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E.L. 21/86

HOWARDS ROAD AREA

ANNUAL REPORT FOR 1988/89

OPEN FILE

MICROFILMED

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Circulation: Mines Department (1)
* RGC Exploration Pty. Ltd. (2)

*GFEL Report No. T/90/1

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SUMMARY

E.L. 21/86, the Howards Road area, was acquired in late 1986 because of its perceived potential for Henty-style gold mineralisation along the possible southern extension of the Rosebery Fault and/or the western splay/extension of the North Henty Fault.

Previous work on the E.L. includes compiling past explorers' stream sediment geochemical data and carrying out further stream sediment sampling and reconnaissance geological mapping. This work focussed attention on the Henty Fault extensions and in 1988 a 20 line km grid was established to explore these structures. The grid was geologically mapped and rock chip sampled, both producing quite disappointing results.

Ground magnetics and a dipole-dipole I.P. survey were completed over the grid during the 1988/89 field season and the results interpreted by Roger Deakin. The surveys delineated two coincident chargeability/resistivity anomalies related to the interpreted position of the North Henty Fault. One of these has a coincident intense magnetic anomaly and therefore presents a possible pyrrhotite target worthy of drilling. Other I.P./magnetic anomalies of lower priority were also outlined.

1.

1. INTRODUCTION

The Howards Road Licence, E.L. 21/86, covers an area of 22 sq. km. south of Rosebery and east of Zeehan, in Western Tasmania (Figure 1). This is a rugged, forested area which includes the southern flanks of Mt. Dundas and is dissected by the tributaries of the Farrell Rivulet and the Henty River.

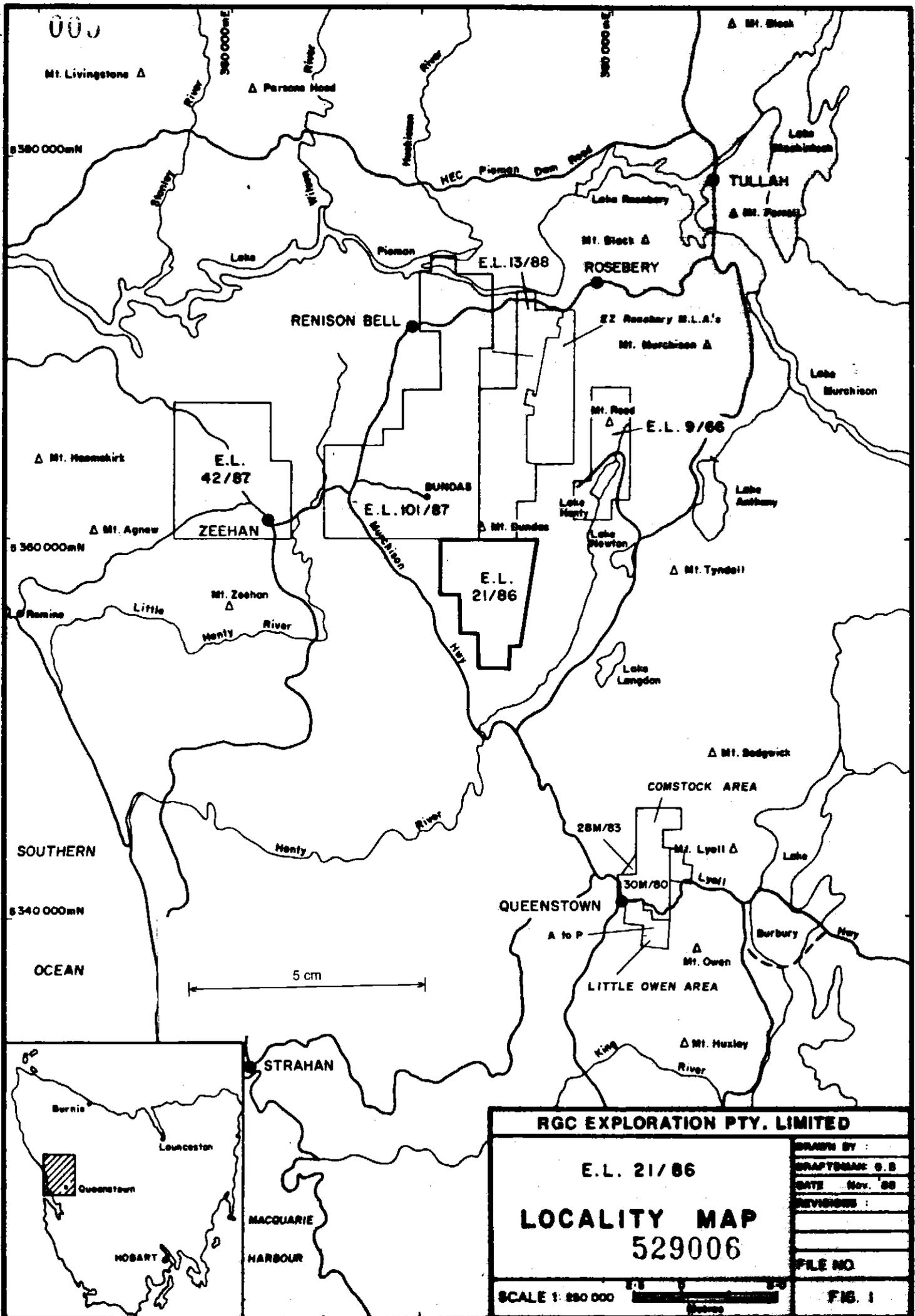
The area was relinquished by C.S.R. in April, 1984. Prior to that time, the block formed part of E.L. 15/76, which then covered 145 sq. km. The Howards Road section was excised from the Licence to meet Mines Department regulations, which came into force in 1982 (all old E.L.'s had to be reduced in area to 125 sq. km. or less).

Geologically, this area covers volcanoclastics and sediments (the White Spur Formation) of the Cambrian Dundas Group in faulted contact with gabbros and andesitic volcanics of the Cambrian Henty River Sequence (Corbett, 1986). A moderately extensive fluvio-glacial cover occurs in the Howards Road E.L. also.

This E.L. was pegged in September, 1986 for the following reasons:

- (1) It covers the postulated southern extension of the Rosebery Fault (south of Mt. Dundas) and the southwestern extension of the western splay of the Henty Fault. Both structures are known to be associated with primary gold mineralisation and therefore the Howards Road block was considered prospective for fault related gold mineralisation.
- (2) C.S.R. had obtained substantial gold values from pan concentrates within the area. Although their follow-up work had suggested that the gold's immediate source lay within glacials they had not shown what the ultimate source of the gold was.

Since the licence was granted in December, 1986 work undertaken by RGC Exploration includes; compiling the previous explorers data onto a series of standard sheets, completing a stream sediment sampling (for gold) and reconnaissance geological mapping programme and in 1988 cutting and geological mapping of the Howards Road Grid. Finally in 1989 ground magnetics and a dipole-dipole survey were completed.



| | | | | | | | | | | | | | |
|-------------------------------------|--|------------|--|-------------|-------|--------|---------|-------------|--|-----------|--|--------|--|
| RGC EXPLORATION PTY. LIMITED | | | | | | | | | | | | | |
| E.L. 21/86 | | | | | | | | | | | | | |
| LOCALITY MAP | | | | | | | | | | | | | |
| 529006 | | | | | | | | | | | | | |
| SCALE 1: 250 000 | <table border="1"> <tr> <td>DRAWN BY :</td> <td></td> </tr> <tr> <td>DRAFTSMAN :</td> <td>G. B.</td> </tr> <tr> <td>DATE :</td> <td>Nov. 88</td> </tr> <tr> <td>REVISIONS :</td> <td></td> </tr> <tr> <td>FILE NO :</td> <td></td> </tr> <tr> <td>FIG. 1</td> <td></td> </tr> </table> | DRAWN BY : | | DRAFTSMAN : | G. B. | DATE : | Nov. 88 | REVISIONS : | | FILE NO : | | FIG. 1 | |
| DRAWN BY : | | | | | | | | | | | | | |
| DRAFTSMAN : | G. B. | | | | | | | | | | | | |
| DATE : | Nov. 88 | | | | | | | | | | | | |
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| FIG. 1 | | | | | | | | | | | | | |

2.

2. PREVIOUS EXPLORATION

2.1 Pre-1986 (Non-RGC Exploration)

A total of eight different companies have held licences over the Howards Road area between the years 1960-1986. Of these, Rio Tinto, Comstaff, McIntyre, Geophoto and C.S.R. were the companies that completed some work within E.L. 21/86. A more detailed description of this work is given in the 1987 Annual Report (Roberts, 1987).

2.2 Post-1986 (RGC Exploration)

During 1986/87, the stream sediment data collected by McIntyre and C.S.R. were plotted onto a series of standard 1:5,000 base sheets. An evaluation of this data indicated that the elongate base metal anomaly obtained by McIntyre on their Anomaly 1 Grid could represent mineralisation associated with the Rosebery Fault. Also, the poor gold soil geochemical results obtained by CSR as a follow-up to their stream geochemical gold anomalies; were questionable for a number of reasons.

Based on these conclusions a field programme was undertaken in 1987 to carry out further gold geochemical stream sediment sampling, rock chip sampling and reconnaissance mapping on the E.L. This work was completed by contract geologist R. Poltock. The stream sediment geochemistry was concentrated on streams that were thought to drain the southern extension of the Rosebery Fault and western extensions of the North Henty Fault.

The results of the 1987 programme severely diminished the potential of the E.L. for everything except possible Henty-style mineralisation adjacent to the western extensions of the North Henty Fault. To test this possibility, a 20 line-km grid was extended along the extrapolated positions of two interpreted North Henty Fault extensions during 1988. This grid was geologically mapped and rock chip sampled. A dipole-dipole I.P. survey was begun but was abandoned after 7.4 line-km because of spurious readings.

The 1988 programme failed to adequately test the gridded area because of the abandonment of the I.P. programme. However the mapping and rock-chip geochemistry did not produce any encouraging results.

3.

3. GEOLOGY3.1 Henty River Sequence

A series of andesitic tuffs, agglomerates and minor lavas occurs in the southern section of the grid (see Figure 2), faulted (by the North Henty Fault) against the White Spur Formation to the north. These andesitic volcanics are interpreted to form part of the Cambrian Henty River Sequence. A suite of contemporaneous gabbros intrudes the andesites in the Howards Road area, and two irregularly shaped bodies occur on the grid. All the rocks are either unaltered or extremely weakly altered, with no noticeable increase in alteration near the North Henty Fault. Outcrop of the andesites is poor while the gabbros are exposed as large blocky boulders.

3.2 White Spur Formation

A sequence of fine grained, fissile siltstones, interbedded with lenses of coarse gritty sandstone/ greywacke occurs over the northern two-thirds of the grid (Figure 2). These units are interpreted to be part of the Cambrian White Spur Formation, which forms a basal, tuffaceous sedimentary section of the Dundas Group (Corbett, 1986). The siltstones are bedded, striking north-south and steeply dipping. All the sediments are very weakly altered or unaltered and mapping in the area over the postulated position of the North Henty Fault splay (Roberts, 1987) which faults siltstone against siltstone, - showed no evidence for the existence of such a fault. The sandstones and siltstones are often found finely interbedded (1-5m), however several thick lenses of predominantly sandstone/greywacke were distinguished and are shown on Figure 2. Exposures of these sedimentary units are scarce, being restricted to creek beds and a few steep slopes.

3.3 Fluvioglacial Deposits

A series of poorly sorted coarse boulders to fine sands occurs in lenses up to several tens of metres thick along the fluvial system of the Farrell Rivulet. This sequence has been alluvially deposited from a more widespread sequence of glacials that once covered most of the ranges surrounding the Farrell Rivulet. At present, remnants of these glacials occur on the flanks and tops of the ranges as very large boulders of Owen Conglomerate and small pockets (1-2m deep) of sand and cobbles. It appears likely that the glacial deposits were derived from the West Coast Range to the east as the deposits contain many rocks and boulders of Mt. Read Volcanics and Owen Conglomerate.

4. WORK COMPLETED AND RESULTS, 1988/89.

During the 1988/89 field season a ground magnetic survey was completed by Ultramag Geophysics. Also the dipole-dipole I.P. survey begun in 1987/88 by Scintrex but abandoned after 7.4 line-km was completed. The completed surveys involved a total of 17.5 line-km.

Details of the I.P. survey are included as Appendix 2, and an interpretative report on the results of both geophysical programmes, prepared by Roger Deakin and Associates, is included as Appendix 3.

The geophysical surveys were designed primarily to test for disseminated sulphide mineralisation of the type found at the Henty Prospect (gold). No other work was considered at this stage because of discouraging results from previous work.

The ground magnetics outlined a variety of anomalies ranging from broad, noisy features to narrow, discrete features with poor correlation between lines. Some anomalies correlate with gabbroic intrusives but many remain unexplained.

The I.P. survey produced a number of anomalies, the most significant of which are listed below:

- 1) Lines 4000E and 3600E; Chargeability/resistivity anomalies coincide with the interpreted position of the North Henty Fault. The anomaly on Line 4000E coincides with an intense magnetic high.
- 2) Line 3600E (North end); A high amplitude chargeability and coincident low resistivity anomaly without apparent geological explanation.
- 3) Line 2000E; A weak IP resistivity anomaly coincides with an intense magnetic anomaly.

Other IP anomalies are considered of low priority.

