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Vol. 5

RENISON LIMITED

S.P.L. 129 - TRIAL HARBOUR AREA

ANNUAL REPORT

1978-79

**OPEN FILE**

**MICROFILMED**

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GEOLOGIST

Copies: Renison (2)  
Mt. Lyell (1)  
Mines Dept. (1)

August, 1979

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1. SUMMARY

During 1978-79 further geological, geochemical and magnetic surveys were carried out on extensions to the East Heemskirk Grid, north of the Trial Harbour Road. This work continues to highlight a zone, adjacent to the Heemskirk Granite, which is considered favourable for the delineation of stanniferous replacement mineralisation. Preliminary work in the Globe Mine area indicates a favourable environment for the location of Sweeney-style mineralisation.

In Area D, one diamond drill hole was completed with disappointing results.

Expenditure on the above programmes amounted to \$54,924.00

Detailed evaluation of anomalous zones within the East Heemskirk Grid is proposed for 1979-80. Diamond drilling and costeaning programmes, however, should follow detailed gradient array induced polarisation surveys over geochemical anomalous zones. A budget of \$63,649 is proposed for this work.

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## 2. INTRODUCTION

Special Prospectors Licence 129 is located south-west of Zeehan, West Tasmania and covers parts of the South Heemskirk Tinfield, Comstock - Tenth Legion Iron Ore District and the Zeehan Lead-Zinc-Silver Field (Fig. 1.)

Base metal mineralisation in these areas is genetically related to the multi-phase Upper Devonian Heemskirk Granite which intruded Upper Pre-Cambrian to Lower Palaeozoic sediments and basic intrusives. In general, the following mineralisation styles are encountered.

- a) Endo-granitic Sn, Zn greisen style deposits
- b) Exo-granitic Sn, (Fe) Pb-Zn-Ag hydrothermal replacement deposits localised in (i) re-active carbonate rich sediments (ii) re-active altered basic/ultrabasic intrusives (iii) faults.

Since 1973, Renison Limited and Mt. Lyell Mining and Railway Company Limited have carried out detailed exploration in two areas, largely within the contact aureole of the Heemskirk Granite, as follows:

- a) Area D Grid. South of the Zeehan - Trial Harbour Road.
- b) East Heemskirk Grid. East of the Heemskirk Range.

During 1978-79, the main exploration effort was focussed on that part of the East Heemskirk Grid occurring north of the Trial Harbour Road. Information from mapping, soil geochemistry ground magnetic and induced polarisation surveys is presented on two 1:5,000 standard sheets-Zeehan C2/2, D1/1. Grid line data is also presented on 1:2 000 Composite Line Profiles.

Elsewhere, one diamond drill hole was completed in Area D.

## 3. EXPENDITURE

Expenditure during the year amounted to \$54,924 and total expenditure to date is \$157,302. A breakdown of costs is shown in Appendix 1.

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4. LAND TENURE

S.P.L. 129 is held by the Mt. Lyell Mining and Railway Company Limited and exploration is carried out by Renison Limited via a Joint Venture Agreement, dated 15th September 1978 under which Renison is increasing its equity. Renison's share is currently 80%. If the budget proposed for 1979-80 (\$63,649) is entirely at Renison's expense, the percentage shares at June 1980 will be Renison 91%, Mt. Lyell 9% and according to Clause 22b of the Joint Venture agreement, Mt. Lyell will be deemed to have withdrawn from the venture.

Within the Licence area, several Mining Leases occur as follows:

- a) Part of 49M/75, held by J.D. Clark over the Spray Mine.
- b) M.L's 10M/70, I.M./73 held by J.D. Clark over the Swansea Mine.
- c) Part of Consolidated Lease 123M/47, held by the E.Z. Co over the Comstock Workings.
- d) M.L. 64M/73, held by S.A. Clark & G.B. Francesconi over the Kynance Mine (for Copper, Lead, Zinc only) *All Minerals (9/81)*
- e) Fire Mining Leases, for Iron Ore only, held by Industrial Mining and Investigations Pty. Ltd in the Tenth Legion Area. (M.L.'s 50M to 54M/75). These Leases were granted in 1975 following the removal of the Temporary Reserve for Iron Ore specified in Statutory Rule No. 183 of 1973. S.P.L. 129 covers rights to all other minerals in these areas.
- f) M.L's 90M/72, 4M/73 held by F.C. Griffiths and D.C. Dunkley over the Maynes and Kelvin Tin Mines.

At this stage, no agreements have been entered into with holders of Mining Leases within the S.P.L. 129 area.

During the year, it was considered necessary to amend S.P.L. 129 to include Iron Ore. (During evaluation of the East Heemskirk Grid, magnetite outcrop and scree was located outside existing Iron Ore Mining Leases, but within the boundaries of the former Temporary Reserve).

5. PREVIOUS WORK5.1 Historical

The main prospects evaluated prior to World War II are shown in Figure 3 and details of individual prospects/mines are recorded in References 1-7. Since World War II, the Mines Department has drilled two holes into the Tenth Legion magnetite deposit and, it is understood, fourteen holes have been completed in M.L's 50 - 54M/75 by Industrial Mining and Investigations Pty. Ltd., (Appendix 9). Detailed results of the latest drilling are not available at the present time.

A review of the literature suggests exo-granitic base metal mineralisation is associated with altered basic intrusive rocks and, in part, with faults. It is further indicated that granitic-related hydrothermal solutions have replaced re-active zones at the margins of basic intrusives. Several workers, however, consider an alternative origin for magnetite - i.e. having segregated from basic magmatic intrusives of Cambrian age and overprinted by Devonian mineralisation.

The discontinuous, scattered iron ore deposits are associated with altered basic rocks - e.g. magnetite (also sphalerite, pyrite at Davern's/H.D. Marsh's 6667M) with contact metasomatic calc-silicate minerals. At the Kynance mine, pyrite-sphalerite-galena-chalcopyrite-magnetite mineralisation is also associated with calc-silicates derived from altered basic intrusives.

Mineralisation at the Globe Mine, within the Heemskirk Granite, consists of galena-sphalerite-chalcopyrite (tetrahedrite-cassiterite ? with quartz, tourmaline, fluorite and siderite. Cassiterite-pyrite bearing quartz-tourmaline veins in altered granite are reported in the Healy and McIvor's Lease 6743 M.

Available reports suggest that production from all prospects was insignificant. It should be noted also, that primary tin mineralisation (as cassiterite) is only reported from prospects within the Heemskirk Granite. Furthermore alluvial tin was only recovered from areas downstream from the Globe, Healy and McIvor's Leases.

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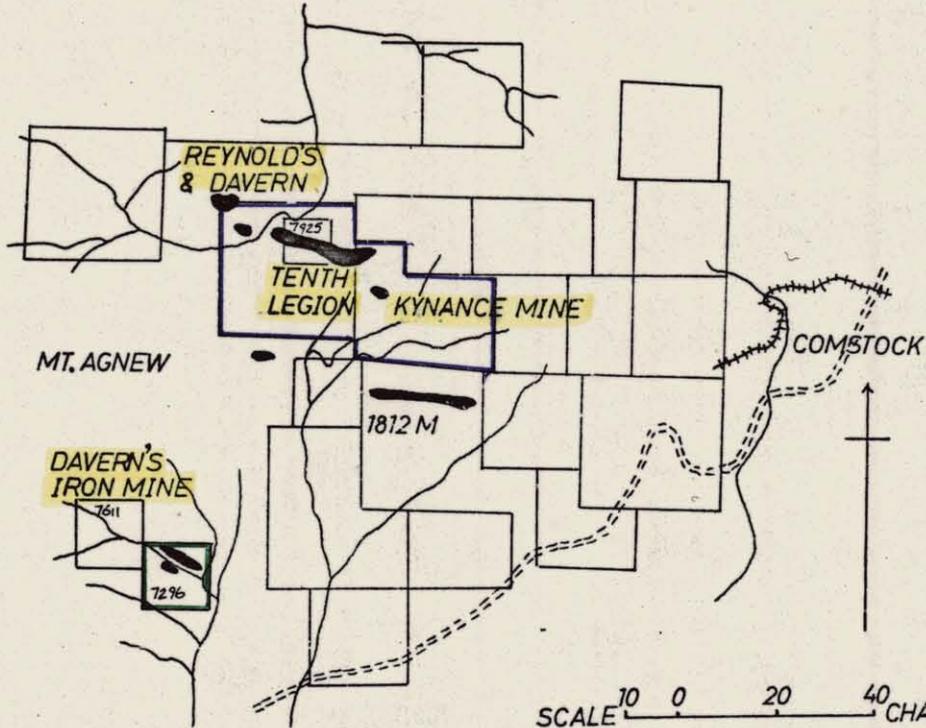
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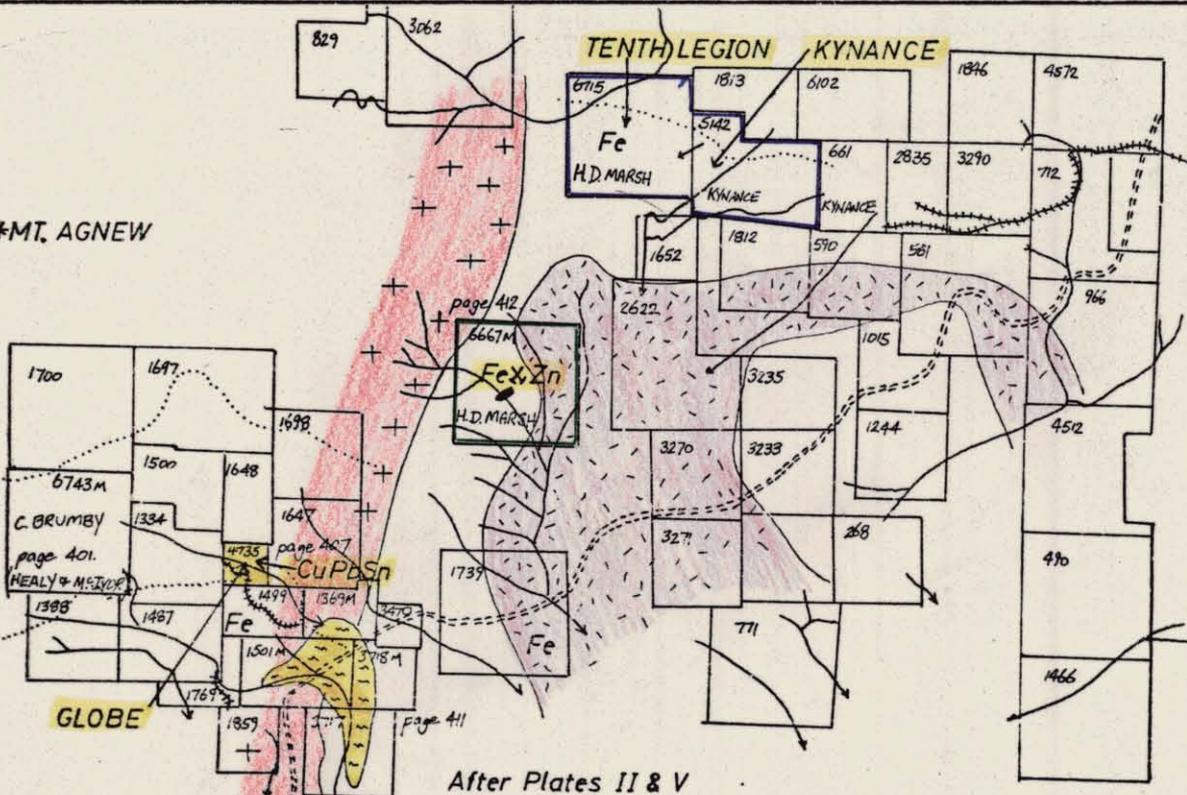
ZEEHAN DISTRICT

Plate VIII



FROM: GEOL SURVEY MINERAL RESOURCES NO. 6  
IRON ORE DEPOSITS 1919

\*MT. AGNEW



After Plates II & V

SCALE 10 0 20 40 CHAINS

FROM: GEOL SURVEY BULLETIN NO. 21 1915  
SOUTH HEEMSKIRK TINFIELD

al.

## 5.2 Current Exploratory Phase

The reader is referred to References 15 - 24 for details of work undertaken by Renison - Mt. Lyell since 1973.

During 1977-78, detailed mapping, soil and rock geochemical sampling, magnetics, and pole-dipole induced polarisation surveys were carried out on 400m grid lines of the East Heemskirk Grid. This work outlined several anomalous zones north of the Trial Harbour Road, but requiring further definition.

## 6. WORK COMPLETED 1978-79

### 6.1 Grid Establishment and Control

The East Heemskirk Grid was increased by approximately 22 kilometres of cut lines, comprising

- (i) 200m spaced, "in-fill" lines 2800N, 3200N, 3600N, 4000N, 4400N, 4800N
- (ii) extensions to the original 400m lines - (a) 3000N, 3400N, 3800N, 4200N, 4600N, 5000N extended to the east (b) 3000N, 3400N, extended to the west. In addition, line 2700N was completed to aid the location of the Globe Mine.

Stadia traverses were undertaken by the Renison Survey Section and included the pick-up of

- (i) pegs 5000N, 2100E, 3400N, 2100E i.e. the ends of the baseline.
- (ii) a walking track in the west of the grid area (to Contiguous Creek)
- (iii) several 4-wheel drive access tracks in the East Heemskirk and Area D Grids.

Otherwise, grid lines were located via aerial photographs.

### 6.2 Mapping

Geological mapping was carried out by the writer on all new grid lines and existing tracks in the area. This data has been collated with the work of P. Stephenson (1977-78) and P. Boshier (Hunting, Photogeological Interpretation 1978).

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### 6.3 Ground Magnetics

Readings were taken with a Geometrics G816 Proton Precession Magnetometer (sensor height 2.6m) at a nominal spacing of 25m along grid lines. In areas of high magnetic gradient a spacing of 12.5m was used. Diurnal variations throughout the survey were found to be minor, however, corrections have been applied to the data to enable correlation with the 1977-78 data. Observers for the current work were P. Ashton and the writer (lines 2700N, 3000N check, 3200N, part 4400N only).

### 6.4 Soil Sampling

Contractor P. Ashton, using a hand-held soil auger, took soil samples from as deep as the profile would allow and at 25m intervals along grid lines. Sample preparation (i.e. drying and sieving to minus 180 micron) was carried out by Renison geological assistants.

Routine "in-house" determinations were made for total - Sn, As (by XRF) and Cu, Pb, Zn (by AAS). Where samples returned total-Sn values above 120ppm, follow-up acid-soluble Sn assays were carried out. Several  $WO_3$  assays were performed on soil samples taken from ironstone outcrop/scree areas (and on magnetite bearing drill core from Mines Department bore holes 1 and 2). N.B. Detailed data from the current geological, geophysical, geochemical surveys has been incorporated with previous work and presented on 1:5000 plans and 1:2000 composite profiles.

### 6.5 Diamond Drilling and Results

One 350m drill hole was completed in Area D (line 24E 750N) during the year, and was designed to test the extensions of a mineralised conglomeratic zone (in drill hole 2) apparently associated with anomalous magnetic, I.P., soils responses in an area complicated by major faulting.

The hole failed to intersect an "economic" zone of tin mineralisation but continued to demonstrate the presence of sulphides associated with metasomatised volcanoclastic sediments in the contact aureole of the Heemskirk Granite. The reader is referred to Appendix 7, Figures 8,9 for details.

7. RESULTS - EAST HEEMSKIRK GRID7.1 Geology7.1.1. Introduction:

The area under discussion lies to the north of the Trial Harbour road and east of Mt. Agnew - a dominant topographical feature. From west to east the underlying geology comprises:

- (i) the Heemskirk Granite (Upper Devonian)
- (ii) Metasomatised, hornfelsed sediments. As in Area D, they are basic volcanoclastic sediments (with minor basic intrusives) of the Crimson Creek Formation. (Lower Cambrian).
- (iii) McIvor Hill Gabbro (Lower Cambrian) Gabbro and associated basic intrusives occur over a wide area.
- (iv) Oonah Formation (Older Pre Cambrian? - Blissett, reference 7). To the east and north east, the geology comprises a strongly contorted, folded quartzite rich sedimentary sequence.

Previous workers have recognised several major fault structures within the area - e.g. Tenth Legion Fault.

7.1.2. Topography

Basically, three zones are recognised.

- (i) Western Zone - This area comprises the eastern steep slopes of the Heemskirk Range and is underlain by granite. Relief is rugged and streams are fast flowing, incised and controlled by NE/NW trending joints. In the north, vegetation consists of low, open button grass on the granite margins but gives way to dense forest with increasing elevation.

In the south, dense rain forest (with partial regrowth) may reflect differences in the composition of the underlying granites. In both areas, however, a shallow, skeletal sandy soil is present with local development of granite tors and scree.

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- (ii) Central Zone. This occupies a valley which drains streams from the eastern slopes of the Heemskirk Range and the western slopes of the Kynance Mine/McIvor Hill area. The underlying geology consists of hornfelsed, metasomatised sediments and basic intrusives with local development of discontinuous ironstone scree areas. Two major swamp areas are separated by low rounded hills, supporting dense tangled rain forest and partly logged eucalyptus forest.

Ironstone scree and deep ferruginous soils are developed on several of the rounded, gently incised hills and may indicate the erosion of a local laterite surface of Tertiary age.

Soils developed along drainage systems and in swamps are expected to be contaminated from old workings. Residual soils occur in areas of positive relief and comprise

- a) clay rich "C horizon" samples derived from Crimson Creek Formation sediments and associated basic intrusives,
- b) ferruginous soils, ironstone scree of probable secondary origin.

