

Interpretation Report on
INDUCED POLARIZATION,
HORIZONTAL LOOP ELECTROMAGNETIC,
AND MAGNETIC SURVEYS
performed on
BONANZA CREEK AREA,
Yukon Territory

for

CANADIAN FERRITE LIMITED

091602

GEOTERREX LIMITED,
SIDNEY, B.C.

October, 1984

Job 4-115

geoterrex
LTD

Registered Issue No I



200100

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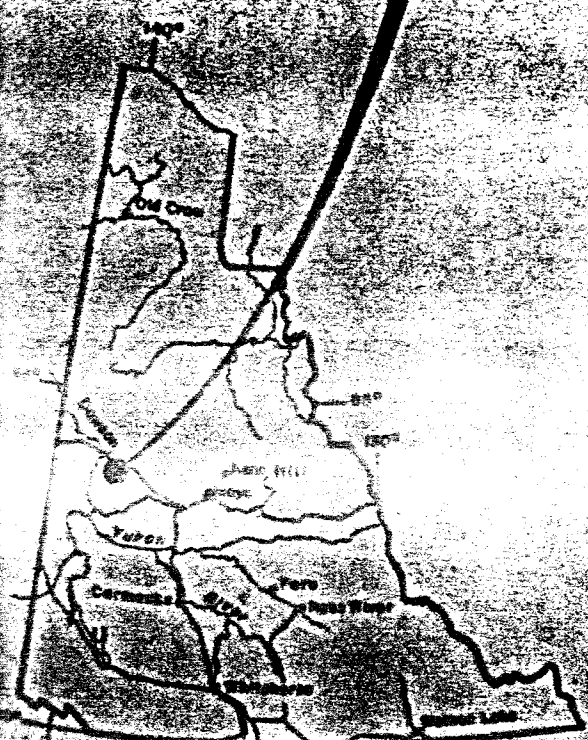
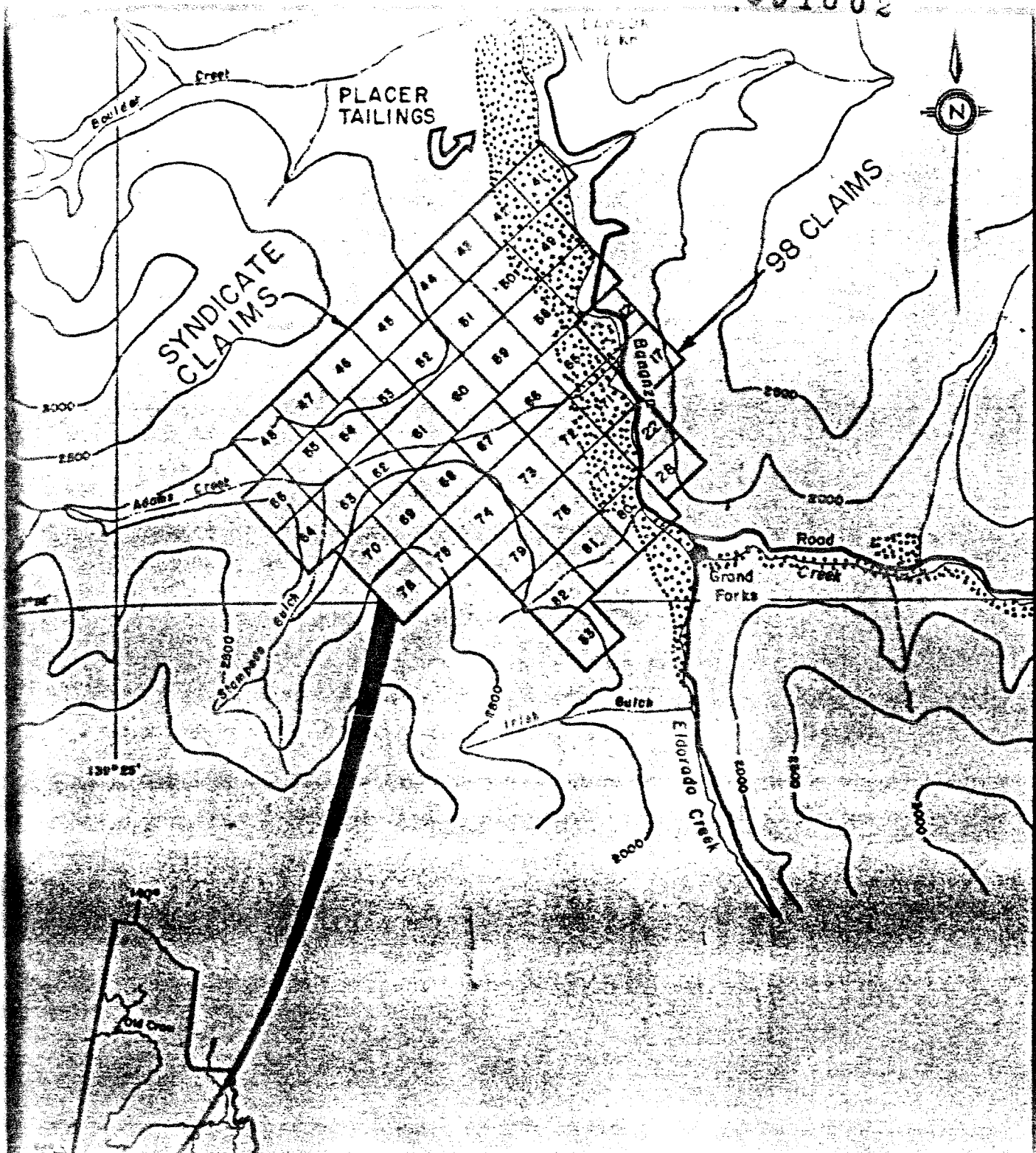
I INTRODUCTION

During the period September 7 to September 20, 1984, Geoterrex Limited of 9865 West Saanich Road, Suite 107A, Sidney, British Columbia, V8L 3S1, conducted an induced polarization, horizontal loop electromagnetic, and magnetic survey on behalf of Canadian Ferrite Limited, 675 West Hastings Street, Suite 1500, Vancouver, British Columbia, V6B 1N2.

Six lines were completed on three separate areas known as Cheechako Hill, Adams Creek, and Skookum Gulch. These areas are located west of Bonanza Creek, near the town of Dawson City, Yukon Territory (see Figure 1).

The survey was designed to follow-up an airborne INPUT survey to delineate possible gold bearing sulphide deposits. Lines were established by Canadian Ferrite personnel.

091602



CANADIAN FERRITE CORPORATION

SYNDICATE AND "98" MINERAL CLAIMS

DAWSON M.D. - Y.T.

NTS 11B-G-14

CLAIM & LOCATION MAP



SCALE 1:50,000

BY R.B. FINE

NOV. 12, 1983

FIGURE 1

YUKON TERRITORY

II PERSONNEL AND EQUIPMENT

A. Personnel

Geoterrex Limited provided the following personnel for the completion of survey related tasks:

James P. Hawkins	Geophysicist/Party Manager
Brian G. Branting	Geophysicist/Operator

In addition, Canadian Ferrite supplied the following helpers:

Perry Grunenberg
Larry Zecchel

Curriculum vitae for Mr. Hawkins can be found in Appendix A, following the report.

B. Equipment

Geoterrex Limited provided the following equipment for field operations:

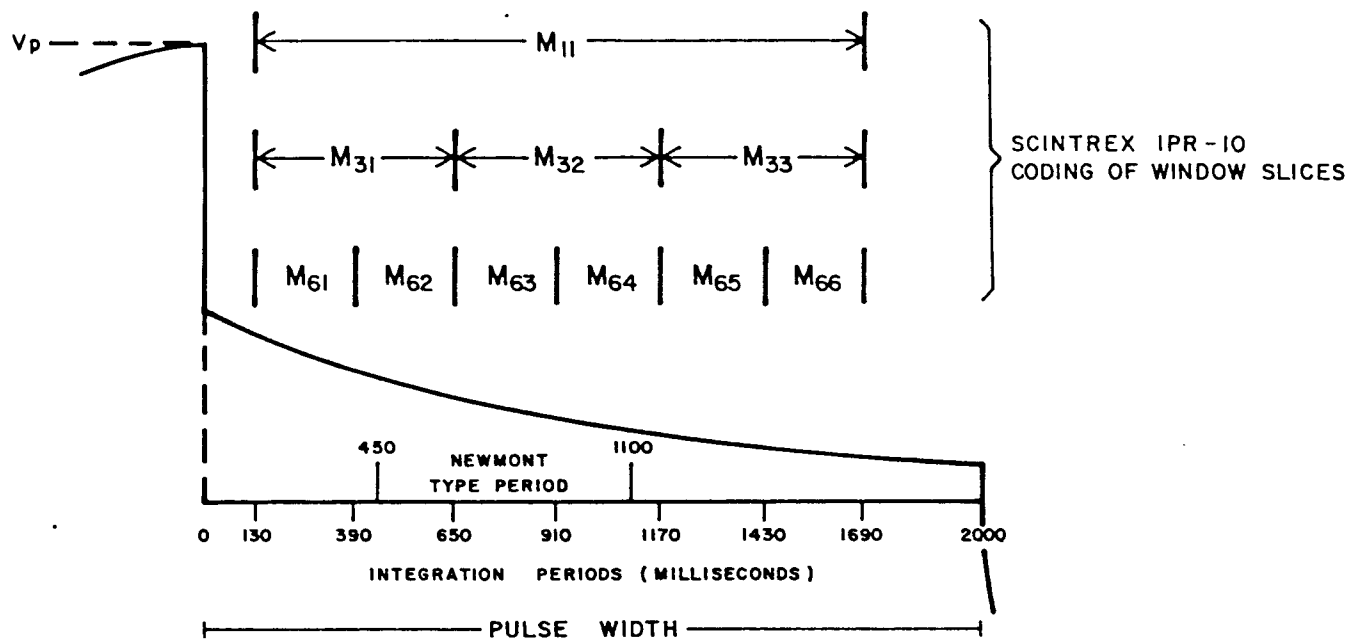
- 1 Scintrex IPR-10A induced polarization receiver
- 1 Scintrex IPR-7 induced polarization receiver
- 1 Elliot 15A induced polarization transmitter and motor generator
- 1 Apex Parametrics Max-min II+ horizontal loop electromagnetic unit
- 1 Scintrex MP-2 proton precession magnetometer
- 2 Motorola FM radio transceivers
- 1 Four wheel drive Suburban

All tools, wire, and ancillary equipment necessary for safe and efficient field operations.

Instrument specifications can be found in Appendix B, following the report. A diagram of the Scintrex IPR-10A induced polarization receiver measurements is shown in Figure 2.

FIGURE 2

SCINTREX IPR-10 TIME DOMAIN INDUCED POLARIZATION MEASUREMENTS



NEWMONT TYPE CHARGEABILITY IS APPROXIMATED BY : $M_n = \frac{M_{32}}{0.7}$

III SURVEY PROCEDURES

A. Induced Polarization

1. Method

The induced polarization method (IP) is based on the electrochemical phenomenon of "over-voltage", that is; on the establishment and detection of double layers of electrical charge at the interface between ionic and electronic conducting material when the electrical current is caused to pass across the interface.

All natural occurring sulphides of metallic lustre, some oxides and graphite give marked induced polarization responses when present in sufficient volume even when such materials occur in low concentrations and in the form of discrete unconnected particles. Thus, induced polarization has general application to the direct detection of disseminated sulphide deposits. Each rock and soil type also exhibits an induced polarization response, usually confined to a relatively low amplitude range, which is characteristic of the mineral or soil. However, certain clays and "laminar" materials including serpentine, sericite and chlorite may give rise to an anomalous response. These effects are attributed largely to "membrane" polarization.

In order to measure IP effects in a volume of rock, a current is caused to flow through it via two current electrodes

contact points and the resulting potential differences are measured across two potential electrode contact points.

In practice, two different techniques are used, namely "Time Domain" and "Frequency Domain". For the Time Domain technique, which was used for this survey, a direct current is allowed to flow for several seconds and then cut off. The decay of the polarization voltages built up during the passage of the current is studied during the time after the current is switched off. In the Frequency Domain technique, a Sine wave current form of two low, but well separated frequencies, is used. Since polarization effects take an appreciable time to build up, the response at the lower frequencies will be greater so that apparent resistivities or transfer impedances between the current and measuring circuits will be larger at lower frequency.

The field measurements taken with the Time Domain technique are as follows:

1. the applied current, I_a , flowing through the two current electrodes;
2. the difference in potential, V_p , existing between the potential electrodes while the current is flowing;
3. the apparent chargeability, M_a , which is the observed IP effect for a single current pulse.

The IP effect measured for the present survey is the normalized integrated decay voltage between 0.45 seconds and 1.10 seconds following the current shut off time. The transmitted current cycle timing was 2 seconds on, 2 seconds off. Figure 3 illustrates an aspect of the induced polarization method.

2. Data Reduction and Presentation

The apparent chargeability, M_a , in milliseconds or millivolt seconds per volt is read directly on the IP receivers used.

From observations of the difference in potential and the applied current, the apparent resistivity may be calculated at each station as follows:

$$\rho_a = \frac{V_p}{I_a} \cdot K$$

where: V_p = the difference in potential in volts;

I_a = applied current in amperes;

K = constant depending on array geometry

The apparent resistivity, ρ_a , is in ohm-metres. For this particular survey, the dipole-dipole array was employed. The K factor for this array is:

$$K = \pi a (n+1) (n+2)$$

where: a = the dipole length in metres;

$n = 1, 2, 3, \text{ etc.};$

n_a = the distance between the near potential electrode and the near current electrode.

FIGURE 3 INDUCED POLARIZATION - RESISTIVITY

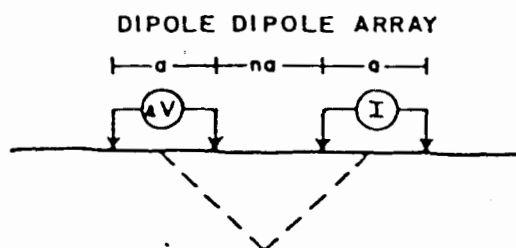
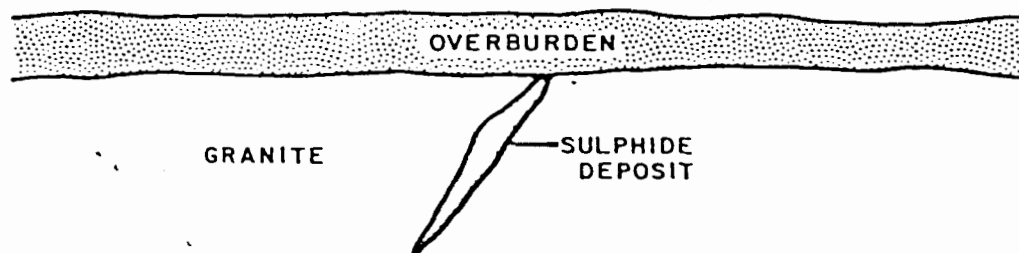
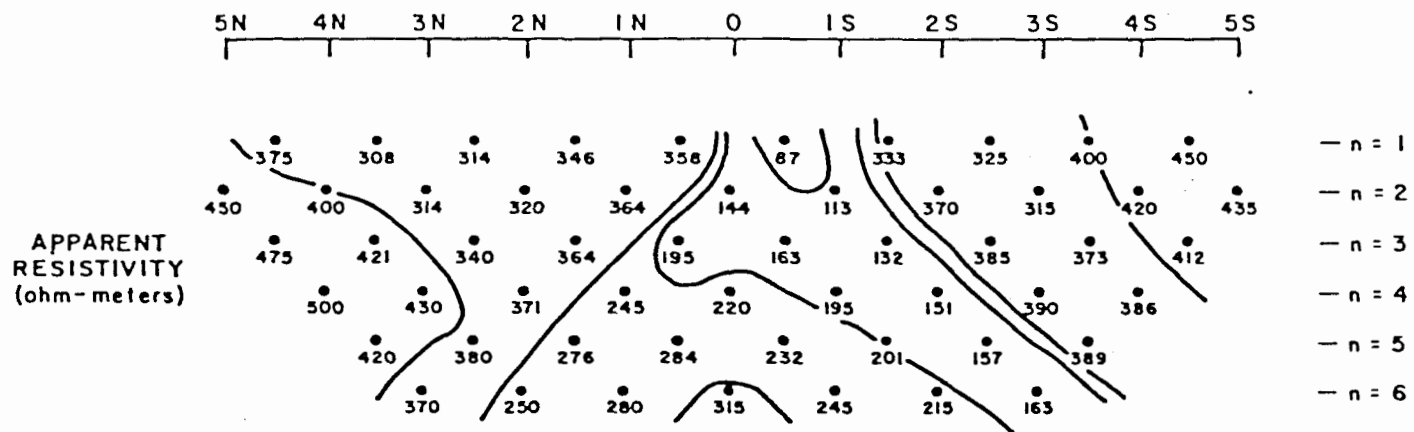
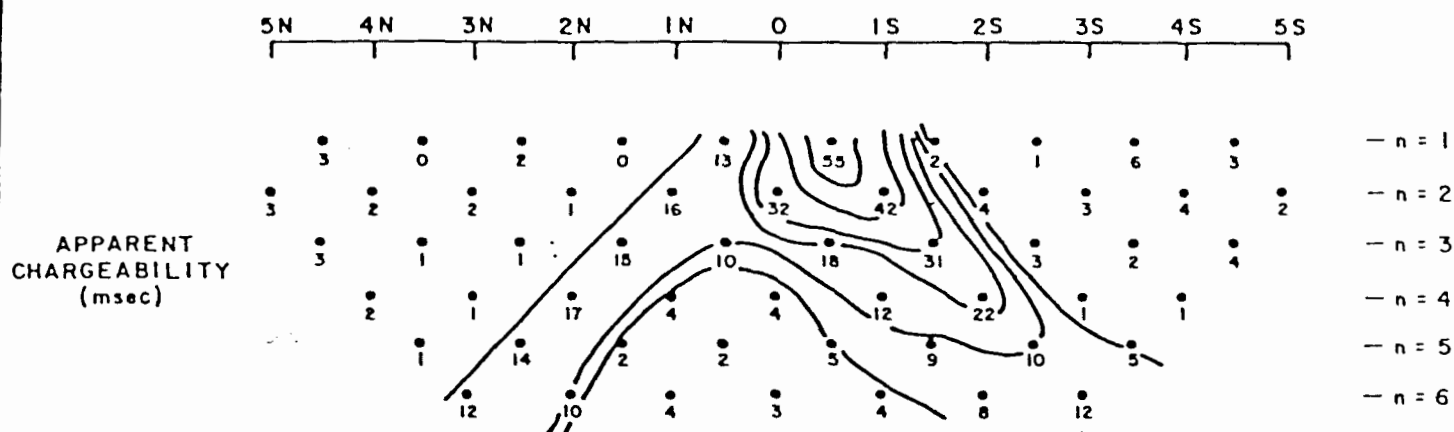
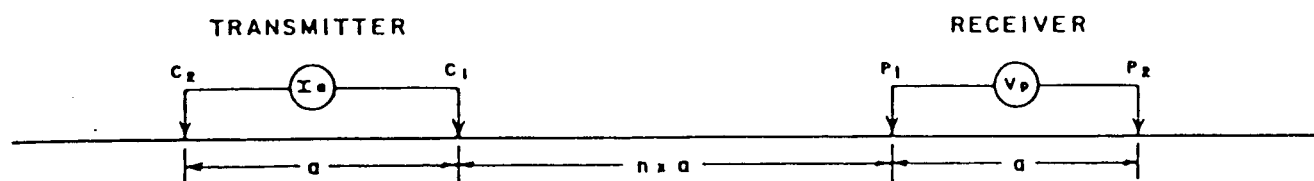