5. CONCLUSIONS AND RECOMMENDATIONS

Conclusions from work completed prior to 1988/89 can be summarised as follows:-

- (1) Generally disappointing gold results were obtained from rock chip and stream sediment sampling.
- (2) The stream sediment sampling indicated that high gold values resulting from C.S.R.'s geochemical survey were derived from glacials. The ultimate source of the gold probably lies to the east of the E.L. in Mt. Read Volcanics.
- (3) No evidence was found to support the possible existence of the Rosebery Fault, however the presence of the Henty Fault was confirmed.
- (4) The limited exposures of bedrock exhibit only very weak alteration at best.

These results severely diminished the exploration potential of everything except the possibility of Henty-style mineralisation adjacent to the western extensions of the North Henty Fault.

The combined geophysical programmes of the 1988/89 season located a few anomalies that Roger Deakin considered worth drilling. These are discussed below:

- 1) Lines 4000K and 3600E; The coincidence of the IP anomalies with the interpreted position of the North Henty Fault is significant. Alteration in the form of silicification and chloritisation was noted in the few scattered outcrops of rhyolitic/andesitic volcanics mapped in the area (Cartwright, 1988). Only two rock chip samples have been collected in the area and neither was anomalous. CSR's panned concentrate geochemistry (Roberts, 1987) indicated gold anomalies in creeks in the area, but the presence of fluvio-glacials in their catchment area discounts their usefulness.

It is recommended that infill lines be cut over the area to produce a 100m x 25m grid spacing between eastings 3400E to 4200E, and northings 8000S to 15000S. Detailed (1:1000) geological mapping and rock chip sampling should be carried out over the grid to help determine the source of the anomalies and aid in planning of a 2-3 hole drilling programme (approx. 450 metres).

6.

- 2) Line 3600E (North end); This high amplitude chargeability and resistivity anomaly is in an area where scattered outcrops of fissile siltstone have been mapped. The anomaly is 150m north of the interpreted position of a major E-W trending fault. No rock chip samples have been collected at this location, and there is no coincident magnetic anomaly.

Because of the possibility that this anomaly is due to the presence of graphite in the siltstones, it is recommended that follow-up work be limited to a detailed mapping/rock chip sampling traverse along a major creek immediately to the west.

- 3) Line 2000E; This combined IP/magnetic anomaly plots in an area of scattered outcrops of andesitic pyroclastics. However the magnetic anomaly extends across three lines (2000E, 2400E and 2800E), and centres over outcrops of gabbro on line 2400E.

It seems likely that these anomalies relate to a poorly outcropping or blind gabbro/ultramafic complex. It is therefore recommended that follow-up work be limited to detailed N-S geological/rock chip traverses across the sequence between 2000E and 2400E.

None of the other anomalies listed by Roger Deakin appear to warrant follow-up work at this stage.

REFERENCES

- CARTWRIGHT, A.J., 1988: E.L. 21/86, Howards Road Area, Annual Report. Unpublished RGC Exploration Report.
- CORBETT, K.D., 1986: Map 3: Geology of the Henty River - Mt. Read area, Geological Survey of Tasmania Map, Mt. Read Volcanics Project.
- ROBERTS, P.A., 1987: E.L. 21/86, Howards Road Area, Annual Report. Unpublished RGC Exploration Report.

APPENDIX 1

Expenditure 1988/89.

1988/89 EXPENDITURE TO SEPTEMBER 30TH 1989

| | |
|-----------------------------|--------|
| PERSONNEL | 7,159 |
| TRAVEL AND ACCOMMODATION | 1,837 |
| CONSULTANTS AND CONTRACTORS | 26,013 |
| ASSAYING | 782 |
| STORES AND SUPPLIES | 803 |
| VEHICLES | 1,047 |
| LAND ACQUISITION | 420 |
| OFFICE AND COMPUTING | 2,378 |
| | <hr/> |
| TOTAL | 40,439 |
| PREVIOUS YEARS' EXPENDITURE | 50,331 |
| | <hr/> |
| | 90,770 |
| | <hr/> |

APPENDIX 2

A Logistic Report for a Combined
IP/Resistivity and Ground Magnetic Survey
near Zeehan, Tasmania.

A LOGISTICS REPORT
FOR A COMBINED
IP/RESISTIVITY AND GROUND MAGNETIC SURVEY
NEAR ZEEHAN, TASMANIA

ON BEHALF OF
R G C EXPLORATION PTY LTD

BY
GEOTERREX PTY. LTD.
PROJECT NO. 4-100

JANUARY/FEBRUARY 1989

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 - 1.1 Location
 - 1.2 Aim
 - 1.3 Personnel and Equipment

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 - 2.1 Survey Procedures
 - 2.2 Survey Statistics

3. DATA PROCESSING AND PRESENTATION
 - 3.1 Magnetic Data Reduction
 - 3.2 IP/Resistivity Data Reduction
 - 3.3 Data Presentation

4. CONCLUSIONS AND RECOMMENDATIONS

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1. Location Map
2. Gradient Array Configuration
3. Primary Current Wave Form (transmitter) and Transient Voltage Wave Form (receiver)

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APPENDIX A - Located Data Tape Formats

1. INTRODUCTION

1.1 Location

During the period 12 January 1989 to 28 February 1989, Geoterrex Pty Ltd conducted a combined Induced Polarization/Resistivity and Ground Magnetics Survey near Zeehan, Tasmania on behalf of R G C Exploration Pty Ltd.

Three survey areas were investigated, the Montezuma, Ring River and Howard's road grids. The majority of the survey lines at the Montezuma and Ring River grids were restricted to helicopter access only. Access to Howard's Road grid was by 4WD vehicle along one road through the centre of the survey lines.

The terrain over the survey areas particularly at the Ring River grid is extremely steep and rugged.

1.2 Aim

The aim of the survey was to examine the IP, resistivity and magnetic response over the survey areas to aid in the delineation of sulphide-related mineralisation.

1.3 Personnel and Equipment

The following Geoterrex personnel were employed on the survey:

| | |
|------------------|-------------------|
| Bradley George | 12.1.89 - 28.2.89 |
| Jeremy Wilkinson | 12.1.89 - 27.2.89 |
| Michael Body | 14.1.89 - 27.1.89 |
| Keith Clinton | 27.1.89 - 19.2.89 |
| Larry Lawrence | 14.1.89 - 23.2.89 |

Geoterrex also supplied the survey equipment consisting of:

1. 2 x 7.5 kw Hunttec IP Transmitter and motor generator set.
2. 2 x Hunttec Mk IV IP Receivers with data loggers.
3. 2 x HP75 Field computers and peripherals.
4. 2 x Geometrics G856 magnetometers.
5. 1 x 4WD vehicle
6. Sufficient wire to expedite survey coverage.
7. IP Transmitter and Receiver spares to minimise downtime.
8. Field and office supplies, as required.

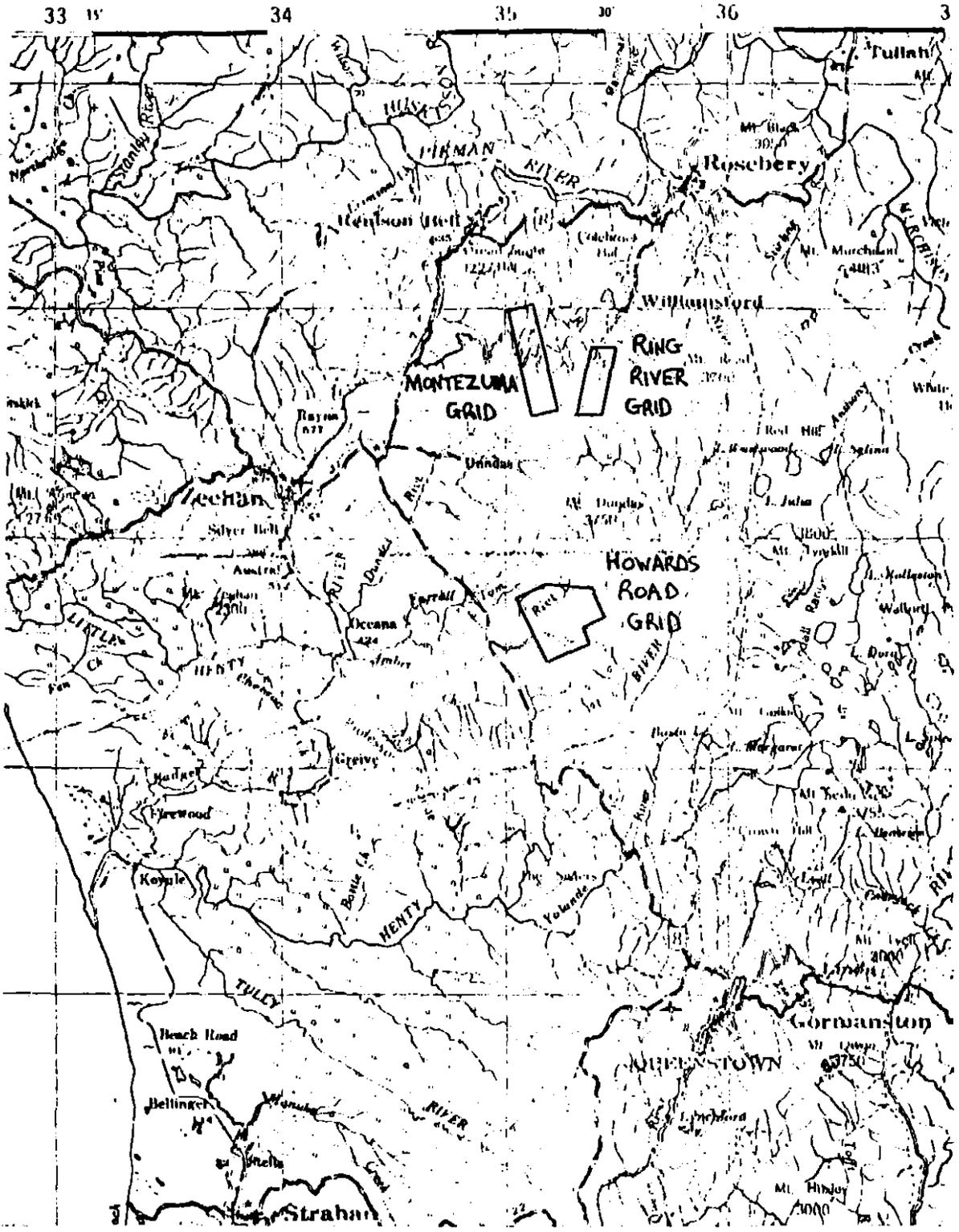
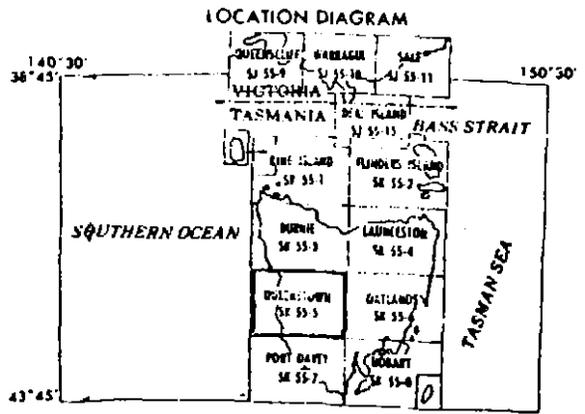


FIGURE 1: LOCATION MAP
SHOWING APPROXIMATE GRID BOUNDARIES

(1:250,000 QUEENSTOWN SK 55-5)

5 cm



2. SURVEY METHOD

2.1 Survey Procedures

(a) IP/Resistivity Survey

The Ring River and Howard's Road grids were surveyed using the gradient array configuration. In this array, (see Figure 2) the two current electrodes (A and B) are placed a large distance apart and kept fixed. The potential dipole (MN) is moved along lines parallel to the line joining the current electrodes. The separation between M and N should be as small as possible so that the readings more closely represent point measurements (ie. to enhance resolution). This distance will be determined by the necessity to have adequate primary and secondary voltages but should not exceed $AB/20$. Readings are plotted below the mid point of the potential dipole (MN).

The length of lines to be profiled is restricted to $2AB/3$ as is the total width of the survey block (see Figure 2) so as to minimize distortion of the apparent resistivity. Distortion occurs when readings are taken in areas where current flow is not parallel to the line joining the current electrodes (AB).

The primary advantage of the gradient array configuration is rapid coverage. This array is also the least susceptible to topographic variations whilst providing good overburden penetration. The method provides excellent lateral resolution and dip information as well as being easy to interpret since anomalies are similar to horizontal magnetic field anomaly forms.

This survey was conducted in the time domain mode (see Figure 3) using a 7.5 kw Hunttec transmitter powered by a three phase, 110V, 400 Hz alternator driven by a petrol engine. A frequency of 0.125 Hz was employed throughout the survey and current electrodes were prepared using aluminium foil. A Hunttec Mark IV IP receiver was used to measure apparent chargeability over an integration time extending from 100 to 1100 milliseconds after transmitter "turn-off". The primary voltage that exists between the potential electrodes while the current is flowing was also measured and used to calculate apparent resistivity (ie. apparent resistivity = geometric constant * primary voltage/applied current). Non-polarisable porous pots, fifty metres apart, were used for potential electrodes and readings were taken every twenty-five metres.

~~(b) Ground Magnetic Survey~~

A ground magnetic survey was conducted over the Montezuma and Ring River grids.

