
COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 82F/2

GEOPHYSICAL REPORT
ON THE
HORIZONTAL LOOP EM AND MAGNETIC SURVEYS
DODGE 1 to 4 CLAIMS
NELSON MINING DIVISION, B.C.



- ASSESSMENT REPORT -

Latitude : 49°02'N

Longitude : 117°50'W

Work Performed by : S.J. Visser & J. Vyselaar
during the period of September 9 & 10
and September 18 to 20, 1986

Claim Owner & Operator : COMINCO LTD.

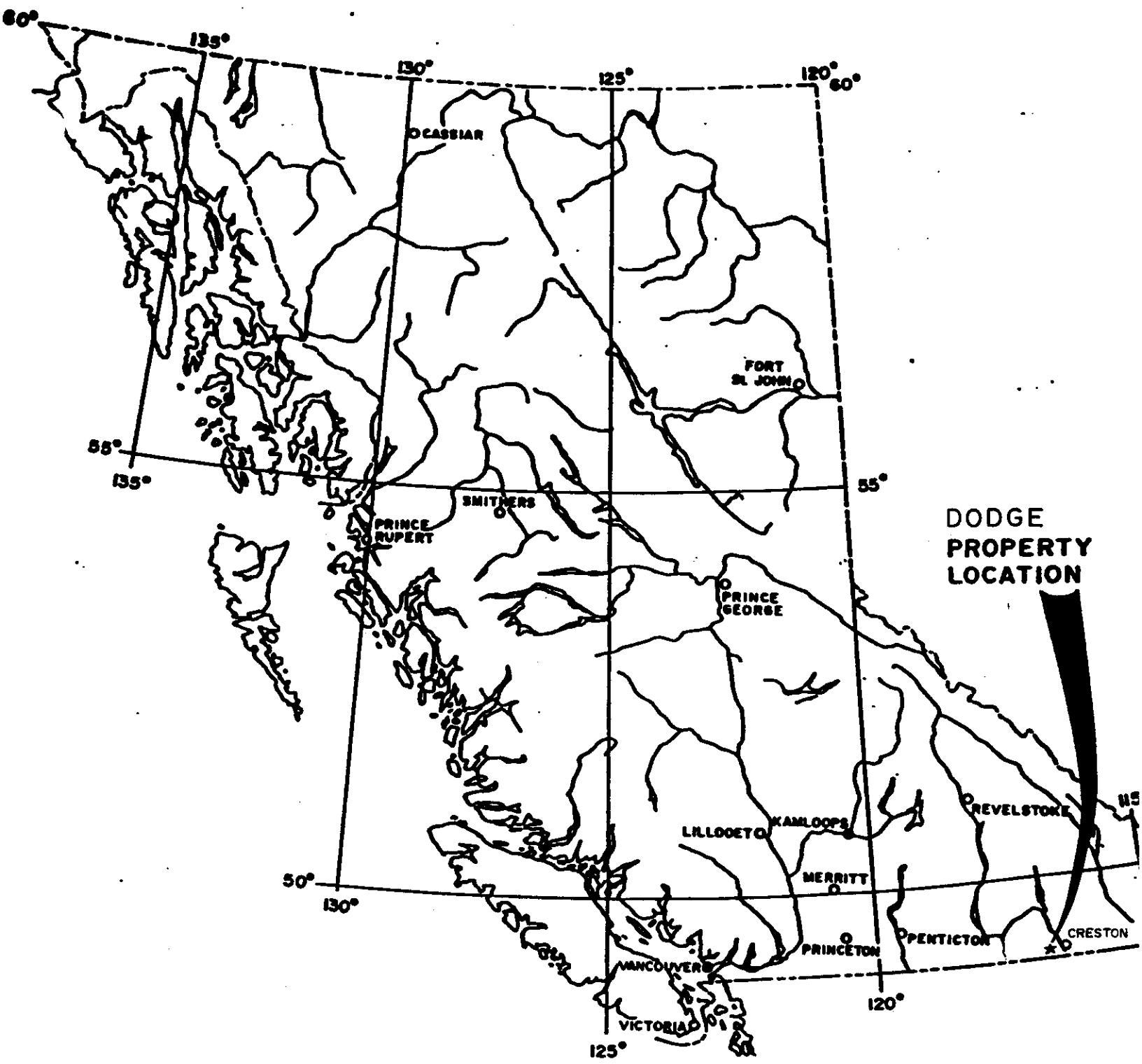
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,604

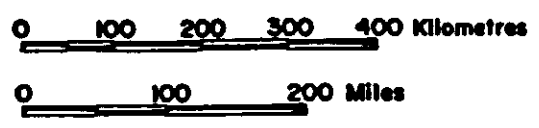
DECEMBER 1986

S.J. Visser

FILMED



DODGE
PROPERTY
LOCATION



DODGE GENERAL PROPERTY LOCATION MAP

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312-86-3	Horizontal Loop EM c.s. 200 m, Freq.: 440 Hz, Line 600N: 220 Hz Scale 1:5,000, 1 cm = 10%	
312-86-4	Horizontal Loop EM c.s. 200 m IP Freq.: 1760-440 Hz; Line 600N: 1760-220 Hz OP Freq.: 1760 Hz Scale - 1:5,000, 1 cm = 10%	
312-86-5	Horizontal Loop EM c.s. 200 m IP Freq.: 3520-440 Hz; Line 600N: 3520-220 Hz OP Freq.: 3520 Hz Scale - 1:5,000, 1 cm = 10%	/
312-86-6	Horizontal Loop EM c.s. 200 m IP Freq.: 7040-440 Hz; Line 600N: 7040-220 Hz OP Freq.: 7040 Hz Scale - 1:5,000, 1 cm = 10%	/
312-86-7	Magnetometer Data Total Field Magnetometer Base Level = 57,500 nT Scale - 1:5,000, 1 cm = 50 nT	/

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 82F/2

GEOPHYSICAL REPORT
ON
HORIZONTAL LOOP EM AND MAGNETIC SURVEYS
ON THE
DODGE 1, 2, 3 & 4 CLAIMS
NELSON MINING DIVISION, B.C.

LIST OF CLAIMS

Cominco Interest - 100%

The claims listed below are partially covered by the grid or adjoin those claims partially covered by the grid.

<u>GRID NAME</u>	<u># OF UNITS</u>	<u>RECORD #</u>	<u>ASSESSMENT WORK DUE</u>
Dodge 1	20	4143	June 20, 1988
2	15	4144	June 20, 1988
3	15	4145	June 20, 1988
4	15	4219	September 12, 1989

INTRODUCTION

The Dodge 1 - 4 claims are located approx. 25 km southwest of Creston (Plates 313-86-1 & 2). Access is via paved road from Creston, along the west side of the Kootenay River to the Dodge Creek turnoff, then by logging road to the property.