Figure 4 illustrates the dipole-dipole configuration and pseudo-section plotting positions.

Induced polarization pseudo-sections are appended to this report.

FIGURE 4

DIPOLE-DIPOLE ELECTRODE CONFIGURATION



C_1, C_2 CURRENT ELECTRODES

P_1, P_2 POTENTIAL ELECTRODES

I_a APPLIED CURRENT

V_p PRIMARY VOLTAGE

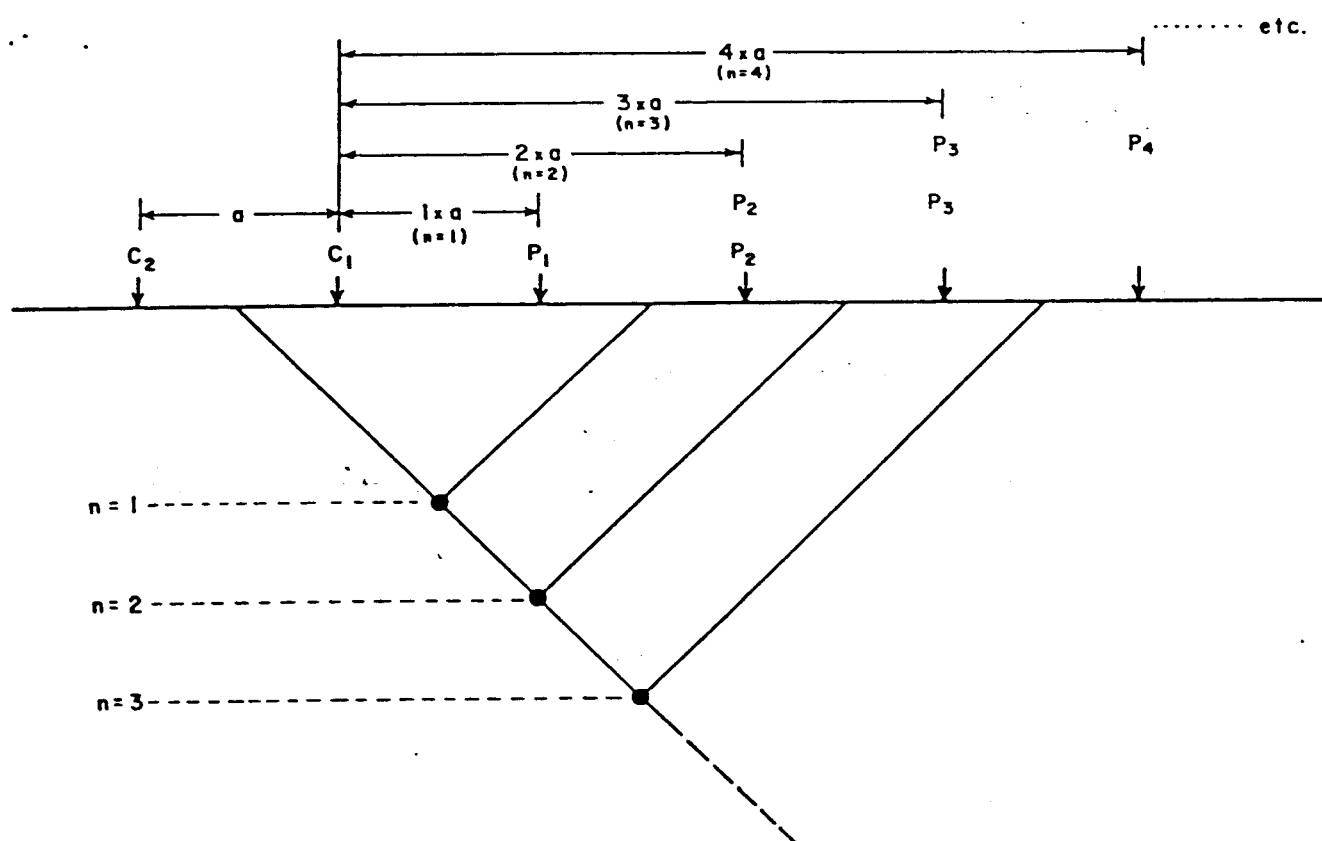
a DIPOLE LENGTH

n 1, 2, 3, ... etc.

APPARENT RESISTIVITY $\rho_a = K_n V_p / I_a$

WHERE $K_n = \pi a n (n+1) (n+2)$

PLOTTING OF MEASUREMENTS ON PSEUDO-SECTIONS



B. Horizontal Loop Electromagnetic

1. Method

For the horizontal loop EM method, two modes of operation are possible. The "maximum" mode requires that two coils, one receiving and one transmitting, are held on a coplanar position and at a fixed distance apart. For the "minimum" mode, the transmitting coil is again held in the horizontal position, but the receiving coil is held in the vertical position, the axis of which contains the transmitter coil. In both cases, the receiver measures the intensity of both the in-phase and quadrature components of the secondary field due to the eddy currents induced in the ground. These measurements are read as a percentage of the primary field intensity. A cable connects the two coils in order to provide a reference signal from the transmitter to the receiver so that the primary field can be cancelled and the phase determined. For the present survey only the "maximum" mode was used.

The results are presented in profiles showing the variation of the in-phase and quadrature components of the secondary field plotted at the midpoint between the coils. The survey procedures using the horizontal loop method requires that the two coils move progressively, as a pair, along the same traverse line. Readings were taken every 25 metres.

The horizontal loop coil configuration gives results which allow a quantitative interpretation of a particular conductor's parameters. The profile over a single vertical conductor shows a negative trough on either side of which the shoulders exhibit positive results. Determinations of depth and conductivity thickness products can readily be made by comparing the

maximum amplitude of the negative trough of the in-phase and quadrature components. The relative thickness of a conductor along the survey traverse may also be determined from the profiles. The shape of the profile over a conductor is sensitive to the direction of the dip.

The operating frequencies and coil separation used are chosen at the geophysicist's discretion. These choices are dependent upon factors such as anticipated depth to the conductor source and the conductivity of the overburden. The coil separation used for the present surveying was 100 metres, with part of line CH-0 being resurveyed with a coil separation of 150 metres to test the conductor at greater depth. The frequencies employed were 222 Hz, 444 Hz, 888 Hz, 1777 Hz, and 3555 Hz to provide additional information to improve the interpretation.

Of the frequencies used, the lower frequencies are generally considered more reliable for quantitative depth and conductivity-thickness determination because they are less distorted by the "inductive thickness effect" of the conductor and "current gathering", the galvanic effect caused by a relatively conductive host rock.

2. Data Reduction and Presentation

The horizontal loop electromagnetic system is sensitive to the transmitter-receiver (Tx-Rx) coil separation and the coplanarity of these coils. In flat terrain, the units are levelled using bullseye levels to achieve coplanarity and as the coil separation is constant, the primary field strength can be effectively tuned out by adjusting the coil separation control, located on the receiver front panel, to the correct coil separation. In rough terrain, however, it is necessary to tilt the coils to the proper inclination to achieve coplanarity and to mathematically correct the EM responses for the effects of the primary field.

Line chainage is important to correct the effects. The accepted practice is to employ a hand held clinometer and determine a constant horizontal station separation through secant chaining. The inclinations are recorded to calculate the inclination for the Tx-Rx coil separation and as the horizontal separation is maintained between the coils allows the following corrections to be applied.

For the in-phase only, the following correction is first added:

$$IP = + \left[1 - \left\{ \cos \cdot \tan^{-1} \left(\frac{\% \text{ slope}}{100} \right) \right\}^3 \right] \times 100$$

then the following correction must be applied to both the in-phase and quadrature response.

$$\times \left\{ \frac{1}{\cos \cdot \tan^{-1} \left(\frac{\% \text{ slope}}{100} \right)} \right\}^3$$

Chainage errors can cause variations in the base level of the in-phase component which appears to be anomalous responses. These can be mathematically corrected once the inclination and slope distance over the mischained line segment have been checked. In some cases, it may be necessary to resurvey the line with the EM system, but this is not always the case. In extremely rough topography, chainage errors become more prevalent due to large numbers of inclination and slope distance measurements that have to be made.

Horizontal loop electromagnetic profiles are appended to this report.

C. Magnetics

1. Method

A magnetometer has a sensor coil which is wrapped by a coil or wire and filled with any dipolar liquid, such as water, kerosene, alcohol, etc. Essentially, protons in the liquid act as small spinning magnetic dipoles which are temporarily aligned when a current is generated in the coil of wire. When the current is removed, the spin of the protons causes them to precess about the direction of the earth's magnetic field, generating a small signal in the same coil used to align the protons. This signal is proportional to the total magnetic field intensity and is accurate within ± 1 gamma.

Variations in the earth's magnetic field may occur from magnetic storms, micropulsations, solar wind, etc. Therefore when conducting magnetic surveys, a field base station is commonly designated and all data is corrected with this station as a reference to diurnal variations. Data is collected along survey "loops" of under two hours duration.

2. Data Reduction and Presentation

As stated above, magnetic data is corrected for diurnal variations with the field base station initial value taken as the base reading.

Magnetic profiles are presented with the horizontal loop electromagnetic profiles, and are appended to the report..

IV SURVEY STATISTICS

A. Cheechako Hill

Three parallel lines, CH-0, CH-2S, and CH-4S were established. Stations were originally located on CH-0 and CH-4S by hip-chain and topofil, but were later secant chained, prior to the horizontal loop electromagnetic survey. Coverage of the Cheechako Hill lines are as follows:

I.P.	CH-0, 5 arrays, 1,300 metres, 850W to 450E
	CH-2S, no coverage
	CH-4S, 4 arrays, 1,050 metres, 850W to 200E
HLEM	CH-0, 5 frequencies, 100 metre coil separation, 1,300 metres, 850W to 450E
	CH-0, 5 frequencies, 150 metre coil separation, 550 metres, 350W to 200E
	CH-2S, 5 frequencies, 100 metre coil separation, 600 metres, 400W to 200E
	CH-2S, 2 frequencies, 100 metre coil separation, 150 metres, 550W to 400W
	CH-4S, 5 frequencies, 100 metre coil separation, 600W to 75E
	CH-4S, 2 frequencies, 100 metre coil separation, 250 metres, 850W to 600W
MAG	CH-0, 1,400 metres, 900W to 500E
	CH-2S, 850 metres, 600W to 250E
	CH04S, 1,025 metres, 900W to 125E

B. Adams Creek

Two sub-parallel lines, LA-1 and LA-2, that partly overlap were established. Geophysical coverage on these lines are as follows:

I.P. LA-1, one array, 300 metres, 400W to 100W

LA-2, one array, 300 metres, 775W to 475W

HLEM LA-1, 5 frequencies, 100 metre coil separation,
400 metres, 450W to 50W

LA-2, 5 frequencies, 100 metre coil separation,
750 metres, 800W to 50W

MAG LA-1, 500 metres, 500W to 0

LA-2, 850 metres, 850 W to 0

C. Skookum Gulch

One line, LS-0, was established. Two induced polarization arrays were surveyed, covering 350 metres between 400W and 50W. Instrument problems prevented the second array from being completed. No horizontal loop electromagnetic or magnetic surveying were conducted on LS-0. Stations were located with hip-chain and topofil.

IV DISCUSSION OF RESULTS

A. General

Three geophysical methods, namely induced polarization, horizontal loop electromagnetic, and magnetic, were used to follow-up airborne anomalies, with varying success. Generally speaking, the induced polarization method proved the most successful, readily delineating polarizable bodies. The horizontal loop electromagnetic surveys confirmed the induced polarization anomalies, but seemed to respond to the edges of the polarizable body, and not the centre. Valuable information on the dip of the bodies was gathered from the electromagnetic data.

The magnetic data shows little or no correlation with either of the other methods, and is generally featureless. The magnetic data was not used in the interpretation of the results.

B. Cheechako Hill

Three lines, CH-0, CH-2S, and CH-4S were established to follow up a discrete three channel airborne anomaly at 20160E and 20170C. Four anomalous areas were defined with ground follow-up surveys.

The first anomaly stretches from 212E on CH-0 to 112E on CH-2S. This is a poorly conductive electromagnetic anomaly, as indicated by the ratio of inphase to quadrature response being less than one, the distance between zero cross-overs being less than the coil separation, and the inphase and quadrature responses indicating different dips and current channeling paths. It is interpreted as having a conductivity-thickness in the range of five to eight siemens, depending on the frequency used in the interpretation procedure. Depth of the conductor is less than twenty metres.

The induced polarization pseudo-section indicates a good polarizable body at 250E on CH-0. It is reasonable to expect a similar result on CH-2S if induced polarization had been conducted on this line. Percentage of polarizable material is interpreted to be greater than 20% to account for the high chargeabilities and weak electromagnetic conductivity.

The inphase electromagnetic response is likely seeing a west dipping contact between polarizable and non-polarizable material, while the quadrature response is elevated to the east by the polarizable body. An accurate dip cannot be determined, although it should be in the range of 50° to 60°.

A hole to test both the induced polarization anomaly at 250E on CH-0 and the electromagnetic anomaly at 212E on CH-0 should be drilled; collar at 212E, dip of approximately 45°, azimuth grid east.

Another anomalous area is located at 100W on CH-4S, and may be a continuation of the previous unit. The electromagnetic results, however, indicate nothing but conductive overburden, as reflected by the rise in background of both inphase and quadrature responses. The induced polarization results support the interpretation of an overburden source, although there is a indication of polarizable material at a depth of greater than forty metres at 125W on CH-4S.

The second anomalous area is located at 125W on CH-0 and is very similar to the first anomaly. It exhibits the same electromagnetic and induced polarization characteristics except that it appears to come to surface. Interpretation of the electromagnetic results indicate a conductivity-thickness in the order of one siemen, and a depth of less than twenty metres. The source is either very weak or disseminated.

The induced polarization anomaly centred at 125W on CH-0 should be drilled; collar at 125W, dip of 45°, azimuth grid east.