- (iii) Eastern Zone - To the east and north-east of the Central Zone are a series of elevated rounded hills, chief of which is McIvors Hill. This zone is largely underlain by older quartzites and to a lesser extent by gabbros, marginal to the Central Zone. Vegetation over the quartzites consists of low open grasses with ti-tree forest developed in stream channels. Shallow, clayey soils are developed over the quartzites, which crop out frequently.

7.1.3. Rock Types and Distribution

- (i) Heemskirk Granite. Work during 1978-79 has clarified the nature of the granite contact. In the south of the gridded area, a large embayment is evident, however, the occurrence of sporadic granite float and outcrop east of the apparent contact suggests, either (a) depth to granite is shallow, or (b) granite dykes occur. The predominant rock type encountered is a medium to coarse grained "red" granite, which weathers to a white, bleached appearance. In the northern, exposed areas, local concentrations of tourmaline nodules and veining are common. In the south, "floaters" of a finer grained granite phase and aplite have been recognised in the Globe Mine vicinity. Furthermore "floaters" of argillised granite are associated with base metal mineralisation in this locality.
- (ii) Gabbro. The dominant area of gabbro occurs east of Kynance Creek and appears to form a NE trending arcuate belt, terminated by faulting at the Kynance Mine. Altered basic intrusives possibly occur in the Tenth Legion area and may be expected within the Crimson Creek Formation sediments.

East of the Tenth Legion Fault, however, no basic intrusives have been recognised.

In outcrop, the dominant rock is a massive dark grey-green medium grained gabbro. Near the western contact of the main mass, veins of magnetite are associated with calc-silicate alteration. In areas of dense forest and deep weathering, red-brown featureless clays have been included in this unit, although it should be noted that similar clays occur over weathered Crimson Creek Formation tuffs or spilitic lavas elsewhere (e.g. Melba spilites).

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(iii) Sediments. During mapping and interpretation, it was intended to distinguish "Oonah Formation" sediments from Crimson Creek Formation sediments. The former are well bedded quartzites, shales and siltstones - commonly highly contorted and quartz veined. The latter are basic volcani-clastic sediments - essentially undeformed tuffaceous mudstones, greywackes. Owing to a combination of poor outcrop, structural complications and variable metasomatic alteration, the boundary of the major sedimentary units is unresolved at this stage.

In general, east of the Tenth Legion Fault, older deformed "Oonah" sediments occur while closer to the granite (especially in the south-west), contact metasomatised Crimson Creek Formation rocks predominate. The latter rocks are typical of altered C.C.F. elsewhere in western Tasmania e.g. in Area D, Mt. Lindsay and Pine Hill - consisting of massive dark grey hornfels to well bedded (or metasomatically banded?) blue grey cherts, displaying variable alteration and development of actinolite/tremolite and traces of sulphide.

(iv) Ironstone. The major areas of ironstone delineated on the geological plans include areas of ferruginous material and encompass all manner of gossanous, lateritic?, and magnetite outcrop/scree. No distinction has been made, at this stage, between primary magnetite mineralisation and secondary ironstone concentrations.

#### 7.1.4. Structure

As mentioned previously, major fault systems are recognised in the area. For example the NW trending Tenth Legion Fault is associated with magnetite mineralisation (Tenth Legion deposit) and base metal sulphide mineralisation (Kynance mine). In broad terms it separates a magnetically active region to the west and an inactive region to the east

Similarly, other magnetic trends indicate the following structures;

- (i) A dominant NE trend in the contact sediments, from line 2800N to line 3600N. This parallels the apparent conformable gabbro contact in this area.
- (ii) A dominant NW trend in the contact sediments in the area north of line 3600N.

This marked change is associated with the major embayment in the granite and may reflect a fundamental tectonic feature e.g. the dominant photo-lineament along Contiguous Creek.

## 7.2 Magnetics

Further detailing of ground magnetics during the year has continued to highlight the complexities of the area. Contouring of the data on 1:5000 scale has not been attempted, however, the dominant trends are shown in order to demonstrate between-line correlation.

A strongly magnetically active zone is associated with sediments in the contact aureole of the granite. To the west, areas underlain by granite have a flat response. A similar pattern is evident for areas underlain by "Oonah" quartzites and gabbro to the west.

Within the active zone, the major anomalies are apparently due to magnetite mineralisation.

## 7.3 Geochemistry

Geochemical data is presented on plans 5,6 (a-e) and can therefore be compared with the geological plans 3 (a,b). Broad geochemical patterns are discussed in terms of fundamental lithological units

- (i) granite
- (ii) sediments within the contact aureole of the granite - mainly altered C.C.F. basics with ironstone development.
- (iii) gabbro
- (iv) quartzite rich "Oonah" Formation sediments.

At this stage, the geochemical data has not undergone a detailed statistical analysis, however, the essential features are outlined by 50, 100, 150 ppm contour levels for Sn, Cu, Pb, Zn and 20, 50, 100ppm for As.

### 7.3.1. Tin

Inspection of acid-soluble tin values, shows that several of the anomalous areas may not be related to cassiterite mineralisation e.g. the following anomalies are associated with significant acid-soluble tin: 3000N 725E, 925E; 3200N, 1250E; 4000N, 1575E, 2400E; 4200N 1625E;

The following anomalies have a low acid-soluble tin content: 2700N 300E; 2800N 275E, 525E, 650E, 1075E; 3000N 450E, 1175E; 3400N 650E, 2000E, 3600N 1475E, 2450E; 3800N 2450E.

Overall, the anomalous tin areas occur (i) in the contact aureole of the granite and are closely associated with ironstone, (ii) in the southern part of the granite in the vicinity of the Globe Mine. Areas underlain by the main granite, gabbro, and quartzite sediments have low tin backgrounds.

### 7.3.2. Arsenic

Anomalous arsenic values are closely associated with areas of ironstone and also occur as isolated highs in the quartzite sediments - related to contamination from abandoned Pb, Zn workings. Areas underlain by gabbro and granite have backgrounds approaching the analytical detection limit.

### 7.3.3. Copper

Similarly, anomalous copper values are associated with areas of ironstone. In addition, gabbro-related soils have moderate background levels of copper. Significant downstream contamination from, for example, the Kynance workings is shown on line 3200N. Soils developed over granite and quartzite sediments are very low in copper.

7.3.4. Lead

Anomalous lead values are related to

- (i) the more easterly of the ironstone areas
- (ii) contamination, downstream from Kynance and other Pb Zn workings NW of the Comstock area.

Background levels are low in granite and gabbro derived soils.

7.3.5. Zinc

Anomalous zinc is dispersed over a wide area and again, values are associated with ironstone areas, and contamination from old Pb Zn workings. Soils developed over gabbro have high background values, whilst granite and quartzites show very low backgrounds.

7.3.6. Tungsten

Several assays of ironstone and magnetite mineralisation (drill core) are contained in Appendices 6,8. No areas of anomalous tungsten have been delineated.

7.4 Anomaly Evaluation

Detailed line information is presented in composite profiles and as a Table of Anomalies. Priority listing of the anomalies has not been attempted since induced polarisation geophysical surveys have not been carried out on the new grid lines. In addition, the results of the 1977-78 pole-dipole I.P. survey are ambiguous, due to the poor resolution of anomalous responses between grid lines.

Overall, the contact aureole of the Heemskirk Granite shows similar geochemical and complex geophysical responses to the Mt. Lindsay area, where sub-outcropping stanniferous skarn mineralisation has

- (i) intense soils Sn, As, Cu response.
- (ii) strong magnetic response.
- (iii) variable IP response.

Concealed mineralisation does not have a Sn soils response but is indicated by leakage As haloes.

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In the contact aureole of the East Heemskirk Area, further screening of the numerous (83) line anomalies is proposed, by way of,

- (i) gradient array induced polarisation surveys.
- (ii) costeaming and sampling ironstone areas.

Following this, diamond drilling should be undertaken on those anomalies indicative of stratiform replacement style mineralisation (and fault zones).

As Mining Leases for Iron Ore and Cu, Pb, Zn, occur within the area, some conflict of interest may arise following diamond drilling. To minimise this possibility, detailed follow-up of the most westerly ironstone area is proposed initially.

The southern granite area is emerging as a favourable target. Preliminary investigation of the Globe workings has indicated Sn, Cu, Pb, Zn mineralisation occurring within granite types similar to that of the Federation - Sweeney's area. Anomalous tin values from dump samples are low in acid-soluble tin, which suggests the presence of cassiterite.

## 8. CONCLUSIONS AND RECOMMENDATIONS

- 8.1 Follow-up soil geochemistry, magnetics and mapping on extensions of the East Heemskirk Grid continue to highlight anomalous geochemical, magnetic responses associated with faulted, meta-somatized Crimson Creek Formation sediments (and basic intrusives) adjacent to the Heemskirk Granite.
- 8.2 The majority of anomalies are associated with areas of ironstone, which are largely covered by Mineral Leases for Iron Ore. S.P.L. 129 confers tin and other base metal mineralisation rights to Mt. Lyell - Renison in these situations.
- 8.3 Stanniferous mineralisation associated with altered granites occurs at the Globe Mine, which was re-located during the year. Further work is required to delineate mineralisation, which superficially resembles Federation - Sweeney style greisen.

- 8.4 Further work on 400m spaced grid lines east of Tenth Legion Fault is not warranted at this stage.

During 1979-80 it is proposed to evaluate anomalies within the contact aureole of the granite and the Globe Mine area. Details of proposed work are:

- (i) In the Globe Mine area: Cut a 600m intermediate grid line (2750N), west from the surveyed walking track.
- (ii) Undertake gradient array induced polarisation surveys over the Globe Mine area and the contact aureole, i.e. on all 200m lines from the granite/sediment contact to approximately 2500E. This would involve two set-ups with current electrodes on lines 3400N, 4400N.
- (iii) Approach Industrial Mining & Investigations Pty. Ltd. with a view to examine their drill core, in order to evaluate tin geochemistry/mineralogy.
- (iv) Costean 150m of grid line 3800N, from 1500E to 1650E, in order to evaluate the soil geochemistry profile. This area is already partially logged and is easily assessed.
- (v) Following the results of 1-4 above, further testing of line anomalies by costeaning and/or diamond drilling is planned.
- (vi) Work in the remainder of SPL 129 will involve the continuation of re-evaluation of existing data, through compilation of 1:5000 standard sheets. Several Pb, Zn, As workings of the Zeehan Field are worthy of examination. A preliminary study of mineralogical data shows that stannite traces occur in Pb, Zn mineralisation from the Spray Mine in the south, to the Montana Mine area in the north.

There is however, no detailed mineralogical information available for Pb Zn workings within SPL 129.

- (vii) For the above programmes, a budget of \$63,649 is proposed and is set out in Appendix 2.

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LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>5000N</u> 1325 - 1475m 1550 - 1625m 1925 2300 - 2400m 3750 - 3875m	No significant response Strong Sol. Sn, also (Zn, As, Cu) No significant response No significant response ? ?	I.P. anomaly I.P. anomaly 1625m I.P. anomaly I.P. anomaly Not available	Strong response Strong response Strong response No response No response	Quartzite float Tenth Legion magnetite Quartzite ? Quartzite Old Pb, Zn workings
<u>4800N</u> 1950 - 2025m 2125 - 2175m	Zn Sn, Zn, As	Not available Not available	Magnetic inflexions Strong response	Old trenches. Quartz vein, altered basic, calc- silicate rocks. Tenth Legion magnetite, Adit.
<u>4600N</u> 1500 - 1550 1750 - 1875 1925 2150 2175 - 2525 3275 - 3575 3775 3875 - 4000	Very weak Cu Strong Zn, Moderate As, Cu Sporadic Sn No significant response Strong Zn, Pb, As, Cu Strong Sol. Sn, As, Zn, Pb Pb Pb Pb, Zn (minor As, Cu)	I.P. anomaly I.P. anomaly I.P. anomaly No response I.P. anomalies at 2350, 2425 Not available Not available Not available	No response Weak inflexions No response No response Intense anomaly No response No response No response	Granite/sediment contact. Outcrop quartzite c̄ pyrite Quartzite Ironstone float Tenth Legion magnetite deposit. Old Pb, Zn workings. Quartzite. Contamination ? Basic rocks. Crimson Creek, Formation tuffs ?

LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>4400N</u>				
1800 - 1875	Zn, Pb, As, Sn	Not available	Inflexions	Ironstone float near granite contact
2000 - 2075	Moderate Zn, S, Cu	Not available	Edge of strong response	Ironstone float.
2425 - 2450	Very high Cu, Minor As, Sn, Zn	Not available.	Weak inflexions	Sediment float
2600	Moderate Sn, As, Zn	Not available	Inflexions	Ironstone float
2650 - 2800	No significant response	Not available	Edge of strong anomaly	Quartzite float
<u>4200N</u>				
1575 - 1725	Sol. S. As, Cu, Pb, Zn	I.P. anomalies at 1575 1650. Low resistivities throughout.	Weak inflexions	Ironstone, sediment float.
1775 - 1800	High Zn	No response	Weak inflexions	Sediments ?
1825 - 2025	High Zn As	I.P. anomaly 1975m	Weak inflexions	Ironstone float
2075 - 2150	Zn, As, minor Sn	I.P. anomaly 2150, 2175	Moderate inflexions	Ironstone float
2350 - 2450	High Cu, Pb, Zn, Minor As	No response	Weak	Swampy conditions over sediments.
2875 - 2950	High Pb, Zn, As, Cu (very minor Sn)	Not available	Weak inflexions	Kynance Cu, Pb, Zn workings.
3200 - 3225	Pb, Zn minor Cu, As.	Not available	Weak inflexions	Ironstone
3575 - 3750	Isolated As, Pb (Cu, Zn)	Not available	No response	Quartzite float, contamination from old workings.
3775 - 4000	High Pb	Not available	No response	Contamination from old workings.

024

LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>4000N</u> 1550 - 1575 1800 - 1825 2175 - 2500	Sn, As, Cu, Zn Zn, Pb, As, Sn Pb, Zn, Cu, As, Sn	Not available Not available Not available	Inflexions Inflexions Inflexions	Ironstone float, near granite outcrop. Ironstone float, hornfels Ironstone - float and outcrop. Associated with calc-silicates.
<u>3800N</u> 1325 - 1500 1575 - 1700 1775 - 1800 1875 - 1925 1975 - 2075 2125 - 2325 2400 - 2550 2625 - 2650 3075 3975 - 4000	Moderate Zn, Sn Cu, Zn, Sn, As, Pb Cu, Pb, Zn, As Pb, Zn, As Zn, minor Cu, Pb, As Strong Zn, Cu, Pb, As, Sn As Cu, Pb, Zn minor Sn Sn, As, Cu, Pb, Zn Zn, As Pb	I.P. anomalies 1350 - 1425 No response No response High resistivity No response I.P. anomalies 2225m, 2325m Not available Not available Not available Not available Not available	Several inflexions Minor inflexions Minor inflexions Minor inflexions Strong response Inflexions Strong inflexions Edge of strong inflexions No response No response	Quartzite float, outcrop Trace pyrite Ironstone float Ironstone float Ironstone outcrop. Vein quartz. Ironstone float, Vein quartz Ironstone associated with calc sediment, quartzites Outcrop ironstone, old workings Associated with ironstone, near gabbro contact Gabbro and basic rocks. Contamination from old Pb, Zn workings

143025

025

LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>3600N</u> 1425 - 1550m  1650 - 1775  1900 - 2200  2300  2375 - 2475	Strong Sn only  Strong Zn, Cu, As, Pb, Minor Sn  Strong Sn, As, Cu, Pb, Zn  Strong Cu, Pb, Zn, As  Strong Pb, Zn minor Cu, Sn, As	Not available  Not available  Not available  Not available  Not available	Minor inflexions  Moderate inflexions  Several strong inflexions  Strong response  Weak response	Chert associated with granite dyke ?  Outcrop ironstone, sediments  Ironstone, magnetite float and outcrop  Sediments at swamp edge  Swamp Contamination from old workings
<u>3400N</u>  650  925   1150 - 1225   1225 - 1350   1425 - 1775   1775 - 1825   1850 - 2075  2250 - 2350  2500 - 3875	High Sn  Moderate Sn Weak Pb  Strong Cu Moderate Sn, As  Cu Zn, As  Strong Zn, Cu, Sn, As  High Zn Moderate Sn, As  High Zn, Sn, As  Very high Pb, Zn minor Sn, As  Moderate Cu	Not available  No response  No response  Changeable zone 1225 - 1625  I.P. anomaly to 1625, Highs at 1500, 1575  I.P. anomaly  Not available  Not available  Not available	No response  Minor inflexion   Edge of minor inflexions.  Several minor inflexions. Esp 1300  Several inflexions to 1700  Strong anomaly   No response  No response  Minor inflexion 2900	Underlain by granite  Granite/sediment contact   Underlain by sediments   Float sediments, chert, quartzite with sulphide  Underlain by ironstone, sediment float. Old pits.  Ironstone associated with gabbro, sediment contact  Gabbro, ironstone float  Gabbro, ironstone, on swamp edge  Associated with gabbro, basics

143026

026

LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>3200N</u>				
400 - 450	Strong Sn Low acid sol. Sn	Not available	No response	Underlain by granite
475 - 700	No significant response	Not available	Several inflexions	Underlain by hornfels
775 - 875	Weak Sn, Zn	Not available	Weak inflexions	Iron stained hornfels
1000 1300	Strong Sn, As, Cu, Zn (high sol. Sn)	Not available	Strong response	Outcrop magnetite, Ironstone scree
1400 - 1550	Strong Zn, Mod. Sn As, Cu	Not available	Several strong inflexions	Granite, hornfels float. Some swamp
1700	Strong Zn Weak Sn, As, Cu, Pb	Not available	Minor inflexion	Calc-silicates, gabbro contact to east. Swamp
2000 - 2275	Very strong Pb, Zn, Cu	Not available	Not available	Swamp developed over gabbro
<u>3000N</u>				
200 - 450	Sn response only	Not available	No response	Underlain by granite
700 - 750	Sn, As, Cu, Zn (sol. Sn)	I.P. anomaly 600-775	Erratic response	Sediment float, hematite
825 - 1100	Sn, As, Cu, Zn (sol. Sn)	I.P. anomaly 1025=1125 Source 850	Major inflexion 850-1075	Ironstone associated with chert, quartzite, sulphides granite.
1350 - 1475	Sn, As, Cu, Pb, Zn	No response	Weak inflexion	Ironstone float. Gabbro contact to east.
1750	Sn, As, Cu (Zn)	No response	No response	Gabbro
1975	Sn? As, Cu, Pb, Zn	Not available	No response	Gabbro.
<u>3000N</u>				
2000 - 2225	Strong Cu, Pb, Zn	Not available	No response	Swamp over gabbro
2225 - 3100	Strong Cu response	Not available	No response	Gabbro, basic rocks
3700 - 3950	Zn (Pb)	Not available	No response	Swamp. Downstream from Constock Pb, Zn workings

143027

023

LOCATION	SOIL GEOCHEMISTRY	INDUCED POLARISATION	MAGNETIC	COMMENTS
<u>2800N</u> 600 - 675	Sn only	Not available	Weak magnetic trough	East of granite/sediment contact. Siltstone, hornfels float.
1100 - 1150	Sn only. Weak As.	Not available	Weak response	Underlain by sediments
1200	Zn only	Not available	No response	Underlain by sediments
<u>2700N</u> 100 - 450	Sn only	Not available	No response	Underlain by granite. Float of two types - fine grained and coarse grained
425	Sn, Cu, Pb, Zn	Not available	No response	Stream sediment sample downstream from Globe Mine
675	No response	Not available	Minor inflexion	Granite/sediment contact
<u>2600N</u> 325 - 475	Sn only	No response	No response	Granite
450 - 650	Weak Pb response	I.P. anomaly Source 550m	Response	Granite/sediment contact
800	Sn only	I.P. anomaly 775m	Minor inflexion	Swamp
1100	No response	No response	Minor anomaly	Swamp. Sandstone O/C with sulphides
1275 - 1500	Zn, Pb As response, No Sn.	1275 - 1400 I.P. anomaly	Response	Ironstone between 1350 - 1425, associated with sediments.