The Dodge claims are underlain by the clastic sediments of the Middle and Lower Aldridge formation of Proterozoic age. The sediments of the Aldridge formation are known to host the Sullivan orebody near Kimberley, B.C.

The horizontal loop survey was performed to explore for shallow (< 100 m) massive sulphide deposits. The magnetometer survey supplements the horizontal loop survey.

FIELD WORK

The Horizontal Loop and Magnetometer surveys were completed during the period of September 9, 10 and 18 to 20, 1986. Seven lines varying in length from 1.0 km to 1.5 km in length for a total of 9 km were surveyed by both horizontal loop and magnetometer.

The Horizontal Loop used in this survey was an Apex Parametrics Ltd. MaxMin I. A short test with a 150 m coil separation on one line indicated no response. It was, therefore, decided to use a 200 m coil separation with a 50 m station spacing.

The grid was slope chained by the linecutter and the distance and slope to each station noted. This data was then entered into the computer to calculate corrections for the horizontal loop operator to use, in maintaining a 200 m coil separation at the correct slope.

Four frequencies: 7040, 3520, 1760 and 440 Hz were monitored on all the lines with the exception of Line 600N, where 220 Hz was used instead of 440 Hz. The 440 Hz was used because of interference from a nearby power line. The low frequency, 440 Hz (or 220 Hz for Line 600N) in-phase component, was subtracted from the higher frequency in-phase component to compensate for any inaccuracies in the chaining. All the data were then plotted as stacked profiles (Plates 312-86-3 to 6).

A Scintrex MP-2 proton precession magnetometer was used for the magnetic survey. Every station on the baseline was established as a base station and lines surveyed with closing loop at intervals no greater than 2 hours, during which period the diurnal drift was considered linear. The data was then base shifted and corrected for diurnal drift and plotted on stacked profiles (Plate 312-86-7), using 57,500 nT as the base level.

DATA PRESENTATION

The maps and results are presented as follows:-


Plate 312-86-1 (in text)	Dodge Property Location Map Scale 1:500,000
Plate 312-86-2 (in text)	Dodge Claim and Grid Location Map Scale 1:50,000
Plate 312-86-3	Horizontal Loop EM c.s. 200 m, Freq.: 440 Hz; Line 600N: 220 Hz Scale 1:5,000, 1 cm = 10%

- PLATE 312-86-4 Horizontal Loop EM
 c.s. 200 m
 IP Freq.: 1760-440 Hz; Line 600N: 1760-220 Hz
 OP Freq.: 1760 Hz
 Scale - 1:5,000, 1 cm = 10%
- 312-86-5 Horizontal Loop EM
 c.s. 200 m
 IP Freq.: 3520-440 Hz; Line 600N: 3520-440 Hz
 OP Freq.: 3520 Hz
 Scale - 1:5,000, 1 cm = 10%
- 312-86-6 Horizontal Loop EM
 c.s. 200 m
 IP Freq.: 7040-440 Hz; Line 600N: 7040-220 Hz
 OP Freq.: 7040 Hz
 Scale - 1:5,000, 1 cm = 10%
- 312-86-7 Magnetometer Data
 Total Field Magnetometer Base Level = 57,500 nT
 Scale - 1:5,000, 1 cm = 50 nT

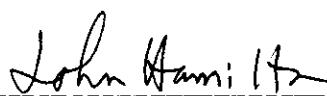
INTERPRETATION AND DISCUSSION

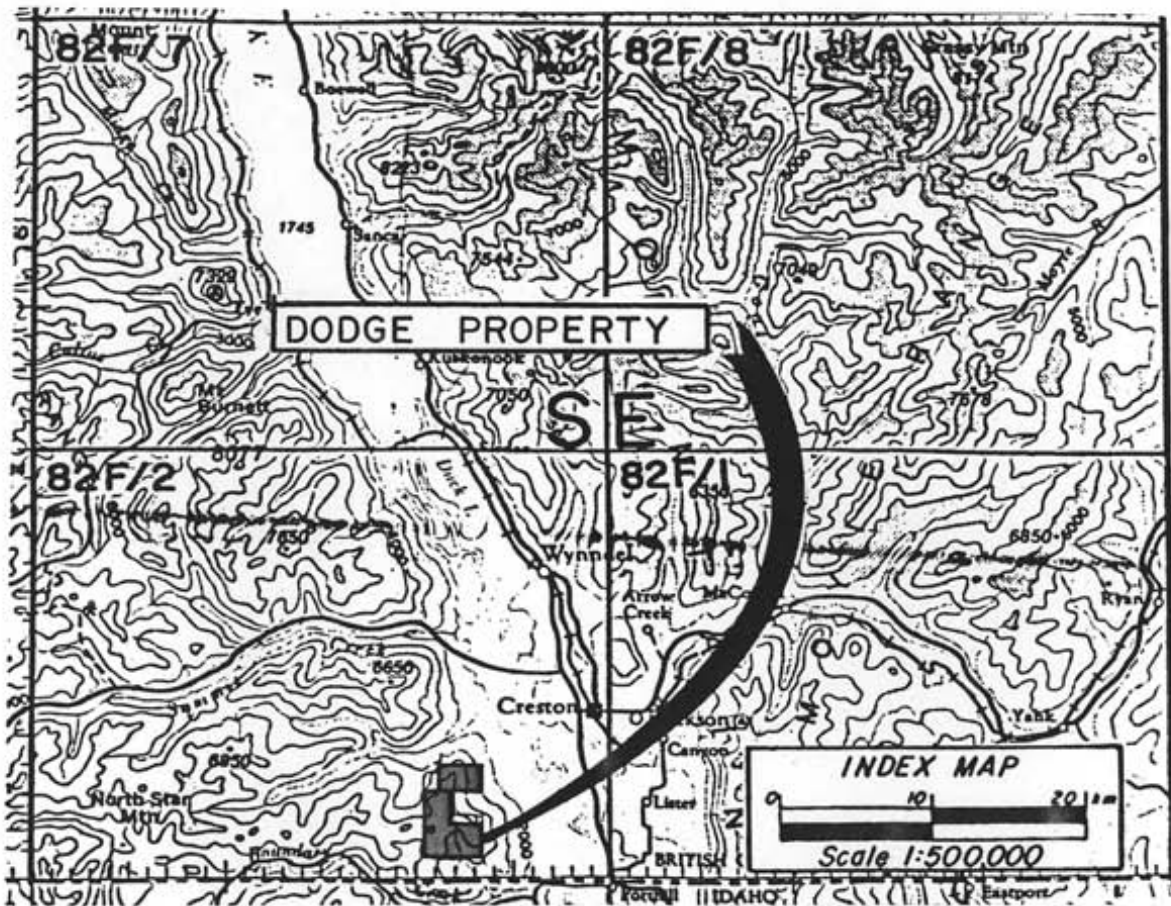
Nothing significant was noticed on either the Horizontal Loop or the Magnetic data. The only small, very weak (< 0.1 mho) conductor is seen on Line 600N at approx. 150E (Plates 312-86-4 to 6).