The third anomaly, located at 375W on CH-2S, could be interpreted as a very weak electromagnetic conductor at approximately forty metres depth, but is most likely surficial. This should be considered a secondary drill target at best.

The fourth anomaly is located at 450W on CH-4S. The very poor inphase response on the electromagnetic survey indicates a very weak conductor, with a conductivity-thickness of less than one siemen. The induced polarization results indicate a shallow body of polarizable material centred at 425W that should be drilled; collar at 425W, dip of 45° to 60° (?), azimuth grid east.

C. Adams Creek

Two lines, LA-1 and LA-2, were established to follow up separate three channel airborne anomalies at 20190F and 20180B, respectively.

An anomalous area is present at approximately 250W on LA-1. The electromagnetic results appear to be a "contact" anomaly, with a more conductive terrain to the west. The axis is located at 250W. No quantitative interpretation is possible from the electromagnetic data. The induced polarization interpretation agrees with the electromagnetic results, with an anomaly centred at 275W on LA-1 and a "tail" of polarizable material at depth to the west.

The induced polarization anomaly at 250W should be drilled, from west to east.

A second anomalous area is located at 600W on LA-2. The electromagnetic interpretation indicates a conductor at 600W, dipping west at approximately 60° (?), with a conductivity-thickness of three siemens and a depth of less than ten metres. It has highly conductive background. The induced polarization survey defined shallow polarizable material at 600W, with a good resistivity low associated with it.

This anomaly should be drilled at 600W on LA-2, to a depth of approximately fifty metres.

D. Skookum Gulch

One line, LS-0, was established to follow up a single channel airborne anomaly, but in a favourable geologic setting.

The induced polarization results show little in the way of a polarizable body, although the entire area appears to be highly conductive. A subtle, ill-defined resistivity low is apparent at approximately 262W. The geophysical results do not warrant a drill hole.

IV CONCLUSIONS AND RECOMMENDATIONS

Anaomalous areas are readily apparent from the induced polarization data. The horizontal loop electromagnetic survey also detects anomalous areas, but seems to reflect the edges of the polarizable bodies. No response is apparent from the magnetics data.

If further work in this area is warranted, it is suggested that just the induced polarization method be used. A gradient array survey with an electrode separation (AB) in the order of three kilometres would allow an area one kilometre by two kilometre to be surveyed quickly and efficiently. Anomalous areas would then be detailed with dipole-dipole.

Consideration should also be given to having the INPUT airborne survey results re-interpreted. Many of the noted conductors appear to be from overburden sources, while some bedrock conductors were overlooked. Re-interpretation may help assign priorities for ground follow-up work, and would save money in the long run.

Geoterrex Limited would like to thank Canadian Ferrite, and especially Art Troup, Perry Grunenberg, and Larry Zecchel for their assistance and support throughout the survey.

Respectfully submitted

James P. Hawkins
James P. Hawkins
Geophysicist

APPENDIX A

Curriculum Vitae

CURRICULUM VITAE

NAME: HAWKINS, James P.

POSITION: Western Manager, Ground Geophysics Surveys

NATIONALITY: Canadian

DATE OF BIRTH: 23 July, 1954

EDUCATION: 1973 - 1977 University of Western Ontario
B.Sc. Geophysics

1977 - 1978 University of New Brunswick
extended studies in Geology

EXPERIENCE:

1975 - 1978 Geophysical assistant on Geological Surveys of
(summers) Canada seismic crews in Ontario, Quebec, Maritimes,
and Western and high Arctic. Eventually acting as
party chief on permafrost projects; using resistivity,
radiometric, land based and marine seismic surveys.

1978 - 1982 Field Geophysicist with Geoterrex Limited conducting,
supervising and interpreting various types of ground
surveys including regional and detailed gravity,
I.P., seismic, magnetic, and frequency and time-
domain E.M. These projects have involved work from
the Canadian Arctic to the American Southwest, with
special emphasis on the Canadian and American Cordillera.

1982-present Geoterrex' Western Manager of Ground Geophysical
Surveys responsible for all phases of management,
interpretation, scheduling, supervision and long
range planning.

APPENDIX B

Instrument Specifications

SPECIFICATIONS

SCINTREX IPR-10A

INDUCED POLARIZATION RECEIVER

MANUFACTURER: Scintrex Limited
222 Snidercroft Road,
Concord, Ontario, Canada L4K 1B5

USE: Induced Polarization/Resistivity

TYPE: Time Domain-Digital/Analog Recording Capability

INPUT IMPEDANCE: 3 megohms

PRIMARY VOLTAGE RANGE: 30 microvolts to 30 volts - 12 steps

ACCURACY: $\pm 3\%$ full scale; 0.1% resolution

CHARGEABILITY

RANGE: 100 milliseconds (100% full Scale)

ACCURACY: $\pm 3\%$ full scale; 0.1 milliseconds resolution

PRIMARY SP BUCKOUT

RANGE: ± 1 volt with 1% accuracy, 1 millivolt resolution

AUTOMATIC SP TRACKING

RANGE: 20 times, V_p , 30 microvolts to 1 volt

ANALOG RECORDER

OUTPUT: ± 4 volts full range, 1 K ohm source resistance

DIGITAL DISPLAY: LCD continuous (above -10°C)
LED flashing (below -10°C)

TRANSMITTER TIMING

STABILITY: Need only exceed measuring program 1,2,4,8
quarter periods

POWER SUPPLY: 4 D size dry cells, 1 alkaline dry cell-penlight

OPERATING RANGE: 15°F to 140°C / -10°C to $+ 60^{\circ}\text{C}$

DIMENSIONS: 12 x 6 x 7 inches / 31 x 15 x 17 centimeters

WEIGHT: 8 pounds / 3.6 kilograms

SPECIFICATIONS

SCINTREX IPR-7

INDUCED POLARIZATION RECEIVER

MANUFACTURER: Scintrex Limited,
222 Snidercroft Road,
Concord, Ontario

USE: Induced Polarization/Resistivity

TYPE: Time Domain, Analog Newmont type

INPUT IMPEDANCE: 300 K ohms

PRIMARY VOLTAGE RANGE: 300 microvolts to 30 volts

ACCURACY: $\pm 3\%$ full scale

CHARGEABILITY (M)

RANGE: 0 to 100 and 0 to 300 milliseconds

ACCURACY: $\pm 5\%$ full scale

CURVE FACTOR (L)

RANGE: 0 to 100 and 0 to 300 milliseconds

ACCURACY: $\pm 5\%$ full scale

DELAY TIME BEFORE
INTEGRATION: 0.45 seconds

INTEGRATION PERIOD: 0.65 seconds

SP AND VLF NOISE
COMPENSATION: Manual: ± 1.5 millivolts
Automatic: 1 m^{V} range $\pm \text{m}^{\text{V}}$ total
 30 m^{V} range $\pm \text{m}^{\text{V}}$ total

OPERATING TEMPERATURE: -20°F to 130°F / -29°C to 55°C
(to 100% humidity non-condensing)

POWER SUPPLY: Internal rechargeable Nicad batteries
12 volts external charger

DIMENSIONS: 14 x 11 x 6.5 inches / 35.5 x 28 x 16.5 centimeters

WEIGHT: 13.5 pounds / 6.1 kilograms including batteries

SPECIFICATIONS

ELLIOT 15A

INDUCED POLARIZATION TRANSMITTER

MANUFACTURER: Elliot Geophysical Company
4653 East Pima Street,
Tucson, Arizona 85712

USE: Induced Polarization/Resistivity

TYPE: TimeDomain - Solid State

INPUT POWER: Single Phase - 400 cps, 115 volts, 2 KVA

OUTPUT POWER
VOLTAGE: 200 to 3000 volts in 12 taps
CURRENT: 5 amperes maximum

TIMING CYCLE: On and off periods adjustable

OPERATING TEMPERATURE: +5°F to 140°F / -15°C to + 60°C

DIMENSIONS: 10.5 x 16 x 11.5 inches/26.7 x 40.6 x 29.2 centimeters

WEIGHT: 45 pounds/20.4 kilograms

SPECIFICATIONS

ELLIOT 15A

INDUCED POLARIZATION TRANSMITTER POWER SUPPLY

MANUFACTURER: Elliot Geophysical Company
4653 East Pima Street,
Tucson, Arizona 85712

TYPE: Alleco Brushless, single phase, 400 cps,
120 volts, shaft driven

OUTPUT: 2 KVA

ENGINE: Briggs and Stratton type 100232, gasoline 4 hp,
aircooled, recoil start

DIMENSIONS: 17 x 25 x 18 inches/ 43.2 x 63.5 x 45.7 centimeters

WEIGHT: 72 pounds/ 32.7 kilograms

SPECIFICATIONS

APEX PARAMETRICS MAXMIN II+

HORIZONTAL LOOP ELECTROMAGNETIC UNIT

MANUFACTURER: Apex Parametrics Limited
200 Steelcase Road East
Markham, Ontario, Canada L3R 1G2

USE: a) Horizontal Loop Coplanar System (Max)
b) Horizontal Loop Minimum Coupled System (Min)
c) Vertical Loop-Fixed Transmitter (VL)

TYPE: 1) In phase and Quadrature components of
secondary measured in Max and Min modes.
2) Tilt angle of total field measured in
VL mode.
3) Direct readout on analog meters.

FREQUENCIES: 222,444,888,1777 and 3555 cps

SCALE RANGES: In phase: $\pm 20\%$ normal, $\pm 100\%$ by switch
Quadrature: $\pm 20\%$ normal, $\pm 100\%$ switch,
Tilt: $\pm 75\%$ slope, Null: null sensitivity
adjustable by separation switch.

COIL SEPARATIONS: Metres: 50,100,150,200,250, and 300 (MM II)
Feet: 200,300,400,600,800 and 1000 (MM II F)

PENETRATION: Up to 0.75 coil separation

READING REPEATABILITY: $\pm 0.25\%$ to $\pm 1\%$, dependent on coil separation
and frequency used.

TRANSMITTER DIPOLE MOMENT: 275 Atm^2 at 222 cps, 250 Atm^2 at 444 cps,
200 Atm^2 at 888 cps, 110 Atm^2 at 1777 cps and
55 Atm^2 at 3555 cps.

Page 2

Apex Parametrics Maxmin II+

Horizontal Loop Electromagnetic Unit

POWER SUPPLY:

Receiver : 4 - 9 volt alkaline transistor
radio type

Transmitter: 12 volt 6 amp-hour Gel-cell
rechargeable battery.

OPERATING TEMPERATURE:

- 40°F to + 140°F / -40°C to 60°C

WEIGHTS:

Receiver: 13 pounds/6 kilograms

Transmitter: 30 pounds / 13.5 kilograms

SPECIFICATIONS

SCINTREX MP-2

GROUND MAGNOMETER

MANUFACTURER: Scintrex Limited
222 Snidercroft Road,
Concord, Ontario, Canada L4K 1B5

TYPE: Portable proton precession

RANGE: 20,000 to 100,000 gammas (25 overlapping steps)

SENSITIVITY: 1 gamma

ACCURACY: ± 1 gamma over full range

SAMPLE RATE: Manual -3.7 seconds, automatic -3.7 seconds
repetitive

GRADIENT TOLERANCE: Up to 1500 gammas/foot or 5000 gammas/metre

OUTPUT: 5 digit LED readout in gammas

POWER SUPPLY: 8 alkaline "D" dry cells (flashlight type)

TEMPERATURE RANGE: -30°F to +140°F/-35°C to +60°C

SENSOR: Omnidirectional, shielded, noise-cancelling
dual coil, optimized for high gradient tolerance

DIMENSIONS: Console: 3 x 6 x 10 inches/8 x 16 x 25 centimeters
Sensor: 3 x 6 inches/8 x 15 centimeters
Staff: 1 x 61 inches/3 x 155 meters

WEIGHT: Console: 3.96 pounds/1.8 kilograms
Sensor: 2.9 pounds/1.3 kilograms
Staff: 1.3 pounds/0.6 kilograms

Vegetation is mixed boreal forest and tundra. Immature and stunted stands of aspen, balsam poplar, and birch are present in the valley bottoms and are beginning to reclaim the older mining areas. Softwood timber consisting mainly of white and black spruce are limited to slopes and ridge tops.

1.3 CLAIM INFORMATION

The property is located in the Dawson Mining District of northwestern Yukon Territory and comprises 47 claims covering an area of approximately 899 hectares on the west side of Bonanza Creek. Claim information is listed in TABLE I below:

TABLE I

CLAIM STATUS

CLAIM NAME	RECORD NO.	DATE CLAIM LOCATED
Syndicate 41	YA 79238	14 September, 1983
Syndicate 42	YA 79239	14 September, 1983
Syndicate 43	YA 79240	14 September, 1983
Syndicate 44	YA 79241	14 September, 1983
Syndicate 45	YA 79242	14 September, 1983
Syndicate 46	YA 79243	14 September, 1983
Syndicate 47	YA 79244	14 September, 1983
Syndicate 48	YA 79245	14 September, 1983
Syndicate 49	YA 79246	14 September, 1983
Syndicate 50	YA 79247	14 September, 1983
Syndicate 51	YA 79248	14 September, 1983
Syndicate 52	YA 79249	14 September, 1983
Syndicate 53	YA 79250	14 September, 1983
Syndicate 54	YA 79251	14 September, 1983
Syndicate 55	YA 79252	14 September, 1983
Syndicate 56	YA 79253	14 September, 1983
Syndicate 57	YA 79254	14 September, 1983
Syndicate 58	YA 79255	14 September, 1983
Syndicate 59	YA 79256	14 September, 1983
Syndicate 60	YA 79257	14 September, 1983
Syndicate 61	YA 79258	14 September, 1983
Syndicate 62	YA 79259	14 September, 1983
Syndicate 63	YA 79260	14 September, 1983
Syndicate 64	YA 79261	14 September, 1983
Syndicate 65	YA 79262	15 September, 1983

CLAIM STATUS (Continued)

CLAIM NAME	RECORD NO.	DATE CLAIM LOCATED
Syndicate 66	YA 79263	15 September, 1983
Syndicate 67	YA 79264	15 September, 1983
Syndicate 68	YA 79265	15 September, 1983
Syndicate 69	YA 79266	15 September, 1983
Syndicate 70	YA 79267	15 September, 1983
Syndicate 71	YA 79268	15 September, 1983
Syndicate 72	YA 79269	15 September, 1983
Syndicate 73	YA 79270	15 September, 1983
Syndicate 74	YA 79271	15 September, 1983
Syndicate 75	YA 79272	15 September, 1983
Syndicate 76	YA 79273	15 September, 1983
Syndicate 77	YA 79274	15 September, 1983
Syndicate 78	YA 79275	15 September, 1983
Syndicate 79	YA 79276	15 September, 1983
Syndicate 80	YA 79277	15 September, 1983
Syndicate 81	YA 79278	15 September, 1983
Syndicate 82	YA 79279	15 September, 1983
Syndicate 83	YA 79280	15 September, 1983
"98" 12	YA 79560	5 December, 1983
"98" 17	YA 79565	5 December, 1983
"98" 22	YA 79570	5 December, 1983
"98" 28	YA 79576	5 December, 1983

1.4 HISTORY AND PREVIOUS PRODUCTION

The colourful history of discovery, development, and subsequent mining of placer gold in the Klondike has been documented by many authors and historians and is therefore treated only briefly herein.

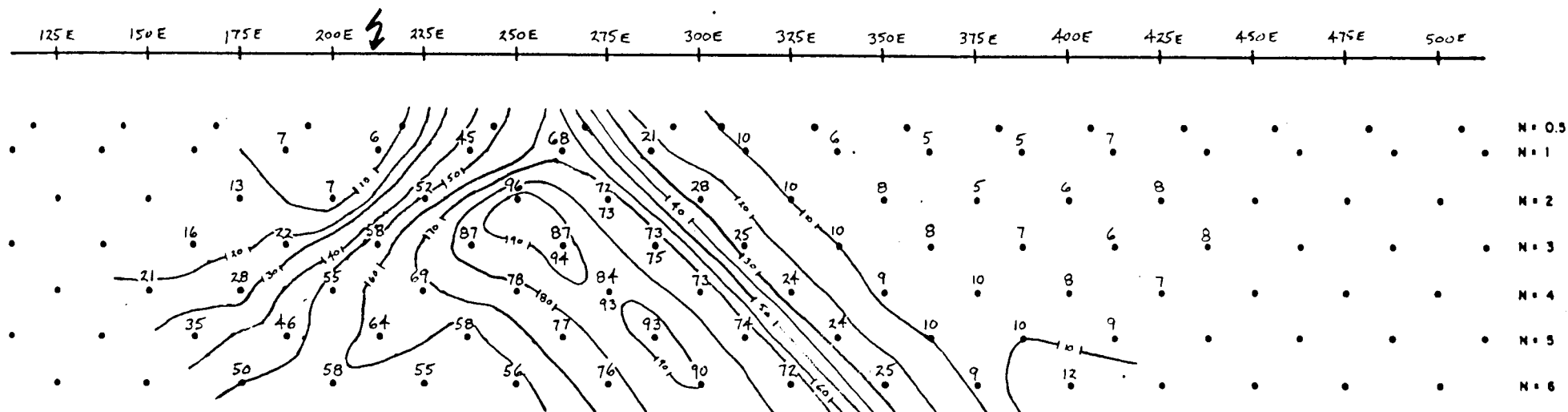
The earliest reported discovery of gold dates to the mid-1800's, but not until the phenomenally rich "Klondike Discovery" in 1896 on Bonanza Creek and the subsequent gold rush of 1897-98, was much interest paid to the area. Gold production from the Western Cordillera of Canada to the end of 1978 totals 35 million ounces, of which over 11 million ounces were produced from the Klondike.