028

RENISON LIMITED

143029

APPENDIX 9

LIST OF TENTH LEGION DIAMOND DRILL CORE  
(Stored at Mined Department, Moonah)

Hole 1	0 - 53'3", - 81'3", - 105'	(32m)
2A	0 - 37'	(11.3m)
B	0 - 28', - 61'	(18.6m)
3	0 - 29', - 40'	(12.2m)
4	0 - 30'	( 9.1m)
5	0 - 58', - 95'	(29.0m)
6	0 - 34', - 45'	(13.7m)
7	0 - 20'	( 6.1m)
8	0 - 45', - 64'	(19.5m)
9	0 - 48', - 50'	(15.2m)
10	0 - 28', - 70'	(21.3m)
11	0 - 63'6", - 70'	(21.3m)
12	0 - 25'	( 7.6m)
13	0 - 58', - 95'	(29.0m)
	TOTAL	245.9m

RENISON LIMITED  
GEOLOGY DEPARTMENT

S.P.L. 129 TRIAL HARBOUR RESPONSIBILITY 074

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ACCOUNT NUMBER	ACCOUNT NAME	PERIOD TO DATE		YEAR TO DATE	
		ACTUAL	VARIANCE	ACTUAL	VARIANCE
010740702	SALARIES	882	878 L	11519	3479 L
010740749	SALARY LOADING	91	49 L	880	326 G
010740751	CONSUMABLES	18	37 G	1281	327 G
010740753	RENISON SERVICES			9299	7167 L
010740755	VEHICLES			60	60 L
010740791	DRILLING			15683	3683 L
010740792	TRACK CUTTING				
010740793	ROAD CONSTRUCTION			1038	5962 G
010740794	BULLDOZER				
010740806	CHARGES FROM PARTNERS				
010740827	OUTSIDE SERVICES	1144	1144 L	15165	6551 L
010740834	TRAVEL AND ACCOMMODATION				
	ROUNDING			1-	1 G
010749999	TOTAL	2105	1734 L	54924	14324 L

FINAL PERIOD 12 MONTHS - 1974

143030

ITEM	REF.	P#01.	P#02.	P#03.	P#04.	P#05.	P#06.	P#07.	P#08.	P#09.	P#10.	P#11.	P#12.	TOTAL
GEOLOGY SPL 129 TRIAL HARBOUR														030

SALARIES	L740702	261	261	418	1077	2155	1616	1077	539	539	277	277	111	8508
SALARY LOADING	L740703	261										277	277	815
CONSUMABLES	C740705	107	214	217	543	271	275	165	165	111	111			2179
VEHICLES	C740708													
TRAVEL & ACCOMMODATION	C740710													
REINSON SERVICES: SURVEY	C740720				271	271			275	275				1092
ASSAY	C740721	1071	1071	1071	2172	2172	1650	550	550	557				10864
RESEARCH	C740722				109	54								163
OTHER	C740723													
OUTSIDE SERVICES:														
GEOLOGICAL	C740730				109	271	271	275	165					1091
GEOPHYSICAL	C740731		4283	4343	1086									9712
GEOCHEMICAL	C740732													
TRACK CUTTING	C740733													
SITE & ACCESS DEVELOPMENT	F740735				500	500								1000
DIAMOND DRILLING	F740736					5625	11250	11250						28125
OTHER	C740737													
LEASE PAYMENTS	F740740													

SECTION TOTAL		1593	1439	5986	8689	12732	13462	14527	1694	1529	945	665	388	63649
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143031

APPENDIX 7

031

PROTON MAGNETOMETER FIELD RECORDINGS

Date: April 1979

Operator: A.R.

Grid Location: EAST

HÆMSKIRK

LINE 2700N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
10m north of 700E Fml 30	62059			B/gms No etc
675	63982.			B/gms No etc granite flat
650	62036			Edge of b/gms, titra
625	62033			Titrae forest
600	62023			Forest. Granite soil
575	62000			Forest No etc
550	61960			" "
525	61906			Creek. at 523m No etc
500	61903			Forest
475	61981			Forest. granite soil
450	62053			Crest. granite soil
432	62134			
425	62184			Creek bed granite etc.
400	62199			Other side of creek
375	62251			granite soil
350	62253			" "
325	62272			No etc
300	62276			granite soil
275	62294			granite soil. Uphill
250	62292			" "
225	62321			Fine Grained Granite fr Mica vein
200	62310			granite floor. "Old Walking Track"
187	62336			granite etc More rocks
175	62323			Coarse grained granite Uphill
162	62336			Flattens off
150	62344			"Old Track"
137	62345			cleared area. Overgrown
125	62353			Titrae forest. flat
100	62357			granite soil

032

143033

(2)

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 2800NWednesday  
DATE 20 Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS	
250 <sup>E</sup>	1820	62295			-32	62263		
		62284				62252		
300 <sup>E</sup>		62282				62250		
		62280				62248		
		62265				62233		
		1835	62258				62226	
400 <sup>E</sup>		62235			-33	62202		
		62225				62192		
		62187				62154		
		1840	62165				62132	
500 <sup>E</sup>		62114				62081		
		62062				62029		
		62004				-34	61970	
		1845	61928				61894	
600 <sup>E</sup>		61873				61831		
		61745				61711		
		61471				61437		
		61189				61155		
700 <sup>E</sup>	1855	61144			-35	61109	walked track.	
		61332				61297		
	1900	61207				61172		
		61161				61126		
800 <sup>E</sup>		61205				61170		
		1905	61245				61210	
		61290				-36	61254	
		61498				61432		
900 <sup>E</sup>	1910	61710				61674	CRF	
		61873				61831		
		1915	62074					62038
975 <sup>E</sup>	1920	62218				62182		

033

143034

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heeniskirk.TRAVERSE Line 2800<sup>N</sup>DATE Wednesday  
20<sup>th</sup> Dec 78OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1000 <sup>E</sup>		62405			-37	62768	
	<del>1935</del>	62578				62541	
		62843				62806	
		62703				62666	
1100 <sup>E</sup>		62539				62502	
		62441				62404	
		624 <del>999</del>			-38	62451	
	1945	62567				62529	
1200 <sup>E</sup>		63664				63626	
		63546				63508	
		62758				62720	
		63243				63205	
1300 <sup>E</sup>	1950	62634			-39	62595	
		62484				62445	
		62357				62319	
		62311				62272	
1400 <sup>E</sup>	1955	62000				61961	
		62171				62132	
		61642			-40	61602	
		61447				61407	
1500 <sup>E</sup>		61424				61384	
		61447				61407	
		61461				61421	
		61499				61459	
1600 <sup>E</sup>		61538				61498	
		61433			-41	61392	
	2005	61500				61459	
		61838				61797	
1700 <sup>E</sup>		61639				61598	
1725 <sup>E</sup>		61655				61614	



035

Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

(5)

AREA E. Heanekirk TRAVERSE Line 3000 N

DATE <sup>Thursday</sup> 21<sup>st</sup> 5<sup>th</sup> 278 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2500 <sup>E</sup>	1746	63805			-8	63797	
		63645				637	
		63561				553	
		63409				63401	
2400 <sup>E</sup>		62570+-25				62562	+25
		62960			952		
		62616			609		
		62504			496		
2300 <sup>E</sup>	1800	62383			-9	374	
		62203				194	
		62051				042	
		62123				62114	
2200 <sup>E</sup>		61872				61863	
		61831			822		
		61847			838		
		61754			745		
2100 <sup>E</sup>		61730				721	
		61709			700		
		61676			667		
		61639			630		
2000 <sup>E</sup>		61611				602	
		61556			547		
		61489			61480		
		62071			62062		
1900 <sup>E</sup>	1815	61637			-10	61627	

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Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskerk TRAVERSE Line 3000<sup>N</sup>DATE Thursday 21<sup>st</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
4000 <sup>E</sup>	1620	62471			-6	62465	
		62450				444	
		62447				441	
		62417				411	
3900 <sup>E</sup>		62385				379	
		62409				403	
		62339				336	
		62413				407	
3800 <sup>E</sup>		62353				347	
		62274				269	
		62259				253	
		62223				217	
3700 <sup>E</sup>		62216				210	
		62273				267	
		62829				823	
		62424				418	
3600 <sup>E</sup>	1635	62184				178	
		62144				138	
		62167				161	
		62224				218	
3500 <sup>E</sup>		62313				307	
		62460				454	
		62494				488	
		62493			-7	486	
3400 <sup>E</sup>		62518				511	
		62488				481	
		62430				423	
		62341				234	
3300 <sup>E</sup>		62258				251	
3275 <sup>E</sup>	1652	62225				218	

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskerk TRAVERSE Line 3000<sup>N</sup>DATE Thursday 21<sup>st</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
3250 <sup>E</sup>	1652	62239			-7	62232	
		62302				295	
3200 <sup>E</sup>		62343				336	
		62383				376	
		62428				421	
		62452				445	
3100 <sup>E</sup>		62501				494	
		62589				582	
	1700	62594				587	
		62689				682	
3000 <sup>E</sup>		62743				736	
		62810				803	
		62883				876	
		62882				875	
2900 <sup>E</sup>		62836				829	
		62826			-8	818	
		62924				62916	
		63142				63134	
2800 <sup>E</sup>		63062				054	
		63684				63676	
		62566				62558	
	1715	63470				63462	
2700 <sup>E</sup>	1740	63696				688	before time on day.
		63815				63807	
		64198				64190	
		63812				63804	
2600 <sup>E</sup>		63646				638	
		63485				477	
		63938				63930	
2525 <sup>E</sup>	1745	64187				64179	



039

143040

Form No. 69/88

REVISION LIMITED

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## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA East Bank TRAVERSE 3000NDATE 3/1/79 OBS AFR.

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1075		59360 - 6080*					
1100E		60230					
		61320					contacted 7/7/76
1150E		61670					
		61720					
1200E		61380					
		63100					
1250E		64600					deep drop to road
		64380					
1300E		61000					
		62380					
1350E		61080					
		65350 - 65830*					
1400E		59600 - 59810*					
		65510					
1450E		61610					
		59380					
1500E		59340					
		59470					
1550E		59690					crk.
		59350					
1600E		60230					hablow
		60490					
1650E		60700					
		60320					
1700E		61040					
		61160					
1750E		61230					
		61300					
1800E		61460					V

048

143041

Form No. 69/88

RENISON LIMITED

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FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

Re-check of 3000N.

AREA East Heemsk. TRAVERSE 3000N

DATE 3/1/79

OBS A.F.R.

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
Base Sta	8.45am	61540.					
Base Sta	11.20am	62350.					
450E	9.15am	61470					
		61540					
500E		62090					
		63370					
(550)		64070					
		63330					
(600)		62580					
		64130					
650E		62190					Location of Sta.
		64000-500*					
685E		65520					
700E		62210-63000*					
740E		62470-65510*					
750E		65520					
		63710					
		63320					
800E		65310					
		60350±100					
850E		62050					cont. granite flat
		60030					
900E		62370-62840*					
		66320-66400*					magnetic
950E		64620					
		69740					
1000E		62340					
1015		64080					
1035		62770					
1050E		6190-62350*					



042

Form No. 73/259

REMISON LIMITED

143043

(12)

## PROTON MAGNETOMETER FIELD RECORDINGS

Date: April 1979

Operator: A.R.

Grid Location: EAST  
HEISKIRK

LINE 3200N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
300E	62338	3.10		Grants ok Creek
325	62292			" " "
350	62305			" "
375	62252			" "
400	62239			Grants float
425	62338			" "
450	62593			Grants float Cont'd Sediment float
475	63741			Grants float.
500	63491			" "
525	63566			Hornfels float
550	63237			" "
575	61377			Hornfels dc
600	63385			Hornfels float.
625	61963			Hornfels dc
650	65649			" "
675	61779			Hornfels Fe stained
700	61136			" "
725	61393			Hornfels float.
750	61922			727m Edge of swamp Swamp
762	61924			Hornfels ok
775	62005			Swamp
800	62053			Creek 778m. Hornfels
825	61563			Grey clay
850	60990			Grey clay No ok
875	60864			Fe stained hornfels
900	61047			No ok - forest.
925	61082			Grey clay forest
950	60711			" " "

043

143044

Form No. 73/269

RENISON LIMITED

(13)

PROTON MAGNETOMETER FIELD RECORDINGS

Date: April 1979

Operator: A. R.

Grid Location: EAST  
NEEMSKIRK

LINE 3200N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
975E	60602			grey clay
1000	59335			" " Homfels fl.
1012	60720			Grey clay Fe stone homfels
1025	60634 - 500*			grey clay
1037	65525			grey clay Homfels fl.
1050	"			Ironstone ok
1062	"			Ironstone ok
1075	65523			"
1087	65525			"
1100	"			"
1112	"			"
1125	65523			"
1137	"			down slope Fe stone seen
1150	65525			"
1162	65524			Forest
1175	65523			Fe stone/magnetite
1187	61240			Fe stone fl.
1200	65524			"
1212	65521			No ok
1225	65524			edge of swamp grey clay
1237	65524			400
1250	65525			Ironstone/magnetite
1275	63041			Fe stone clay
1300	<del>65524</del> 61415			Orange clay New creek
1325	<del>62003</del> <del>61415</del>			Creek - Granite frags.
1350	61942			Across creek
1375	66144-65523*			White homfels flat grey clay
1400	61743			Swampy grey clay



045

143046

(5)

Form No. 69/88

REINSON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskwjk. TRAVERSE Line 3400N

Wednesday  
DATE 20<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
300 <sup>E</sup>	1415	62469			-3	62466	
		62424				62421	
		62428				62425	
		62405				62401	
400 <sup>E</sup>		62407			-4	62403	
		62387				62383	
		62379				62375	
		62377				62372	
500 <sup>E</sup>	1430	62366			-5	62361	
		62340				62335	
		62343				62337	
		62339				62333	
600 <sup>E</sup>		62301			-6	62292	
		62270				62264	
		62275				62268	TRACK Along CRIB TO SOUTH.
		62278				62271	
700 <sup>E</sup>		62259			-7	62252	
		62308				62300	
		62354				62346	
		62371				62363	
800 <sup>E</sup>	1500	62322			-8	62313	
<p>↓ N.B. Peg 800<sup>E</sup> on the original line (which was numbered 700<sup>E</sup>) can be found 10<sup>MTRS</sup> to the north of 775<sup>E</sup> of the extended line and the reading at that peg (original 800<sup>E</sup>) was 62348 @ 1500 hrs.</p>							

048

143047

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Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 3400<sup>N</sup>

DATE 21<sup>st</sup> Dec 78 <sup>Thursday</sup> OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS	
2100 <sup>E</sup>	1350	60413			0	60413		
		60428				60428		
		60509				60509		
		60671				60671		
2200 <sup>E</sup>		60656				60656		
		60000 + 200				60000	+200	
		60685				60685		
		60764				60764		
2300 <sup>E</sup>		60904				60904		
		60806				60806		
		60861				60861		
		60926				60926		
2400 <sup>E</sup>		61022				61022		
		61070				61070		
		61607				61607		
		61301				61301		
2500 <sup>E</sup>		61385				61385		
		61473				61473		
		61548				-1	61547	
		61620					61619	
2600 <sup>E</sup>		61697				61696		
		61778				61777		
		1410 61853					61852	
		61954					61953	
2700 <sup>E</sup>		62055				62054		
		62189				62188		
		62220					62219	
		62489					62488	
2800 <sup>E</sup>		62715				62714		
2825 <sup>E</sup>	1417	63458				63457		

047

143048

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Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskerk

TRAVERSE Line 3400<sup>N</sup>

DATE Thursday 21<sup>st</sup> Dec 78

OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2850 <sup>E</sup>	<del>1418</del> 1418	63377				63006	
		63457				63476	
2900 <sup>E</sup>		62225 <sup>+30</sup>				62224	+30
		63546				63546	
		63401				63400	
		63191				63190	
3000 <sup>E</sup>	1430	63231			-2	63219	
		63018				63016	
		63349				63347	
		63029				63027	
3100 <sup>E</sup>		62626				62624	ROAD.
		62765				62763	
		62698				62696	
		62588				62586	
3200 <sup>E</sup>	<del>1430</del>	62594				62592	on load.
		62537				62535	on load.
		62477				62475	
		62346				62344	
3300 <sup>E</sup>		62450				62448	
		62527				62525	
		62528				62526	
		62606				62604	
3400 <sup>E</sup>		62656				62654	
		62755				62753	
		62858			-3	62855	
		63015				63012	
3500 <sup>E</sup>		62916				62913	
		62791				62788	
		62678				62675	
3575 <sup>E</sup>	1456	62781				62778	



049

143050

(19)

Form No. 69/88

REYNOLSON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E-Heemskerk

TRAVERSE Line 3600<sup>N</sup>DATE <sup>Wednesday</sup> 20<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2500 <sup>E</sup>	1010	61135			+25	61160	
		61123				61198	
		61112				61137	
		61030				61055	
2400 <sup>E</sup>		60880			+24	60904	
		60650				60674	
		62430 <sup>+40</sup>				62454	+40
		60556				+23	60579
2300 <sup>E</sup>		66220 <sup>+60</sup>				66243	+60
		65390 <sup>+130</sup>				65413	+130
		63936				63959	
		63733			+22	63755	
2200 <sup>E</sup>		62680 <sup>+30</sup>				62702	+30
		60550 <sup>+150</sup>				60572	+150
		60200 <sup>+200</sup>			+21	60221	+200
		64450 <sup>+250</sup>				64471	+250
2100 <sup>E</sup>	1035	67340 <sup>+30</sup>				67361	+30
		65450 <sup>+250</sup>				65471	+250
		62000 <sup>+12</sup>			+20	62020	+12
		62113				62133	
2000 <sup>E</sup>	1040	61100				61120	TRACK
		62019			+19	62038	
		62701				62720	
		62512				62531	
1900 <sup>E</sup>		63252				63271	
		62845			+18	62863	
		61132				61150	
		60994				61002	
1800 <sup>E</sup>		61512			+17	61529	
1775 <sup>E</sup>		61485				61502	

Base

050

143051

(20)

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heeginslwk TRAVERSE Line 3600NDATE Wednesday 20<sup>th</sup> Dec 88 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1750 <sup>E</sup>		61348				61365	
		61644			+16	61660	
1700 <sup>F</sup>		62751				62767	
		61140				61156	
		57750 <sup>+70</sup>				57266	+70
		60158			+15	60173	
1600 <sup>E</sup>	1105	61534				61549	
		61903				61918	
		62126			+12	62140	
	1110	62312				62326	
1500 <sup>E</sup>	1155	62494				62509	
		62466				62480	
	1200	61581			+13	61594	
		62300 <sup>+700</sup>				62313	+700
1400 <sup>E</sup>	1205	61342				61355	
		60005			+12	60017	
		61436				61448	
		62091				62103	
1300 <sup>E</sup>		62120				62132	
		62111			+11	62122	
		62089				62100	
	1215	62109				62120	
1200 <sup>E</sup>		62150			+70	62160	
		62187				62197	
		62235				62245	
		62245				62255	
1100 <sup>E</sup>	1221	62244			+9	62253	
		62243				62252	
	1230	62280				62289	
1025 <sup>E</sup>		62342			+8	62350	



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Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA: E. Heemskirk

TRAVERSE

Line 3800NThursday  
DATE 21<sup>st</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2400 <sup>E</sup>	1010	60050 <sup>+55</sup>			+7	60057	+55
		68383				68390	
		68260				68267	
		60570 <sup>+70</sup>				60577	+70
2500 <sup>E</sup>		58700 <sup>+200</sup>				58707	+200
		59200 <sup>+500</sup>				59207	+500
		66420				66427	
	1030	67120				67127	
2600 <sup>E</sup>		67429				67436	
		63340 <sup>+90</sup>				63347	+90
		62150 <sup>+100</sup>				62157	+100
		61915				61922	
2700 <sup>E</sup>		62132				62139	
		62469				62475	
		62520				62527	
		62533				62540	
2800 <sup>E</sup>	1045	62407			+6	62413	
		62393				62399	
		62295				62301	
		62255				62261	in creek.
2900 <sup>E</sup>		62361				62367	
		62361				62367	
		62356				62362	
		62321				62327	
3000 <sup>E</sup>		62388				62394	
		62354				62360	CREEK.
		62268				62274	
		62357				62363	
3100 <sup>E</sup>	1105	62474				62480	
3125 <sup>E</sup>		62421				62427	

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143054

(23)

Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA F. Heemskerk TRAVERSE Line 3800<sup>N</sup> DATE Thursday 21<sup>st</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
3150 <sup>E</sup>	1107	62429				62435	
		62439				62445	
3200 <sup>E</sup>		62475			+5	62480	
		62528				62533	
		62561				62566	
		62612				62617	
3300 <sup>E</sup>		62656				62661	
		62709				62714	
		62766				62771	
		62815				62820	
3400 <sup>E</sup>		62851				62856	
		62876				62881	
		62889				62894	
		62895				62900	
3500 <sup>E</sup>		62866				62871	
	1110	62858				62863	
		62816				62821	
		62791				62796	
3600 <sup>E</sup>		62779			+4	62783	
		62781				62785	
		62761				62765	
		62770				62774	
3700 <sup>E</sup>	1150	62756				62750	
		62710 +20				62712	+20
		62739				62743	
		62752				62756	
3800 <sup>E</sup>		62756				62760	
		62738				62742	
		62748				62752	
3875 <sup>E</sup>	1158	62754				62758	



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Form No. 69/88

RENISON LIMITED<sup>6</sup>

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

(25)

AREA E. Heemskirk TRAVERSE Line 4000<sup>N</sup>DATE Tuesday 19<sup>th</sup> Dec 78 DBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
700 <sup>E</sup>	1445	62508			+7	62515	
		62454			.	62461	
		62442			.	62449	
		62401			.	62408	
800 <sup>E</sup>		62370			.	62377	
		62371			.	62376	
		62396			+6	62402	
		62380			.	62386	
900 <sup>E</sup>		62356			.	62362	
		62354			.	62360	
		62350			.	62356	
		62351			.	62357	
1000 <sup>E</sup>	1510	62341			+5	62346	
		62345			.	62351	
		62347			.	62352	
		62352			.	62357	
1100 <sup>E</sup>		62342			.	62347	
		62346			.	62351	
		62332			+4	62336	
		62322			.	62326	
1200 <sup>E</sup>		62320			.	62324	
		62300			.	62304	
		62283			.	62287	
		62263			.	62267	
1300 <sup>E</sup>		62241			+3	62244	
		62181			.	62184	
		62144			.	62147	
		62105			.	62108	
1400 <sup>E</sup>	1525	62037			.	62032	
1425 <sup>E</sup>		61931			.	61934	

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143057

(26)

Form No. 69/88

REXSON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 4000N

Tuesday  
DATE 19<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS	
1450 <sup>E</sup>	1528	61819			+2	61821		
		61617				61619		
1500 <sup>E</sup>	1530	61164				61196		
		60292				60294		
		60540					60542	
		58068					58070	
1600 <sup>E</sup>		61767			+1	61768		
		60885				60886		
		61653					61654	
		61844					61845	
1700 <sup>E</sup>	1545	62083				62082		
		62953				62954		
		62788			0	62788		
		62574				62574		
1800 <sup>E</sup>		61105				61105	+15	
		62108				62108		
		62192				62192		
		64325				64325	+75	
1900 <sup>E</sup>		62054			-1	62053		
		61879					61878	
		61689					61688	
		60704					60703	
2000 <sup>E</sup>		62082				62081		
		61266				61265		
		61378				61376		
		61228				61226		
2100 <sup>E</sup>		61600				61598		
		1605	61508			61506		
		61711				61709		
2175 <sup>E</sup>		62296				62294		



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143059

(28)

Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 4200<sup>N</sup>

DATE Tuesday 19<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2500 <sup>E</sup>	10.15.	62500			+33	62533	
		62996				63029	
		62575				62608	
2600 <sup>E</sup>	10.20	62343				62376	
		62927				62960	
		62912				62945	
2700 <sup>E</sup>	10.25	62756				62789	
		62989				63022	
		62962				62995	
2800 <sup>E</sup>	10.30	63760				63793	
		63942			+32	62974	
		63305				62337	
2900 <sup>E</sup>	10.35	62977				63009	
		62740				62772	
		62589				62621	
3000 <sup>E</sup>		62553				62585	
		62790				62822	
		62561				62593	
3100 <sup>E</sup>	10.45	65374				65406	
		63628				63660	
		63230			+31	63261	
3200 <sup>E</sup>		63212				63243	
		63414				63445	
		63517				63548	
3200 <sup>E</sup>	10.49	63566				63597	
		63627				63658	
		63653				63684	
3200 <sup>E</sup>	10.49	63625				63656	
		62414				62445	
<del>3200</del> 3225 <sup>E</sup>	10.49	63559				63590	

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143060

Form No. 69/88

REMISON LIMITED

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## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heens Kirk TRAVERSE Line 4200NDATE Tuesday 19<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
3250 <sup>E</sup>	1050	63740			+30	63770	
		63788				63818	
3300 <sup>E</sup>		63798				63828	
	1055	63788				63818	
		63788				63818	
		63862				63892	
3400 <sup>E</sup>		64211				64241	
		64120				64150	
		63873				63903	
		63798				63828	
3500 <sup>E</sup>		63762				63792	
	1100	63724			+29	63753	
		63706				63735	
		63680				63709	
3600 <sup>E</sup>		63659				63688	
		63640				63669	
		63633				63662	
		63643				63672	
3700 <sup>E</sup>		63630				63659	
	1105	63628				63657	
		63608				63637	
		63601			+28	63629	
3800 <sup>E</sup>		63601				63629	
		63604				63632	
		63617				63645	
		63645				63673	
3900 <sup>E</sup>		63689				63717	
	1115	63737				63765	
		63798				63826	
		63829				63857	
4000 <sup>E</sup>	1117	63824			+27	63851	

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143061

(30)

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. HeenskuikTRAVERSE Line 4400<sup>N</sup>DATE 18<sup>Monday</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1100 <sup>E</sup>	1150	62343			+13	62356	
		62350				62363	
		62338				62371	
		62323			+12	62335	
1200 <sup>E</sup>		62334				62346	
		62302				62314	
		62284			+14	62295	
	1200	62280				62291	
1300 <sup>E</sup> ↑		62255				62265	
3 <sup>AKS</sup> ↓		62206			+10	62216	
1350 <sup>E</sup> ↓		62248				62258	
		62244				62254	
1400 <sup>E</sup>		62240			+9	62249	
		62223				62232	
		62222				62231	
		62171			+8	62180	
1500 <sup>E</sup>	1210	62144				62152	
		62155				62163	
		62196			+7	62203	
		62098				62105	
1600 <sup>E</sup>		62120				62127	
		61962			+6	61968	
		61862				61868	
		61934				61940	
1700 <sup>E</sup>		62009			+5	62014	
		62002				62007	
	1220	61628				61633	
		61044			+4	61048	
1800 <sup>E</sup>		61215 +13				61219	+13
1825 <sup>E</sup>	1225	59803 +5				59807	+5

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143062

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Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E Heamskirk TRAVERSE Line 4400<sup>N</sup>

DATE <sup>Monday</sup> 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1850 <sup>E</sup>	1224	60280 +30			+3	60283	+30
		62827				62830	
1900 <sup>E</sup>		64085				64088	
		59170 +50			+2	59172	+50
		59880 +100				59882	+100
2000 <sup>E</sup>	1230	62340 +20				62342	+20
		59750 +250			+1	59757	+250
		57900 +50				57901	+50
		59250 +250				59251	+250
		58900 +150			0	58900	+150
2100 <sup>E</sup>	1240	60300 +100				60300	+100
		67198				67198	
	1305	65406			-1	65405	
2200 <sup>E</sup>		64783				64782	
		63648				63647	
		62681				62682	
		62031			-2	62029	
2300 <sup>E</sup>		61866				61864	
		61356				61354	
		61497				61495	
		61434			-3	61431	
		61300				61297	
2400 <sup>E</sup>		61487				61484	
		60997				60994	
		61711				61708	
		62354				62351	
2500 <sup>E</sup>	1407	63196			-4	63192	



063

143064

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Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 4600<sup>N</sup> DATE Monday 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
4000 <sup>E</sup>	1706	63490			-21	63469	
		63477				63456	
		63460				63439	
		63453				63432	
3900 <sup>E</sup>		63439				63418	
		63420				63399	
		63391				63370	
		63380			-22	63358	
3800 <sup>E</sup>	1715	63372				63350	
		63372				63350	
		63367				63345	
	1720	63368				63346	
3700 <sup>E</sup>		63361				63339	
		63357				63335	
		63363			-23	63347	
		63365				63342	
3600 <sup>E</sup>		63366				63342	
		63371				63347	
		63376				63352	
		63398				63375	
3500 <sup>E</sup>	1730	63412				63399	
		63431			-24	63407	
		63442				63418	
		63449				63425	
3400 <sup>E</sup>		63461				63437	
		63472				63448	
		63489				63465	
		63555				63521	
3300 <sup>E</sup>		63724			-25	63800	
3275 <sup>E</sup>	1740	63514				63489	

064

143065

Form No. 69/88

RENISON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

(34)

AREA E. Heemskirk TRAVERSE Line 4600NDATE <sup>Monday</sup> 18 Dec 58 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
3250 <sup>E</sup>	1741	63473				63478	
		63459				63434	
3200 <sup>E</sup>	1750	63444				63419	
		63441				63416	
		63427			-26	63402	
		63437				63411	
3100 <sup>E</sup>		63449				63423	
		63480				63454	
		63513				63487	
		63578				63552	
3000 <sup>E</sup>	1800	63613				63587	
		63669			-27	63642	
		63747				63720	
		63851				63824	
2900 <sup>E</sup>	1805	63994				63967	
		64136				64108	
		64437				64410	
		64703				64676	
2800 <sup>E</sup>	1810	65017			-28	64989	
		65255				65227	
		65752				65724	
		66158				66130	
2700 <sup>E</sup>	1615	66650				66622	
		67011				66983	
		67479 <sup>+3</sup>				67451	+3
		67592			-29	67563	
2600 <sup>E</sup>		67744				67715	
		67614				67585	
		66802				66773	
		67731				67702	
2500 <sup>E</sup>	1830	61550 <sup>+750</sup>			-30	61520	Very noisy. +750

065

143066  
(35)

Form No. 69/88

REMISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskerk TRAVERSE Line 4800N DATE Monday 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2500 <sup>E</sup>	1015	63378			-1 + 20	63398	
		63415				63435	
		63401				63420	
		63282				63302	
2400 <sup>E</sup>		63169				63189	
		63576				63596	
		63899				63919	
	1025	63609				63629	
2300 <sup>E</sup>		62920				62940	
		62345			+ 19	62364	
		61795				61814	
		62773				62792	
2200 <sup>E</sup>		64113				64132	
		66515				66534	
	1035	66500 + 400				66519	+ - 500 400
		61399 + 5				61418	+ - 5
2100 <sup>E</sup>		60254			+ 18	60272	
		62883				62903	
		63540				63556	
		62010 + 90				62028	+ - 90
2000 <sup>E</sup>		54810 + 30				54825	+ - 30
	1045	61031 + 3				61049	+ - 3
		63900 + 45				63918	+ - 45
		61345				61363	
1900 <sup>E</sup>		62191			+ 17	62208	
		61512				61529	
		61202				61219	
		62022				62039	
1800 <sup>E</sup>		61920				61937	
1775 <sup>E</sup>	1053	62025				62042	

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143067

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Form No. 69/88

REMISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskirk TRAVERSE Line 4800<sup>N</sup> DATE Monday 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
1750 <sup>E</sup>	1054	62121				62138	
	1055	62013				62030	
1700 <sup>E</sup>		61922			+16	61938	
		62234 <sup>+2</sup>				62250	+2
		62441				62457	
		62556				62572	
1600 <sup>E</sup>		62285				62301	
		62382				62398	
		62334				62350	
		62135				62151	
1500 <sup>E</sup>		62161			+15	62176	
		62131				62146	
		62131				62146	
		62155				62170	
1400 <sup>E</sup>	1105	62145				62160	
		62167				62182	
		62121				62136	
		62238				62243	
1300 <sup>E</sup>		62202 <sup>1</sup>				62216	
		62213			+14	62227	
		62224				62238	
		62228				62242	
1200 <sup>E</sup>		62233				62247	
		62256				62270	
		62258				62272	
		62248				62262	
1100 <sup>E</sup>		62249				62263	
		62308				62322	
		62267				62281	
		62299				62317	
1000 <sup>E</sup>	11.18	62292			+13	62305	

067

143068

Form No. 73/269

RENISON LIMITED

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PROTON MAGNETOMETER FIELD RECORDINGS

Date: November 28, 1978 Operator: A. Ross

Grid Location: East Hemsirk Line 4800N

Grid station	Gamma Reading	Time	Diurnal correction	Corrected Reading
25E	63397		Quartzite float	Slope to north h/grass
	63447		" "	Crest "
	63451		" "	" "
	63425		" "	Slope to west "
	63400		" "	" "
24.5E	63404		" "	" "
	63383		Quartzite	Shale
	63313		Quartzite	" "
	63276		Quartzite ok <sup>Bedding</sup> <sub>10° 75° N</sub>	" "
	63210		Quartzite ok	Slope slope to west "
24 E	63226		Creek	
	63662		No ok	Flat Tilted
	63568		"	" "
	63737		"	" "
	63891		"	Creek to left "
23.5E	63587		Quartzite float check	"
	63795		Grey shale Gneiss	Tilted - Flat, Creek to left
	63657		No ok	Tilted Flat Creek to left
	63431		Check ok	Tilted flat, Creek to left
	63174		No ok	Tilted - flat, Creek to left
23 E	62946		Quartzite ok	Edge of creek
	62407		ok	In creek. Bedding quartzite <sub>25° 100° N</sub>
	62320		Edge of creek	Tilted
	62092		Tilted. Quartzite	flat
	61770		Creek	Bedded shale
22.5E	61781		In thine	
	61934		In thine	
	62321		In thine	

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PROTON MAGNETOMETER FIELD RECORDINGS

Date: November 28, 1978

Operator: A. Ross

Grid Location East Hemskirk  
Line 4800N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
	62956		9.5 trees	
	63736		9.5 trees	
22E	64135		On other side of creek with trees	
	64435		At creek, Boulder globe etc	
	65306		Magnetic snow down slope	
	67860		Magnetic snow on small hill	
	63441		Magnetic snow	
15E	66160		Magnetic snow Trees	
	62125		Magnetic snow	
	61252		Magnetic snow	
	61044		Magnetic snow	
	60435		Trees etc	
21E	60219		No etc.	
	61462		Edge of creek. Noble blg	
	63774		Blatress	No etc.
	62083*			
	62592*			
20.5E	63361*		Flat swamps	No etc.
	65115*			
	65320*			
	58269*			
	60300*		Flat blgrass	
20E	60768*		Variable blg. Flat.	
	58907		Green shale floor	
	60714		Beta grass.	
	62703		Edge of wood	
	64379			
19.5	64212		Foot of small trench.	