Report by:


 S. J. Visser, B.Sc.
 Geophysicist
 S.J.V. Consultants Ltd.

Approved for
 Release:


 J. M. Hamilton, P. Eng.
 Manager, Exploration
 Western Canada
 Cominco Ltd.



DODGE PROPERTY

FORT STEELE M.D.; B.C.



N.T.S.
82-F/2

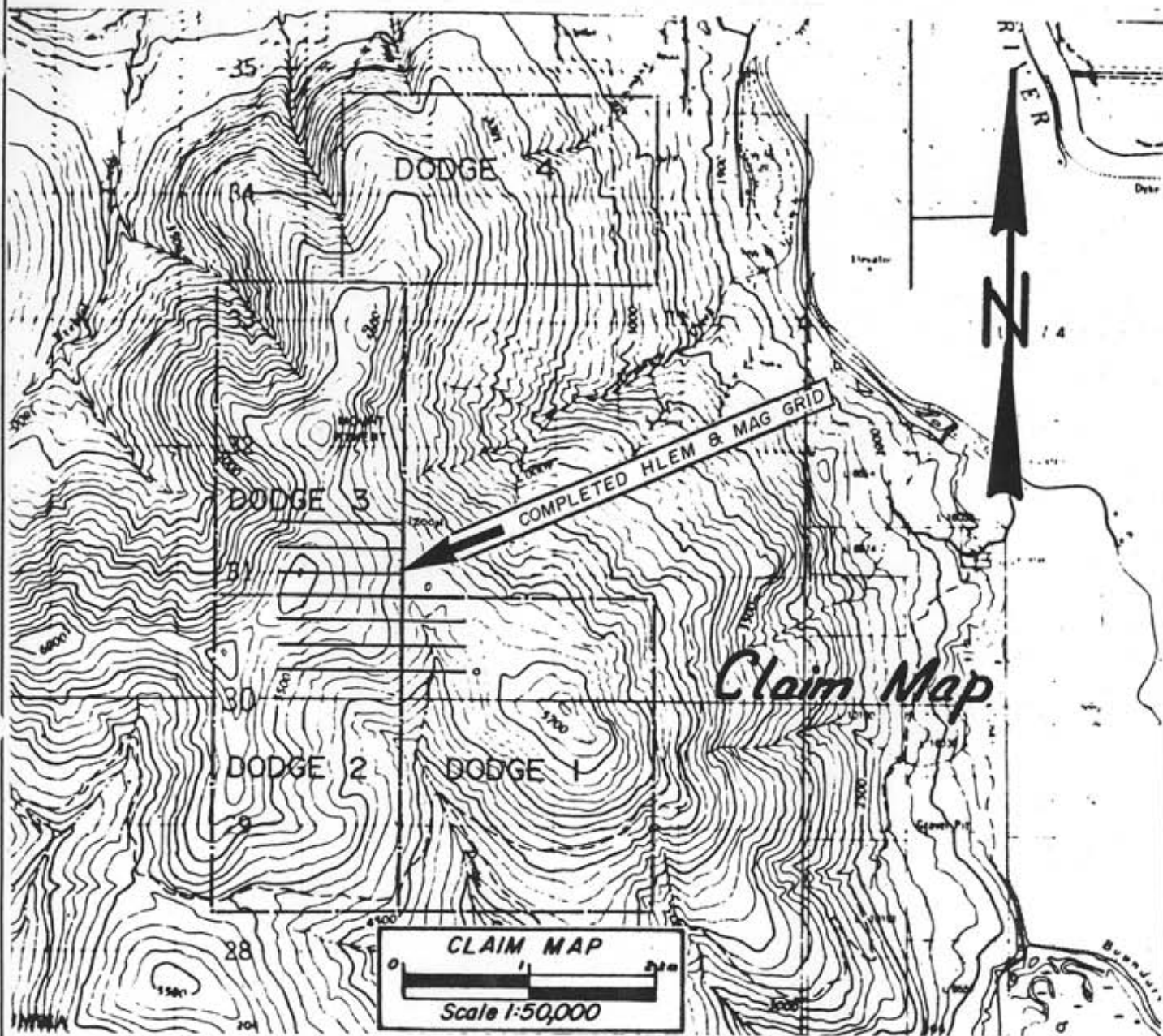
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Revised by	Date	Revised by	Date

PROPERTY LOCATION MAP

Scale: 1 : 500,000

Date: DECEMBER 1986

Plate: 312-86-1



DODGE PROPERTY

FORT STEELE M.D.; B.C.



N.T.S.
82-F/2

Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

CLAIM and GRID LOCATION MAP

Scale: 1 : 50,000

Date: DECEMBER 1986

Plate: 312-86- 2

A P P E N D I X I

APPENDIX I

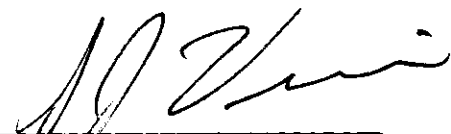
IN THE MATTER OF THE B.C. MINERAL ACT
AND IN THE MATTER OF A GEOPHYSICAL PROGRAMME
CARRIED OUT ON DODGE 1, 2, 3, & 4 CLAIMS
LOCATED 25 KM SOUTHWEST OF CRESTON, B.C.
IN THE NELSON MINING DIVISION OF
PROVINCE OF BRITISH COLUMBIA, MORE PARTICULARLY
N.T.S.: 82F/2

S T A T E M E N T

I, SYD J. VISSER, OF THE MUNICIPALITY OF DELTA, IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:-

- 1) THAT I am employed as a geophysicist by S.J.V. Consultants Ltd., on contract with Cominco Ltd. and as such have a personal knowledge of the facts to which I hereinafter depose;
- 2) THAT annexed hereto and marked as "EXHIBIT "A" to this statement is a true copy of expenditures incurred on a geophysical survey on the DODGE mineral claims;
- 3) THAT the said expenditures were incurred for the purpose of mineral exploration of the above-noted claims in the period of September 9 & 10 and September 18 to 20, 1986.

Signed:



S.J. Visser, B.Sc.
Geophysicist
S.J.V. Consultants Ltd.