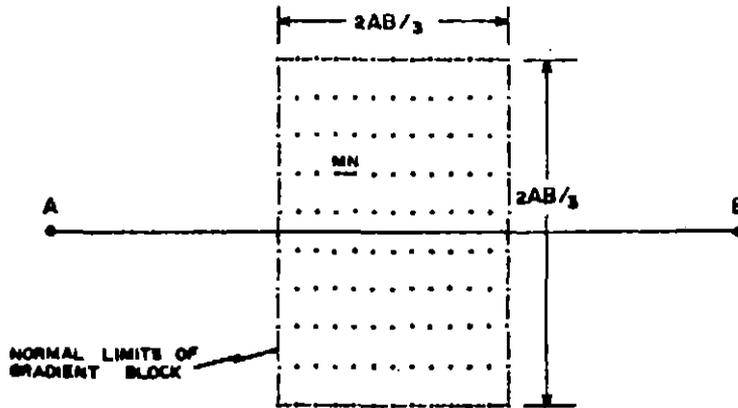
The data was obtained using a Geometrics G856 proton precision magnetometer with sensor at 2.0 metres height. A second G856 magnetometer was used as a base station to monitor diurnal variation and magnetic storms. The data is recorded digitally within the magnetometer.

The line spacing was 200 metres. The station spacings were 12.5 and 25 metres along the lines.

Three base stations were employed for the ground magnetometer survey:

| <u>Base Station</u> | <u>Location</u> | <u>Grid Coordinates</u> | <u>AMG Coordinates</u> |
|---------------------|-------------------------|-------------------------|------------------------|
| 1 | Ring River Grid Helipad | 4760N 7050E | 5364650mN 374550mE |
| 2 | Montezuma Grid Helipad | 4700N 5200E | 5364600mN 373100mE |
| 3 | Zeehan Quarry | - | 5362150mN 366450mE |

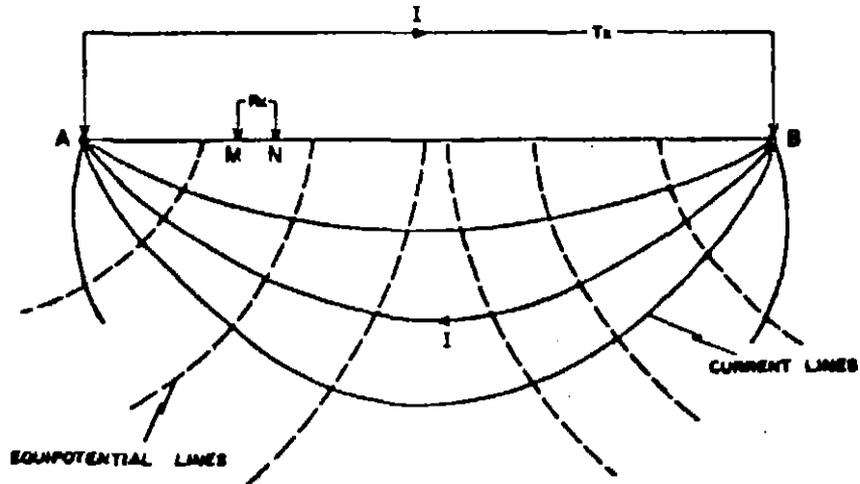
GRADIENT ELECTRODE CONFIGURATION



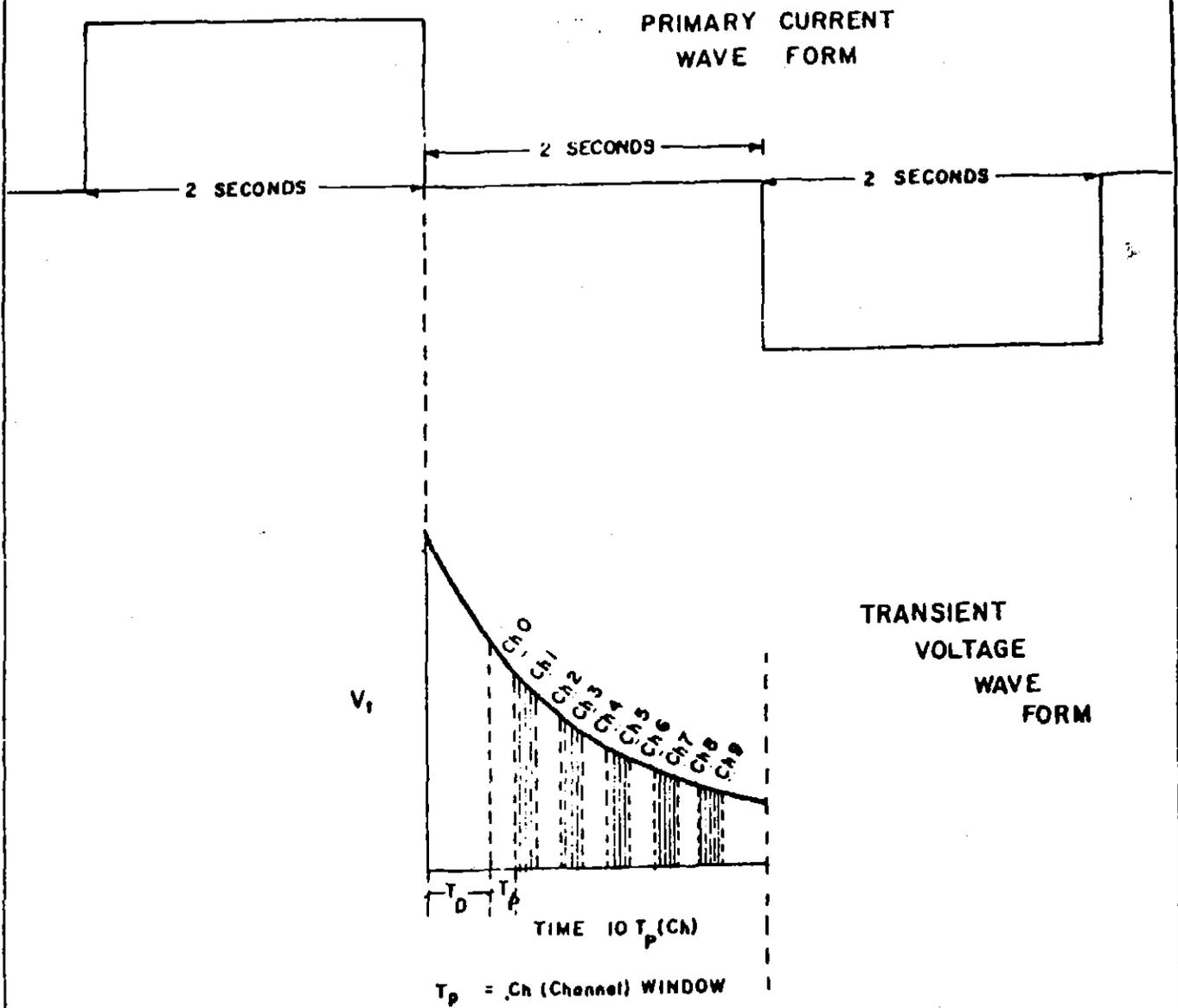
AB CURRENT ELECTRODES

MN POTENTIAL ELECTRODES

READINGS PLOTTED AT MID-POINT OF POTENTIAL DIPOLE.



geotrex limited



TIME DOMAIN WAVE FORMS AND QUANTITIES MEASURED BY THE HUNTEC MIV RECEIVER

FIGURE 3

2.2 Survey Statistics

~~(a) Montezuma Grid~~

Ground Magnetic Survey (only)

| Line | Stations | Coverage |
|--------|-------------|---|
| 4200N | 4500E-5500E | 1000m at 12.5m spacing |
| 4400N | 4500E-5500E | NOT PROCESSED - excessive noise/no diurnal data |
| 4500N | 4550E-5525E | 975m at 12.5m spacing |
| *4700N | 4575E-5600E | 1025m at 25m and 12.5m spacings |
| *4900N | 4650E-5625E | 975m at 25m and 12.5m spacings |
| *5200N | 4750E-5750E | 1000m at 25m spacing |
| *5400N | 4800E-5800E | 1000m at 25m spacing |
| *5600N | 4800E-5775E | 975m at 25m spacing |
| 5900N | 4900E-5900E | 1000m at 12.5m spacing |
| 6100N | 4850E-5850E | 1000m } |
| 6300N | 4850E-5850E | 1000m } |
| 6600N | 4800E-5800E | 975m } |
| 6800N | 4725E-5700E | 975m } |
| 7000N | 4725E-5725E | 1000m } |
| 7200N | 4675E-5675E | 1000m } |
| 7400N | 4700E-5700E | 1000m } |
| 7600N | 4675E-5675E | 1000m } |
| 7800N | 4700E-5700E | 1000m } |
| 8000N | 4800E-5800E | 1000m } |
| 8200N | 4700E-5700E | 1000m } at 12.5m spacing |
| 8400N | 4750E-5750E | 1000m } |
| 8600N | 4700E-5700E | 1000m } |
| 8800N | 4725E-5725E | 1000m } |
| 9000N | 4625E-5625E | 1000m } |
| 9200N | 4600E-5600E | 1000m } |
| 9400N | 4550E-5550E | 1000m } |
| 9600N | 4500E-5500E | 1000m } |

Total Coverage = 26 lines, 2026 stations, 25.9 line km.

*Denotes these lines utilised Montezuma base station not Zeehan base station.

Ground Magnetic Survey

| Line | Stations | Coverage |
|--------|-------------|------------------------|
| *4400N | 6800E-7800E | 1000m at 25m spacing |
| *4600N | 6900E-7875E | 975m at 25m spacing |
| *4800N | 6950E-7900E | 950m at 25m spacing |
| *5000N | 7000E-8000E | 1000m at 25m spacing |
| *5200N | 7000E-8000E | 1000m at 25m spacing |
| *5400N | 6975E-7975E | 1000m at 25m spacing |
| *5600N | 7050E-8000E | 950m at 25m spacing |
| *5800N | 7000E-8000E | 1000m at 25m spacing |
| 6000N | 7000E-8000E | 1000m at 12.5m spacing |
| 6200N | 7025E-8025E | 1000m at 12.5m spacing |
| 6400N | 7150E-8150E | 1000m at 12.5m spacing |
| 6600N | 7075E-8075E | 1000m at 12.5m spacing |
| 6800N | 7175E-8175E | 1000m at 12.5m spacing |
| 7000N | 7250E-8450E | 1200m at 12.5m spacing |

Coverage = 14 lines, 826 stations, 14.075 line km

*Denotes these lines utilised Ring River base station not Zeehan base station.

(c) Howard's Road Grid

IP/Resistivity Survey

Gradient Array Block No 1 (current electrodes at 600S and 2500N on 2600E)

| Line | Stations | Coverage | |
|-------|-----------|----------|---------------------|
| 2000E | 25N-1725N | 1700m | AB = 3.1km MN = 50m |
| 2400E | 25N-1475N | 1450m | 4 lines |
| 2800E | 25N-1350N | 1325m | 5.85 line km |
| 3200E | 25N-1400N | 1375m | |

Gradient Array Block No 2 (current electrodes at 500N and 2800S on 2600E)

| Line | Stations | Coverage | |
|-------|-----------|----------|---------------------|
| 2000E | 0N-1475S | 1475m | AB = 3.3km MN = 50m |
| 2400E | 0N-1675S | 1675m | 4 lines |
| 2800E | 25N-1725S | 1700m | 6.35 line km |
| 3200E | 0N-1500S | 1500m | |

Gradient Array Block No 3 (current electrodes at 700N and 2300S on 4600E)

| Line | Stations | Coverage | |
|-------|----------|----------|---------------------|
| 3600E | 0N-1825S | 1825m | AB = 3.0km MN = 50m |
| 4000E | 0N-1775S | 1775m | 4 lines |
| 4400E | 0N-275S | 275m | 4.35 line km |
| 4800E | 0N-475S | 475m | |

Gradient Array Block No 4 (current electrodes at 1600N and 1000S on 4600E)

| Line | Stations | Coverage | |
|-------|----------|----------|---------------------|
| 3600E | 0N-775N | 775m | AB = 2.6km MN = 50m |
| 4000E | 0N-675N | 675m | 4 lines |
| 4400E | 25N-675N | 650m | 2.65 line km |
| 4800E | 25N-575N | 550m | |

Total Coverage = 8 lines, 787 stations, 19.2 line km

Ground Magnetic Survey

Magnetic data for Howard's Road Grid provided by RGC Exploration Pty Ltd.

3. DATA PROCESSING AND PRESENTATION

3.1 Magnetic Data Reduction

The field survey and base station data was transferred from the magnetometers on to Hewlett-Packard micro-cassette at the survey site for transfer to the Geoterrex office in Sydney for data processing.

The survey and diurnal data was checked for single reading spikes, null or missing values and that there was sufficient diurnal data to cover each days survey period. The diurnal data was filtered using a 3 point triangular filter and subtracted from the survey data for each day.

~~(a) Montezuma Grid~~

~~After diurnal subtraction, an arbitrary datum of 62,100 nT was added to the data so that the "reduced" data was of a similar magnitude as the original Total Intensity values. No diurnal data was available for subtraction from lines 4200N and 4500N so arbitrary values of 370 and 270 nT were subtracted from the original Total Intensity values to approximate the average diurnal base value for each line. These values were determined from statistical observation of adjacent lines and evaluation of the contour maps.~~

(b) Ring River Grid

~~After diurnal subtraction, an arbitrary datum of 62,000 nT was added.~~

(c) Howard's Road Grid

No diurnal subtraction was performed as RGC Exploration Pty Ltd supplied diurnally corrected magnetic data on 9 track digital tape in ASCII code from a previous survey.