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Form No. 13/259

RENISON LIMITED

143070

(39)

PROTON MAGNETOMETER FIELD RECORDINGS

Date: November 28, 1978

Operator: A. Ross

Grid Location: East Heemskirk  
Line 4600N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
	60440		Check. Two trenches in road.	
	61208			Edge of small forest
	61636		No o/c.	Clear b/g.
	6112		No o/c	Clear b/g.
19E	62150		No o/c	Butter grass plain
	62022		"	Sediments 50m to east
	61629		"	"
	61090		"	Barren
	61135		"	"
18.5E	61165		"	"
	62090		"	"
	62091		"	"
	61921		"	"
	61908		"	"
18.0E	61925		"	"
	61954		"	"
	61996		"	"
	62045		"	"
	62096		"	"
17.5E	62128		"	"
	62122		"	Sediments on level 20m to south
	62054		Sediments to south 20m (o/c)	Flat b/grass
	62005			b/grass
	61924			"
	61848			Creek No o/c
17E	61923		Flat b/grass	No o/c
	62008		"	"
	62138		"	"

070

143071

Form No. 73/269

RENISON LIMITED

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PROTON MAGNETOMETER FIELD RECORDINGS

Date: November 28, 1978

Operator: A. ROSS

Grid Location: East Heemskirk  
Line 4800N

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
	62335		Flat w/ grass	No o/c
	62437		"	"
16.5E	62485		"	"
	62248		"	"
	62537		"	"
	62564		"	"
	62358		"	"
16.E	62288		"	"
	62299		"	"
	62381		"	"
	62396		"	"
	62423		Source Small hill	
15.5E	62345		4m east of creek	CRW side of hill.
	62260		CRW side of creek.	CRW Flat big no dc.
	62141		No o/c	Flat w/ grass
	62148		"	"
	62181		"	"
15.0E	62167		Granite o/crop	3m west.
	62134		"	Next to creek.
	62138		"	" . . .
	62134		"	Slope uphill to west.
	62140		Granite dc	
14.5E	62138		"	B/ grass
	62133		"	"
	62154		"	
	62189		"	Small hill
	62167		"	Creek to south.
14E	62151		Granite o/c.	Edge of creek

071

Form No. 73/269

REINSON LIMITED

143072

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PROTON MAGNETOMETER FIELD RECORDINGSDate: November 28, 1978Operator: A. RossGrid Location: East Hembrick  
Line 4800N.

Grid Station	Gamma Reading	Time	Diurnal correction	Corrected Reading
	62150		other side of creek.	Granite.
	62170		Granite of	Slope uphill to west
	62185		"	" "
	62153		"	" "
B5E	62126		Granite	
	62253		Granite	Weak foliation at 330°
	62253		"	Top of small hill
	62211		"	
	62199		"	Small valley. Bl/grass.
B3E	62206		"	
	62212		"	Slope uphill to west
	62217		"	
	62220		"	
	62227		"	Slope uphill to west
125F	62230		"	" "
	62232		"	Flat
	62237		"	
	62232		"	
	62235		"	
120E	62238		"	Flat
	62239		"	
	62249		"	
	62270		"	
	62267		"	Top of hill.
115E	62262		"	Top of hill.
	62247		"	Clear broken surface
	62246		"	Small outcrop
	62252		"	U. hill to west.



073

143074

Form No. 69/88

RENESSON LIMITED

## FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

(43)

AREA E. Heemskirk TRAVERSE Line 5000<sup>N</sup>DATE <sup>Monday</sup> 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
2400 <sup>E</sup>	1535	62228			-12	62216	
		62317				62205	
		62245				62223	
		62327				62215	
2500 <sup>E</sup>		62335				62123	
		62368			62356		
		62380			62338		
		62412			62400		
2600 <sup>E</sup>		62439				62427	
		62457			62445		
		62465			62453		
		62468			62455		
2700 <sup>E</sup>	1545	62487			-13	62474	
		62501				62474	
		62511				62494	
		62517				62504	
2800 <sup>E</sup>		62519				62506	
		62533			62520		
		62544			62521		
		62566			62552		
2900 <sup>E</sup>		62574				62561	
		62578			62565		
		62574			62560		
		62593			62599		
3000 <sup>E</sup>		62599				62585	
		62599			62585		
		62595			62581		
		62583			62569		
3100 <sup>E</sup>	1555	62582				62566	
3125 <sup>E</sup>	1557	62589				62577	

07A

143075

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Form No. 69/88

RENISON LIMITED

FIELD REPRODUCTION SHEET FOR MAGNETOMETER SURVEY

AREA E. Heemskijk

TRAVERSE

Line 5000<sup>N</sup>DATE Monday 18<sup>th</sup> Dec 78 OBS P. Ashton

STATION	TIME	READING	SCALE	DRIFT	BASE CORR	ANOMALY	REMARKS
3150 <sup>E</sup>	1558	62604				62590	
		62604				62590	
3200 <sup>E</sup>		62599			-15	62584	
		62598				62583	
		62613				62598	
		62638				62617	
3300 <sup>E</sup>	1605	62676				62661	
		62702				62687	
		62727				62712	
		62744				62729	
3400 <sup>E</sup>		62761				62747	
		62775				62760	
		62782				62787	
		62792				62777	
3500 <sup>E</sup>		62802			-16	62786	
		62810				62794	
		62815				62799	
		62827				62811	
3600 <sup>E</sup>		62840				62824	
		62853				62837	
		62867				62851	
		62882				62866	
3700 <sup>E</sup>	1615	62892				62876	
		62907				62891	
		62918				62902	
		62927				-17 62910	
3800 <sup>E</sup>		62931				62914	
		62932				62935	
		62932				62932	
3875 <sup>E</sup>	1618	62931				62910	



143077 2700<sup>N</sup>

076

Form No. 39/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk.

LINE NO. Line 2700<sup>N</sup>

DATE

085

STATION	Bedrock Reached	DEPTH	DESCRIPTION
100 <sup>E</sup>	✓	60cm	Granite soil + weathered Granite
	✓	50cm	" " " "
	✓	50cm	" " " "
	✓	15cm	" " + Veg
200 <sup>E</sup>	✓	50cm	" " " "
⊙	✓	50cm	" " + Veg
	✓	40cm	" " " "
	✓	40cm	" " " "
300 <sup>E</sup>	✓	40cm	" " " "
	✓	30cm	Brown Soil + Veg + Granite chips
		80cm	Granite soil.
		80cm	" " " "
400 <sup>E</sup>	✓	40cm	Brown soil + Granite frags.
450 <sup>E</sup>		80cm	Granite soil.
		80cm	" " " "
⊙		80cm	" " " "
500 <sup>E</sup>	close	80cm	" " + Granite chips.
510	stopped sieve?	60cm	" " " "
	sieve? ✓	40cm	Beige Brown clayey soil + weathered Granite frags.
	stopped.	60cm	Brown Grey soil.
600 <sup>E</sup>	✓	70cm	Tan Brown clayey weathered Granite
	stopped.	60cm	Grey granite soil.
	stopped sieve?	50cm	Black soil + Granite chips + Base.
	stopped sieve?	30cm	Brown soil + Veg + Granite chips.
700 <sup>E</sup> on 1/10/89		80cm	Black Mus. Soil on bedrock?

2700<sup>N</sup>

077

143078

2800N

Form No. 1/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Meamsville

TRANSVERSE

LINE 2800N

DATE

OBS

STATION	BEDROCK REACHED	DEPTH	DESCRIPTION
250E	✓?	40cm	Brown Moss soil + Rock chips (sieve?)
	✓?	15cm	Greyish soil + Veg + " "
300E	✓	40cm?	Weathered Granite.
	✓	45cm	" "
	in bank of creek below large sieve	50cm	Brown Clayey soil + weathered Granite.
	✓	60cm	" " " + " "
400E	✓	65cm	" " " + Rusty " "
	✓	45cm	" " " + White powdered rock.
	✓	70cm	Weathered iron rich granite.
	stopped sieve.	30cm	Brown clayey soil + weathered Granite.
500E	✓	60cm	" " " + Rusty " "
	✓	70cm	" " " + " " "
	close	75cm	" " " + Beige " "
	✓	70cm	" " " + " " "
600E		75cm	Granite Soil
	✓	70cm	" " " + weathered Granite.
	stopped	60cm	Grey beige brown soil + Granite frags.
	✓	30cm	Greyish soil + Veg + altered Granite? chips
700E	✓?	40cm	" " " + " " ? "
	✓?	45cm	" " " + " " ? "
	✓?	50cm	" " " + " " ? " + frags.
	✓?	60cm	" " " + " " ? "
800E	✓?	45cm	" " " + " " ? "
	✓?	35cm	" " " + " " ? "
	✓	45cm	Rusty brown weathered rock.
	✓?	10cm	Brown soil + whitish beige rock chips.
900E	stopped.	45cm	Greyish clay + white? frags.
	stopped.	40cm	Brownish " " ? "
	✓	70cm	Brownish Tan weathered white? + Greyish clay above.
975E.	✓	70cm	" " " " ? " " "

2800N

078

143079  
2800<sup>N</sup>

Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

TRaverse Line 2800<sup>N</sup>

DATE

OBS

STATION	SAMPLE No.	DEPTH	DESCRIPTION
1000 <sup>E</sup>	stopped	50m	Greyish Clay + <sup>white?</sup> granite? swes
	stopped	50m	" " = <sup>white?</sup> " ? "
	stopped	20m	Brownish Mus + <sup>white?</sup> granite? frags (water in hole)
	stopped	40m	" Grey Soil + Veg + <sup>white?</sup> granite? frags
1100 <sup>E</sup>	stopped	60m	Grey Clay + <sup>white?</sup> granite? frags
	stopped	50m	" " + " " "
		80m	Orange Yellow clay
		75m	Khaki clay
1200 <sup>E</sup>	close.	80m	" Orange clay + weathered rock chips.
		80m	" " " " " "
		80m	" " Grey + white clay.
		80m	Blue Grey Clay
1300 <sup>E</sup>	stopped	60m	Grey beige clay + Brown Mus.
	stopped ✓	50m	Brown Mus + Rock frags.
		50m	Tan Grey clay + weathered rock.
		80m	Brown Mus + Granite frags.
1400 <sup>E</sup>		80m	Tan Brown clay.
	✓	30m	Black soil + veg + rock chips.
	stopped	60m	Brown Mus + small rock frags.
		80m	" " " " "
1500 <sup>E</sup>		80m	Grey Clay + Brown Mus.
	stopped	50m	Brown Mus.
		80m	Brown clayey mus + Grit (alluvial from creek)
		80m	Brown Grit + Veg + Bluish Clay at bottom.
1600 <sup>E</sup>	✓	50m	Greyish brown Gritty clay + rock chips.
	✓	10m	Yellow clay + rock chips
	✓	20m	Khaki Orange clay + rock chips.
	✓	25m	Brown Soil + Veg + " "
1700 <sup>E</sup>	✓	25m	Orange Yellow clay + " "
1725 <sup>E</sup>	✓	20m	Khaki Beige clay + " "



080

143080

3000<sup>N</sup>

Form No. 35/82

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk.

LINE 3000<sup>N</sup>

DATE

OBS

STATION	S-	DEPTH	DESCRIPTION
4000 <sup>E</sup>	Reached ✓	55cm	Gabbro clay = weathered Gabbro.
	stopped ✓	45cm	Brown Mus + Veg = Qty Frags.
		50cm	Gabbro chips + clay under alluvium.
		80cm	Cratty alluvium.
3900 <sup>E</sup>	✓	70cm	Gabbro chips + clay.
	✓	60cm	Brown gatty mud + Gabbro chips
	✓	70cm	" " " " "
	✓	30cm	" " " " "
3800 <sup>E</sup>		80cm	Gabbro clay.
	✓	30cm	Brown Soil + Gabbro chips.
	✓	50cm	Weathered Gabbro + clay.
	✓	30cm	Brown mud + Gabbro chips.
3700 <sup>E</sup>		80	Gabbro clay = frags.
	✓	60	Brown Mus + Veg + Gabbro chips.
3650 <sup>E</sup>	✓	50	" " " " "
		SWAMP.	
3600 <sup>E</sup>			
3500 <sup>E</sup>			
3400 <sup>E</sup>			
3300 <sup>E</sup>			

081

143081

3000<sup>N</sup>

Form No. 54/59

HEWLETT LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskik.

PROJECT

Line 3000<sup>N</sup>

DATE

OBS

STATION	S. BEDROCK REACHED	DEPTH CMS.	DESCRIPTION
<del>3250<sup>E</sup></del> 3250 <sup>E</sup>			Swamp.
3200 <sup>E</sup>		80	" Vegetation only ? not sampled.
		80	" " " " " "
		80	" " " " " "
3150 <sup>E</sup>	in swamp. ✓	80	Greeny Grey clay & weathered Cobble.
	edge of swamp ✓	80	Yellow Orange clay. " chips.
3100 <sup>E</sup>	✓	60	" " " " " "
	✓	60	" " " " " "
	✓	70	" " " " " "
	✓	50	" " " " " "
3000 <sup>E</sup>	✓	80	" " " " " "
	✓	50	" " " " " "
	✓	80	Purple-pink clay. in marsh.
	✓	50	Orange Yellow clay " " "
2900 <sup>E</sup>		80	Beige clay in marsh.
		80	Orange Yellow clay.
	✓	70	" " " " weathered Cobble chips.
	✓	50	" " " " " "
2800 <sup>E</sup>	stopped ✓	45	" " " " " frags.
	✓	50	" " " " " Cobble chips.
	✓	30	Beige clay & scree & frags (Cobble) below Road.
	✓	80	Yellow Orange clay " Cobble chips
2700 <sup>E</sup>	✓	40	" " " " weathered " "
	✓	30	Tan Red clay " " "
	✓	35	Yellow Orange clay " " "
	✓	40	" " " " " "
2600 <sup>E</sup>	close	80	Khaki Yellow clay & weathered Cobble "
		80	Orange Yellow clay
		80	" " " "
2525 <sup>E</sup>	✓	20	Yellow Brown clay " Cobble chips

082

143082

3000<sup>N</sup>

Form No. 39/85

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

LINE Line 3000<sup>N</sup>

DATE

OBS

STATION	BEDROCK REACHED	DEPTH cms	DESCRIPTION
2500 <sup>E</sup>	✓	60	Yellow Orange clay = Gabbro chips
	✓	80	" " " " " "
	✓	60	" " " " " "
	✓	40	" " " " " "
2400 <sup>E</sup>	✓	25	Brown Soil = roots on Gabbro outcrop.
	✓	20	Yellow Orange clay = Gabbro chips.
	✓	40	" " " " " "
	✓	40	" " " " " "
2300 <sup>E</sup>	✓	40	" " " " " "
	✓	30	" " " " " "
		80	Grey clay = veg in Marsh
		80	Blue Grey " " " "
2200 <sup>E</sup>		80	" " " " " "
		80	Grey clay = " "
		80	" " " " " "
		80	Blue Grey clay = veg "
2100 <sup>E</sup>		80	Beige Brown Orange clay = Alb frags "
		80	Yellow Orange clay = Veg. "
	close.	80	White Tan Orange clay = weathered Gabbro. "
		80	Blue Grey clay = veg "
2000 <sup>E</sup>		80	Greeny Grey clay = frags "
		80	" " " " " "
	✓	30	Brown Mud = veg on Gabbro bedrock "
1925 <sup>E</sup> .	✓	25	Beegy Orange Soil = Gabbro chips. In Marsh
1900 <sup>E</sup>			Previously sampled.

3000<sup>N</sup>

083

3000<sup>N</sup>

Form No. 134/69

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk.