The mining history of the Klondike can be divided into four overlapping periods: 1) hand and primitive mining, 2) dredging, 3) dormant, and 4) renewed activity.

Hand and primitive mining methods lasted about nine years (1896 to 1905) and were undertaken usually by individuals or small groups. Production through these early years was estimated by McConnell in 1905 to have been over 5.5 million ounces; this production was primarily by shaft sinking and drifting along bedrock or by open-cut mining. When water was available and the topography allowed the use

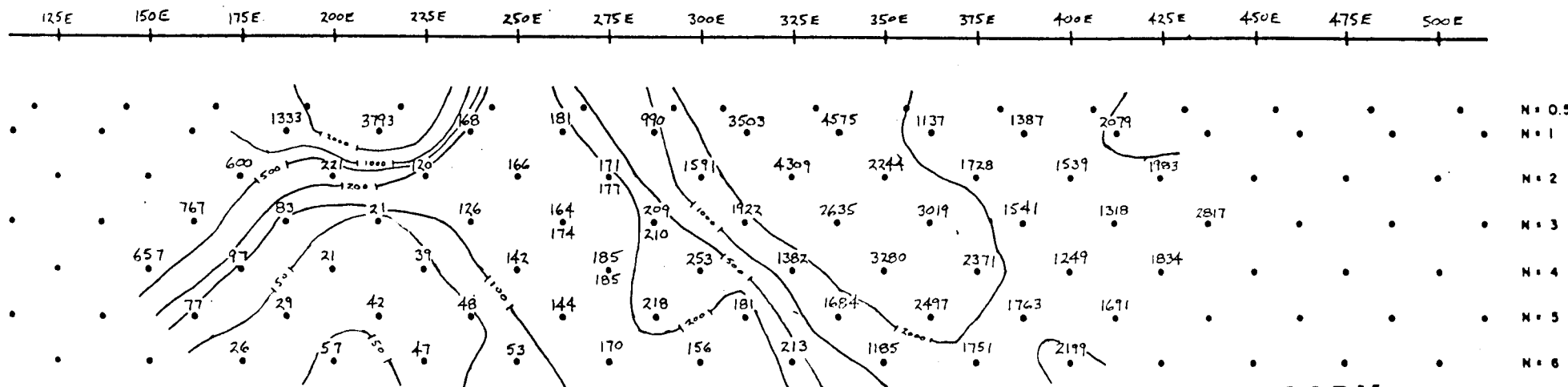
CONTOUR INTERVAL - 10 msec.

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1.25 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

LINE #: CH-0

LINE DIRECTION: _____

DIPOLE LENGTH: 25 METRES

DATE: SEPT 14 1984

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

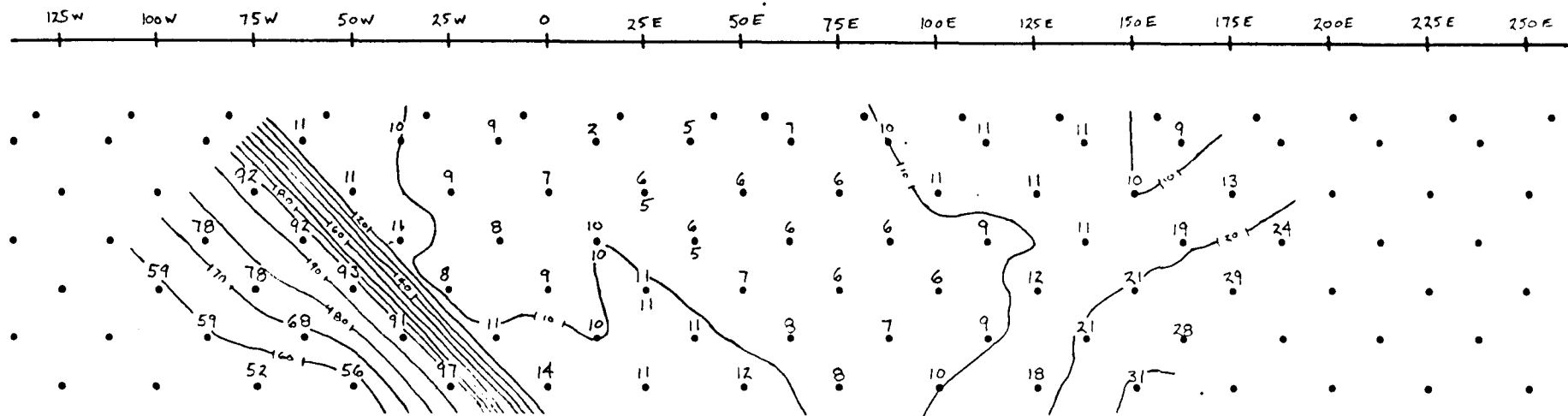
(DIPOLE - DIPOLE ARRAY)

PROJECT #: 4-115



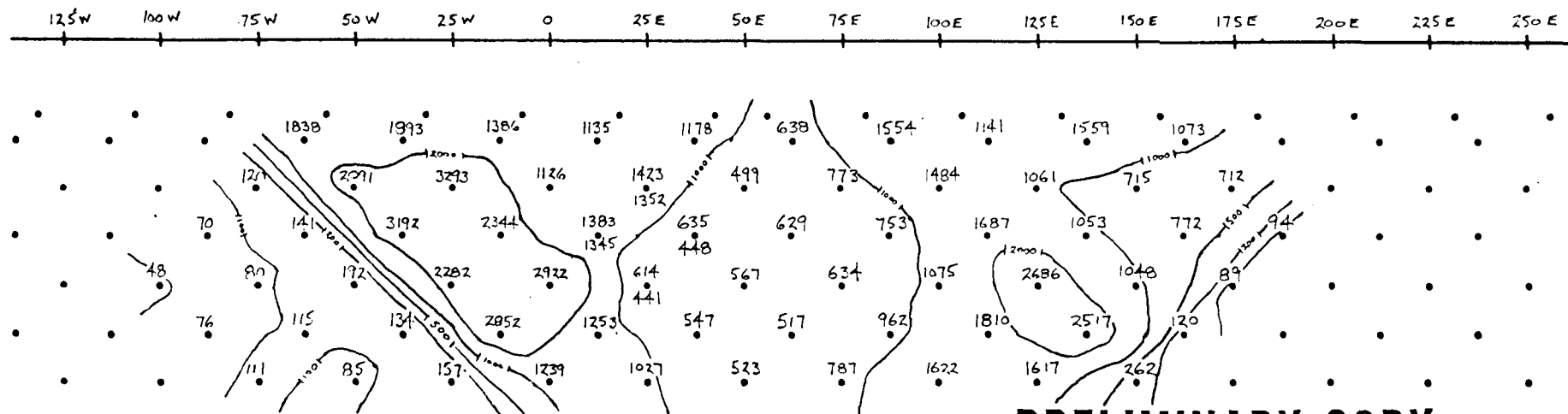
CONTOUR INTERVAL - 10 msec

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1.25 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

LINE # : CH - 0

LINE DIRECTION :

DIPOLE LENGTH : 25 METRES

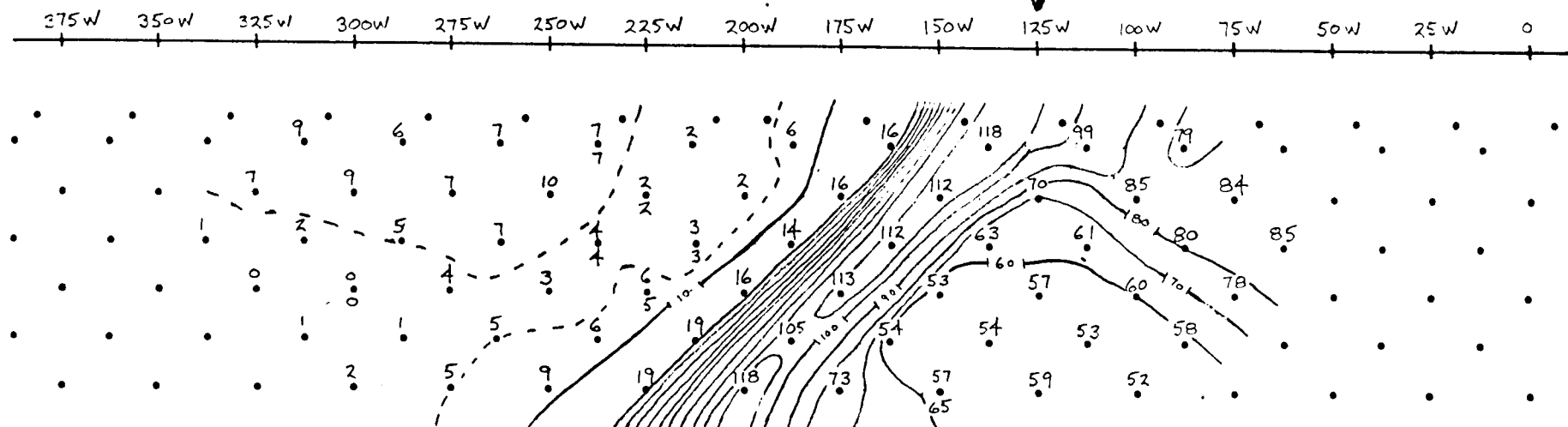
DATE : SEPT 13, 1984

INDUCED POLARIZATION
AND RESISTIVITY SURVEY
(DIPOLE - DIPOLE ARRAY)
PROJECT # 4-115



CONTOUR INTERVAL - 10 msec.

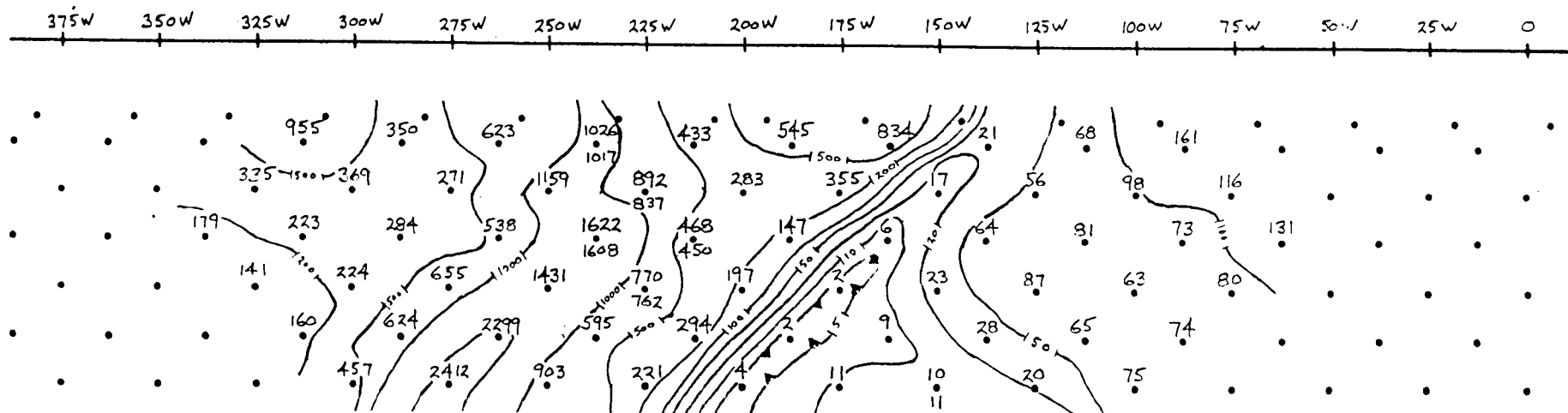
APPARENT CHARGEABILITY



N = 0.5
N = 1
N = 2
N = 3
N = 4
N = 5
N = 6

CONTOUR INTERVAL - 1, 2, 5 PER DECADE OHM-METRES

APPARENT RESISTIVITY



N = 0.5
N = 1
N = 2
N = 3
N = 4
N = 5
N = 6

LINE # : CH - 0

LINE DIRECTION :

DIPOLE LENGTH : 25 METRES

DATE : SEPT 9 1984

NOTE: 30 METRE HILL,
BASE AT 150W
CREST AT 210W

PRELIMINARY COPY

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

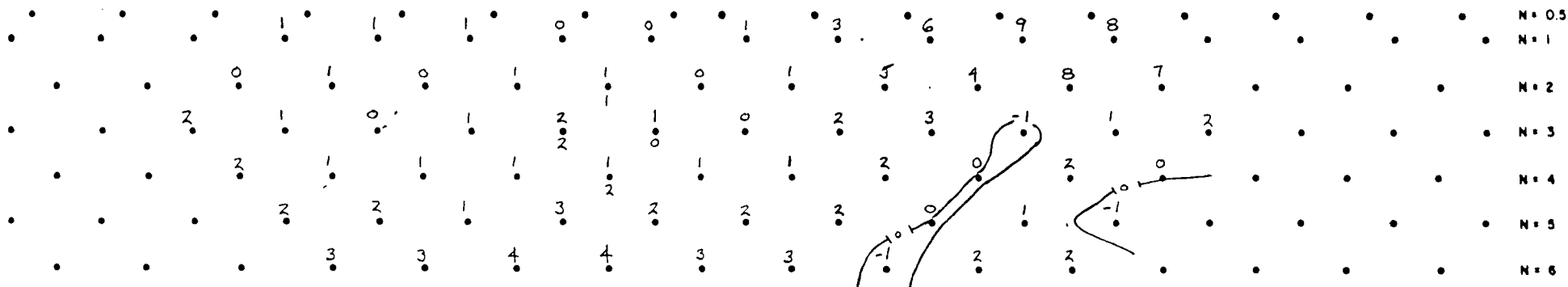
PROJECT # 4-115



CONTOUR INTERVAL - 10 msec

APPARENT CHARGEABILITY

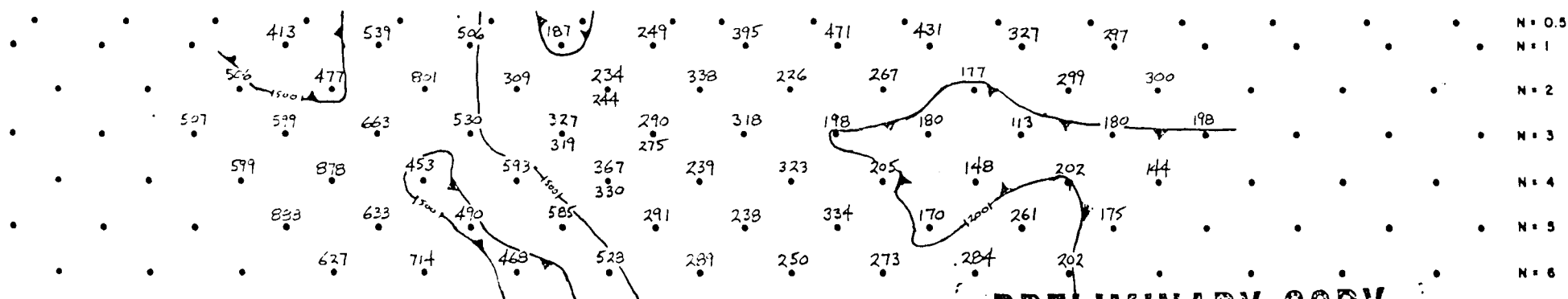
625W 600W 575W 550W 525W 500W 475W 450W 425W 400W 375W 350W 325W 300W 275W 250W