3.2 IP/Resistivity Data Reduction

The IP/resistivity data was logged directly from the receiver by a Hewlett-Packard HP75 computer and transferred to micro-cassettes for further processing.

The apparent resistivity (P_a) in gradient arrays is a function of the primary voltage (V_p) measured between potential electrodes, the input current (I) and a constant (K) dependant on the location of the potential electrodes with respect to the current electrodes.

$$P_a = K * V_p / I$$

Preliminary apparent resistivities were calculated in the field to check data quality and consistency.

(a) Montezuma Grid

No IP/resistivity data was collected or processed for this area.

(b) Ring River Grid

The apparent resistivities calculated in the field were used as the final processed values.

(c) Howard's Road Grid

All apparent resistivities were recalculated using the final base-map coordinates which corrected for the irregular baseline (Howard's Road) that had been arbitrarily assigned as ON even though it was not a N-S line.

3.3 Data Presentation

(a) Montezuma Grid

The magnetic data from lines 5200N-5600N was resampled by linear interpolation to complete 12.5 metre sampling for the entire grid. The data was gridded and contoured for presentation as ink on mylar maps using the following parameters:

| | |
|-------------------|------------------------------|
| Grid mesh size: | 25 x 25 metres |
| Grid filter: | Polynomial, radius 50 metres |
| Contour interval: | 10, 50 and 250 nT |
| Horizontal scale: | 1:5,000 |
| No of sheets: | 1 |

The magnetic data was presented as multi-channel profiles as biro on paper finals using the following parameters:

| | |
|------------------------------------|--|
| Horizontal scale: | 1:2,500 |
| Profile 1: | Magnetics, vertical scale = 40 nT/cm |
| | Magnetics, vertical scale = 200 nT/cm |
| Profile 1: | Magnetics, vertical scale = 200 nT/cm |
| (Lines 6800-7600 and 9200-9900) | Magnetics, vertical scale = 1000 nT/cm |

The gridded data was written to 9 track digital tape in I * 4 Binary code at a density of 1600 bpi in ECS (Engineering Computer Services Pty Ltd) GRDFIX format.

All line data was written to 9 track digital tape in ASCII code at a density of 1600 bpi in a format described in Appendix A.

(b) Ring River Grid

The magnetic data from lines 4400N-5800N was resampled by linear interpolation to complete 12.5 metre sampling for the entire grid. The data was gridded and contoured for presentation as ink on mylar finals using the following parameters:

| | |
|-------------------|------------------------------|
| Grid mesh size: | 25 x 25 metres |
| Grid filter: | Polynomial, radius 50 metres |
| Contour interval: | 5, 25 and 100 nT |
| Horizontal scale: | 1:5,000 |
| No of sheets: | 1 |

(c) Howard's Road Grid

The magnetic data supplied by RGC Exploration Pty Ltd at 1, 5, and 10 metre sampling intervals was resampled by linear interpolation and deletion to complete 5 metre sampling for the whole grid. The IP/resistivity data was resampled by linear interpolation to complete 5 metre sampling for the whole grid.

Due to the wide line spacing, no gridding and contour presentation was attempted. The magnetic and IP/resistivity data was presented as multi-channel profiles as biro on paper finals using the following parameters:

Horizontal scale: 1:2,500

Profile 1: Apparent resistivity, vertical scale = 1 logarithmic decade/3 cm

Profile 2: Total chargeability, vertical scale = 5 units/cm

Profile 3: Magnetics, vertical scale = 50 nT/cm

vertical scale = 200 nT/cm

All line data was written to 9 track digital tape in ASCII code at a density of 1600 bpi in a format described in Appendix A.

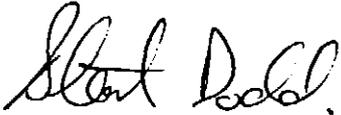
4. CONCLUSIONS AND RECOMMENDATIONS

A comprehensive geophysical program has been successfully completed over three areas located near Zeehan in Tasmania. The results suggest that this method of investigation is suited to this region, including the particularly rugged and therefore difficult areas such as those encountered on the Ring River Grid. Helicopter support greatly expedited survey productivity in these areas.

The irregular base line of the Howard's Road Grid meant that apparent resistivities could not be readily calculated in the field. Therefore, knowledge of correct survey grid coordinates prior to the acquisition of field data would simplify subsequent data processing for future surveys.

To facilitate the production of multi-channel profiles and located data tapes, it is essential that the sampling intervals for each geophysical method, where different, be even multiples of each other.

Respectfully submitted,



STUART DODD
Geophysicist

APPENDIX A

LOCATED DATA TAPE FORMATS

- (a) ~~Montezuma Grid~~
- (b) ~~Ring River Grid~~
- (c) Howard's Road Grid

RGC EXPLORATION PTY LTD

HOWARD'S ROAD GRID
GROUND SURVEY

LOCATED DATA TAPE FORMAT

| COLUMN | DESCRIPTION |
|---------|-----------------------------|
| 1 - 6 | DATE IN ddmmyy |
| 7 | BLANK |
| 8 - 10 | DAY number |
| 11 - 16 | Not used |
| 17 | BLANK |
| 18 - 23 | LINE number |
| 24 - 29 | FIDUCIAL |
| 30 | ASTERISK (*) if recovery pt |
| 34 - 42 | AMG EASTING coordinate |
| 46 - 55 | AMG NORTHING coordinate |
| 57 - 62 | Station identifier |
| 63 - 70 | Corrected magnetic value |
| 71 - 76 | Total Chargeability |
| 77 - 82 | Apparent Resistivity |
| 83 - 84 | BLANK |

| | | |
|---------------|---|------------|
| RECORD LENGTH | = | 84 Bytes |
| BLOCK SIZE | = | 5040 Bytes |
| 9-TRACK ASCII | | 1600 bpi |

APPENDIX 3

Report on Geophysical Results from the Howards Road Prospect

Report on Geophysical Results
from the
Howards Road Prospect
E.L. 21/86 TASMANIA
on behalf of
R.G.C. Exploration Ltd.

by

R. Deakin

January 1989

Contents

| | Page |
|------------------------------------|------|
| 1. Introduction | 1 |
| 2. Geophysical Results and Geology | 1 |
| 3. Interpretation | 2 |
| 4. Conclusions | 5 |
| 5. Recommendations | 6 |

Accompanying Plans

Figure No.

1. Geophysical Interpretation Plan 1:5000
2. Line 4000E Data and Interpretation Section
3. Line 3600E Data and Interpretation Section
4. Line 2000E Data and Interpretation Section

1. INTRODUCTION

- 1.1 The Howards Road prospect is an exploration grid established within E.L. 21/86 in the Rosebery - Zeehan district of Tasmania by R.G.C. Exploration Pty. Ltd. As part of their base and precious metal exploration program within this area R.G.C. have carried out a magnetometer survey and a gradient array I.P. - resistivity survey of the grid.
- 1.2 The Howards Road grid consists of eight traverses, oriented approximately NNW-SSE and spaced 400m apart. The geophysical data was presented as line profiles at 1:2500 scale of the three parameters that were recorded, viz: total force magnetics, gradient array chargeability and gradient array apparent resistivity. Interpretation of this data was carried out with the assistance of an interpretative geological plan at 1:5000 scale and topographic contours at 1:25000 scale.
- 1.3 The style of mineralisation sought in the area is either a Henty style gold-pyrite body or a Renison style tin-pyrrhotite assemblage. Both target types are often associated with large faults and the focus of interest within the Howards Road grid is the North Henty Fault which strikes approximately E-W and occurs in the southern part of the grid. Of similar interest is another geologically inferred fault with an E-W strike direction, which has been interpreted in the northern part of the grid.

2. GEOPHYSICAL RESULTS AND GEOLOGY

- 2.1 In the south east of the grid, the North Henty Fault strikes E-W and swings to an approximate NE-SW strike west of grid line 3600E. South of this fault, rocks of the Henty River Sequence, predominantly andesitic volcanics with gabbroic intrusives have been mapped. These lithologies characteristically produce a low chargeability background of about 7 mV/V which rises to about 20 mV/V north of the fault.
- 2.2 A magnetic anomaly zone, about 300m wide, with peaks up to 2000 n.T. occurs in the south-western corner. On grid line 2400E this magnetic anomaly zone can be readily correlated with gabbroic intrusives which however, are not recorded on adjacent lines. A definite correlation between intrusive gabbro and anomalous magnetics cannot therefore be established from the results; also a large area of gabbroic intrusives, shown on the southern end of lines 3200E to 4000E, is magnetically flat.

037

- 2.3 North of the North Henty Fault, the Cambrian White Spur Formation, predominantly mudstones and siltstones, has been mapped. Within this formation, N-S striking units of a conglomeratic tuffaceous greywacke have been differentiated. In the central part of the grid an E-W valley is filled with Quaternary deposits which mask the underlying White Spur Formation.

Two of these greywacke units in the west are intersected by grid lines 2000E, 2400E and 2800E. In each case this lithology is characterised by coincident magnetic anomalies, a small increase in background chargeability and a decrease in background apparent resistivity. Further east a similarly denoted, larger, greywacke unit has no equivalent magnetic response although similar background changes in chargeability and resistivity are apparent.

- 2.4 A handful of moderately interesting chargeability and resistivity anomalies have been delineated by the gradient array survey. The most striking is the chargeability high and apparent resistivity low at 650N - 700N on line 3600E which occurs about 200m north of the inferred fault on this line. In the south, chargeability anomalies and corresponding apparent resistivity lows occur on lines 3600E and 4000E adjacent to the North Henty Fault.

In the south west a weak chargeability anomaly and apparent resistivity low, at 1150S - 1200S on line 2000E, occurs within the broad magnetic anomaly here and could be associated with pyrrhotite mineralisation.

Weak to moderate chargeability anomalies are evident in the data from lines 4400E and 4800E on either side of the interpreted fault in this area. These anomalies occur within sediments of the White Spur formation.

3. INTERPRETATION

3.1 MAGNETICS

- 3.1.1 Magnetic anomalies in the grid area are either broad noisy features or narrow discrete anomalies with questionable or no correlations to adjacent grid lines. For these reasons the magnetic interpretation is basically qualitative. Generally however the data indicates that anomaly sources are shallow and steeply dipping.

Several, one or two point spikes are evident in the data profiles. These are considered to be spurious instrumental or cultural noise or lightning strikes.

- 3.1.2 In the south west corner of the grid broad magnetic anomalies on lines 2000E to 2800E appear to form an E-W, arcuate, zone which correlates with intrusive gabbro only on line 2400E (Figure 1). One anomaly peak on line 2000E coincides with a small I.P. - resistivity anomaly and approximate quantitative interpretation (figure 4) indicates a near vertical source at an approximate depth of 30 metres.

The poor correlation of the magnetics with the mapped gabbro and the lack of anomalous magnetic character over the large gabbro body to the east, indicates that there is two or more different gabbroic lithologies or a mineralogically differentiated series of intrusions.

- 3.1.3 Narrower magnetic anomalies occur on lines 2800E to 4000E in a zone south of the North Henty Fault and north of the interpreted gabbro intrusive. A possible ENE- WSW strike direction can be interpreted for these features which however is uncertain, because of the large (400m) line spacing. Cross faulting, with an approximate N-S orientation, can be invoked to explain interpreted displacements of these trends (Figure 1).

The magnetic anomaly at 1200S -1300S on line 4000E is an extremely high amplitude feature compared to the other narrow anomalies to the west, and therefore may be expected to reflect a quite different lithology.

- 3.1.4 Magnetic anomalies or anomaly zones occur at 200N - 500N/line 2000E, 800N - 1050N/line 2400E and 600N - 850N/line 2800E which correlate directly with units of conglomeratic tuffaceous greywacke within the White Spur Formation. A relatively large concentration of magnetite within these units is therefore inferred. Further east however, a larger greywacke zone is recorded which has no magnetic character whatsoever. Significantly different mineralogies are therefore interpreted for these similarly named units. The possibility of magnetic intrusive dykes within the greywacke units in the west may be worth investigation.

Other magnetic anomalies of similar magnitude and character occur in this zone on lines 2000E, 2400E and 3200E and are interpreted as similar bodies or units with a similar N-S strike direction. (Figure 1). Apart from the small anomaly at 575E on line 2400E these anomalies are masked by Quaternary sediments and therefore have not been delineated by the geological mapping. Possible E-W faulting has been invoked (Figure 1.) to explain possible displacements of these anomalies.

3.2 GRADIENT ARRAY I.P. - APPARENT RESISTIVITY

- 3.2.1 A moderate chargeability (I.P.) anomaly of the order of 20mV/V above background (inferred) has been recorded in the interval 1000S to 1300S on line 4000E. The main peak of this anomaly is just south of the North Henty Fault and a subsidiary chargeability peak to the north, can be interpreted which is coincident with the surface occurrence of this fault and with an anomaly low in the apparent resistivity profile. The interpreted dip of the causative body is to the south (Figure 2) and the I.P. anomaly may well reflect sulphide mineralisation associated with the fault, should it dip to the south. Interpretation of the gradient array data here is only qualitative because the anomaly is superimposed upon the gradient of increasing chargeabilities to the north which occurs universally across the North Henty Fault in the grid area.

Another subsidiary peak in the chargeability profile is centred at 1275S and is coincident with a resistivity anomaly low and with a high intensity magnetic anomaly. This zone therefore is a prospective pyrrhotite target and interpretation of the magnetics indicates a steep dip to the south and a source depth of the order of 30 metres (Figure 2).