TRAVERSE Line 3000<sup>N</sup> Extension DATE

OBS

STATION	SP	DEPTH	DESCRIPTION
00		80m	Brownish muddy clay.
		80m	Tan Beige Muddy clay / weathered rock.
	✓	75m	Beige Orange Brown weathered Granite + Pinkish flakes + chips.
	✓	50m	Brown Beige weathered Granite?
100 <sup>E</sup>	✓?	30m	Beige clay soil + roots + Granite chips (in large sizes)
200 <sup>E</sup>	✓	40m	Brown muddy clay + roots + " "
	✓	20m	" soil + roots + " "
	stopped.	45m	" " + " " + " "
200 <sup>E</sup>	✓	60m	Dark brown weathered Granite.
	✓	50m	Beige Brown soil + " "
	✓	40m	" " + " " + " "
	✓	15m	Cray brown soil + roots + Granite chips.
300 <sup>E</sup>		80m	Brownish Cray soil + weathered Granite
		80m	" " + " " + " "
	✓	50m	Tan weathered rock + Granite soil.
400 <sup>E</sup>	✓	25m	Brown soil + Granite chips (weathered)
		75m	Brown soil + Granite soil.
	✓?	30m	" " + " " + " "
	✓	30m	White Muddy soil.
500 <sup>E</sup>		80m	Fairy Yellow Clayey soil.
			Previously sampled.

084

143084

3200<sup>N</sup>

Form No. 39/89

REMISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemakirk TRANSVERSE Line 3200<sup>N</sup> DATE            OBS           

STATION	BEDROCK REACHED	DEPTH	DESCRIPTION
300 <sup>E</sup>	✓	15cm	Brown Soil + Veg on Granite outcrop/scree.
	✓	10cm	" " " " " " " "
	✓	40cm	Greyish brown beige sandy clay + Granite chips.
	✓	30cm	" " soil + roots " " "
400 <sup>E</sup>	✓	30cm	" " " " " " "
	✓	50cm	Beige " " " " "
	scree? ✓	30cm	" " + Pale scree + situated at top?
	scree? ✓	40cm	" brown clay + Granite frags.
500 <sup>E</sup>	Compos. Variation (✓)	30cm	" " " " + weathered chips. altered siltstone?
	✓	15cm	Grey beige clay + roots " " " " ?
	✓	40cm	" " " " " chips " " ?
	✓	35cm	" " soil " " " " "
600 <sup>E</sup>	✓	30cm	Grey beige soil + Veg + Rock chips altered siltstone?
	✓	20cm	" " " " " " " "
	✓	35cm	Brownish soil " " " " ?
	✓	15cm	" " " " " " ?
700 <sup>E</sup>	✓	Pyrites. 20cm	Greyish beige clay " " " with PYRITES
	✓	15cm	Dark brown soil + Veg " " "
		80cm	Beige brown Mus + Greenish Grey clay at bottom in Mass.
	✓	40cm	Brown clay + Veg + frags + chips (Granite?)
800 <sup>E</sup>	✓	30cm	Tan Grey clay + chips. siltstone?
	stopped? ✓	30cm	Yellow Orange brown Grey clay + Veg + siltstone? chips.
	✓	20cm	Brown Mucky clay + siltstone? chips
	stopped. ✓	30cm	Beige clay.
900 <sup>E</sup>	✓	70cm	Tan Orange clay + weathered siltstone?
	✓	50cm	" " " " " " "
	✓	30cm	" " " " + roots + siltstone? chips.
	Compos. Variation (✓)	30cm	" " " " " " + weathered.
1000 <sup>E</sup>	↓	30cm	Tan clay + altered siltstone chips + frags (iron rich)
1025 <sup>E</sup>	↓	35cm	Yellow Orange clay + " " " " "

085

143085

3200<sup>N</sup>

Form No. 59/89

REMISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk.

TRaverse

Line 3200<sup>N</sup>

DATE

085

STATION	Bedrock Reached	DEPTH	DESCRIPTION
1050 <sup>E</sup>	Compass variation ✓	20m	Reddish Brown soil + Veg in limestone.
	✓	30m	" " " " " "
1100 <sup>E</sup>	✓	70m	Reddish soil + weathered limestone.
	stopped ✓	30m	limestone nodules.
	✓?	40m	" " " "
	✓?	30m	" " " "
1200 <sup>E</sup>	✓?	70m	Yellow Orange Mussy Clay + limestone nodules + chips.
	✓	80m	Blue Grey Clay.
	✓	30m	Orange clay + black weathered rock chips <sup>weathered limestone?</sup>
	stopped?	50m	limestone nodules.
1300 <sup>E</sup>	✓	65m	weathered altered siltstone?
	✓	30m	Dark brown clay + altered siltstone? chips
	✓	30m	Khaki Clay clay " " " "
	✓	30m	" " " " " " " "
1400 <sup>E</sup>		80m	Blue Grey white clay (coarse)
	✓?	50m	Brown clay " " " "
	✓	70m	Tan Orange Khaki clay " " " "
	✓	80m	Yellow Orange clay " " " "
1500 <sup>E</sup>	✓	20m	Yellow Tan soil " " " "
	✓	50m	" " " " " " " "
	✓	30m	" " " " " " " "
	✓	30m	Light " " " " " " " "
1600 <sup>E</sup>	✓	30m	Tan clayey soil " " " "
	stopped	60m	Coarse Sand + finge (alluvium from creek)
	✓?	70m	Brown Fine Sandy soil + altered siltstone chips.
		80m	Black Musc.
1700 <sup>E</sup>	stopped	40m	Brown Musc. Veg " " " "
	✓	35m	Tan beige soil + veg + Gabbro? chips
	✓	25m	Khaki Orange soil " " " "
1775 <sup>E</sup>	✓	30m	" " " " " " " "

can 180  
14 m<sup>2</sup> south of here.



086

143086

3200<sup>N</sup>

Form No. 30785

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

LINE 3200<sup>N</sup>

DATE

085

STATION	Bedrock Reached	DEPTH	DESCRIPTION
1800 <sup>E</sup>	✓	20cm	light Tan Soil, Veg = Gabbro chips.
	✓	30cm	Orange clay = " "
		80cm	" " " " " "
	✓	15cm	" " " " " "
1900 <sup>E</sup>	✓	25cm	Khaki Tan Soil = " "
	✓	25cm	" " " " " "
	✓	25cm	" " clay = " "
	✓	35cm	Orange Yellow clay = " "
2000 <sup>E</sup>		80	" " " " " "
		80	" " " " " "
	clae	80	Brown clay = " "
		80	Pale Green clay = veg.
2100 <sup>E</sup>	clae	80	" Brown " " "
		80	Berge clay = frags.
	clae	80	" " " " " "
		80	Moss + Veg.
2200 <sup>E</sup>		80	" " " " " "
	stopped.	60	" " " " " "
		80	" " " " " "
	stopped.	45	" " " " " "
2300 <sup>E</sup>	✓	60	Brown Moss. Old frags = Gabbro? chips

3200<sup>N</sup>

087

143087

3400N

Form No. 34/69

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

LINE ~~33~~ 3400N

DATE

OBS

STATION	Bedrock Returned	DEPTH	DESCRIPTION
3875 <sup>E</sup>	✓	40cm	Yellow Orange clay & Gabbro sand chips
	✓	30cm	" " " " Gabbro chips.
		80cm	" " " "
3800 <sup>E</sup>	✓	30cm	" " " " " "
	✓	40cm	Yellowish Soil & Gabbro chips.
	✓	30cm	Yellow Orange clay & weathered Gabbro chips
3700 <sup>E</sup>	✓	70cm	" " " " " "
	✓	70cm	" " " " " "
	✓	70cm	" " " " " "
	✓	25cm	" " " " " "
	✓	70cm	" " " " " "
3600 <sup>E</sup>	✓	60cm	" " " " " "
	✓	60cm	" " " " " "
	✓	70cm	" " " " " "
	✓	80cm	" " " " " "
3500 <sup>E</sup>	✓	70cm	" " " " " "
	✓	50cm	" " " " " "
	✓	15cm	khaki Brown clay (brownish) " "
	✓	40cm	Yellow Orange " " " "
3400 <sup>E</sup>		80cm	" " " " " frags.
		80cm	" " " " " "
	✓	50cm	" " " " Gabbro chips.
	✓	70cm	" " " " " "
3300 <sup>E</sup>		50cm	" " " " " "
		70cm	" " " " " "
		20cm	" " 12m below Road. " "
3200 <sup>E</sup>		20cm	" " " " " "
		20cm	" " " " " "
3150 <sup>E</sup>		40cm	" " " " " "

north Road  
into bank

088

143088  
3400<sup>N</sup>

Form No. 69/89

RENISON LIMITED

## FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk

TRANSVERSE Line 3400<sup>N</sup>

DATE

OBS

STATION	Bedrock Reached	DEPTH cms.	DESCRIPTION
3125 <sup>E</sup>	✓	60	Yellow Orange clay → Cabbw chips.
3100 <sup>E</sup>		80	" " "
	✓	70	" " " " "
	close	80	" " " → weathered " "
	✓	40	" " " " "
3000 <sup>E</sup>		80	" " " "
	✓	40	" " " " "
	✓	15	Tan Soil + Veg " "
	✓	30	" " " " "
2900 <sup>E</sup>	✓	20	" " " " "
	✓	20	Orange Yellow clay + Veg " "
	✓	40	" " " " "
	✓	30	" " " " "
2800 <sup>E</sup>	✓	80	" " " → Cabbw frags.
	✓	60	" " " → Cabbw chips.
	✓	80	" " " " "
	✓	60	" " " " "
2700 <sup>E</sup>		80	" " " "
	✓	70	" " " " "
	✓	70	Brown Orange clay " " in Marsh.
		80	" " " " "
2600 <sup>E</sup>	✓	70	" " " sandy " " "
	✓	60	Greasy clay " " " "
	✓	65	Orange Yellow clay " "
		80	Greasy clay + veg " "
2500 <sup>E</sup>		80	" " " " "
		80	" " " " "
		80	Brownish Grey Muddy clay + Veg " "
	✓	30	Bluish clay + sh fragments " "
2400 <sup>E</sup>		80	Orange Tan clay " "



090

143090

3400<sup>N</sup>

Form No. 54/60

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk

TRANSVERSE Line 3400<sup>N</sup> Extension. DATE

OBS

STATION	BEDROCK S <sub>1</sub> REACHED	DEPTH	DESCRIPTION
300 <sup>E</sup>	✓	15 <sup>m</sup>	Brown Soil/Roots + Veg on Tan Granite.
	✓	30 <sup>m</sup>	" " " " " "
	✓	10 <sup>m</sup>	" " " " " "
	✓?	50 <sup>m</sup>	Beige Grey coarse Sand + Clay.
400 <sup>E</sup>	✓	30 <sup>m</sup>	" " " " " + Granite chips.
	✓?	35 <sup>m</sup>	Brownish soil + Roots + " "
	✓	40 <sup>m</sup>	Brown Beige weathered rock.
	stopped.	40 <sup>m</sup>	" Muddy Soil + Veg + Granite? frags.
500 <sup>E</sup>	✓	30 <sup>m</sup>	" " " " " " + chips. (see?)
	✓	35 <sup>m</sup>	Brown beige weathered rock + Granite frags.
	Roots stopped	60 <sup>m</sup>	" " + beige sandy clay soil + Roots.
	✓	60 <sup>m</sup>	Brown beige weathered rock + brown soil
600 <sup>E</sup>	✓?	50 <sup>m</sup>	" " " " "
	✓	40 <sup>m</sup>	" " " " " + clay.
	✓?	40 <sup>m</sup>	" " " " Granite? + frags.
	✓	10 <sup>m</sup>	" " + Rusty " " ? + chips.
700 <sup>E</sup>	✓?	40 <sup>m</sup>	" " Muddy soil + Granite frags.
	stopped.	50 <sup>m</sup>	Crack black soil + Roots + weathered Granite.
	✓	60 <sup>m</sup>	Rusty Brown weathered rock.
	✓	40 <sup>m</sup>	Beige " " " + chips.
800 <sup>E</sup>	Previously		Sampled.

3400<sup>N</sup>

091

143091

3600<sup>N</sup>  
0

Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heemskerk

TRANSVERSE Line 3600<sup>N</sup>

DATE

GPS

STATION	DEPTH	BEDROCK REACHED	DESCRIPTION	
600 <sup>E</sup>	30 cm	stopped sieve	Brown soil & sieve chips (Granite?)	Hill to N
	45 cm	"	Greyish soil & roots.	
	35 cm	"	Brownish Grey " & " & " & " & "	NE
	25 cm	" sieve outside	Brownish soil & roots & Granite? chips.	
700 <sup>E</sup>	40 cm	stopped	Black Brown gritty mud & clay.	
	35 cm	stopped	" " " " & " & roots.	
	50 cm	stopped sieve	Sandy soil & roots.	W
	80 cm	"	Grey sandy soil.	W
800 <sup>E</sup>	25 cm	stopped sieve	Brown beige sandy soil & veg	W
	35 cm	stopped sieve/dry	" " " " & "	
	35 cm	"	Black soil & veg + Granite sieve chips.	W
	35 cm	"	" " " " & " & " & "	W
900 <sup>E</sup>	40 cm	"	Brown soil & sand + Granite (weathered)	
	60 cm	stopped	Black gritty mud & brown " "	NE
	45 cm	" outside	Black Brown gritty soil & granite chips.	N
	25 cm	"	" " " " & " & "	
1000 <sup>E</sup>	40 cm	✓	" " " " & " & "	
	20 cm	✓	" " " " & " & "	
	60 cm	✓	" " " " & Brown weathered Granite.	
	30 cm	✓	Grey gritty soil & Granite chips.	
1100 <sup>E</sup>	50 cm	✓	Black " " & Brown weathered Granite	N
	50 cm	✓	" " " " & " & "	
	30 cm	✓ sieve	" " " " & " & "	
	70 cm	✓	" " " " & " & "	
1200 <sup>E</sup>	30 cm	✓ sieve	" " " " & " & "	
	30 cm	✓	" " " " & " & "	
	30 cm	✓ sieve	Beige " " & Granite chips.	NW
	45 cm	✓ sieve	" " " " & " & "	N
1300 <sup>E</sup>	45 cm	✓ sieve	Brown " " & Beige weathered Granite	NW
1325 <sup>E</sup>	25 cm	✓	Brown soil & veg & Granite chips.	

092

143092

3600<sup>N</sup>  
②

FORM NO. 69/89

REMISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heemskerk.TRANSVERSE Line 3600<sup>N</sup>

DATE

085

STATION	DEPTH	BEDROCK RESISTANCE	DESCRIPTION	HILLS
1350 <sup>E</sup>	50 cm	✓	Beige Orange clay + Brown Beige rock chips (shale?)	NE
	30 cm	✓	Black soil + Veg + Quartz chips	N
1400 <sup>E</sup>	20 cm	✓	Grey clay + " ? "	N
	20 cm	✓	" " + " ? "	N
	20 cm	✓	" " + " ? "	NW
	20 cm	✓	" " + " ? "	W.
1500 <sup>E</sup>	40 cm	✓	Khaki clay + Orange rock chips.	W
	20 cm	✓	Grey Beige clay + Grey " " " "	W
	30 cm	✓	Beige Khaki clay + rock chips	W
	45 cm	✓	" " Grey " + " " "	NW
1600 <sup>E</sup>	25 cm	✓	Beige Grey clay + Quartz chips + frags	
bottom of hill	55 cm	stopped.	Grey Mus + Frags in swampy marsh.	
	70 cm	✓	Khaki / Dark Grey clay + chips	
	30 cm	stopped?	Pinky beige soil + roots + limestone frags.	
1700 <sup>E</sup>	30 cm	stopped?	Beige clayey soil + roots + limestone frags.	
	45 cm	stopped?	Blackish soil + roots + " " "	
	70 cm	stopped.	Brown Mus + roots in marsh.	
	0-80 cm		" " " " " "	
1800 <sup>E</sup>	60 cm	stopped?	Grey gritty Mus + Quartz frags in marsh.	
	0-80 cm		Blackish " " " "	
	80 cm		Orange Brown + black soil.	
	80 cm		" " " " "	
1900 <sup>E</sup>	75 cm	✓	" " Soil + black limestone chips.	
	45 cm	✓	" " " " " "	
	60 cm	✓	" " " " " "	
	55 cm	✓	" " " " " "	
2000 <sup>E</sup>	80 cm		Weathered limestone.	
	65 cm	✓	Orange Brown soil + Black limestone chips.	
	80 cm		Orange Brown soil + Black limestone chips.	
2075 <sup>E</sup>	55 cm	✓?	Brownish " + " " "	

093

143093

3600<sup>N</sup>  
①

Form No. 59/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heemskerk

TRANSVERSE Line 3600<sup>N</sup>

DATE

OBS

STATION	DEPTH	Bedrock REACHED	DESCRIPTION	Hit To
2100 <sup>E</sup>	40cm	√?	Ironstone frags & chips in Brown soil.	
	25cm	√?	" nodules "	
	60cm	√	Orange Brown Red clay & Black ironstone chips.	
	35cm	√?	" " soil & ironstone frags & chips. W	
2200 <sup>E</sup>	35cm	√?	" " clay " " " " W	
	80cm		Yellow Brown clay:	
	80cm		" " "	
	80cm		Black Brown Mus & Veg in marsh.	
2300 <sup>E</sup>	0-80cm		" " " " " swamp. not good sample.	
	55cm	stopped.	Brown Mus & Beige clay & Qz pebbles & frags in marsh	
	70cm	stopped.	" " " " " " " "	
	50cm	stopped	Brown Mus in swamp.	
2400 <sup>E</sup>	80cm		Beige Brown Turquoise clay & Brown Mus in marsh	
	80cm		" " " " " " "	
	80cm		" " " " " " "	
2500 <sup>E</sup>	80cm		Beige Yellow clay & some orange & Green blocks chips	
	80cm		" " " " & some orange. in marsh	
			END.	