CONTOUR INTERVAL - 1,2,5 PER DECADE OHM-METRES

APPARENT RESISTIVITY

625W 600W 575W 550W 525W 500W 475W 450W 425W 400W 375W 350W 325W 300W 275W 250W



LINE #: CH-0

LINE DIRECTION: _____

DIPOLE LENGTH: 25 METRES

DATE: SEPT. 10 1984

PRELIMINARY COPY

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

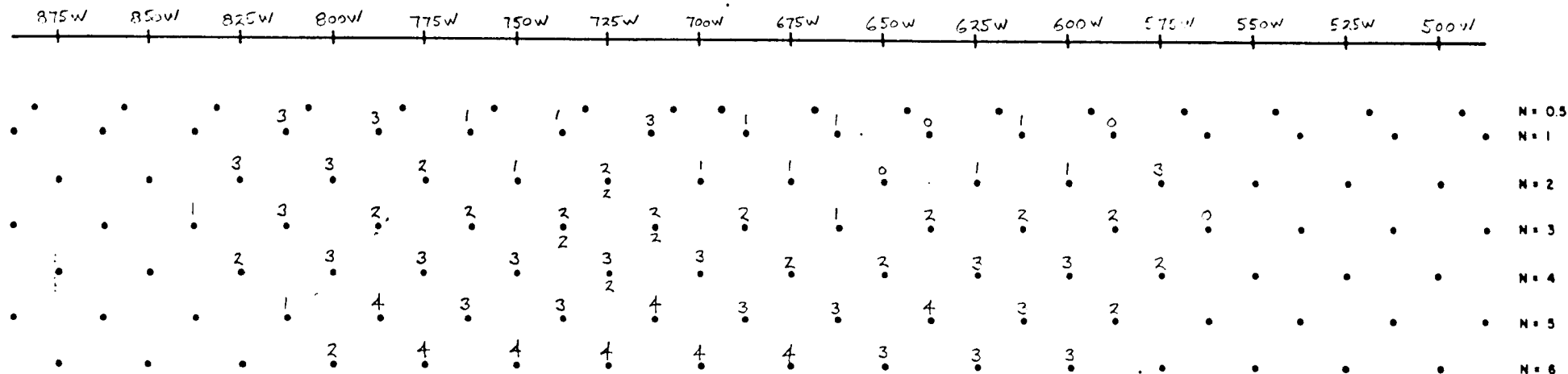
(DIPOLE - DIPOLE ARRAY)

PROJECT #: 4-115



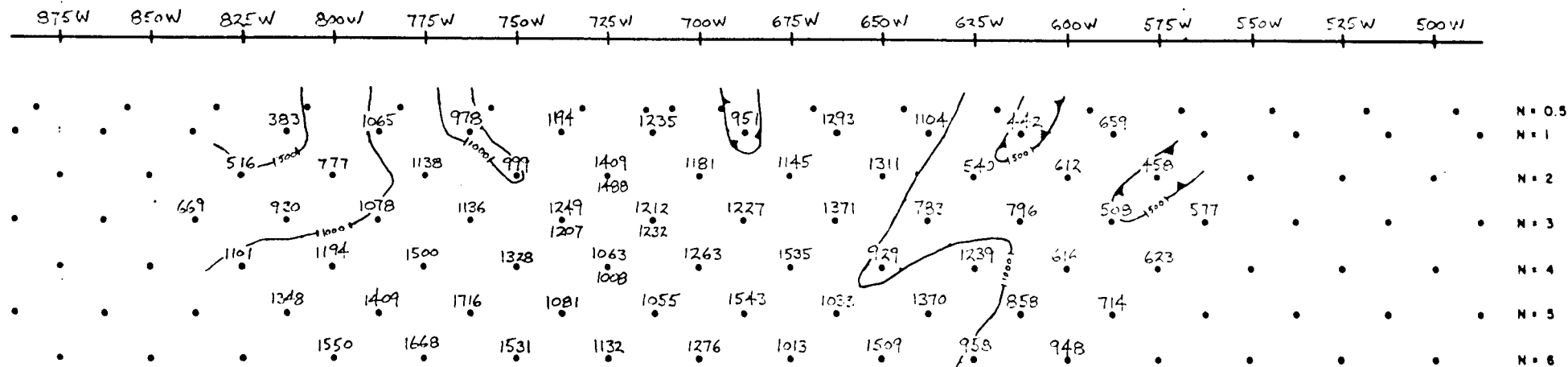
CONTOUR INTERVAL - 10 msec

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1, 2, 5 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

LINE #: CH - 0

LINE DIRECTION: _____

DIPOLE LENGTH: 25 METRES

DATE: SEPT 10/11 1984

INDUCED POLARIZATION AND RESISTIVITY SURVEY

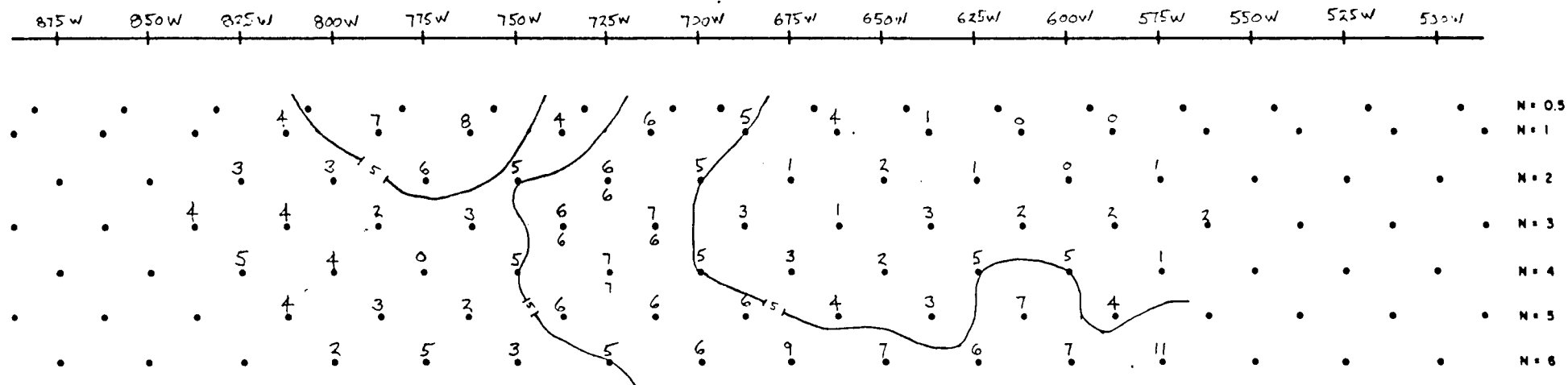
(DIPOLE - DIPOLE ARRAY)

PROJECT #: 4-115



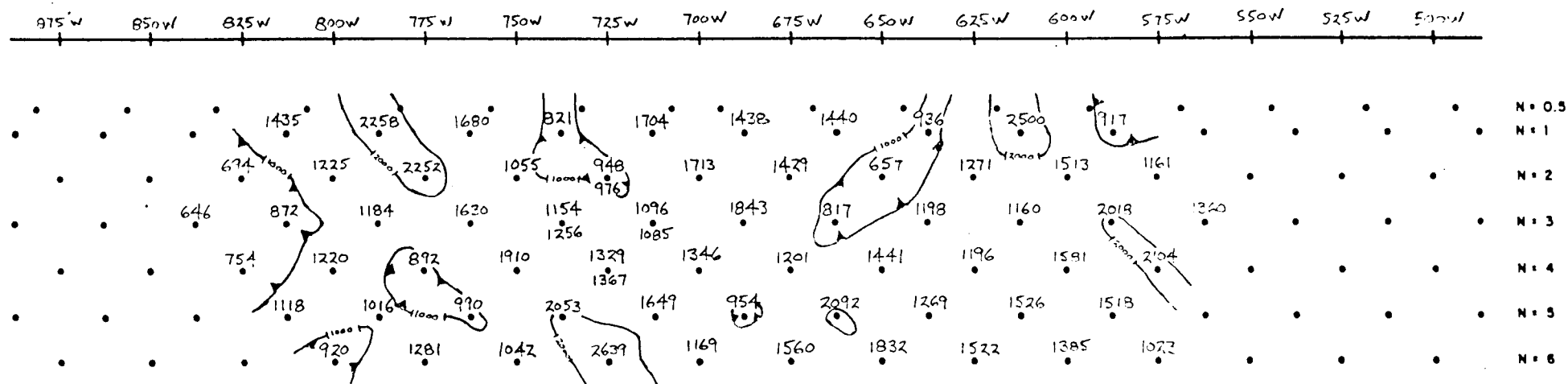
CONTOUR INTERVAL - 5 msec.

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1.25 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

PROJECT # 4-115

LINE # : CH-45

LINE DIRECTION :

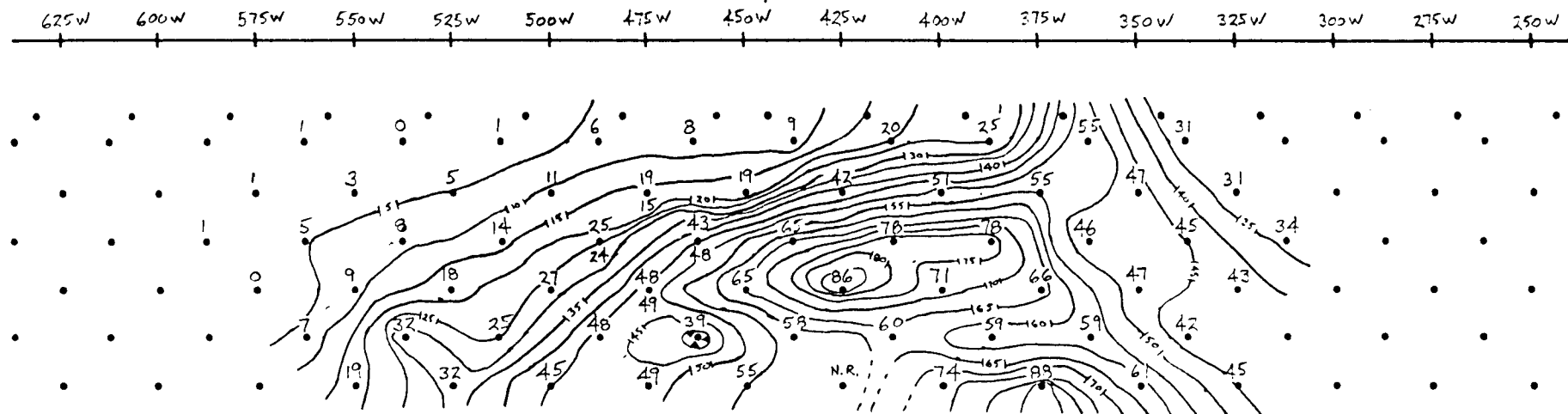
DIPOLE LENGTH : 25 METRES

DATE : SEPT 12, 1984



CONTOUR INTERVAL - 5 msec

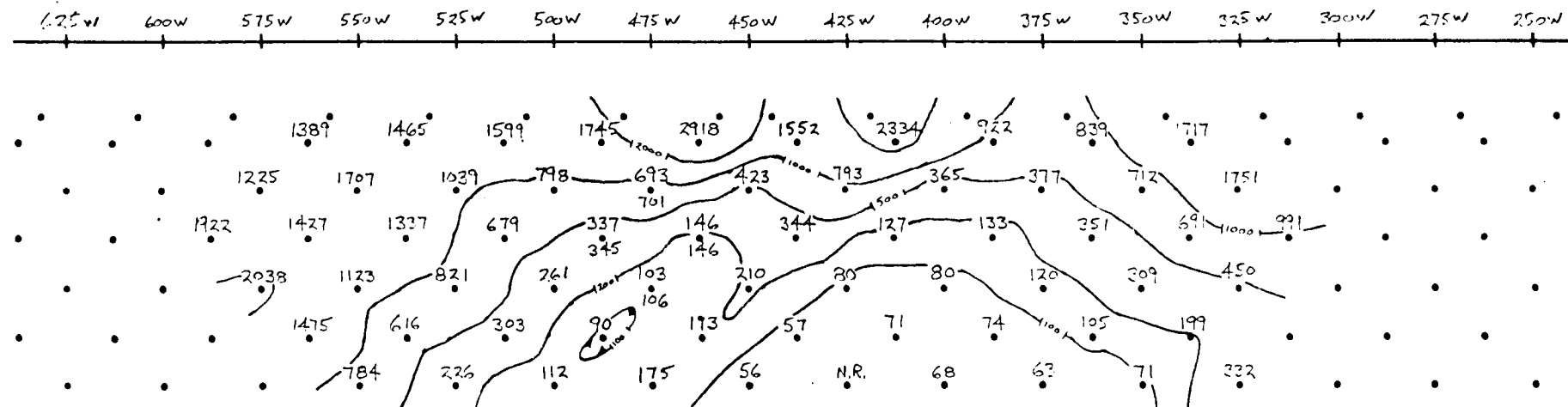
APPARENT CHARGEABILITY



N = 0.5
N = 1
N = 2
N = 3
N = 4
N = 5
N = 6

CONTOUR INTERVAL - 1,2,5 PER DECADE OHM-METRES

APPARENT RESISTIVITY



N = 0.5
N = 1
N = 2
N = 3
N = 4
N = 5
N = 6

LINE # : CH - 45

LINE DIRECTION : _____

DIPOLE LENGTH : 25 METRES

DATE : SEPT 12, 1984

PRELIMINARY COPY

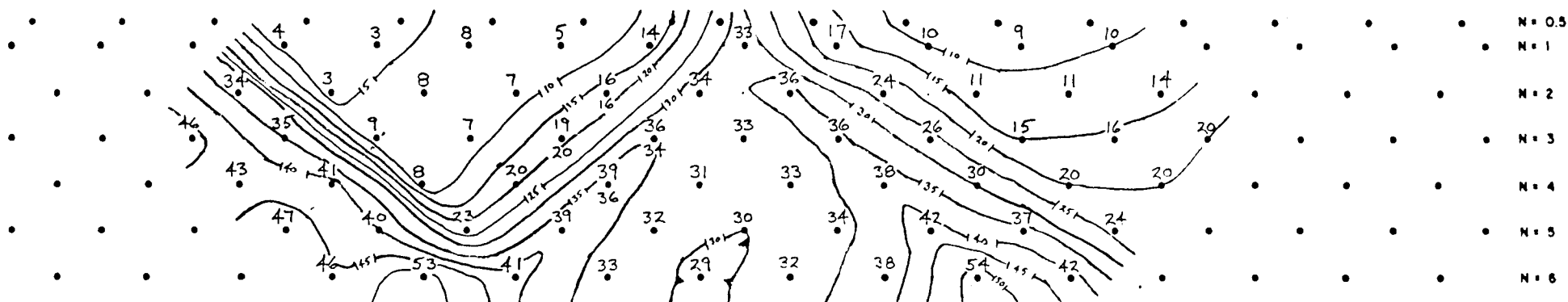
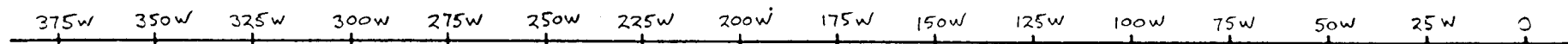
INDUCED POLARIZATION
AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

PROJECT # 4-115

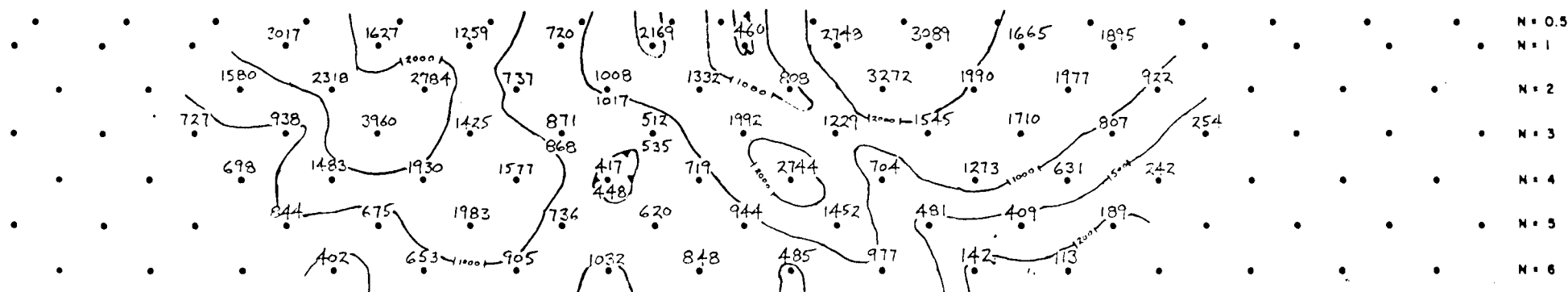
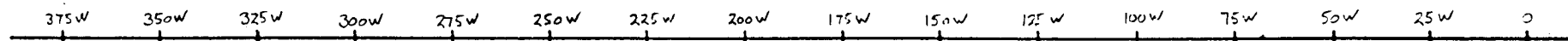


APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1,2,5 PER DECADE OHM-METRES

APPARENT RESISTIVITY



LINE # : CH - 45

LINE DIRECTION : _____

DIPOLE LENGTH : 25 METRES

DATE : SEPT 11 1934

NOTE: METALLIC JUNK
BETWEEN 225W
AND 230W

PRELIMINARY COPY

INDUCED POLARIZATION AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

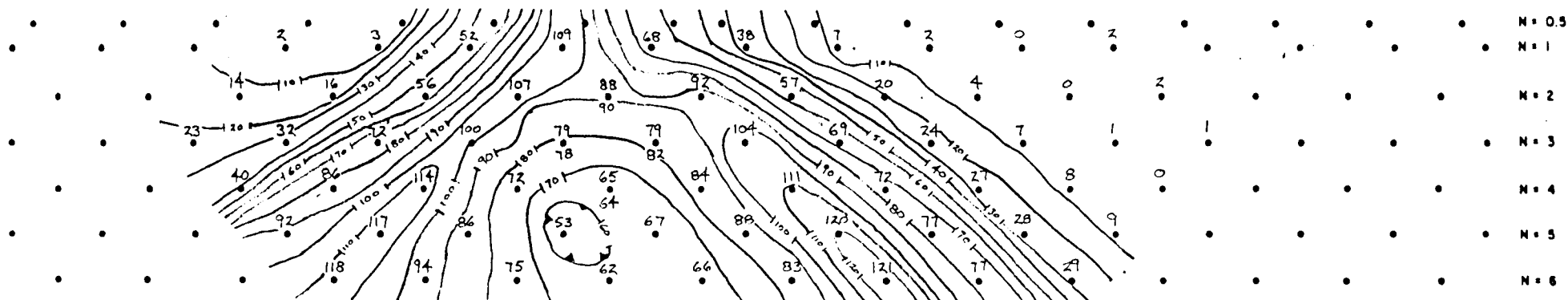
PROJECT ** A-115



CONTOUR INTERVAL - 10 msec.