DECEMBER 1986

EXHIBIT "A"

STATEMENT OF GEOPHYSICAL EXPENDITURES - 1986

ON THE DODGE 1, 2, 3 and 4 CLAIMS

(1) SALARIES

a)	S.J. Visser, geophysicist		
	5 days @ \$240/day	1,200.00	
b)	J. Vyselaar, geophysicist		
	5 days @ \$240/day	1,200.00	
c)	M.J. Davies, technician		
	3 days @ \$115/day	345.00	
d)	B. Murphy, assistant		
	4 days @ \$70/day	<u>280.00</u>	\$ 3,025.00

(2) OPERATING DAY CHARGES Note: This charge is applied for those days on which useful data are acquired, to cover cost of data compilation, drafting, interpretation and report

4 days @ \$250/day 1,000.00

(3) EQUIPMENT RENTAL

MaxMin	4 days @ \$45/day	180.00	
MP-2	4 days @ \$15/day	<u>60.00</u>	240.00

(4) EXPENSE ACCOUNTS

S.J. Visser	455.83	
(inc. B. Murphy)		
J. Vyselaar	137.00	
M.J. Davies	<u>143.00</u>	735.83


Carried Forward 5,000.83

Carried Forward \$ 5,000.83

(6) MISCELLANEOUS

Accommodation - 4 days @ \$89.88/day	359.52	
Truck Rental - 4 days @ \$46.60/day	186.40	
Shipping Charges (est.)	200.00	
Prorated Demobilization 4 x \$29.70	<u>118.80</u>	864.72
		<hr/>
TOTAL		<u>\$ 5,865.55</u>

I certify this to be a true Statement of Expenditures for the geophysical survey on the Dodge 1, 2, 3 and 4 claims in 1986.



S.J. Visser, B.Sc.
Geophysicist
S.J.V. Consultants Ltd.

A P P E N D I X I I


APPENDIX II

C E R T I F I C A T I O N

I, SYD J. VISSER, of 8081 - 112th Street, in the Municipality of Delta, in the Province of British Columbia, do hereby certify:-

- 1) THAT I graduated from Haileybury School of Mines in 1971 as a Mining Technician and from the University of British Columbia in 1981 with Honours B.Sc. in Geophysics and Geology.

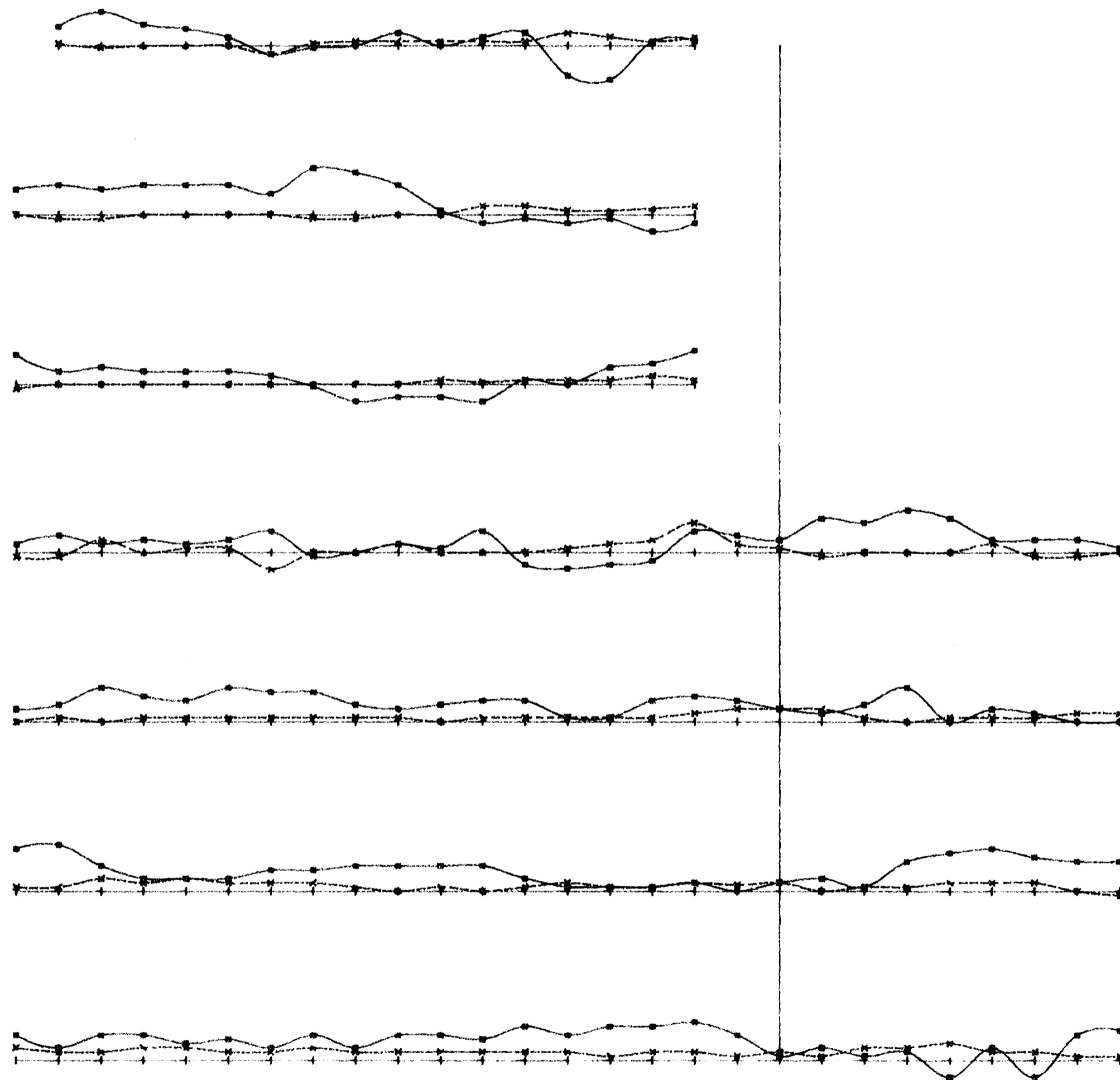
- 2) THAT I have worked in mineral exploration since 1968.



S.J. Visser, B.Sc.
Geophysicist
S.J.V. Consultants Ltd.