To the west, on line 3600E, a chargeability high and resistivity low of comparable magnitude are coincident with the North Henty Fault. These results therefore suggest the possibility of 400m plus, of strike length of mineralisation associated with the fault in this locality. A narrow magnetic anomaly with a significantly reduced amplitude occurs at 1230S on this line and is about 150m south of the fault. This may be correlated with the magnetic anomaly at 1275S on line 4000E but the difference in amplitude and the lack of coincident chargeability - resistivity character for the 3600E anomaly, tends to negate this conclusion.

- 3.2.2 A distinctive chargeability high (30mV/V above background) with a coincident apparent resistivity low occurs at 650N - 700N on line 3600E. This anomaly, which has no equivalent response on adjacent traverses, can be interpreted in terms of a shallow, thin tabular source with a steep dip to the south (assuming on approximate E-W strike direction?) using a simplified 2D, uniform electric field modelling procedure (Figure 3).

No clue as to the likely cause of this anomaly is evident in the geological data. The geologically interpreted E-W fault in this area is masked by Quaternary deposits on line 3600E and could be related to the anomaly. The inferred position of this fault is however 200m further to the south.

A very broad, low amplitude, chargeability high and resistivity low is evident in the interval 900N to 1150N on line 3200E. This weak anomaly could be the response of a similar body at a depth of the order of 100m to 150m. The possibility exists therefore of an E-W striking body or zone with a significant plunge to the west.

- 3.2.3 A weak chargeability high (7mV/V above background) with a coincident resistivity low occurs at about 1200S on line 2000E. This anomaly is within the broad zone of anomalous magnetic character south of the North Henty Fault and correlates directly with a separate magnetic anomaly within the broader feature. The anomaly results together with an interpretation of the magnetic anomaly are shown of Figure 4.

The direct coincidence with the magnetic anomaly provides a possible pyrrhotite target. The causative body is interpreted as approximately vertical dipping and at a depth of about 30m (Figure 4).

- 3.2.4 A narrow and very weak chargeability high and resistivity low anomaly occurs at 575N on line 2400E. This is coincident with a weak magnetic anomaly and could present a possible pyrrhotite target. It is more likely however, that this data reflects another narrow greywacke lens which characteristically are magnetic with elevated chargeabilities and lower apparent resistivities.
- 3.2.5 Broad and relatively weak chargeability highs have been recorded at 50S - 200S and 200N - 300N on line 4800E either side of the interpreted fault here. Quite subtle resistivity lows are associated with these chargeability highs which could be indications of sulphides but are more likely to reflect background charges related to variations in lithology within the White Spur Formation. Similarly, a narrow, noisy, weak chargeability anomaly centred at 500N on line 4400E may be of interest although it has no associated resistivity anomaly.

4. CONCLUSIONS

- 4.1 The magnetometer survey of the Howards Road grid has delineated a variety of anomalies which are only partly explained. In the west, north of the North Henty Fault units of conglomeratic tuffaceous greywacke correlate with magnetic anomalies and on face value do not appear to be an adequate explanation. The possibility of basics or ultrabasics with these greywacke units may be worth investigation.

Anomalous magnetic zones in the south west of the grid

correlate in part, with gabbroic intrusives however the true source of the magnetic anomalies is unclear.

- 4.2 Chargeability anomalies with coincident resistivity lows appear to be related to the North Henty Fault on lines 4000E and 3600E. At this stage these anomalies present the most prospective target for the Howards Road prospect.

The chargeability anomaly on line 4000E is associated with an intense magnetic anomaly and presents therefore a potential pyrrhotite target.

- 4.3 A weak I.P. - resistivity anomaly in the south west on line 2000E also has a coincident magnetic anomaly and is therefore considered as another potential pyrrhotite target.

- 4.4. A high amplitude chargeability high with a coincident resistivity low occurs at the northern end of line 3600E. There is no apparent geological reason for this anomaly, however it has potential as a base metal - precious metal (or graphite!) target. A possible deeper, extension to the west of this anomaly occurs on line 3200E.

- 4.5 Other I.P. anomalies on lines 4400E and 4800E are worthy of consideration as prospective mineralised targets. At this stage however, they are considered low priority targets.

5. RECOMMENDATIONS

- 5.1 At this stage of the exploration of the Howards Road prospect the detailed geology is unclear and the cause of the geophysical anomalies is speculative.

The recommendations therefore are to test the three most encouraging anomalies and re-assess the prospect in the light of these results.

- 5.2 The recommended drill targets in priority order are:-

1. Line 4000E - to test the I.P. anomaly.
A drill hole collared at approximately 1200S, inclined towards the north and designed to intersect the point at 1160S, RL 570m (or 50m depth below 1160S). This hole should extend approximately 100m beyond the target depth. (Figure 2),
2. Line 4000E - to test the magnetic/I.P. anomaly.
A drill hole collared at approximately 1310S, inclined towards the north and designed to intersect the point 1280S, RL 550m (or 50m vertically below 1280S). This

hole should extend 50m beyond the target (Figure 2).

3. To test the I.P. anomaly on the northern end of line 3600E.

A drill hole collared at approximately 640N on line 3600E, inclined to the north and designed to intersect the point 50m vertically below 675N. This hole should extend 50m beyond the target (Figure 3).

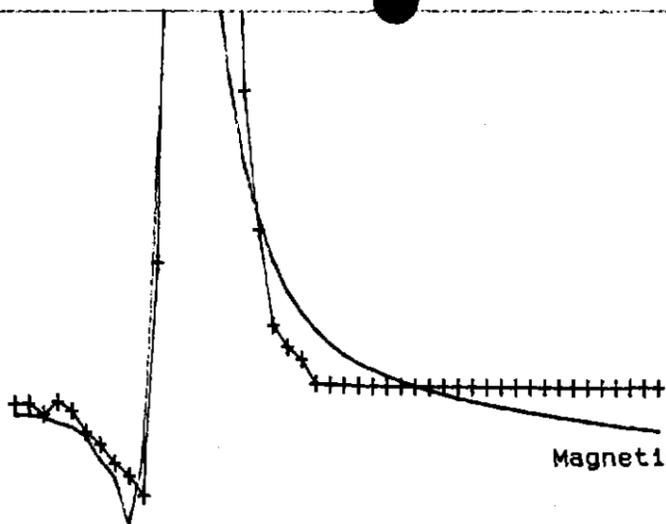
4. To test the I.P.- magnetic anomaly on the southern end of line 2000E.

A drill hole collared at approximately 1250S on line 2000E, inclined towards the north and designed to intersect the point 1200S, R.L. 350m (or 60m vertically below 1200S). This hole should extend 50m beyond the target. (Figure 4).

- 5.3 Should it be advisable to test the North Henty Fault directly, a drill hole beneath the coincident chargeability anomaly on line 3600E presents the most favourable location. For this location a target at 50m depth below the surface position of the fault is recommended.

043

nanno Tesla
2000
1600
1200
800
400
0

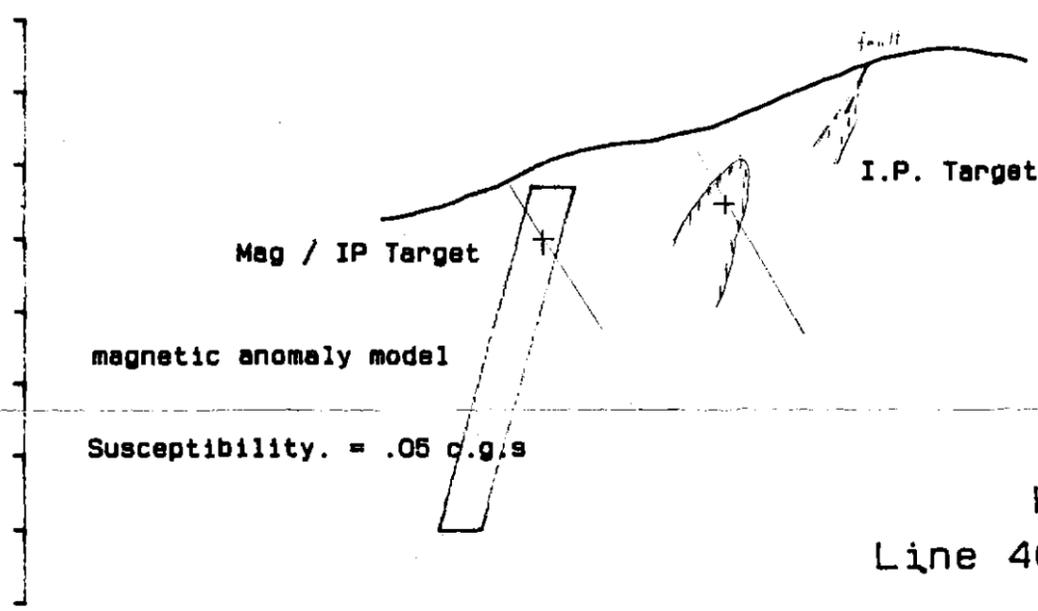


m.S.
20
15
10
5
0

ohm metres
5000
4500
4000
3500
3000
2500
2000
1500

R.L. metres
700
650
600
550
500
450
400
350
300

Distance in metres
-1400 -1300 -1200 -1100 -1000 -900



R.G.C. Exploration Ltd.
Howards Road Prospect
Line 4000E Data + Interpretation

5 cm

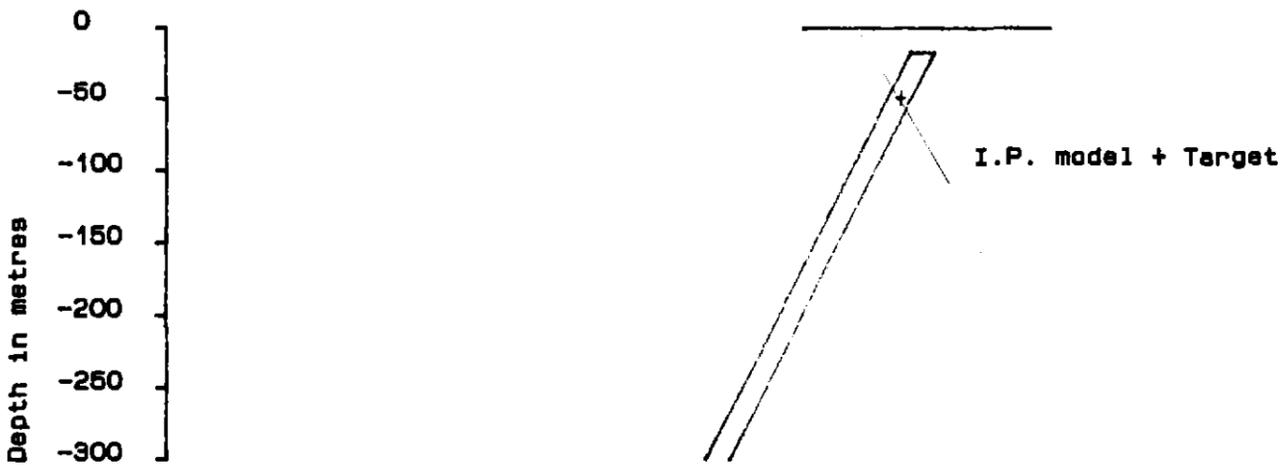
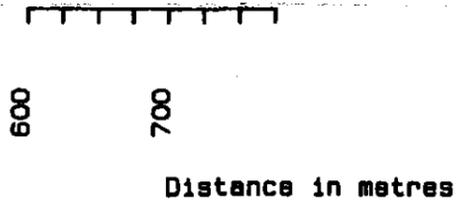
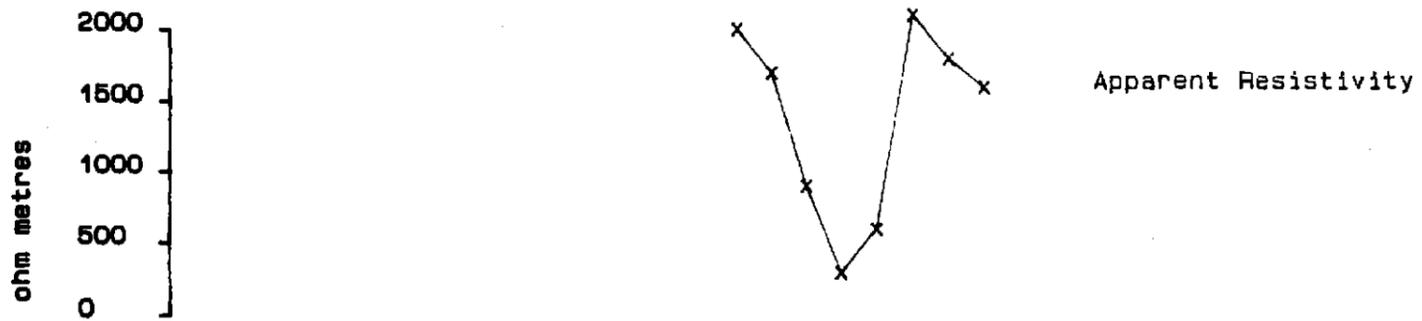
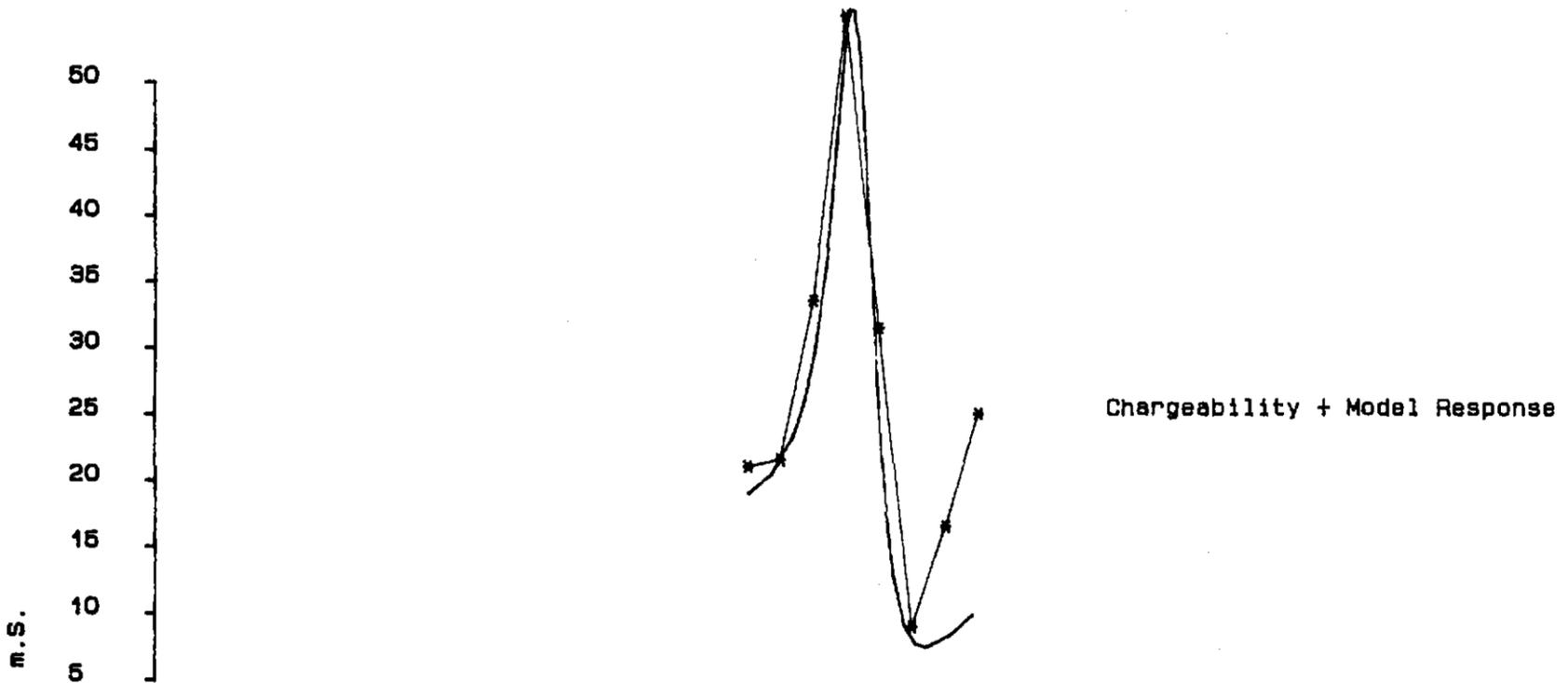
Scales :
Hor. 1 : 5000
Vert. as shown