APPARENT ϵ CHARGEABILITY

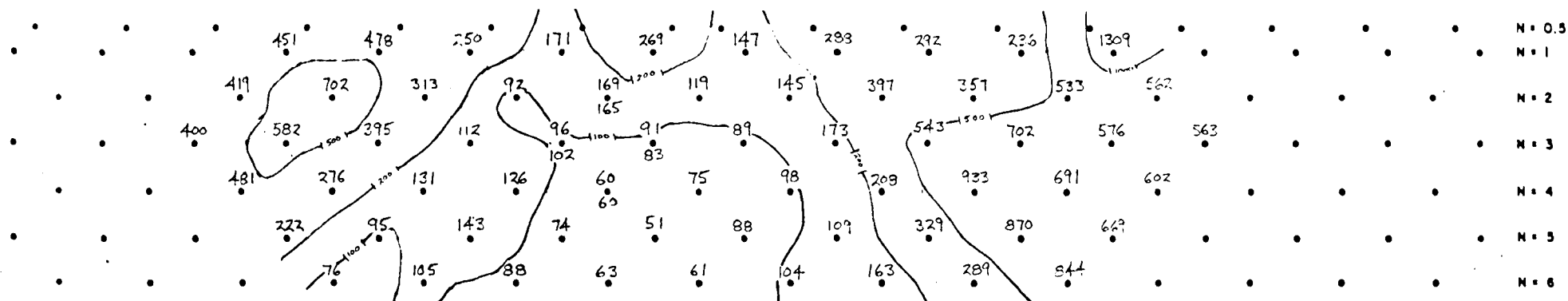
425W 400W 375W 350W 325W 300W 275W 250W 225W 200W 175W 150W 125W 100W 75W 50W



CONTOUR INTERVAL - 1.2.5 PER DECADE O.V.M. METRES

APPARENT RESISTIVITY

425W 400W 375W 350W 325W 300W 275W 250W 225W 200W 175W 150W 125W 100W 75W 50W



PRELIMINARY COPY

LINE # : LA - 1

LINE DIRECTION : _____

DIPOLE LENGTH : 25 METRES

DATE : SEPT. 19, 1984

**INDUCED POLARIZATION
AND RESISTIVITY SURVEY**

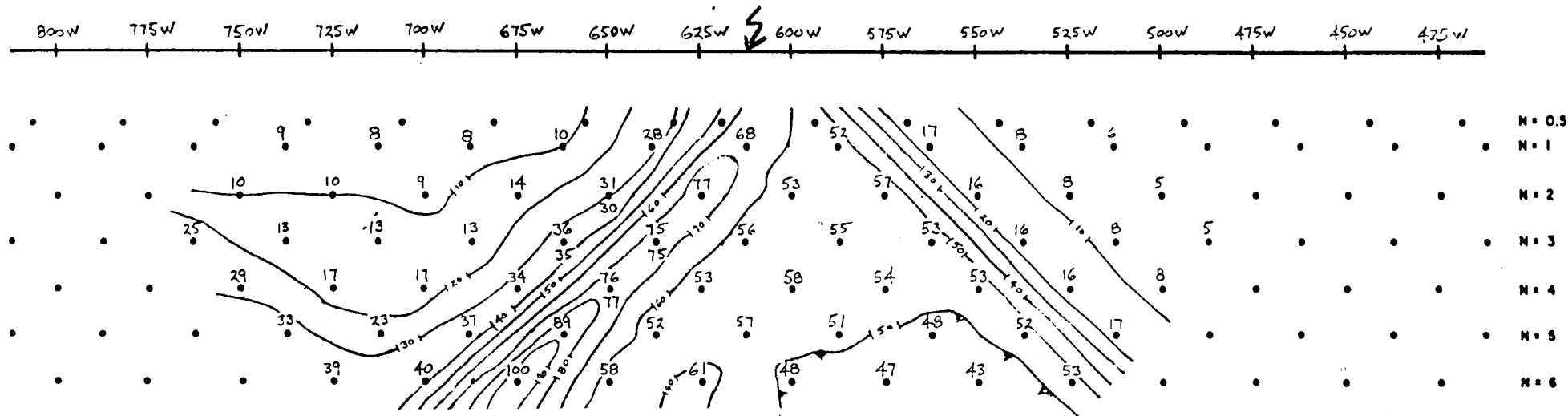
(DIPOLE - DIPOLE ARRAY)

PROJECT # 4-115



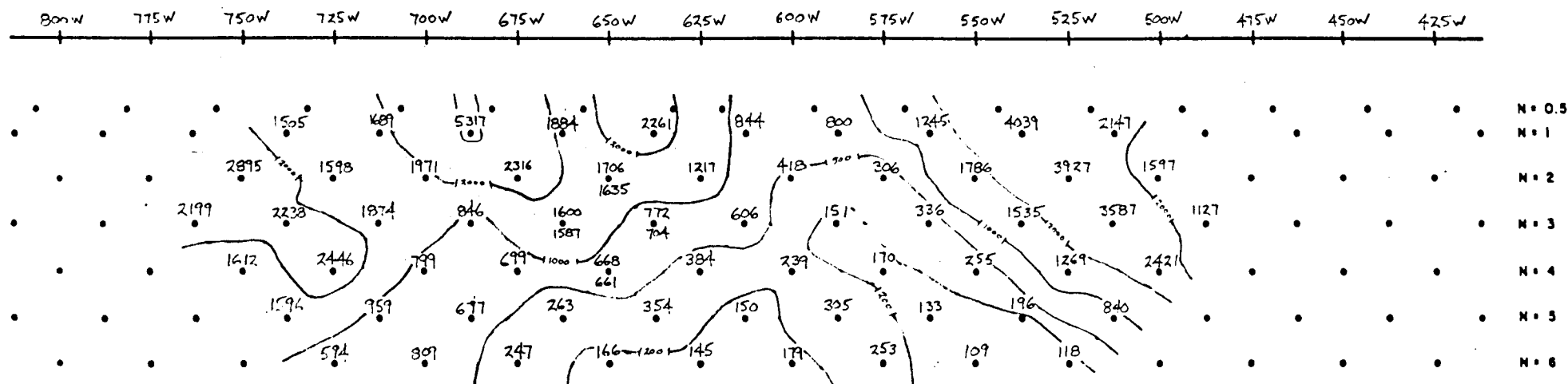
CONTOUR INTERVAL - 10 msec.

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1.25 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

LINE #: LA-2

LINE DIRECTION: _____

DIPOLE LENGTH: 25 METRES

DATE: SEPT 20, 1984

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

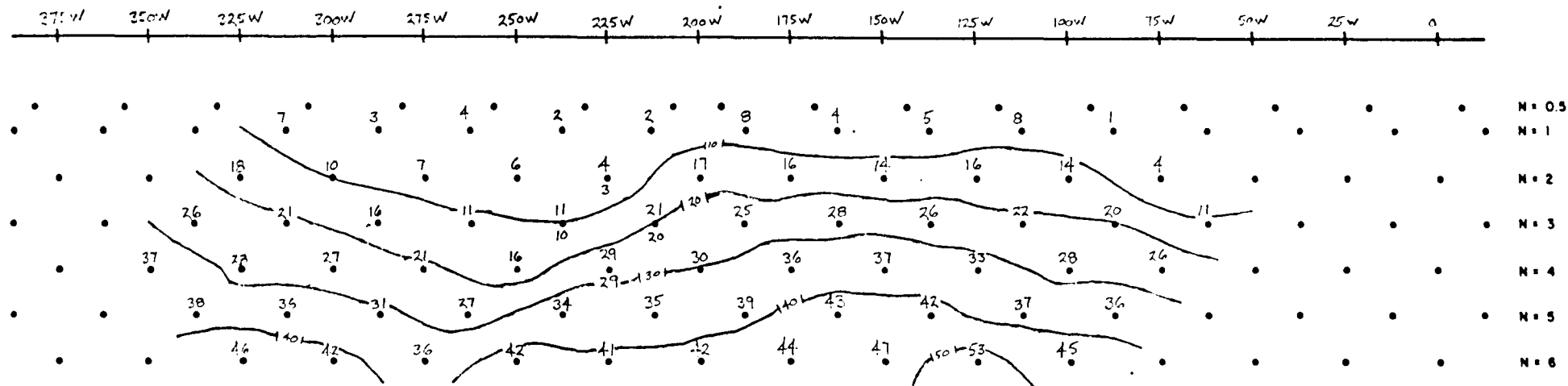
(DIPOLE - DIPOLE ARRAY)

PROJECT # 4-115



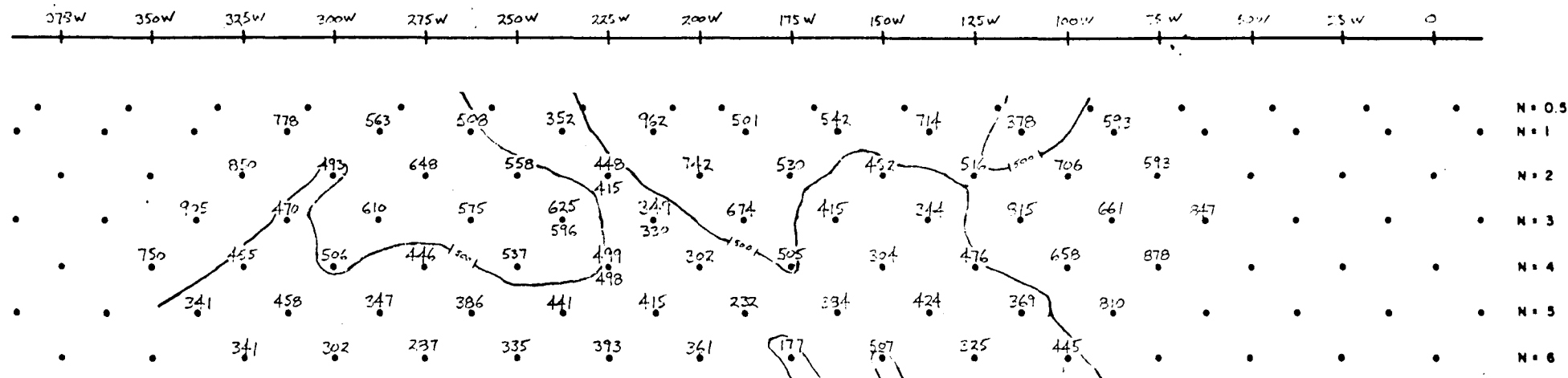
CONTOUR INTERVAL - 10 msec

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1.25 PER DECADE OHM-METRES

APPARENT RESISTIVITY



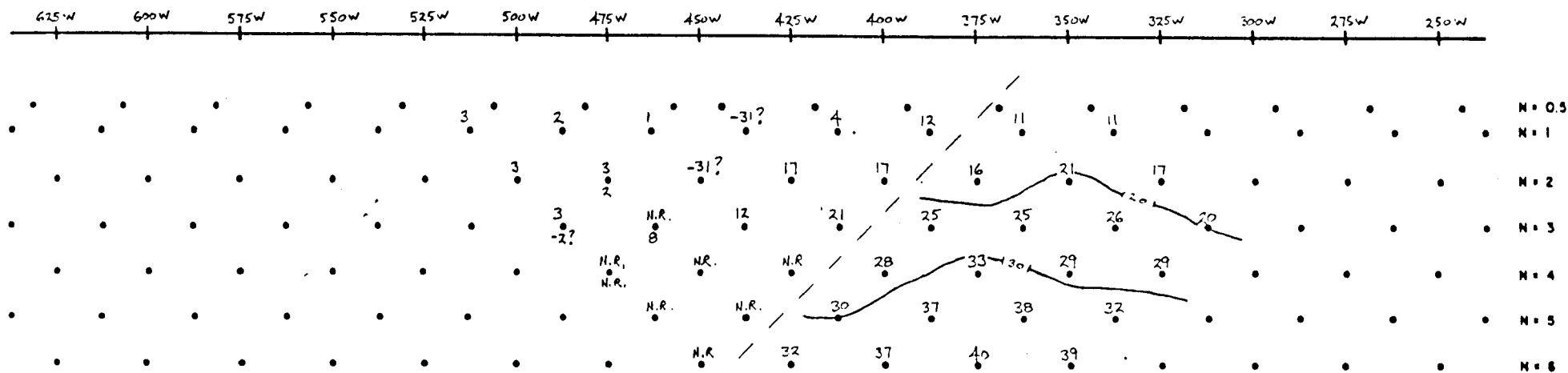
LINE # : LS-0
 LINE DIRECTION : _____
 DIPOLE LENGTH : 25 METRES
 DATE : SEPT 28 1981

PRELIMINARY COPY
INDUCED POLARIZATION
AND RESISTIVITY SURVEY
 (DIPOLE - DIPOLE ARRAY)
 PROJECT # 4-115



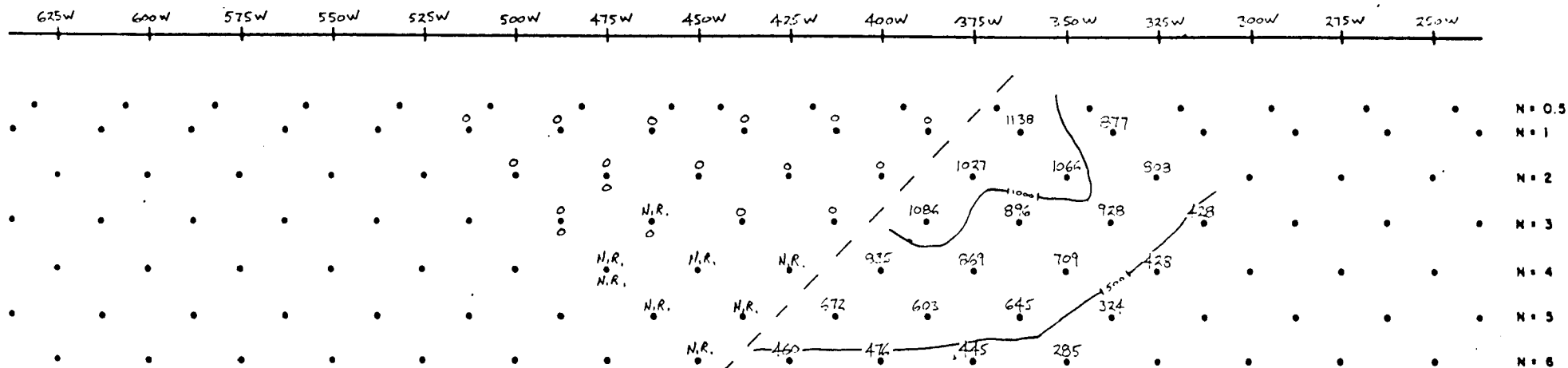
CONTOUR INTERVAL - 10 msec

APPARENT CHARGEABILITY



CONTOUR INTERVAL - 1,2,5 PER DECADE OHM-METRES

APPARENT RESISTIVITY



PRELIMINARY COPY

INDUCED POLARIZATION
AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

PROJECT # 4-115

LINE # : LS - 0

LINE DIRECTION :

DIPOLE LENGTH : 25 METRES

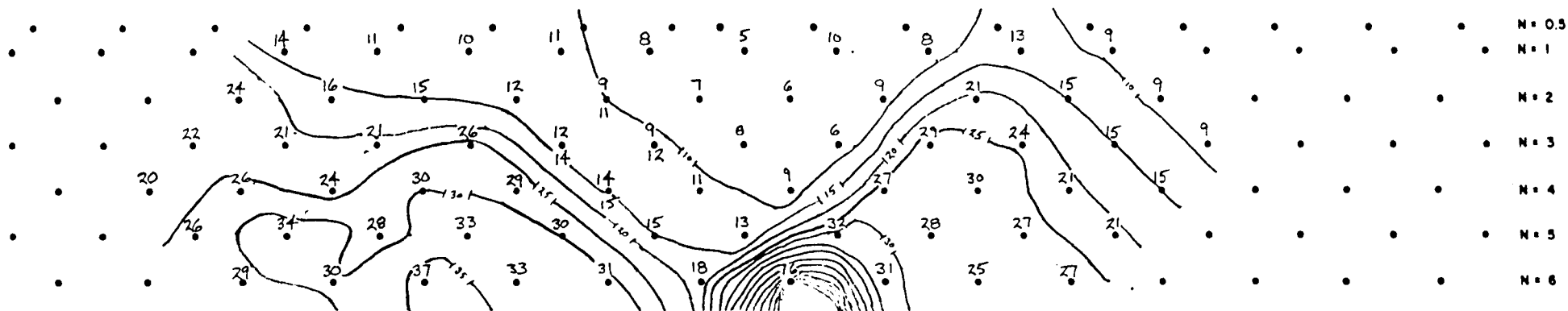
DATE : SEPT 23 1934



CONTOUR INTERVAL - 5 msec.