December 1986

- 1000W
 - 900W
 - 800W
 - 700W
 - 600W
 - 500W
 - 400W
 - 300W
 - 200W
 - 100W
 - 0E
 - 100E
 - 200E
 - 300E
 - 400E
 - 500E



1200N

1000N

800N

600N

NOTE: Frequency on this line is 220 Hz

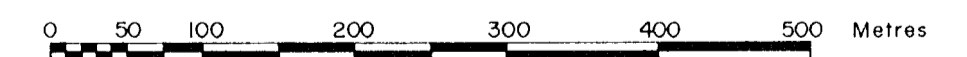
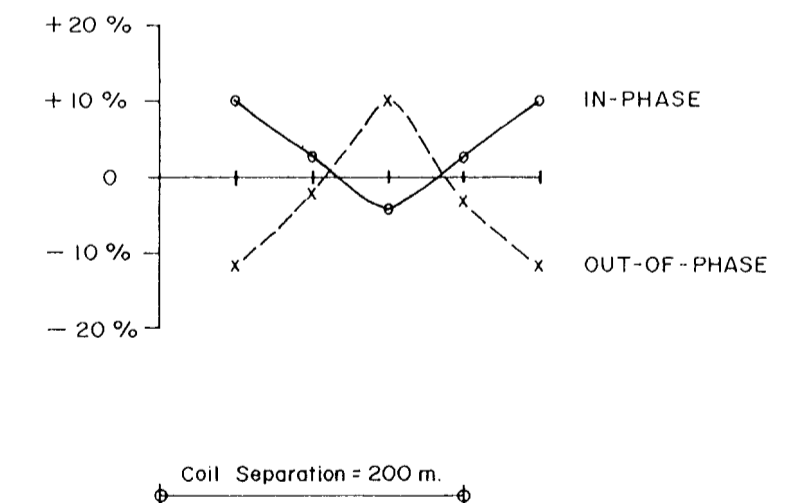
400N

200N

0

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,604



DODGE PROPERTY

FORT STEELE M.D.; B.C.

N.T.S.
82-F/2

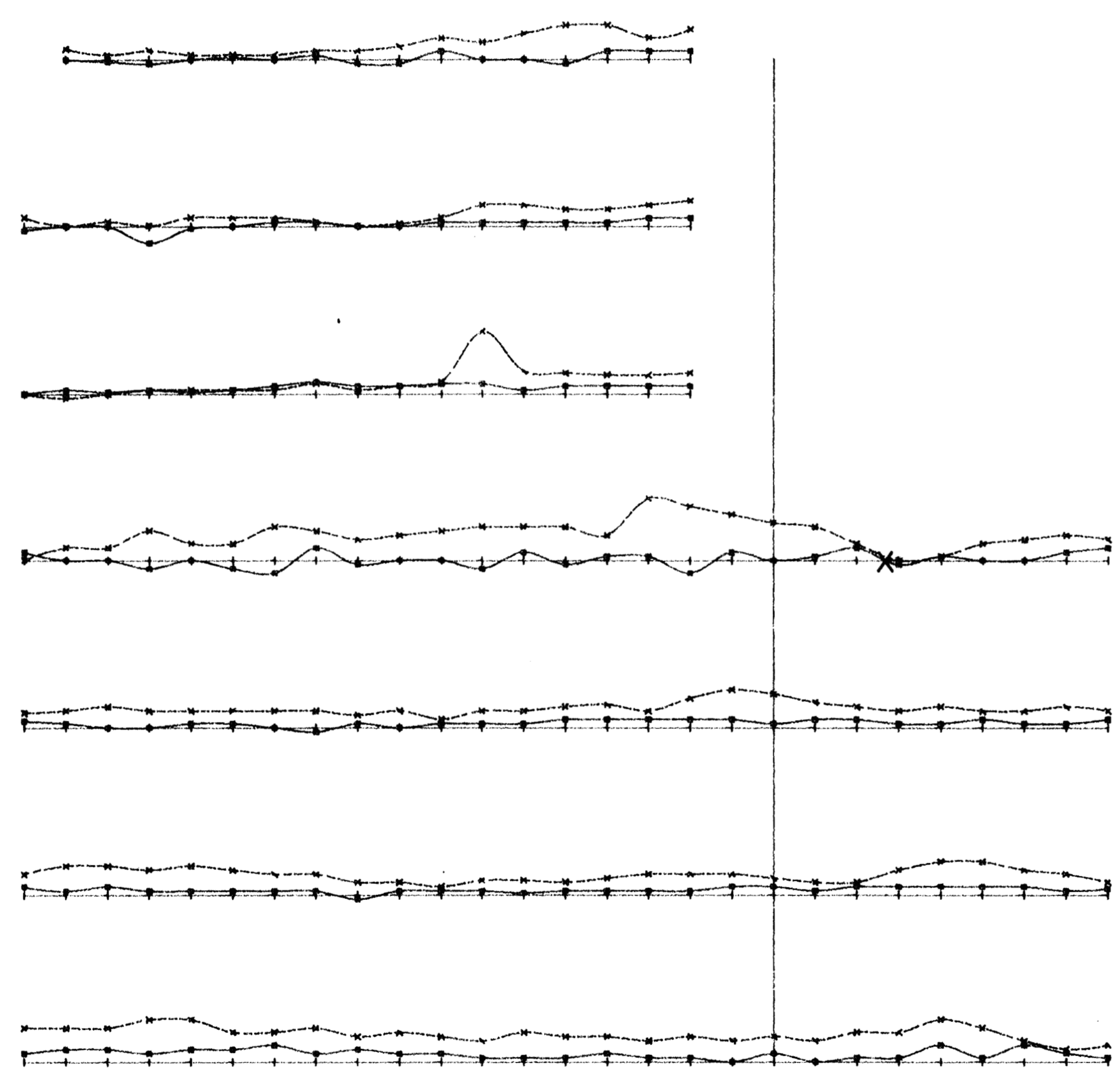
Drawn by:	Traced by:
Revised by	Revised by
Date	Date

HORIZONTAL LOOP EM

Frequencies [IN-PHASE : 440 Hz
 Line 600N:220Hz [OUT-OF-PHASE : 440 Hz
 Coil Separation = 200 metres

Scale: 1 : 5000 Date: DECEMBER 1986 Plate: 312-86-3

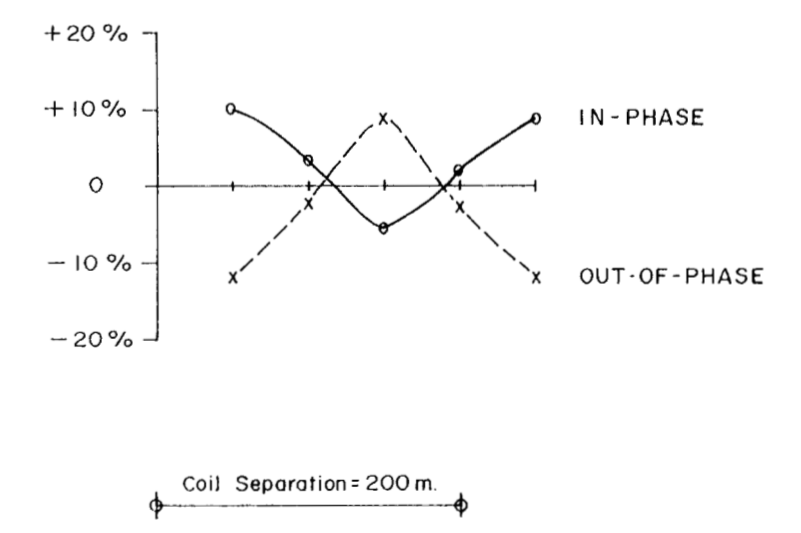
- 1000W
 - 900W
 - 800W
 - 700W
 - 600W
 - 500W
 - 400W
 - 300W
 - 200W
 - 100W
 - 0E
 - 100E
 - 200E
 - 300E
 - 400E
 - 500E