094

143094

3800<sup>N</sup>  
0

Form No. 59/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

TRANSVERSE Line 3800<sup>N</sup>

DATE

DBS

STATION	DEPTH.	BED ROCK REACHED.	DESCRIPTION
4400 <sup>E</sup>	50m.	stopped.	Grey blue clay + Qz frags + scree.
	50m.	✓	light grey Qz white chips hill to NW
	55m.	✓	Grey Brown soil - white chips (weathered) " " NW
	25m.	✓	" " weathered Qz chips " " NW
3900 <sup>E</sup>	25m.	stopped.	Brown <sup>veg</sup> soil + Qz frags. " " N.
	70m.	✓	Brown + Blue Grey clay + weathered white chips. " " N.
	60m.	stopped.	Brown clayey soil + Qz white chips + frags " " NW.
	35m.	✓	Blue Grey clay + white chips. " " N.
3800 <sup>E</sup>	30m.	✓	" " " " " " " " N.
	30m.	✓	" " white chips + black bits + veg. " " N.
	55m.	✓	" " beige " " + clay. " " N.
	35m.	✓	" " " clay + white chips. hill to N.
3700 <sup>E</sup>	70m.	stopped.	Grey Beige Mus - white scree + frags " " N.
	50m.	✓	Blue Grey weathered white chips + clay. " " N.
	65m.	✓	" " " " " " + beige Grey clay " " N.
	30m.	✓	Beige Grey clay + Qz white chips + frags " " N.
3600 <sup>E</sup>	10m.	✓	Greyish clay on brownish yellow white " " N.
	30m.	✓?	Brownish muddy clay on white bedrock? " " N.
	30m.	✓	Beige Orange clay + <sup>CRASS</sup> white chips " " N.
	60m.	✓	Blue grey beige Orange clay + " " weathered.
	80m.	✓	Beige clay + Orange clay + white frags " " NW.
3500 <sup>E</sup>	30m.	✓	Yellow beige weathered white + chips " " W.
	40m.	✓	Khaki Orange " " + clay
	60m.	✓	Khaki Grey clay + Brown Orange weathered rock.
	80m.	✓	" " " " " " " " hill to NE
3400 <sup>E</sup>	10m.	✓	Black soil + roots on <sup>CRASS</sup> white? Outcrop/s
	25m.	stopped.	" Brown " " " " " " scree.
	40m.	✓	Brown Orange clay + weathered <sup>CRASS</sup> white chips hill to E.
	45m.	✓	" " " " " " " " hill to E.
3300 <sup>E</sup>	45m.	✓	" " " " " " " " hill to E.
3275 <sup>E</sup>	80m.		Whitish Yellow silty clay. hill to E.

095

143095

3800N  
②

Form No. 64/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk

TRAVERSE Line 3800N

DATE

OBS

STATION	DEPTH	BEDROCK REACHED	DESCRIPTION
3250 <sup>E</sup>	55cm	✓	Beige grey clay + Yellow rock chips. hill to E.
	40cm	✓	Khaki Beige clay + weathered rock chips -- E.
3200 <sup>E</sup>	35cm	stopped	Brown Mass in Scree. (Gabbro?) -- E.
	30cm	stopped	Khaki Orange clay + rock chips probably scree. -- E.
	50cm	stopped	Yellow Khaki clay + scree, frags. -- E.
	60cm	✓	Yellow Orange clay + rock chips (Gabbro?) -- E.
3100 <sup>E</sup>	80cm	stopped?	Orange Yellow clay -- E.
	30cm	stopped?	Yellow Brown Mass Gabbro? frags in scree/outcrop -- NE
	50cm	stopped?	" " " + weathered Gabbro? chips.
	40cm	stopped?	Khaki Brown clay + " " scree.
3000 <sup>E</sup>	80cm		Yellow Orange clay hill to W.
	30cm	stopped?	Beige soil roots in Gabbro? scree/outcrop.
	40cm	stopped?	Yellow beige soil/clay + Gabbro? chips.
2915 <sup>E</sup>	50cm	✓	Orange Yellow Brown weathered Gabbro? clay + chips. hill to N.
2900 <sup>E</sup>	80cm	close	" " " " " " " " " " " "
	60cm	✓	" " " " " " " " " " " " hill to NE
	80cm		Yellow Orange clay hill to NW
	30cm	✓?	" " " + weathered black limestone chips. -- NW
2800 <sup>E</sup>	80cm		" " " " " " " " " " " " hill to N
	50cm	✓	" " " + weathered gabbro chips.
	25cm	stopped	" " " " " " " " " " " "
	50cm	✓	" " " + weathered gabbro chips. hill to NE
2700 <sup>E</sup>	55cm	stopped	" " " " " " " " " " " " OLD DIGGINGS AT PEG SAMPLED 4 METERS WEST.
	30cm	stopped	Brown lumpy Mass in Marsh. hill to N.
	10cm	✓	Weathered limestone + Yellow Orange muddy soil -- N.
	30cm	✓?	Khaki Brown clay + limestone frags.
2600 <sup>E</sup>	55cm	✓	Orange Grey clay + weathered gabbro chips in scamp.
	70cm	✓	Orange Yellow clay + " " " " hill to NW
	80cm	close	Brown soil roots + limestone frags.
2525 <sup>E</sup>	30cm	stopped?	" " " " " " " " " " " "



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Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heemskerk

TRANSVERSE Line 4000N

DATE

OBS

STATION	DEPTH	REDUCED KENTWOOD	DESCRIPTION	HILL TO
700 <sup>E</sup>	40 cm	✓	Black Soil + Rock + Granite	
	20 cm	✓	" " " " "	W.
	20 cm	✓ sieve.	" " " " "	W.
	30 cm	✓ sieve.	" " " " "	W.
800 <sup>E</sup>	50 cm	stopped - sieve.	" " " " "	E.
	30 cm	stopped.	" " " " "	
	30 cm	✓	Yellow Brown Sand + Black Soil (weathered granite)	
	30 cm	✓	" Orange " " " "	
900 <sup>E</sup>	40 cm	✓	Black Soil + Brown weathered Granite.	W.
	30 cm	✓	Tan Brown " " "	E.
	40 cm	✓ sieve?	Black Soil " " "	
	40 cm	✓	" " " Tan Brown " "	
1000 <sup>E</sup>	50 cm	✓ sieve	Black beige Mus + Orange weathered Granite.	W.
	30 cm	stopped	" " " + Granite chips.	N
	40 cm	✓ sieve.	Black Soil + Brown weathered Granite chips.	N
	55 cm	✓ sieve.	" " " " " " "	N.
1100 <sup>E</sup>	75 cm	stopped.	Black Crty. Soil.	
	20 cm	✓	Black Soil + Granite chips.	
	30 cm	✓	" " " " "	W.
	25 cm	✓	" " roots " " "	
1200 <sup>E</sup>	10 cm	✓	" " " " " "	
	20 cm	✓	" " " " " "	W.
	30 cm	✓	" " " " " "	W.
	25 cm	✓	" " roots " " "	W.
1300 <sup>E</sup>	30 cm	✓ sieve	" " " " " "	W.
	25 cm	✓ sieve.	" " " " " "	W.
	60 cm	✓ sieve.	" " " " " "	W.
	35 cm	✓ sieve.	" " " " " "	W.
1400 <sup>E</sup>	80 cm		Beige Sandy Soil.	W.
1425 <sup>E</sup>	35 cm	✓ sieve.	Black Soil + Granite chips.	W.

098

143098

4000<sup>N</sup>

Form No. 59/89

REVISION LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heanekuk

TRANSVERSE Line 4000<sup>N</sup>

DATE

D88

STATION	DEPTH	REDROCK REACHED	DESCRIPTION	HILL TO
1450 <sup>E</sup>	30cm	✓ same	Black Soil (moss) or Granite chips.	W
	50cm	✓ same	" " " "	W
1500 <sup>E</sup>	30cm	✓ same	" " " "	W
	30cm	✓ same	" " " "	W
	25cm	✓?	limestone nodules.	S.
	80cm		Yellow Orange clay.	
1600 <sup>E</sup>	50cm	stopped.	limestone nodules.	
	80cm		White beige clay / weathered rock.	
	80cm		White beige Orange clay.	
	80cm		Brown Beige clay.	
1700 <sup>E</sup>	80cm	✓	Grey clay & white? chips.	
	80cm		" Beige " & weathered Rock.	
	80cm		Orange Clay. (3 moss samples south of line)	
	55cm	✓	Orange Brown clay & rock chips.	
1800 <sup>E</sup>	80cm		Blackish & Orange Solsy Clay.	
	80cm		Bluey green & Orange clayey soil.	W
	70cm		Greeny Brown Mussy fine grit.	
	50cm	stopped	Brown Mus & Veg in marsh.	
1900 <sup>E</sup>	80cm		Brown Britty Mus in Marsh.	
	55cm	stopped.	Brown Mus & Veg + Qty pebbles / frags. in Marsh.	
	40cm	stopped.	Black " " + " " " "	
	55cm	stopped.	" " " " + " " " "	
2000 <sup>E</sup>	55cm	stopped.	" " " " + " " " "	
	55cm	stopped.	" " " " + " " " "	
	30cm	stopped.	" " " " + " " " "	
	25cm	stopped.	" " " " + " " " "	
2100 <sup>E</sup> Bl	— Sampled —		Previously.	
	35cm	stopped	" " " " + " " " "	
	55cm	stopped	" " " " + " " " "	
2175 <sup>E</sup>	80cm		" " " " in Swamp.	



100

143100

4200N

Form No. 59/65

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk.

LINE 4200N

DATE

OBS

STATION	DEPTH.	Bedrock REACHED.	DESCRIPTION
2525 <sup>E</sup>	30cm	✓	Beige Sand + Qz/Qtz chips
2550 <sup>E</sup>	80cm	✓	Orange Beige clay + beige Qz/Qtz chips <small>hill to N.E.</small>
	50cm	✓	" " " + " " <small>hill to N.E.</small>
2600 <sup>E</sup>	80cm		Brownish Orange clay <small>hill to N.E.</small>
	65cm	✓	Beige Green powdered Qz/Qtz chips <small>hill to N.</small>
	30cm	✓	Light Grey " " " "
	70cm	✓	Yellow Green " " " <small>hill to S.E.</small>
2700 <sup>E</sup>	50cm	✓	Orange Grey <sup>powdered</sup> weathered " " " <small>hill to S.</small>
	70cm	✓	Brown beige weathered " " " <small>hill to E.</small>
	70cm	not stopped.	Grey clay + Qz/Qtz scree + frags <small>hill to E.</small>
	40cm	stopped.	Black Grey Soil + " " " "
2800 <sup>E</sup>	40cm	✓	Grey weathered " " + clay.
	50cm	stopped.	Rust Brown weathered Qtz + clay + mus.
	40cm	✓	" " powdered " + black mud.
	80cm		Beige Grey clay + Qz/Qtz frags
2900 <sup>E</sup>	30cm	✓	Orange Brown Qz/Qtz with black staining <small>+ Black soil + veg. in Grey Clay</small>
	70cm	stopped close.	Black Brown soil + Qz/Qtz frags
	25cm	✓	Black Brown Soil on iron rich Qtz <small>(could be from digging 5m East.)</small>
	80cm		Sandy white grey clay + some Qz/Qtz pebbles.
3000 <sup>E</sup>	55cm	✓	Greyish weathered Qtz + chips. <small>hill to N.</small>
	80cm		Grey clay + weathered Qtz
	80cm		Orange beige clay. <small>hill to E.</small>
	50cm	stopped.	Black Grey soil + Qz/Qtz scree + frags <small>hill to E.</small>
3100 <sup>E</sup>	40cm	✓	Grey weathered Qtz + chips
	40cm	stopped.	Black Brown mucky Soil + Qz scree + frags.
	30cm	stopped.	" " " " " " " "
	80cm		Yellow brown clay + weathered Qtz
3200 <sup>E</sup>	80cm	✓	" " " " " <small>hill to N. " chips</small>
	75cm	✓	" " " " " " " "
3250 <sup>E</sup>	40cm	✓	Orange + Grey weathered Qtz + chips. <small>hill to E.</small>

4200N

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143101

4200N

Form No. 69/89

REWISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heendrik

LINE 4200N

DATE

OBS

STATION	DEPTH	BEDROCK REACHED	DESCRIPTION
3275 <sup>E</sup>	60 cm	✓	Silver Grey weathered Qz, Chalk hill to E.
3300 <sup>E</sup>	50 cm	✓	" " " " " chips hill to E.
	60 cm	stopped.	Tan Brown clay soil + Qz frags.
	40 cm	✓	Beige clay + weathered Qz = chips
	50 cm	stopped.	" " + Qz frags
3400 <sup>E</sup>	40 cm	stopped.	Tan Greyish " + " " hill to N.
	30 cm	stopped.	Tan Greyish " + " " + Qz frags hill to N.
	50 cm	stopped.	" " " + " " + scree hill to N.
	60 cm	stopped.	" " " + " " " hill to N.
3500 <sup>E</sup>	60 cm	stopped.	Tan " " + " " " hill to N.
	45 cm	stopped.	" " " + " " + Qz scree + frags hill to N.
	65 cm	✓	Grey white orange weathered Qz = chips. hill to N.
	40 cm	✓	" " " " " " hill to N.
3600 <sup>E</sup>	30 cm	✓	Beige Grey " " " "
	50 cm	stopped.	" " Clay + Qz scree + frags. hill to N.
	60 cm	✓	Orange Brown clay + Qz chips.
	65 cm	stopped.	Greyish " + Qz, Qz scree + frags. hill to N.
3700 <sup>E</sup>	35 cm	stopped.	" " + " " " " hill to N.
	35 cm	stopped.	" " + " " " " " "
	45 cm	stopped.	" " + " " " " " "
	60 cm	✓?	Beige Clay + Qz = Qz chips
3800 <sup>E</sup>	35 cm	✓	Light Grey clay + weathered Qz = chips. hill to N.W.
	35 cm	stopped.	Greyish Black soil + Qz scree + frags. hill to N.
	40 cm	stopped.	Greyish Muddy clay + Qz + Qz scree + frags.
	60 cm	stopped.	" " " " " " " "
3900 <sup>E</sup>	60 cm	✓	Grey Clay + weathered Qz = chips. hill to N.
	45 cm	✓	Grey clay + weathered Qz = chips hill to N.
	40 cm	stopped.	Blackish muddy soil + Qz scree + frags. hill to N.W.
	40 cm	✓	White grey soil Qz = Qz chips. hill to N.W.
4000 <sup>E</sup>	50 cm	stopped.	Beige Brown Grey <sup>soil</sup> + Qz frags + scree. hill to N.W.



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143103  
1400<sup>N</sup>

Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk TRAVERSE Line 1400<sup>N</sup> DATE 085

STATION	DEPTH	BE ROCK REACHED	DESCRIPTION
1850 <sup>E</sup>	55 cm	✓	Rusty Mus & Ironstone chips in swamp.
	80 cm		Mus in Swamp.
1900 <sup>E</sup>	80 cm		Gritty Mus " "
	80 cm		Grey Beige clay.
	80 cm		Yellow Orange clay.
2000 <sup>E</sup>	50 cm	stopped.	Beige Grey clay & Qtz pebbles.
	80 cm		Green Grey clay & Brown Mus in Marsh.
	80 cm		Beige clay " " " "
	75 cm	✓	Orange clay & Ironstone chips.
	55 cm	stopped.	" " " " hill to E
2100 <sup>E</sup> Baseline		SAMPLED	PREVIOUSLY.
	20 cm	✓	Beige Soil & weathered Qtz.
	80 cm	✓	Orange Beige weathered Qtz & chips.
	35 cm	✓	Grey clay - Qtz chips & frags.
2200 <sup>E</sup>	30 cm	✓	Brown weathered Qtz? & Qtz frags.
	30 cm	✓	Grey clay & Qtz chips & frags.
	50 cm	✓	Brownish weathered Qtz & Grey muddy clay.
	60 cm	✓	" " " & Clay.
2300 <sup>E</sup>	30 cm	✓	Brownish Beige weathered Qtz & chips.
	60 cm	✓	Yellow Brown " " " " hill to NE.
	80 cm		Yellow Orange clay. hill to N.
	50 cm	✓	Greyish Clay - weathered Qtz. " - NW
2400 <sup>E</sup>	30 cm	stopped.	Grey clay & Qtz frags. " - W
	50 cm	✓	Blackish Brown Grey weathered Qtz & chips.
	80 cm		Yellow Grey clay.
	50 cm	✓	Grey clay & Qtz chips.
2500 <sup>E</sup>	50 cm	stopped.	Grey Beige clay & Qtz Scree & chips.

END.

HUNSON



105

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143105

Line 4800<sup>N</sup>

Form No. 69/89

REINSON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURV.

AREA E. Heemskw.

TRAVERSE Line 4800<sup>N</sup>

DATE

088

STATION	SAMPLE DEPTH	BEDROCK		DESCRIPTION
		REACHED	DEPTH	
1000 <sup>E</sup>	30 cm	✓		weathered Granite + Roots, + chips
	30 cm	✓		" "
1050 <sup>E</sup>	30 cm	✓		" "
	30 cm	✓		" "
1100 <sup>E</sup>	15 cm	✓		" "
	50 cm	✓		" "
1150 <sup>E</sup>	30 cm	✓		" "
	25 cm	✓		" "
1200 <sup>E</sup>	25 cm	✓		" "
	30 cm	✓		" "
1250 <sup>E</sup>	30 cm	✓		" "
	35 cm	✓		" "
1300 <sup>E</sup>	45 cm	✓		" "
	15 cm	✓		" "
1350 <sup>E</sup>	25 cm	✓		" "
	50 cm	✓		" "
1400 <sup>E</sup>	25 cm	✓		" "
	15 cm	✓		" "
1450 <sup>E</sup>	50 cm	✓		" "
	30 cm	✓		" "
1500 <sup>E</sup>	80 cm			Brownish black soil + weathered Granite?
	80 cm			" " clayey soil.
1550 <sup>E</sup>	50 cm	✓		Beige yellow sand + Sandstone chips.
	80 cm			Gitty brown clayey soil.
1600 <sup>E</sup>	65 cm	stopped ✓?		Black Mud + Veg + brown Grit in Marsh.
	65 cm	stopped ✓?		Brown Grit in Marsh.
1650 <sup>E</sup>	70 cm	stopped ✓?		<del>Fine</del> Grit. " " + Black Mud.
	80 cm			<del>Brown Sandy Soil</del> next to creek. Tan Soil.
1700 <sup>E</sup>	80 cm	✗		Brown Sandy Soil next to creek.
1725 <sup>E</sup>	70 cm	stopped ✓?		Brown clayey fine grit.