APPARENT CHARGEABILITY

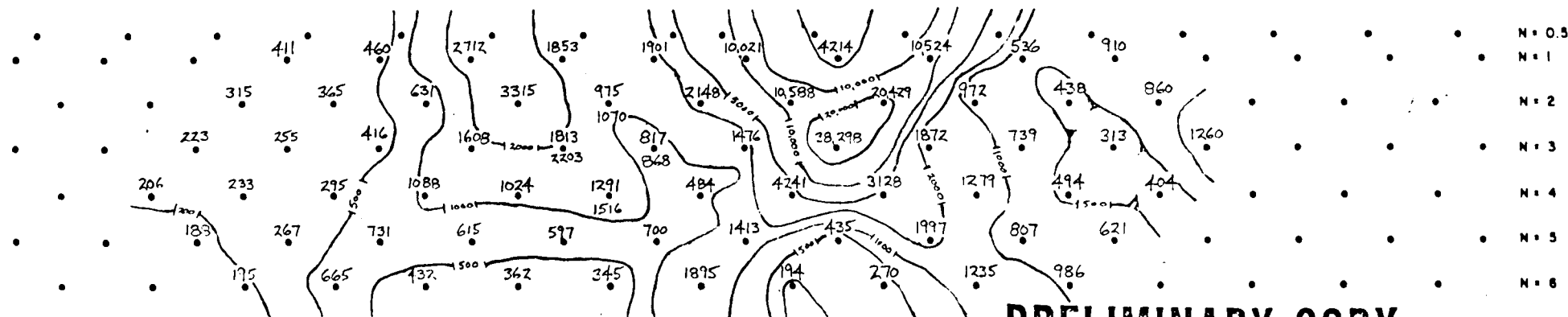
125W 100W 75W 50W 25W 0 25E 50E 75E 100E 125E 150E 175E 200E 225E 250E



CONTOUR INTERVAL - 1,2,5 PER DECADE OHM-METRES

APPARENT RESISTIVITY

125W 100W 75W 50W 25W 0 25E 50E 75E 100E 125E 150E 175E 200E 225E 250E



PRELIMINARY COPY

LINE # : CH-45

LINE DIRECTION : _____

DIPOLE LENGTH : 25 METRES

DATE : SEPT 14/16, 1984

INDUCED POLARIZATION AND RESISTIVITY SURVEY

(DIPOLE - DIPOLE ARRAY)

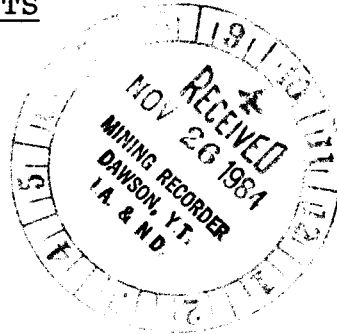
PROJECT # 4-115



COST STATEMENT
 WILLIAM T. DAWSON
 GEOPHYSICAL, DIAMOND DRILLING, TRENCHING & ROAD BUILDING
 BONANZA CREEK PROPERTY
15 October - 11 November 1984

GENERAL COSTS

<u>FOOD & ACCOMMODATION</u>		
3 persons, 62 mandays @ \$54.01		\$ 3,348.58
<u>FUEL</u>		772.22
<u>SUPPLIES</u>		263.58
<u>SHIPPING & POSTAGE</u>		120.06
<u>REPAIRS</u>		308.75
<u>FIELD TELEPHONE SERVICE</u>		64.20
<u>TAXIS</u>		15.40
<u>AIR FARES (CP Air) 2 Vcr/Wth, 3,8 Nov</u>		900.00
<u>RENTALS</u>		
NORCAN 4wd PU, 1-11 Nov, 11 days @ \$43	\$473.00	
EZEKIEL Field/Camp Equipment, 62 mandays @ \$6	372.00	845.00
<u>CONSULTANT FEES, ARCHEAN ENGINEERING</u>		495.00
<u>REPORT PREPARATION</u>		3,385.30
 <u>TOTAL GENERAL COSTS</u>		 \$10,518.09 =====



ROAD BUILDING & TRENCHING

<u>SALARIES & WAGES</u>		
2 persons, 7 man days @ \$95.65		\$ 669.55
<u>BENEFITS @ 20%</u>		133.91
<u>CONTRACTOR</u>		
WAYNE HAWKS D8K, 20-25 Oct		5,700.00
<u>ASSAYS/ANALYSES - Chemex Labs</u>		
3 Rocks for Cu, Pb, Zn, Ag, W, Sn, Au		77.49
<u>GENERAL COSTS APPORTIONED</u>		
7/57 X \$10,518.09		1,291.69
 <u>TOTAL ROAD BUILDING & TRENCHING COST</u>		 \$7,872.65 =====

I.P. HORIZONTAL LOOP ELECTROMAGNETIC & MAGNETIC SURVEY

<u>CONTRACTOR</u>		
GEOTERREX, 7 - 30 Sep		\$23,985.49 =====

DIAMOND DRILLING COSTSALARIES & WAGES

3 persons, 50 mandays @ \$95.65

\$ 4,782.50

BENEFITS @ 20%

956.50

CONTRACTOR

PHIL'S DIAMOND DRILLING, 464' @ \$40

18,560.00

ASSAYS & ANALYSES, Chemex Labs

100 Core for Cu, Pb, Zn, Ag, Sn, W, Au

2,583.00

SUPPLIES (Mud, Rods, Bits)

2,200.00

FOOD & ACCOMMODATION, 52 mandays @ \$55

2,860.00

GENERAL COSTS APPORTIONED

50/57 X \$10,518.09

9,226.39

TOTAL DIAMOND DRILLING COST

\$41,168.39

=====

COSTS APPORTIONED TO CLAIMS

<u>Claim</u>	<u>Road</u> <u>Trenching</u>	<u>Drilling</u>	<u>Geoterrex</u>	<u>Total</u>
Syndicate 23	\$ 633.88	\$	\$	\$ 633.88
Syndicate 24	933.88	26,794.94	1,042.85	28,771.67
Syndicate 31	633.88			633.88
Syndicate 39	633.88			633.88
Syndicate 46	633.88			633.88
Syndicate 54	633.88			633.88
Syndicate 60			1,042.85	1,042.85
Syndicate 61	633.88		1,042.85	1,676.73
Syndicate 62	633.88		1,042.85	1,676.73
Syndicate 71			1,042.85	1,042.85
Syndicate 72			1,042.85	1,042.85
Syndicate 73			1,042.85	1,042.85
Syndicate 74			1,042.85	1,042.85
Syndicate 75			1,042.85	1,042.85
Syndicate 76			1,042.85	1,042.85
Syndicate 77			1,042.85	1,042.85
Syndicate 78			1,042.85	1,042.85
Syndicate 79			1,042.85	1,042.85
Syndicate 80			1,042.85	1,042.85
Syndicate 81			1,042.85	1,042.85
Syndicate 82			1,042.85	1,042.85
"83" 26		4,258.80		4,258.80
"83" 27			1,042.84	1,042.84
"83" 31		10,114.65	1,042.84	11,157.49
"83" 32			1,042.84	1,042.84
"98" 17			1,042.84	1,042.84
"98" 22			1,042.84	1,042.84
"98" 28			1,042.84	1,042.84
Plinc 21	933.87		1,042.84	1,976.71
Plinc 22	933.87			933.87
Filler 8	633.87			633.87
<u>TOTALS</u>	\$7,872.65	\$41,168.39	\$23,985.49	\$73,026.53

3555 Hz

+80%

0

-20%

1777 Hz

+20%

0

-20%

888 Hz

+20%

0

-20%

444 Hz

+20%

0

-20%

222 Hz

+20%

0

-20%

400 W

300 W

200 W

100 W

0

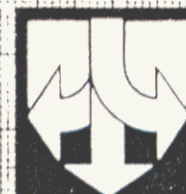
100 E

200 E

INPHASE

QUADRATURE

COIL SEPARATION 150 METRES



SURVEYED & COMPILED BY

geoterrex

CANADIAN FERRITE LTD.

091602

CHEECHAKO HILL, DAWSON CITY, YUKON

Scales:

HORIZONTAL 1:2500

VERTICAL 1cm = 10%

HORIZONTAL LOOP
ELECTROMAGNETIC PROFILES

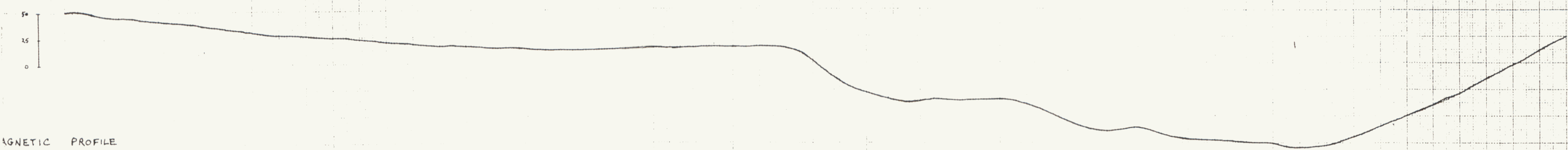
LINE CH-0

Instruments:

APEX PARAMETRICS MAX-MIN II+

SURVEYED BY J.H. D.B. L.T. PLOTTED BY J.H.
DATE SEPT. 1984

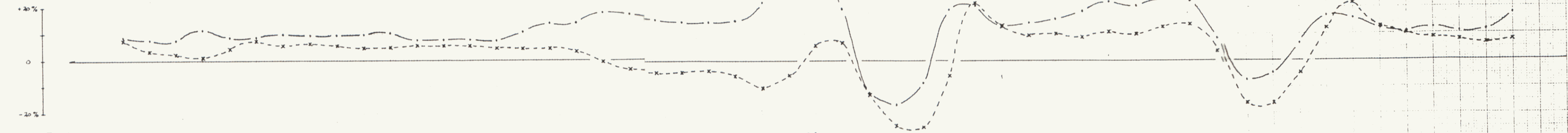
BATHYMOGRAPHY



MAGNETIC PROFILE



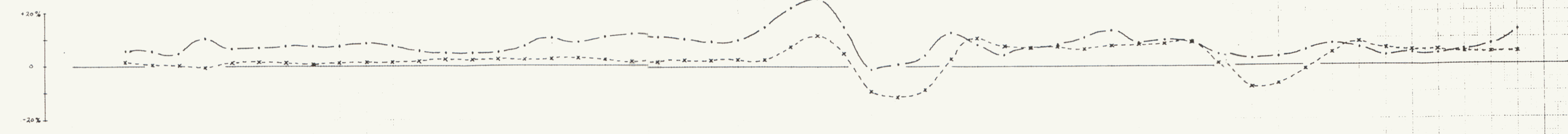
3555 Hz



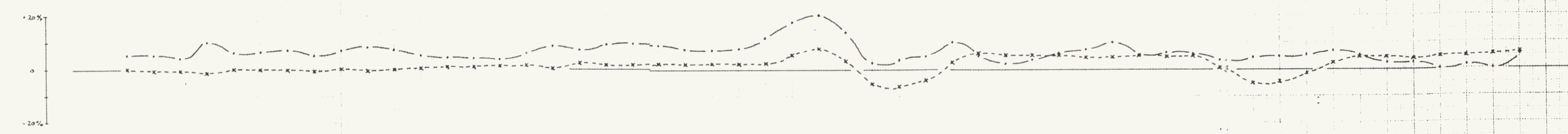
1777 Hz



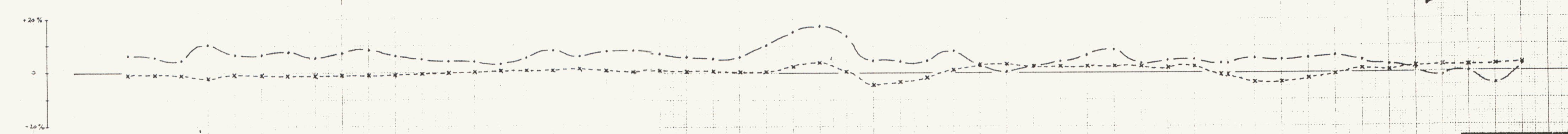
888 Hz



444 Hz



222 Hz



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

INPHASE
QUADRATURE
SCOTCH SEPARATION - 100 METRES

		SURVEYED & COMPILED BY	
		geoterrex	
		CANADIAN FERRITE LTD.	
		091602	
CHEECHAKO HILL, DAWSON CITY, YUKON			
Scales:		HORIZONTAL LOOP ELECTROMAGNETIC PROFILES	
HORIZONTAL - 1:2500			
VERTICAL - MAG 1cm = 100 N.T.			
E.M. 1cm = 10 %			
Instruments:		LINE CH-0	
APEX PARAMETRICS MAX-MIN II+			
SCINTREX MP-2 MAGNETOMETER			