1200N
 1000N
 800N
 600N
 400N
 200N
 0

← NOTE: IP Frequency on this line is 1760-220 Hz

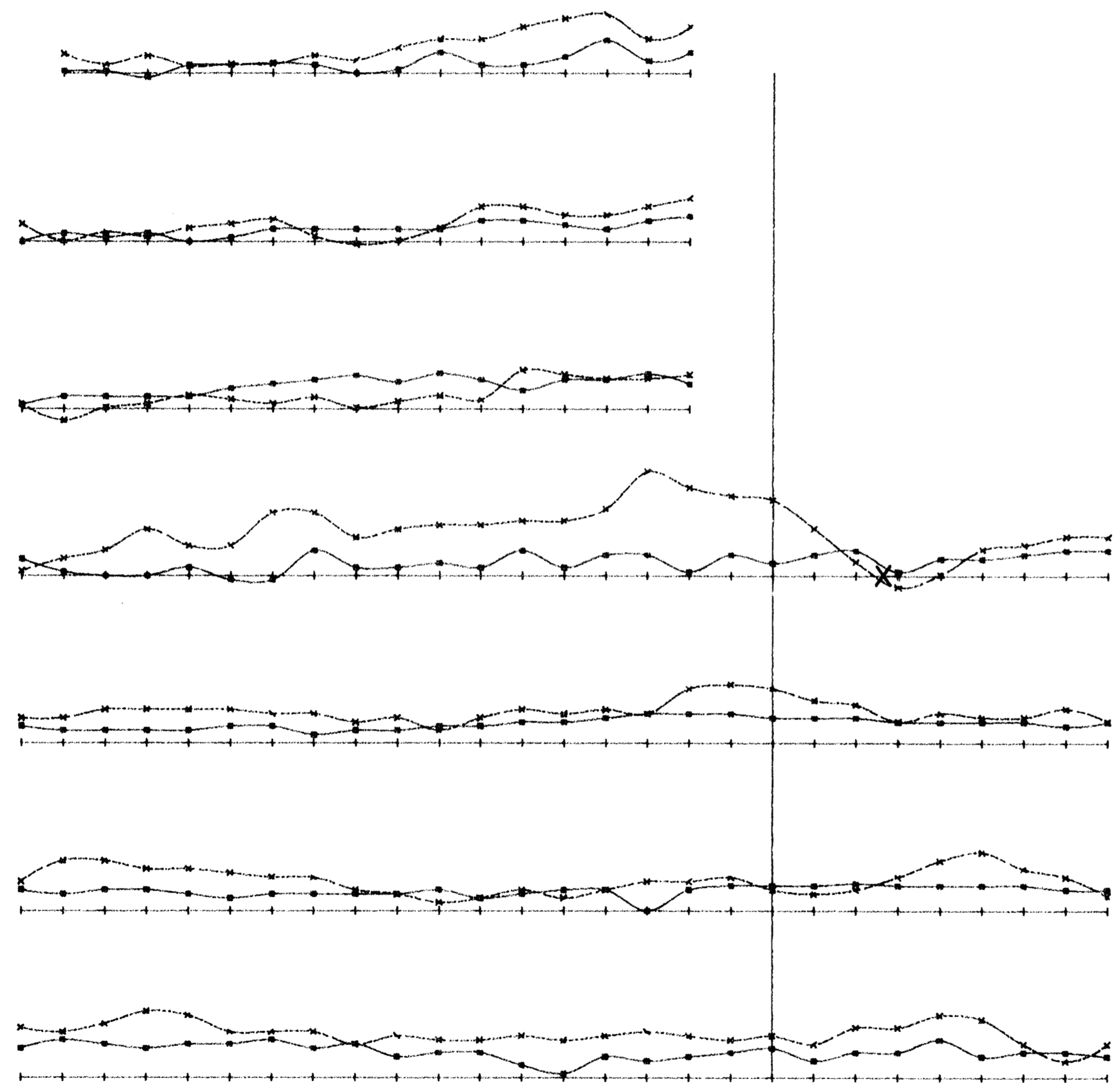
GEOLOGICAL BRANCH
 ASSESSMENT REPORT
15,604



X - CONDUCTOR AXIS

DODGE PROPERTY		FORT STEELE M.D., B.C.		N.T.S. 82-F/2	
Drawn by:	Traced by:	HORIZONTAL LOOP EM			
Revised by:	Date:	Revised by:	Date:	Frequencies	
				IN-PHASE : 1760-440 Hz	
				Line 600N : 1760-220 Hz	
				OUT-OF-PHASE : 1760 Hz	
				Coil Separation = 200 metres	
Scale: 1 : 5000		Date: DECEMBER 1986		Plate: 312-86-4	

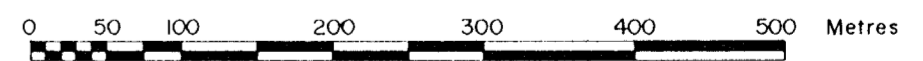
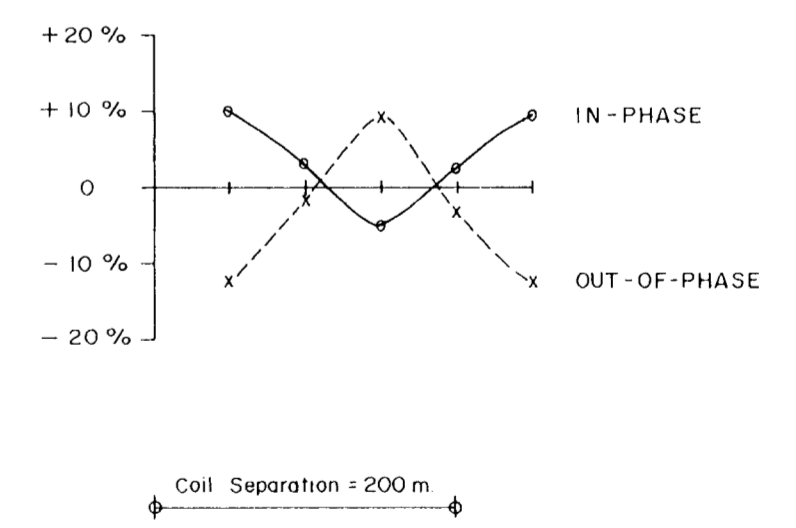
— 1000W
 — 900W
 — 800W
 — 700W
 — 600W
 — 500W
 — 400W
 — 300W
 — 200W
 — 100W
 — 0E
 — 100E
 — 200E
 — 300E
 — 400E
 — 500E