90-3081

Figure 2

529044

044



R.G.C. Exploration Ltd.
 Howards Road Prospect
 Line 3600E Data Profiles

5 cm

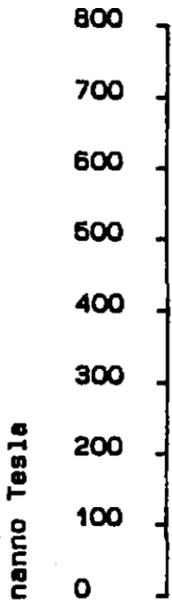
Scales :
 Hor. 1 : 5000
 Vert. as shown

90-3081

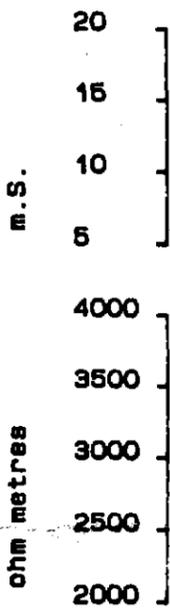
Figure 3

529045

045

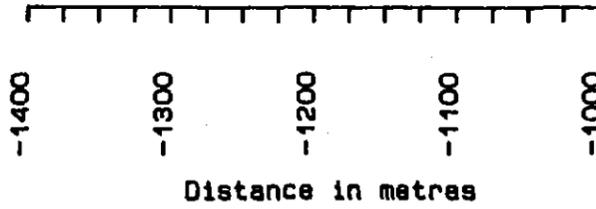


Magnetics + Model Anomaly

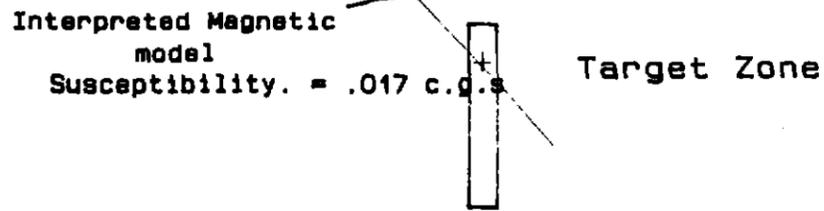
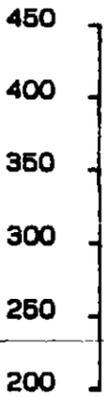


Chargeability

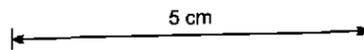
Apparent Resistivity



R.L. metres



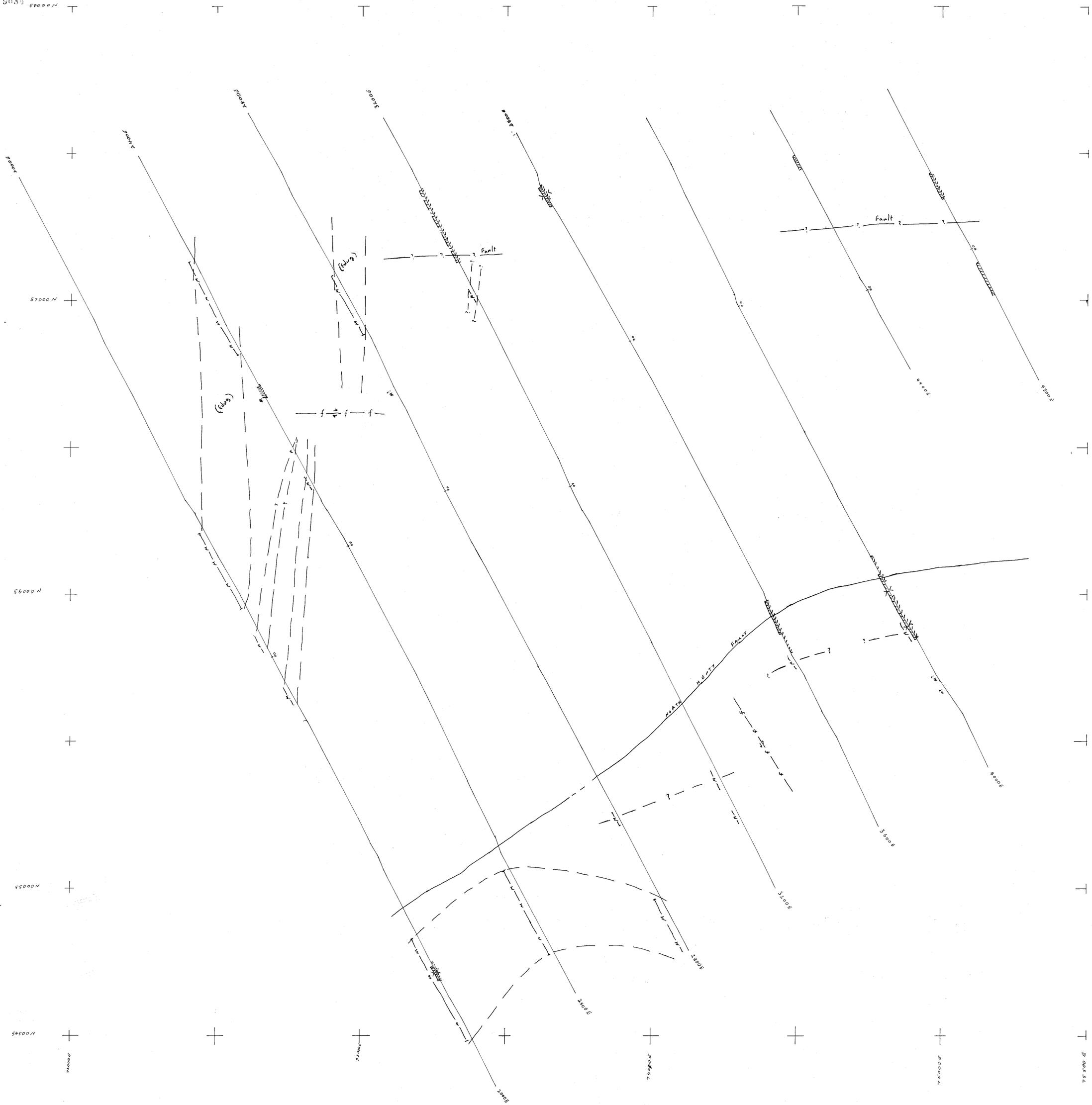
R.G.C. Exploration Ltd.
 Howards Road Prospect
 Line 2000E Data + Interpretation



Scales:
 Hor. 1 : 5000
 Vert. as shown.

90-3081

Figure 4



- Geophysical Grid Line
- ▨ Chargeability (I.P.) Anomaly
- ▨ Apparent Resistivity (low) Anomaly
- Magnetic Anomaly
- - - Anomaly trend or boundary (interpreted)
- f - f - Possible fault interpreted from geophysics
- X Drill target

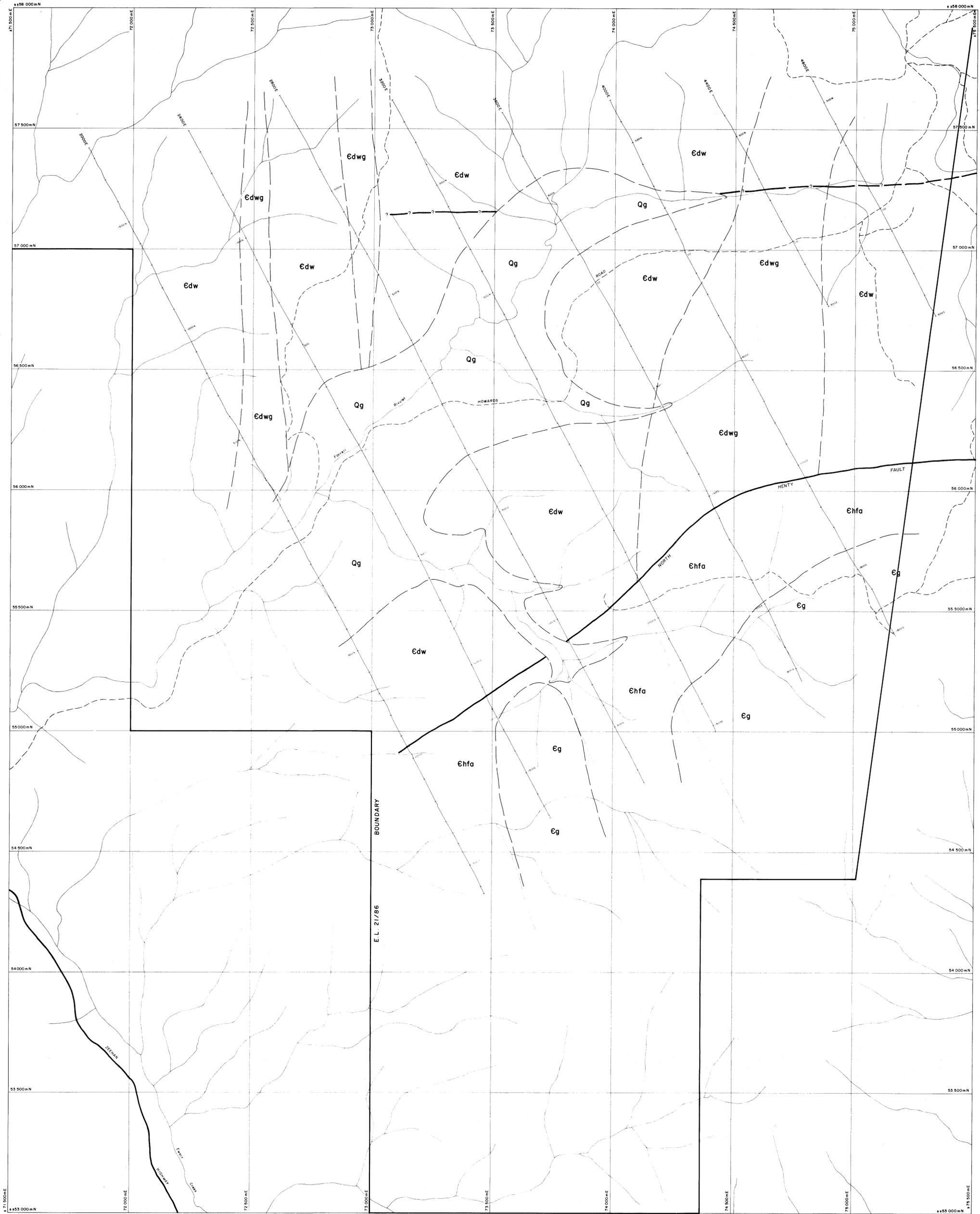
5cm

R.G.C. Exploration Ltd.
 Howards Road Prospect
 Geophysical Interpretation Plan
 Scale 1:5000