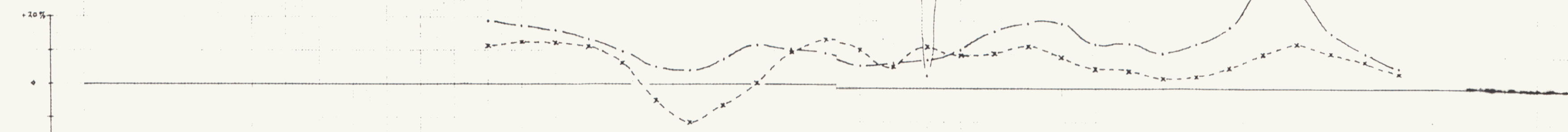
TOPOGRAPHY



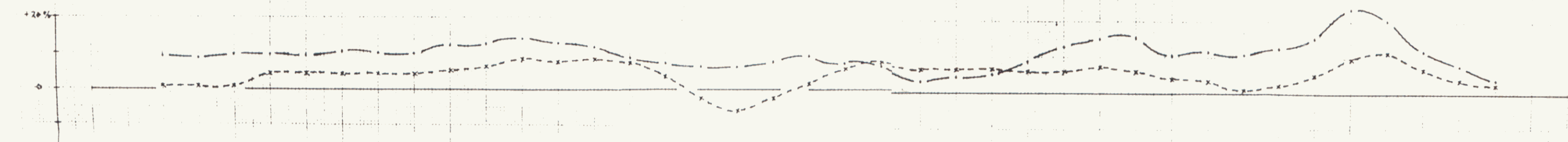
MAGNETIC PROFILE



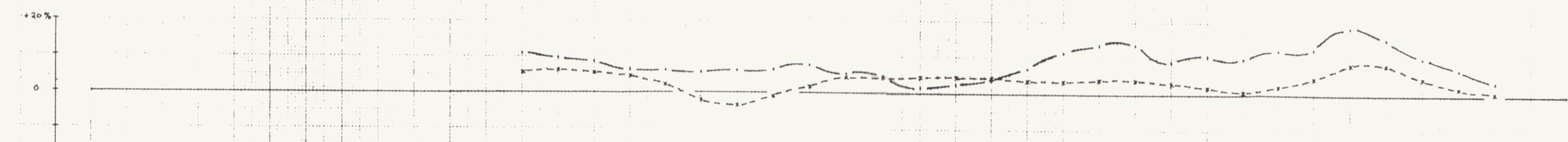
3555 Hz



1777 Hz



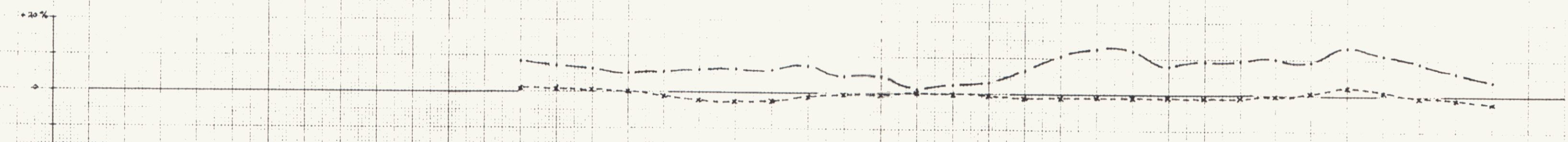
888 Hz



444 Hz

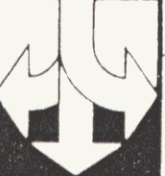


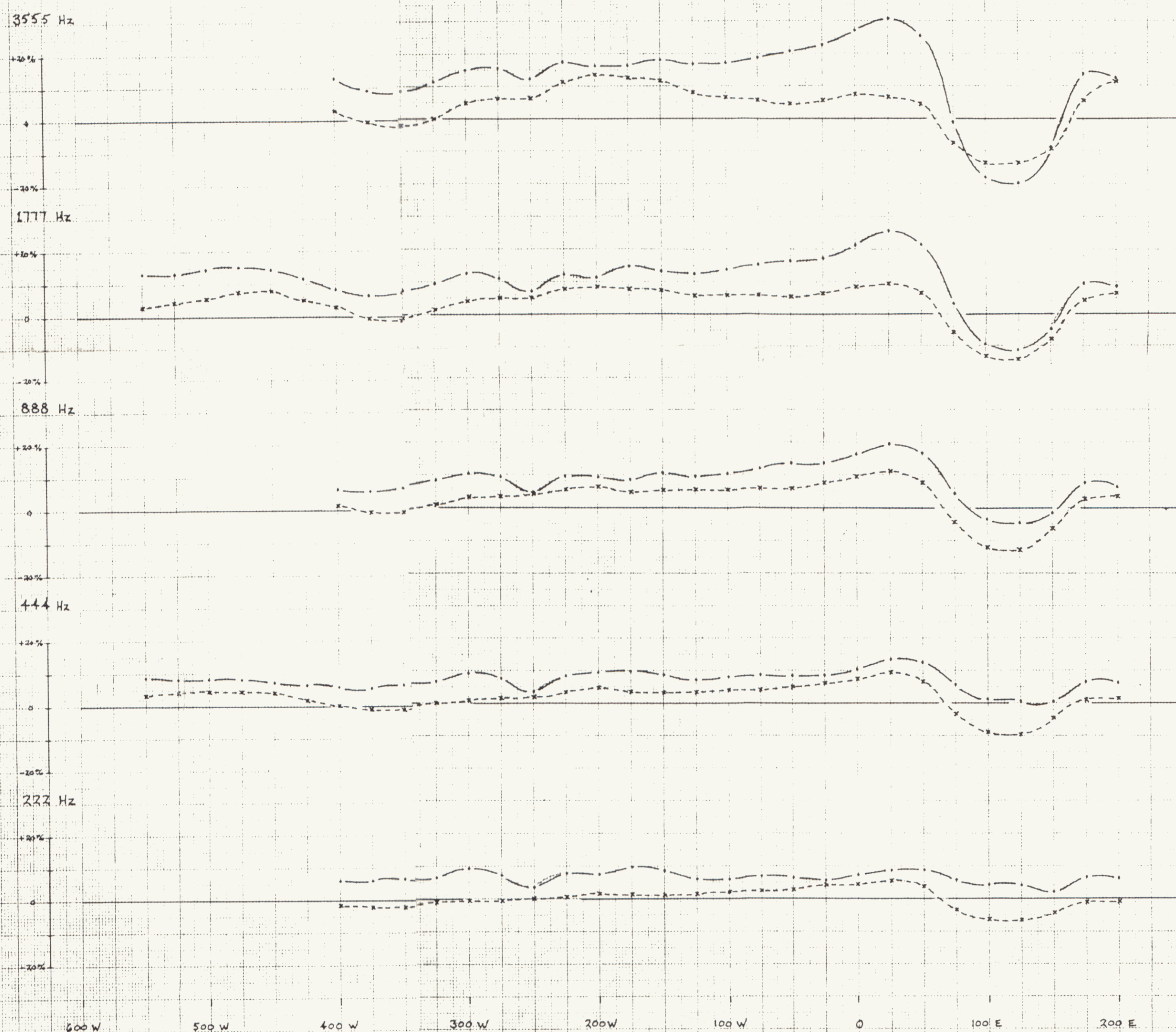
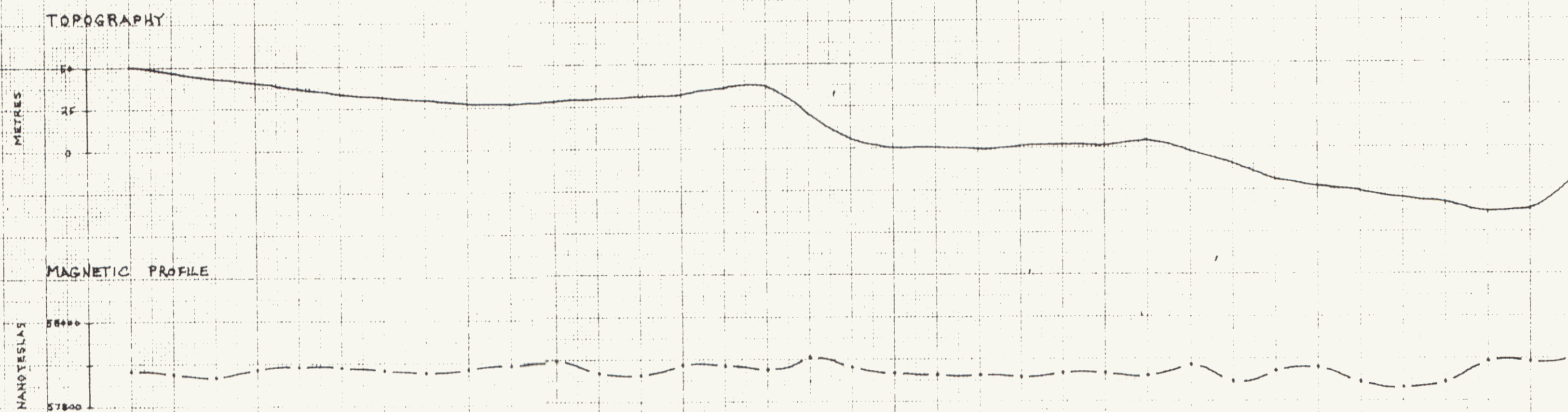
222 Hz



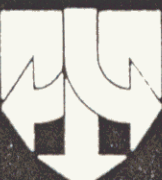
900 W 800 W 700 W 600 W 500 W 400 W 300 W 200 W 100 W 0 100 E

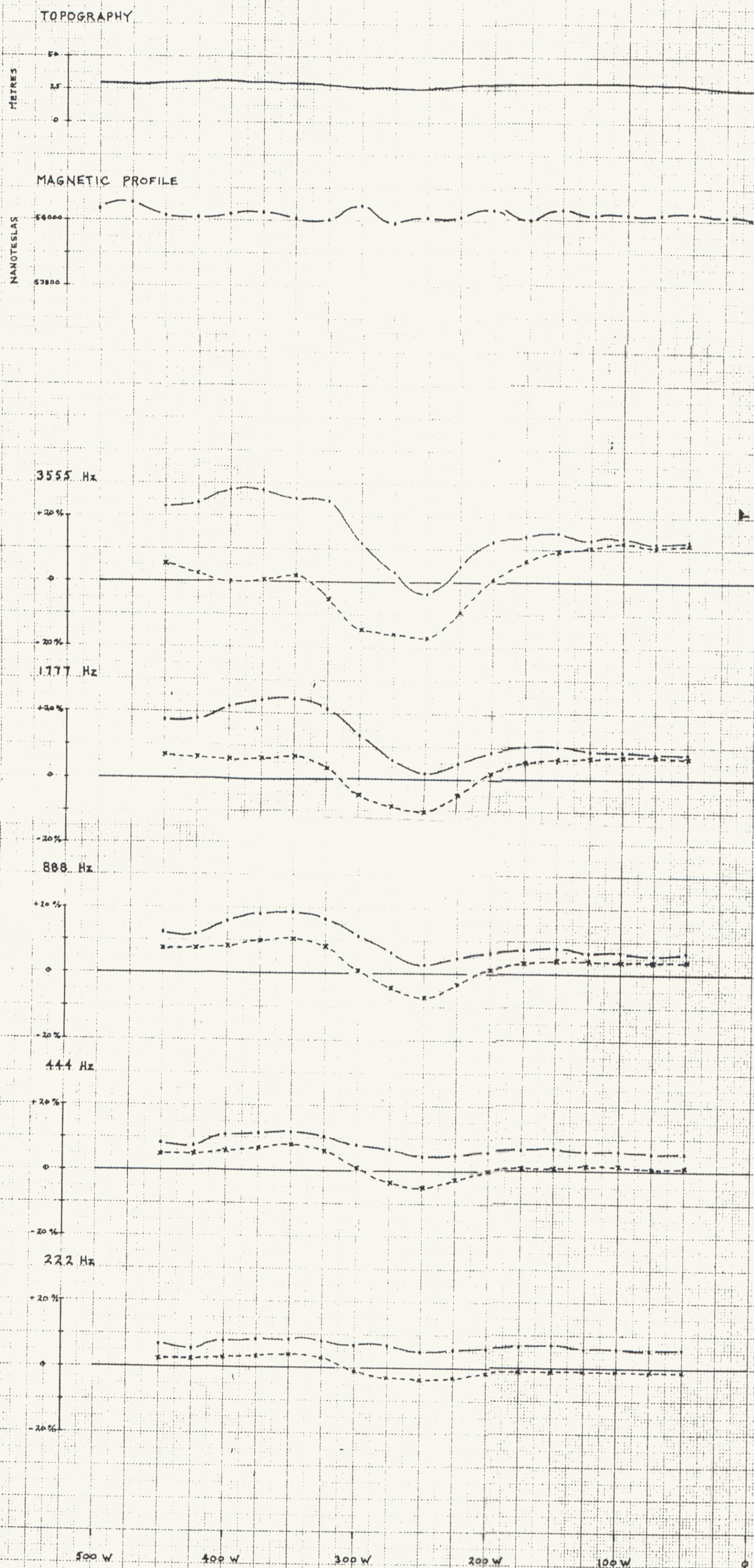
INPHASE
QUADRATURE
COIL SEPARATION - 100 METRES

	SURVEYED & COMPILED BY		CANADIAN FERRITE LTD.
	091602		
CHEECHAKO HILL, DAWSON CITY, YUKON			
Scales: HORIZONTAL - 1:2500 VERTICAL - MAG. - 1cm = 100 NT. E.M. - 1cm = 10 %		HORIZONTAL LOOP ELECTROMAGNETIC SURVEY  LINE 01-4S	
Instruments: APEX PARAMETRICS MAX-MIN II+ SCINTREX MP-2 MAGNETOMETER		DRAWN BY J.M. & L.Z. PLOTTED BY J.M. 101 SEPT 1984	

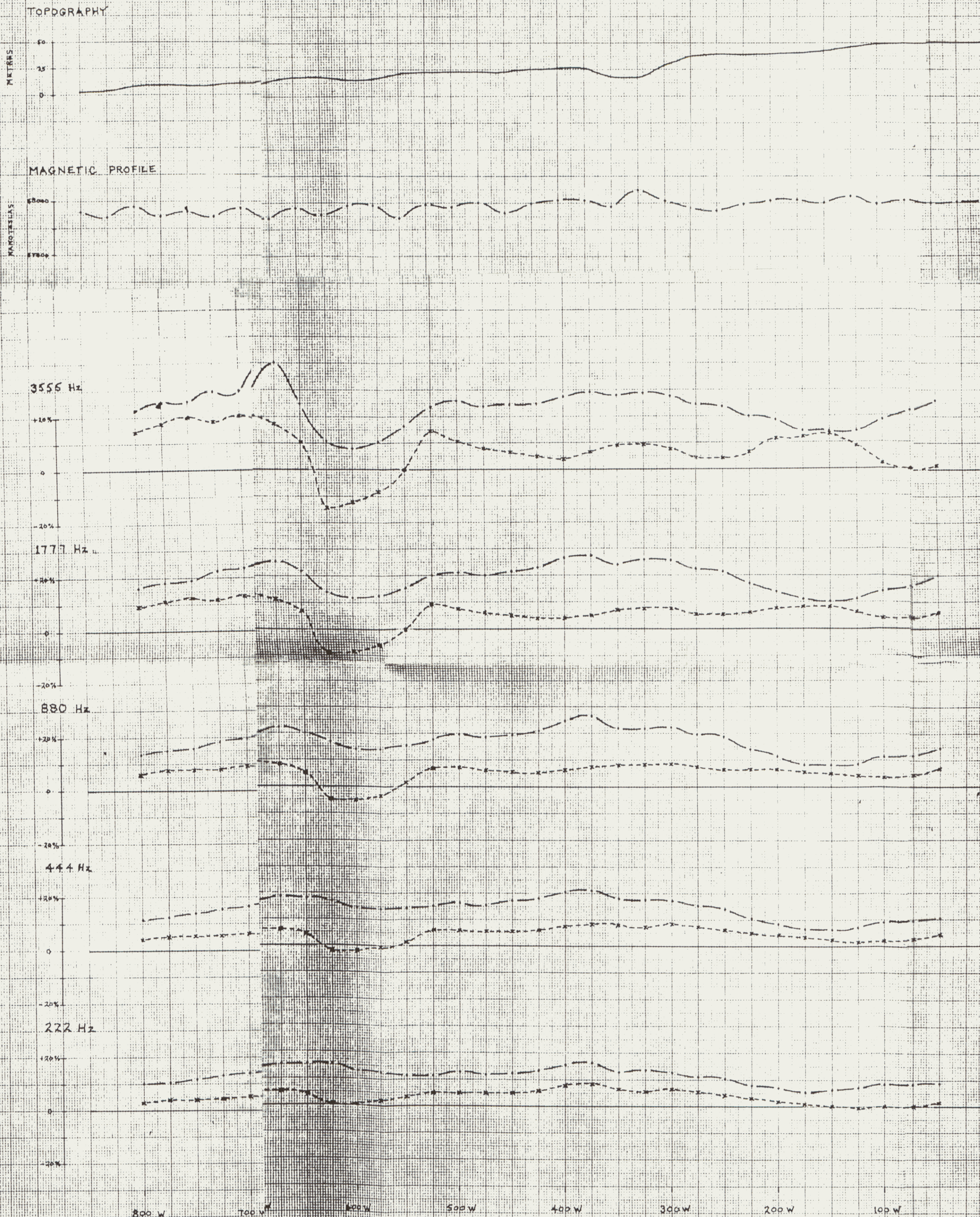


INPHASE
QUADRATURE
COIL SEPARATION - 100 METRES

	SURVEYED & COMPILED BY	
	geoterrex INC.	
		CANADIAN FERRITE LTD.
		091602
CHEECHAKO HILL, DAWSON CITY, YUKON		
Scales: HORIZONTAL - 1:2500 VERTICAL MAG 1 cm = 100 N.T. E.M. 1 cm = 10 %		HORIZONTAL LOOP ELECTROMAGNETIC PROFILES LINE CH-25
Instruments: APEX PARAMETRICS MAX-MIN II+ SCINTREX MP-2 MAGNETOMETER		SURVEY BY J.M. & B. L.Z. PLOTTED BY J.M. DATE: SEPT. 1984



	SURVEYED & COMPILED BY	FOR
	geoterrex INC.	CANADIAN FERRITE LTD.
		091602
ADAMS CREEK, DAWSON CITY, YUKON		
Scales: HORIZONTAL - 1:2500 VERTICAL - MAG - 1cm = 100 N.T. E.M. - 1cm = 10 %	HORIZONTAL LOOP ELECTROMAGNETIC SURVEY LINE LA-1	
Instruments: SCINTREX MP-2 PROTON PRESSION MAG. APEX PARAMETRICS MAX-MIN II+		SURVEY BY J.H. & L.Z. PLOTTED BY J.H. DATE SEPT. '84 GEOTERRIX PROJECT NO. 0115



IN PHASE
QUADRATURE
COIL SEPARATION - 100 METRES

	SURVEYED & COMPILED BY		FOR
	geoterrex		CANADIAN FERRITE LTD.
		001602	
ADAMS CREEK, DAWSON CITY, YUKON			
Scales:		HORIZONTAL LOOP ELECTROMAGNETIC SURVEY	
HORIZONTAL - 1:2500		LINE LA-2	
VERTICAL - MAG. 1cm = 100 N.T.			
E.M. 1cm = 10%			
Instruments:			
APEX PARAMETRICS MAX-MIN II+			
SCINTARX MP-2 MAGNETOMETER			
		SURVEY BY J.A. D.B. L.Z. PLOTTED BY J.M.	
		DATE SEPT. 1984 GEOTERRIX PROJECT NO. 115	