1200N
 1000N
 800N
 600N
 400N
 200N
 0

NOTE: IP Frequency on this line is 3520-220 Hz

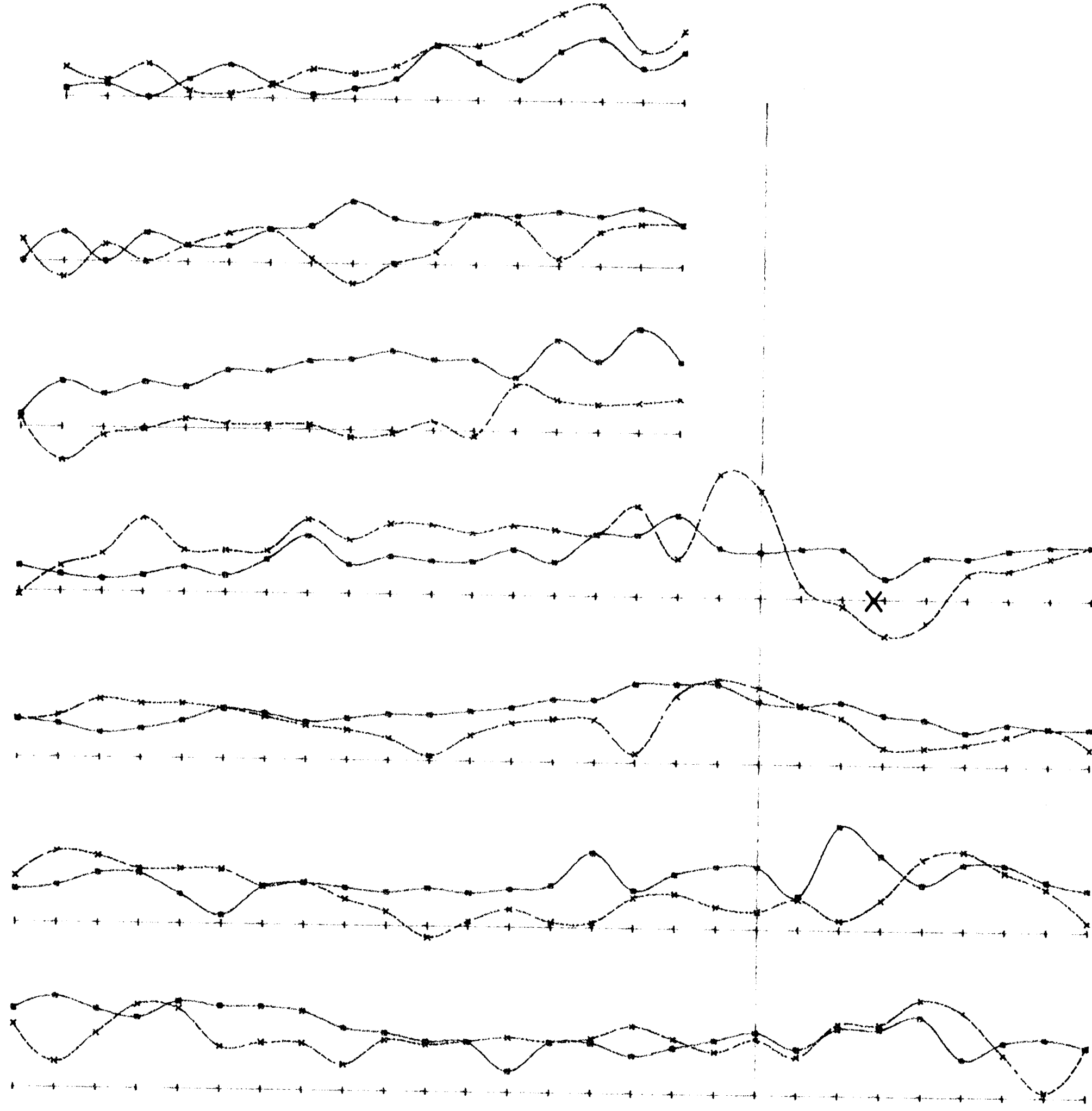
**GEOLOGICAL BRANCH
 ASSESSMENT REPORT**
15,604



X - CONDUCTOR AXIS

DODGE PROPERTY		FORT STEELE M.D.;B.C.		N.T.S. 82-F/2	
Drawn by:	Traced by:	HORIZONTAL LOOP E M			
Revised by	Date	Revised by	Date	Frequencies	
				IN-PHASE : 3520-440 Hz	
				Line 600N : 3520-220 Hz	
				OUT-OF-PHASE : 3520 Hz	
				Coil Separation = 200 metres	
Scale: 1 : 5000		Date: DECEMBER 1986		Plate: 312-86-5	

-- 1000W
 -- 900W
 -- 800W
 -- 700W
 -- 600W
 -- 500W
 -- 400W
 -- 300W
 -- 200W
 -- 100W
 -- 0E
 -- 100E
 -- 200E
 -- 300E
 -- 400E
 -- 500E