90-3081

529047

Appendix 3
Figure 1



LEGEND

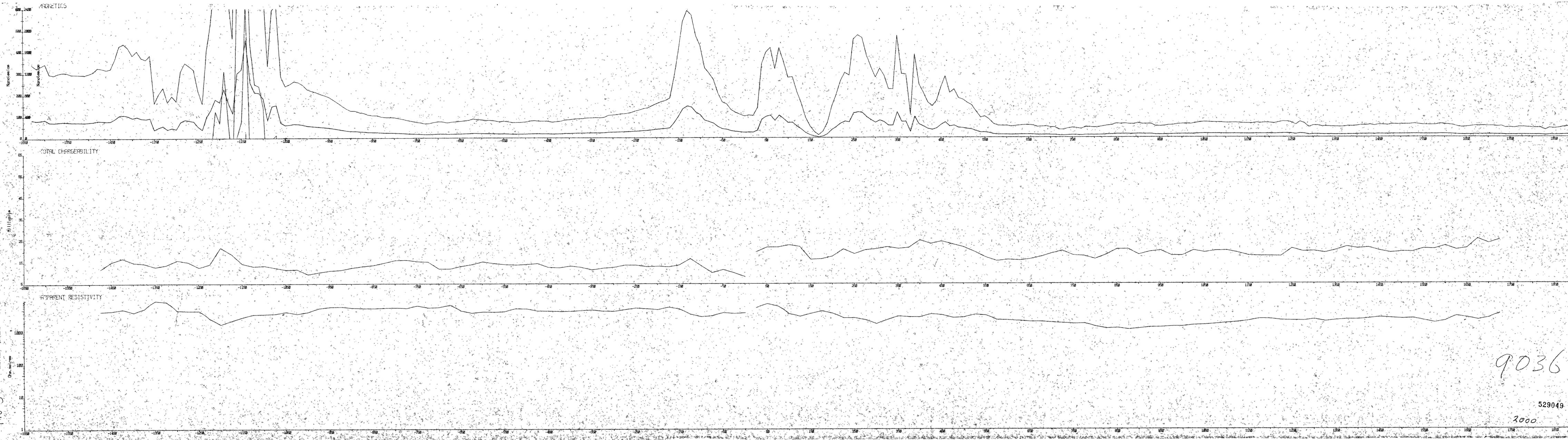
- QUATERNARY Qg Fluvio-glacial and alluvial deposits
- Edw DUNDAS GROUP White Spur Formation, predominantly siltstones and silty shales mudstones with lenses of coarse, conglomeratic, tuffaceous greywacke.
- CAMBRIAN Ehfa Eg HENTY RIVER SEQUENCE Predominantly andesitic volcanics, agglomerates, lavas and tuffs with gabbroic intrusives (Eg)
- Inferred Geological Contact
- Inferred Fault
- Fault



9035

| | | | | | | | | | | | |
|---|--------------|--------|-------|------|------|-----------|---------|--|------------------|--------|--|
| RGX EXPLORATION PTY. LIMITED <small>(INC. IN N.S.W.)</small> | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">COMPILED</td><td style="font-size: 8px;">A.J.C.</td></tr> <tr><td style="font-size: 8px;">DRAWN</td><td style="font-size: 8px;">G.B.</td></tr> <tr><td style="font-size: 8px;">DATE</td><td style="font-size: 8px;">Okt. 1988</td></tr> <tr><td style="font-size: 8px;">CHECKED</td><td style="font-size: 8px;"> </td></tr> <tr><td style="font-size: 8px;">25,000 REFERENCE</td><td style="font-size: 8px;">OCCANA</td></tr> </table> | COMPILED | A.J.C. | DRAWN | G.B. | DATE | Okt. 1988 | CHECKED | | 25,000 REFERENCE | OCCANA | <p style="font-size: 10px;">E.L. 21/86</p> <p style="font-size: 10px;">HOWARDS ROAD GRID</p> <p style="font-size: 12px;">INTERPRETIVE</p> <p style="font-size: 12px;">GEOLOGY 529048</p> |
| COMPILED | A.J.C. | | | | | | | | | | |
| DRAWN | G.B. | | | | | | | | | | |
| DATE | Okt. 1988 | | | | | | | | | | |
| CHECKED | | | | | | | | | | | |
| 25,000 REFERENCE | OCCANA | | | | | | | | | | |
| BASE PLAN No. _____ | SCALE 1:5000 | | | | | | | | | | |
| OVERLAY PLAN No. _____ | FIG. 2 | | | | | | | | | | |

9036
FIG 3
LINE 2000
4-100 RC HOWARDS ROAD GRID PROFILES

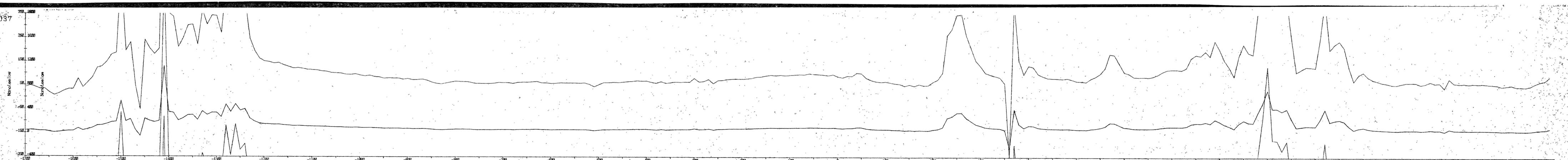


9036

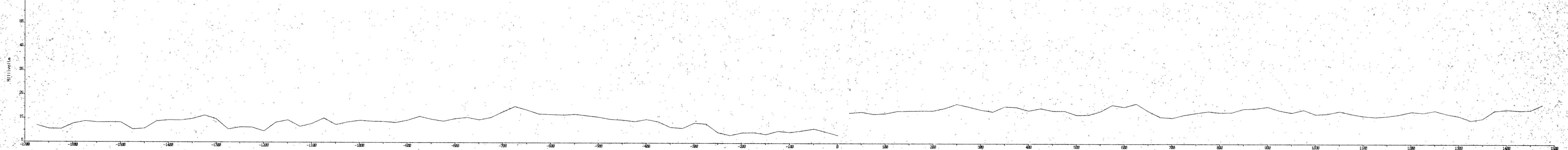
529049

2000

9037



TOTAL CHARGEABILITY



APPARENT RESISTIVITY

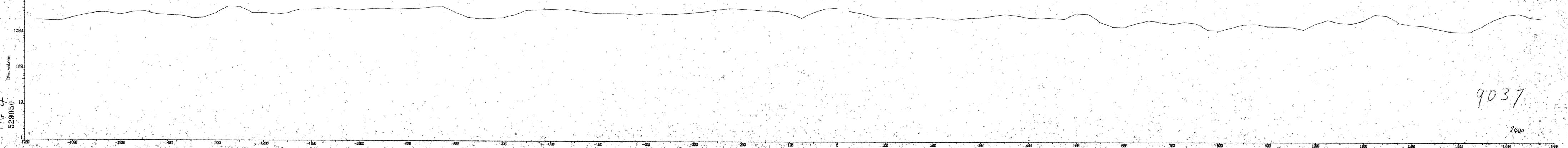
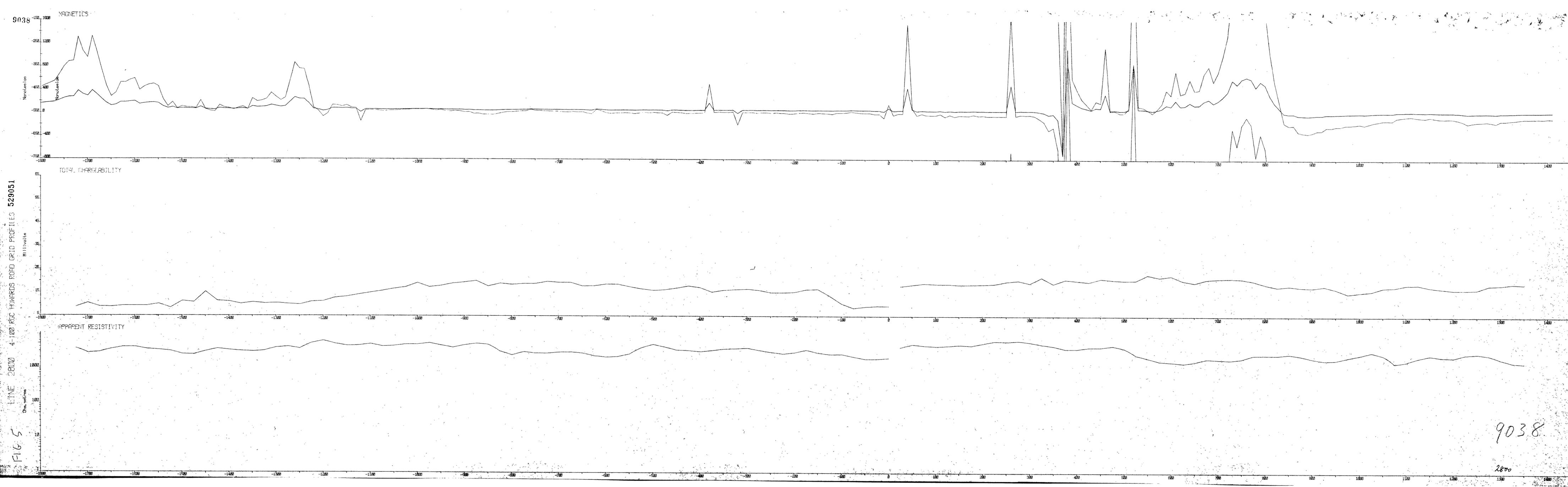


FIG 4
 529050
 LINE 2400 / 4-100 RCC HOWARD ROAD GRID PROFILES

9037

2400

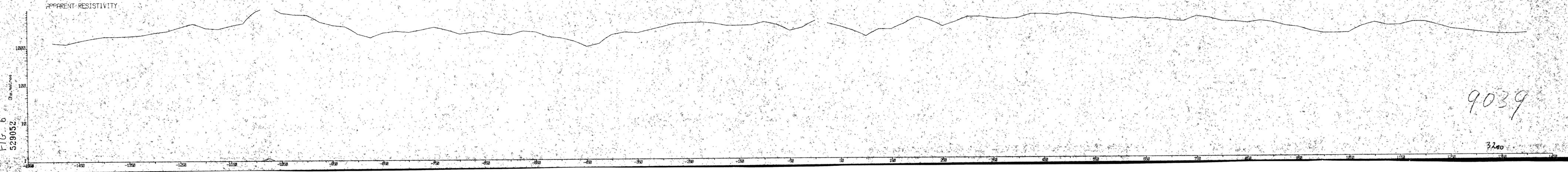
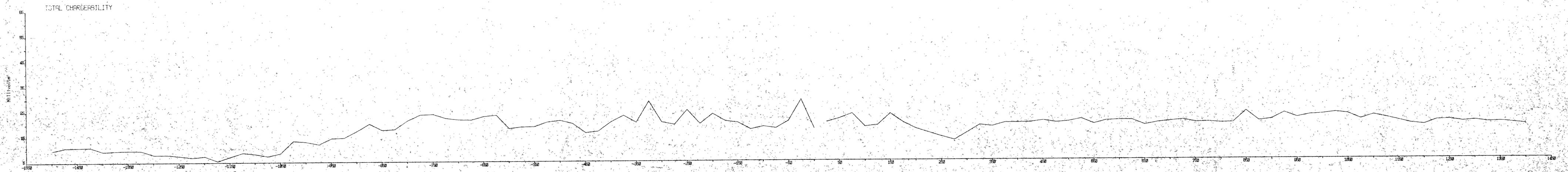
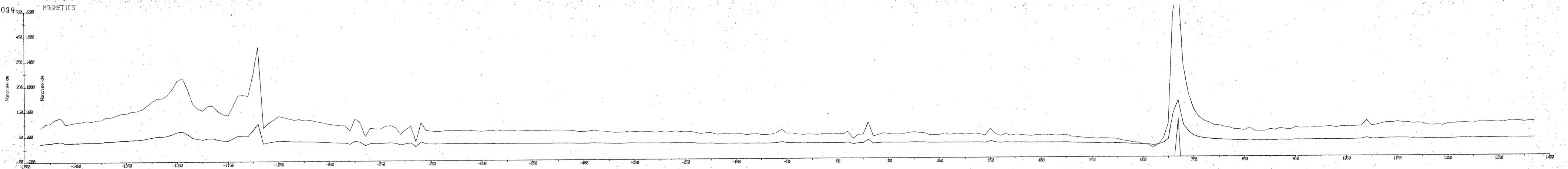
FIG 5 LINE 2800 4-100 RCG HUIARDS ROAD GRID PROFILES 529051