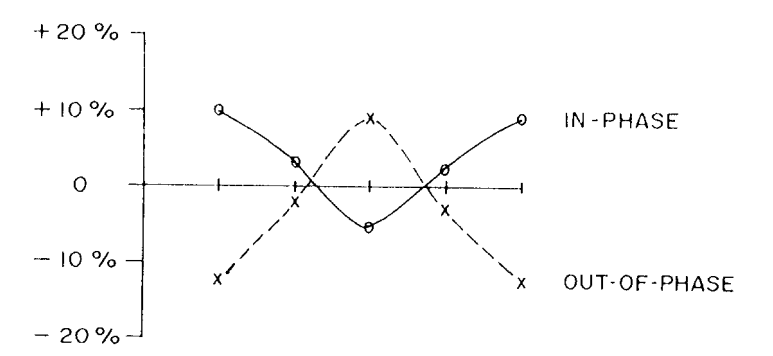


1200N
 1000N
 800N
 600N
 400N
 200N
 0

NOTE: IP Frequency on this line is 7040-220 Hz

GEOLOGICAL BRANCH ASSESSMENT REPORT

15,604

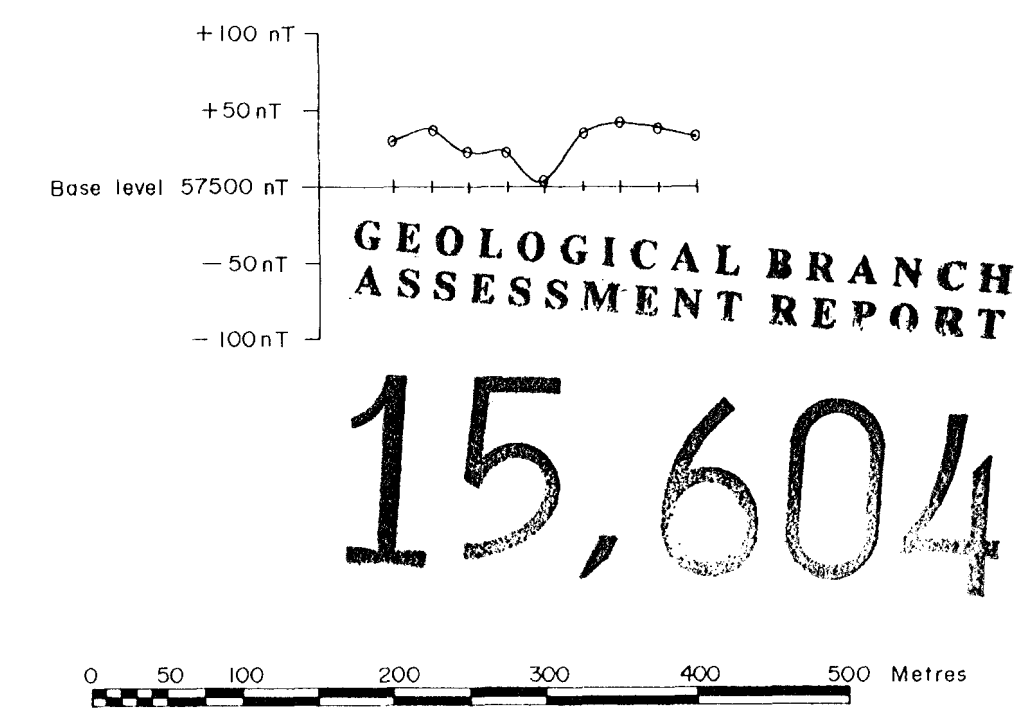
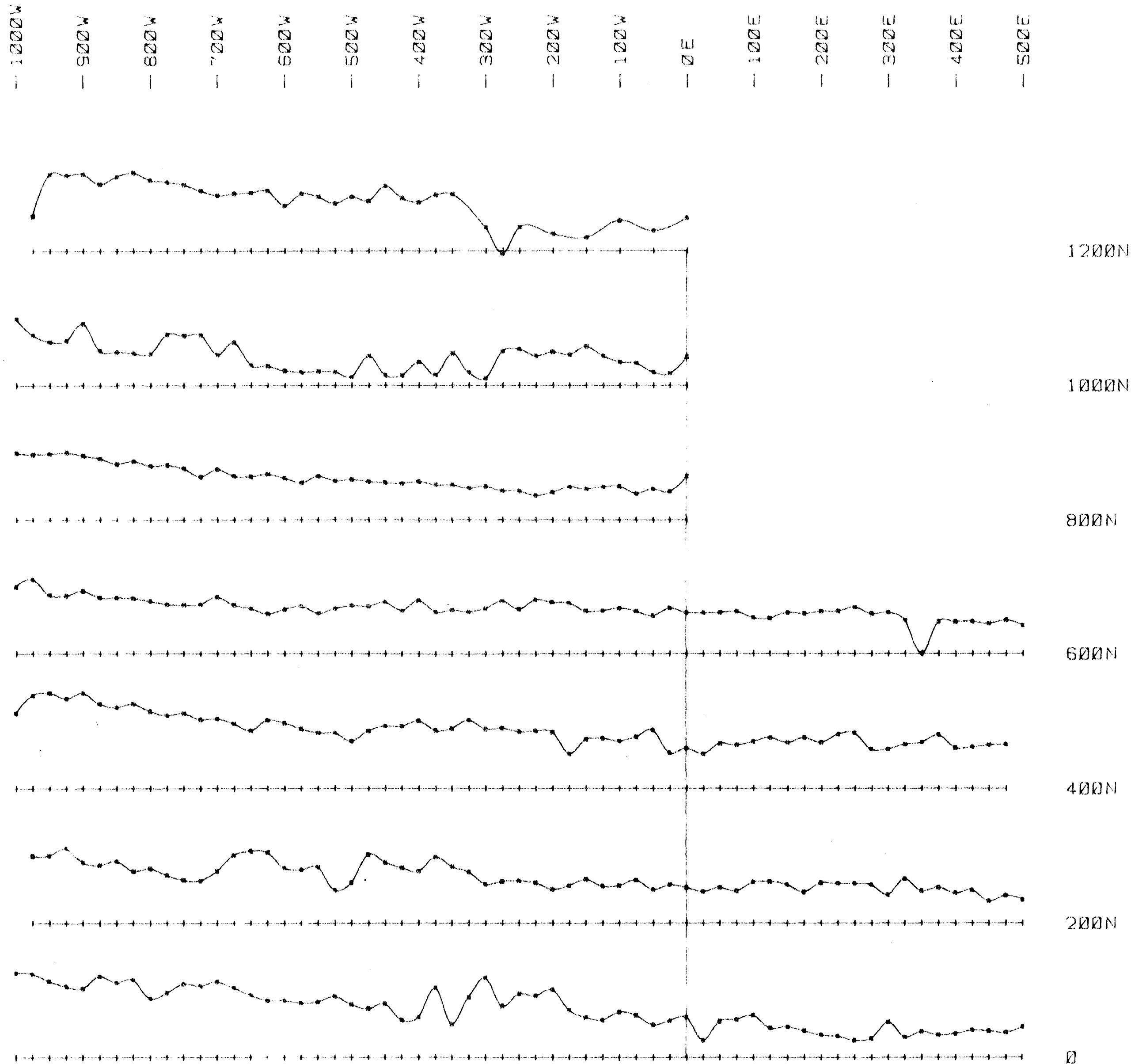



Coil Separation = 200 m.



X - CONDUCTOR AXIS

DODGE PROPERTY		FORT STEELE M.D.; B.C.		N.T.S. 82-F/2
Drawn by:	Traced by:	HORIZONTAL LOOP EM IN-PHASE : 7040-440Hz Line 600N - 7040-220 Hz OUT-OF-PHASE : 7040 Hz Coil Separation = 200 metres		
Revised by:	Date:			
		Scale:	Date:	Plate:
		1 : 5000	DECEMBER 1986	312-86-6



DODGE PROPERTY		FORT STEELE M.D.; B.C.		 N.T.S. 82-F/2	
Drawn by:		Traced by:		MAGNETOMETER DATA Total Field Magnetometer Base Level = 57500 nT	
Revised by	Date	Revised by	Date		
				Scale: 1 : 5000	
				Date: DECEMBER 1986	
				Plate: 312-86-7	