9038

2800

9039



LINE 3200 4-100 RC HOWARDS ROAD GRID PROFILES
 FIG. 6
 529052

9039

3200

9040

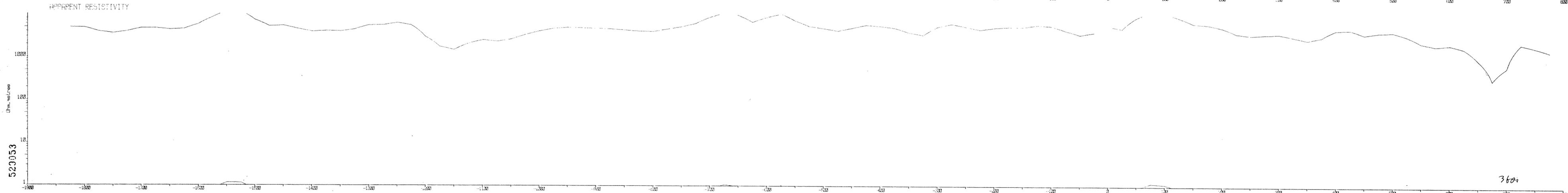
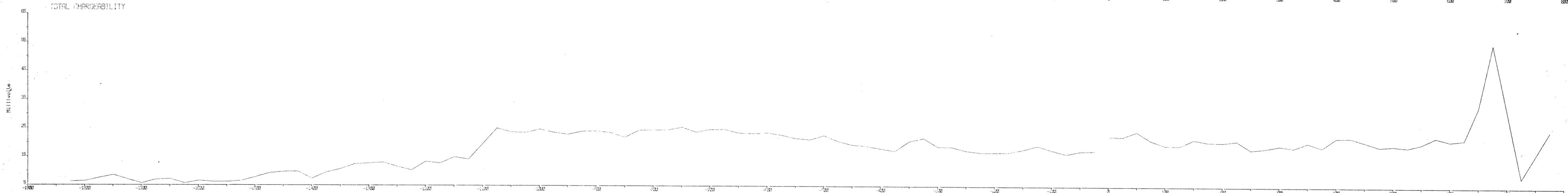
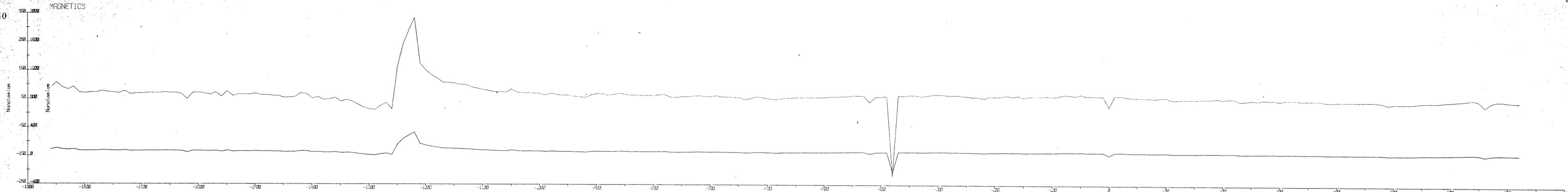


Fig. 7 LINE 3600 4-100 RCG HOWARDS ROAD GRID PROFILES

523053

3600

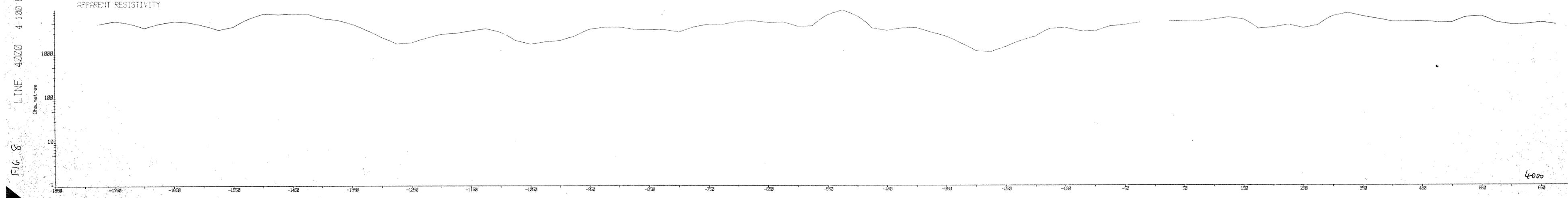
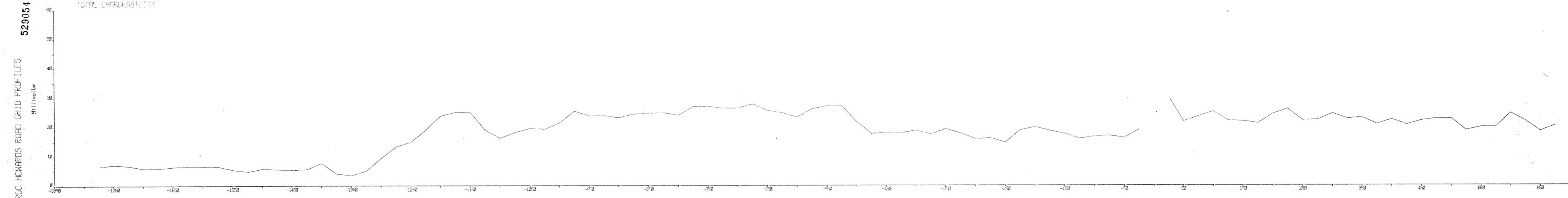
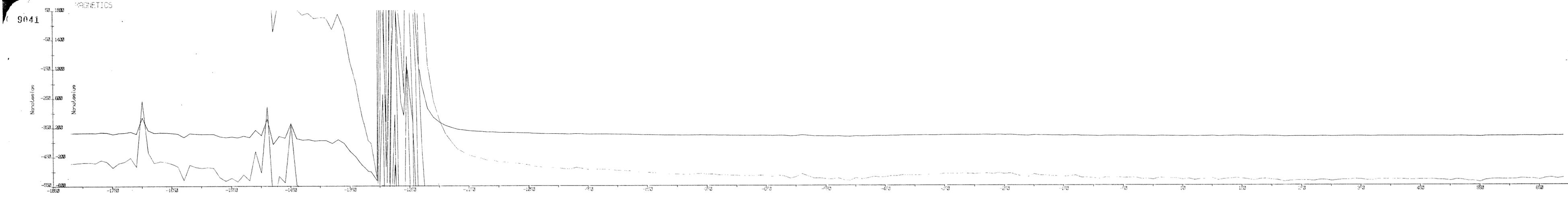
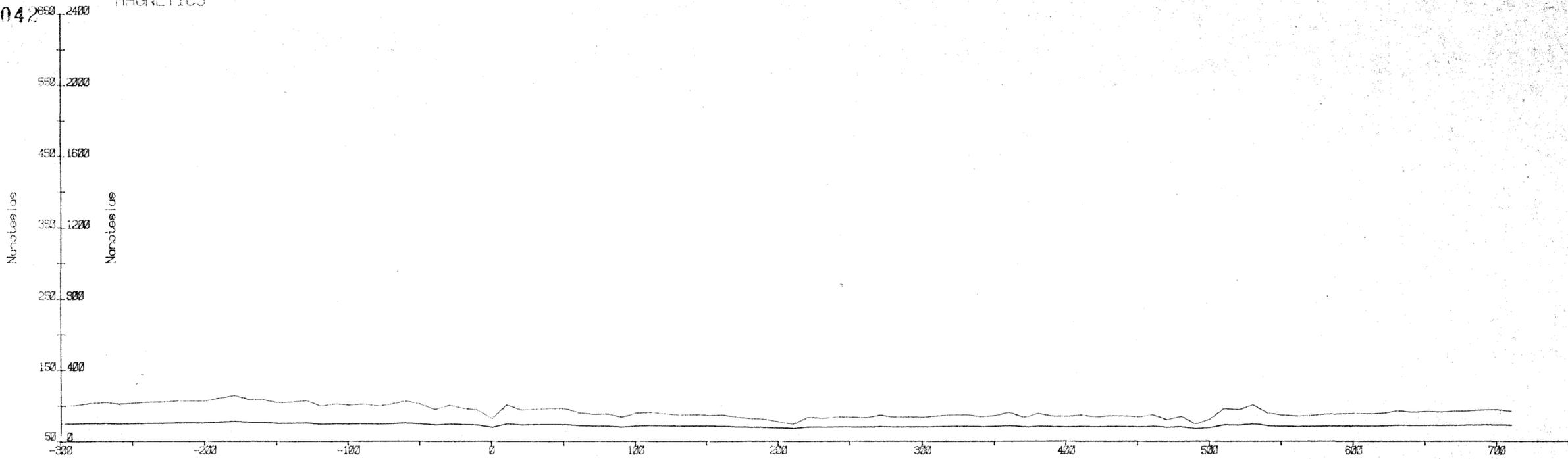


FIG 8 LINE 4000 4-100 RCC HOWARDS ROAD GRID PROFILES

4000

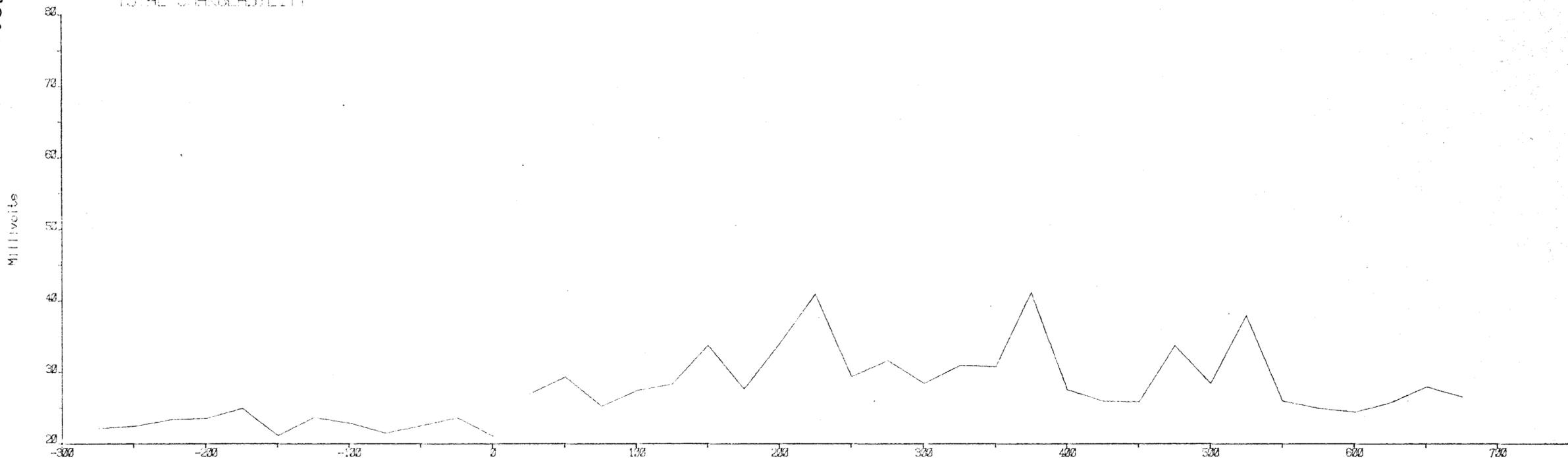
9042

MAGNETICS

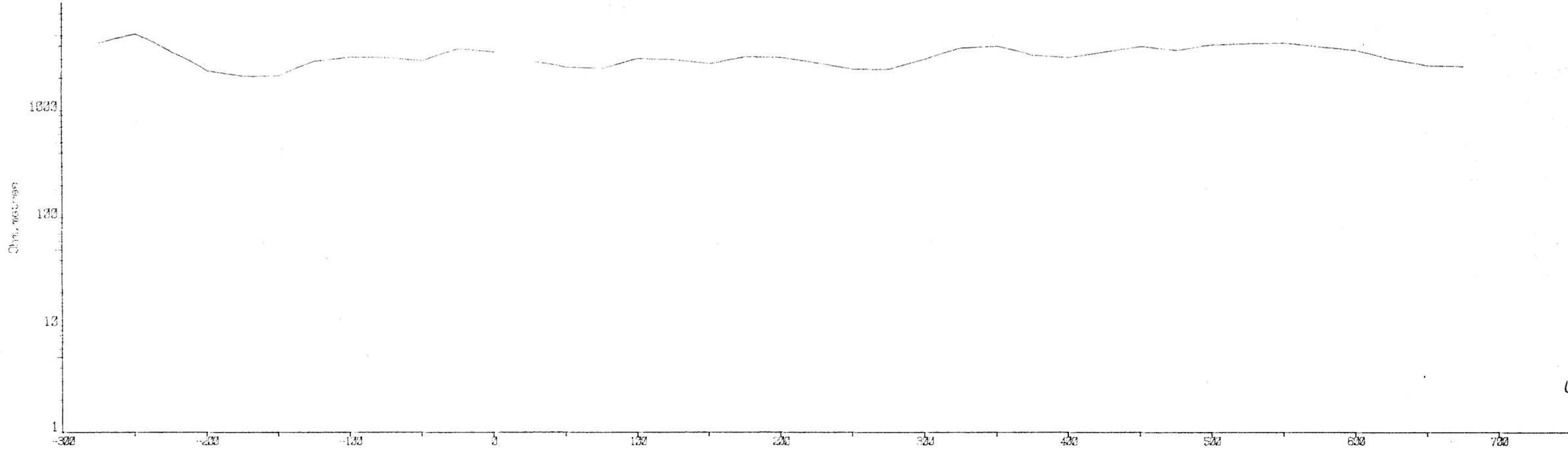


529055

TOTAL CHARGEABILITY



APPARENT RESISTIVITY



LINE 4400 4-100 RCG HOWARDS ROAD GRID PROFILES

FIG. 9

4400

Ohm metres

Millivolts

Nanoteslas

RESISTION

TOTAL PERMEABILITY

APPARENT RESISTIVITY