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143106

Line 4800<sup>N</sup>

Form No. 6-789

REYSON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskerk

LINE/VERSE Line 4800<sup>N</sup>

DATE

OBS

STATION	DEPTH	Bedrock Reached.	DESCRIPTION
1750 <sup>E</sup>	70cm	stopped	Brown clayey coarse grit.
	60cm	✓	Brown grit in soil/Weathered bedrock.
1800 <sup>E</sup>	80cm		Black Brown Mus & Veg in Marsh.
	75cm	✓	White tan soil + Rock chips.
1850 <sup>E</sup>	65cm	✓	Brown Mus + Grey Green rock chips
	65cm	✓	Tan Brown Soil + Rock chips.
1900 <sup>E</sup>	50cm	✓	Brown Tan White Rock chips + weathered rock
	80cm		Tan Clay including Brown Rotting roots
1950 <sup>E</sup>	80cm with 1/2 m. <del>probe</del>		White grey clay + weathered rock <sup>sampled at bottom of old cabin.</sup>
	80cm		Grey + Beige clay.
2000 <sup>E</sup>	80cm		Grey clay.
	80cm		Grey beige clay in Marsh.
2050 <sup>E</sup>	80cm		Brownish + Black clay + Brown Mus in Marsh.
	45cm	stopped.	Coarse grit + mus in Marsh.
2100 <sup>E</sup> B/L.	SAMPLED		PREVIOUSLY
	60cm	stopped.	Worstone Nodules + Red brown clay.
2150 <sup>E</sup>	80cm		Orange grey weathered rock + clay <sup>sampled in cutting into foot.</sup>
	80cm	✓	Yellow Orange Clay + Rock chips
2200 <sup>E</sup>	80cm		Brown Sand + Rock chips. next to creek.
	75cm	✓	Brown Sand + Mus on bedrock.
2250 <sup>E</sup>	50cm	stopped.	Coarse Gravel + Rocks next to creek.
	40cm.	✓	Qtz rock chips + some Worstone nodules
2300 <sup>E</sup>	80cm		Khaki Sand next to creek (not good sample)
	60cm	✓	Orange grey powdered rock + chips.
2350 <sup>E</sup>	40cm	✓	Grey clay + Qtz chips + Frags.
	30cm	✓	" " " " "
2400 <sup>E</sup>	30cm	✓	" " " " "
2425 <sup>E</sup>	80cm	✓	Tan Grey " " " "
2450 <sup>E</sup>	50cm	✓	Grey " " " "
2475 <sup>E</sup>	30cm	✓	" " " " "
2500 <sup>E</sup> 2nd.	20cm.	✓	" " " " "

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143107

Form No. 69/89

RENISGN LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk.

LINE USE Line 4600<sup>N</sup>

DATE

OBS

STATION	DEPTH	BEING REACHED	DESCRIPTION
2525 <sup>E</sup>	55 cm	stopped.	Qz. / W. stone scree in brown black muddy clay hill to S.
2550 <sup>E</sup>	55 cm	stopped.	Brown beige clay + Qz. / white pebbles. hill to E.
	70 cm	✓	Dark beige powdered rock & chips (Qz. / white) hill to E.
2600 <sup>E</sup>	30 cm	✓	Beige Sandy soil + Qz. / white chips + weathered Qz. / white
	60 cm	✓	Creasy Grey powdered rock (feels like talc)
	40 cm	✓	Grey beige powdered Qz. / white? = chips.
	50 cm	stopped.	Qz. / white fragments + scree in beige Sandy soil hill to S.
2700 <sup>E</sup>	50 cm	stopped.	" " " " " "
	40 cm	stopped.	Tan Sandy soil + Qz. / white chips + frags.
	60 cm	✓	light grey powdered & weathered Qz. / white.
	65 cm	✓	Grey Beige clay + weathered Qz. / white chips hill to S.
2800 <sup>E</sup>	40 cm	stopped.	Beige clay + Qz. / white + Qz. / white frags + scree. hill to SE.
	60 cm	✓	Orange Grey Clay + weathered Qz. / white
	80 cm	close.	Orange Khaki Grey clay + weathered Qz. / white.
	40 cm	✓	Light grey weathered Qz. / white + chips.
2900 <sup>E</sup>	60 cm	✓	grey brown clay + weathered Qz. / white + chips next to track
	80 cm	✓	Grey Yellow Beige clay + Qz. / white chips.
	35 cm	✓	Beige " " " " + weathered Qz. / white.
3000 <sup>E</sup>	55 cm	stopped.	Blackish Mud + Qz. / white scree.
	45 cm	✓	Beige Clay + weathered Qz. / white + chips. hill to N.
	65 cm	stopped close.	Muddy Khaki Clay + Qz. / white chips + scree.
	45 cm	✓	Tan Grey Green clay + " "
	75 cm	✓	" " " " + " " + weathered Qz. / white <sup>hill to N.</sup>
3100 <sup>E</sup>	50 cm	stopped.	Muddy Grayish Brown Clay + Qz. / white scree. hill to N.
	15 cm	✓	Qz. / white chips in Brownish soil + roots on Outcrop.
	50 cm	✓	Whitish Grey Qz. / white sand + chips. hill to W.
	40 cm	stopped.	Black Clayey soil + Qz. / white scree " " W
3200 <sup>E</sup>	45 cm	stopped close.	Yellow Tan soil + Qz. / white chips + scree hill to S.
	60 cm	✓	Creasy Grey weathered Qz. / white. " " S.
3250 <sup>E</sup>	80 cm	close.	Brown Tan weathered Qz. / white + Fragments. " " S.

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143108

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Form No. 59/89

REWISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk

LINE/GRAB Line 4600<sup>N</sup>

DATE

OBS

STATION	DEPTH	BEDROCK REACHED.	DESCRIPTION
3275 <sup>E</sup>	80cm		Orange Brown Grey clay + few <sup>rich</sup> weathered pebbles.
3300 <sup>E</sup>	60cm	✓	Grey clay + weathered Quartz chips hill to W.
	50cm	stopped.	Black grey soil + Quartz Scree. Alluvial Diggings 15m W.
	40cm	stopped.	Black soil + " " hill to S.E.
	40cm	stopped.	" " + " " hill to S.
3400 <sup>E</sup>	50cm	stopped.	Black Grey clayey soil + Qz = Quartz scree. hill to S.
	40cm	stopped.	" " + " " hill to S.
	50cm	stopped.	Grey Mud/clay + Qz Quartz scree next to North flowing creek.
	55cm	stopped.	Grey Brown Clay + Quartz scree (very wet) hill to S.E.
3500 <sup>E</sup>	35cm	stopped.	Grey clay + Quartz scree. hill to S.E.
	60cm	✓	Brown Grey clay + weathered Quartz chips. hill to S.E.
	70cm	✓	Whitish Tan clayey soil + weathered rock (Quartz?) hill to S.
	60cm	✓	Brown clay + weathered Quartz (siltstone?) hill to S.
3600 <sup>E</sup>	40cm	stopped.	Beige Clay + Quartz Fragments + Scree. hill to S.E.
	50cm	stopped.	Grey Clay + " " " "
	50cm	stopped.	Greyish " + " " " "
	45cm	✓	Grey Clay + weathered Quartz.
3700 <sup>E</sup>	80cm		Whitish Tan Clay / weathered rock.
	40cm	✓	Whitish beige clay + weathered Quartz.
	60cm	✓	Quartz chips in beige soil hill to S.W.
	40cm	✓	Brown clayey soil + Quartz chips "
3800 <sup>E</sup>	75cm	✓	Tan Grey clayey soil + " " hill to S.
	70cm	✓	White grey soil + " " "
	40cm	✓	" " " + " " " + pebbles.
	70cm	✓	Orange khaki soil + rock chips (siltstone?)
3900 <sup>E</sup>	30cm	✓	" " " + " " " "
	50cm	stopped.	Bronzy Orange clay + Quartz = siltstone chips + pebbles
	70cm	✓	Khaki Orange + grey clay + weathered siltstone?
	80cm	✓	" " " " + " " "
4000 <sup>E</sup>	80cm	✓	Khaki Orange Clay + weathered rock. (siltstone?)

109

7 ⑤

143109

Form No. 54/89

RENTISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heenskuik.

LINE 5000<sup>N</sup>

DATE

OBS

STATION	DEPTH.	BEDROCK RECOVERED.	DESCRIPTION
2400 <sup>E</sup>		Previously	Sampled. Blackish Sand next to creek
	80cm	80	Yellow Tan Khaki clay + weathered Quartz + chips
	35cm	✓	↓ ↓ ↓ Clay ↓ u ↓ *
	45cm	✓	<del>Brown Mus</del> Grey weathered Quartz + chips.
2500 <sup>E</sup>	40cm	stopped	Brown Mus + Quartz Fragments in marshy Depression flowing N.
	35cm	✓? stopped	Beige Soil + Quartz chips.
	80cm	close.	Grey beige clay + weathered Quartz + chips.
	30cm	✓	Brown " " "
2600 <sup>E</sup>	35cm	✓	Tan Grey " " "
	35cm	✓	Brown Beige " " "
	50cm	✓	Grey Beige " " "
	50cm	✓	Brown Beige " " " in valley flowing N.W.
2700 <sup>E</sup>	80cm		Tan Brown Clay + Old Rocks. " " "
	50cm	stopped.	Brown Mus + Quartz + Quartz scree at edge of valley flowing N.W.
	55cm	✓	Yellow Grey weathered Quartz + chips.
	35cm	stopped.	Tan Brown Clay + Quartz fragments + scree.
2800 <sup>E</sup>	50cm	✓	Tan Grey weathered Quartz + chips. hill to E.
	50cm	✓	" " " " " " hill to E.
	75cm	✓	" " " " " " hill to E.
	45cm	stopped.	" " clay + Quartz + Quartz fragments + scree. hill to S.E.
2900 <sup>E</sup>	75cm	✓	Yellow Grey Orange clay + weathered Quartz + chips. hill to S.
	80cm		Grey Orange Clay.
	50cm	✓	Grey weathered Quartz + chips. hill to S.E.
	35cm	✓	Tan Grey weathered Quartz + chips. hill to S.E.
3000 <sup>E</sup>	50cm	stopped.	Whitish tan clay + Quartz fragments.
	55cm	✓	Beige weathered Quartz + chips. hill to S.W.
	35cm	stopped.	Grey clay + Quartz, Quartz scree + fragments. hill to S.W.
	55cm	stopped.	" " " " " " hill to W.
3100 <sup>E</sup>	70cm	✓	Orange Khaki weathered Quartz + chips. hill to S.E.
3125 <sup>E</sup>	40cm	✓	Grey Beige weathered " " " " hill to S.

110

143110

Form No. 34/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA E. Heemskirk.

TRAVERSE Line 5000<sup>N</sup>

DATE

OBS

STATION	DEPTH	BEDROCK REACHED	DESCRIPTION
3150 <sup>E</sup> <sub>AB</sub>	25 cm	✓	Beige Qtz chips + soil.
	50 cm	stopped.	Clay beige muddy clay Qtz + white scree + frags. <sup>hill to S.</sup>
3200 <sup>E</sup>	50 cm	✓	Clay beige weathered Qtz + white + chips. hill to W.
	40 cm	stopped.	Blackish grey Muddy Clay + Qtz + white frags + scree. hill to SW
	25 cm	stopped.	Clay beige clay + Qtz + white scree + frags. hill to E.
	75 cm	stopped.	" "muddy" + " " " " hill to E.
3300 <sup>E</sup>	60 cm	stopped.	Brown Beige " " " " " " hill to E.
	60 cm	stopped.	Black " " " " " " hill to E.
	40 cm	stopped.	Beige Clay + " " " " " " hill to E.
	60 cm	✓	Yellow Brown weathered white + chips
3400 <sup>E</sup>	40 cm	stopped.	Tan Muddy Clay + Qtz scree. hill to E.
	50 cm	✓	Tan Grey weathered white + chips. hill to NE.
	50 cm	✓	Tan Brown clay + white chips hill to N.
	70 cm	✓	Beige clay + " " " " hill to N.
3500 <sup>E</sup>	50 cm	✓	Tan Grey weathered white + chips. hill to N.
	40 cm	stopped.	Tan Grey white <sup>frags + scree</sup> + Blackish Muddy clay. hill to N.
	40 cm	✓	" " " chips + " " " " hill to N.
	40 cm	stopped.	" " Clay + white chips + scree.
3600 <sup>E</sup>	50 cm	stopped.	Qtz Scree + Black Grey Muddy Clay. hill to E.
	45 cm	stopped.	Qtz scree. + " " " " " " hill to E.
	25 cm	✓	Beige Soil + Beige Grey white chips + weathered chips.
	20 cm	✓	Beige Grey weathered white + chips. <del>scree</del>
3700 <sup>E</sup>	20 cm	✓	" " " " " " + Brown Mus.
	15 cm	✓	" " " " " "
	15 cm	✓	" " " " " "
	15 cm	✓	" " " " " " + some fine silica.
3800 <sup>E</sup>	40 cm	✓	Beige Grey <sup>Small Digging 5m E.</sup> Dramp Clay + weathered " " + " " "
	35 cm	stopped.	Beige Grey <del>scree</del> white <sup>scree + frags.</sup> + <del>scree</del> hill to E/W
	40 cm	✓	" " weathered white + chips. hill to W.
3875 <sup>E</sup>	35 cm	✓	" " " " " " hill to W.



SEA 112 HEEMSKIRK GRID - S.P.L 129

-18gms MESH FRACTIO

LINE NO. 2700N

143112

P.P.

ME CATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)		HCC Sdble Sn
00	120	<5	<5	<5	15		
25	90	<5	<5	5	<5		
50	170	<5	5	5	6		100
75	90	<5	5	5	10		
2 00	190	<5	5	5	<5		60
25	230	<5	5	<5	<5		<100
50	180	<5	5	5	<5		<100
75	160	<5	5	10	<5		100
3 00	190	<5	5	5	<5		100
25	150	<5	5	5	<5		100
50	90	<5	5	5	10		
75	190	<5	5	<5	5		<100
4 00	70	<5	5	10	15		
25	190	5	50	200	60		60
50	130	<5	<5	10	<5		100
75	70	<5	<5	10	5		
5 00	45	<5	<5	5	5		
25	70	<5	5	10	10		
50	5	<5	5	10	5		
75	5	<5	5	20	5		
6 00	130	<5	5	10	5		100
25	60	<5	<5	10	5		
50	70	<5	5	5	10		
75	60	<5	5	15	10		
7 00	70	<5	<5	5	5		

EAST HEEMSKIRK GRID - S.P.L 129

-189µm MESH FRACT

LIVE NO. 2800 N

143113

P.

DEPTH (m)	Sn	As	Cu	Pb	Zn	ACE Soluble Sn
250	45	<5	<5	10	30	
275	250	<5	5	5	30	<100
300	90	<5	5	5	20	
325	80	<5	<5	5	15	
350	50	<5	<5	5	20	
375	75	<5	<5	10	10	
400	100	<5	10	10	10	
425	60	<5	5	10	10	
450	50	25	5	15	15	
475	45	45	5	15	20	
500	55	<5	5	10	10	
525	130	<5	5	20	5	<100
550	80	<5	5	10	10	
575	100	<5	<5	45	10	
600	260	<5	<5	45	5	<100
625	120	<5	<5	5	5	
650	230	<5	45	10	5	<100
675	130	<5	5	10	10	
700	300	<5	<5	10	10	<100
725	100	<5	<5	15	5	
750	100	<5	<5	5	10	
775	60	<5	<5	45	10	
800	60	<5	<5	5	10	
825	45	<5	5	5	15	
850	45	<5	5	30	10	
875	30	<5	5	10	10	
900	55	<5	5	10	5	
925	50	<5	5	15	10	
950	40	<5	20	10	5	
975	30	<5	20	10	20	

114

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 124

-180µm MESH FRACTION

LINE NO. 2600 N

143114

P.P.

DEPTH LOCATION	Sn	As	Cu	Pb	Zn	HCl Soluble Sn
1000	50	<5	5	10	10	
25	50	<5	5	20	10	
50	50	<5	5	5	20	
75	140	<5	35	5	45	400
1100	90	<5	35	15	50	
25	85	<5	20	5	30	
50	35	40	70	15	45	
75						
1200	45	<5	60	20	150	
25	95	<5	15	20	100	
50	40	<5	50	25	85	
75	30	<5	40	20	100	
1300	80	<5	15	15	55	
25	30	<5	30	20	50	
50	60	<5	5	10	10	
75	30	<5	55	15	50	
1400	90	<5	10	10	10	
25	55	5	30	10	20	
50	110	10	15	20	40	
75	80	<5	10	10	15	
1500	80	<5	5	10	15	
25	80	<5	15	15	30	
50	60	5	10	5	25	
75	70	<5	10	20	40	
1600	55	25	10	25	35	
25	70	<5	10	10	35	
50	30	<5	15	25	30	
75	50	<5	5	10	15	
1700	20	<5	15	25	20	
25	40	<5	10	15	15	
50	40	<5	5	10	10	
75	60	<5	5	10	10	
1800	45	<5	10	20	15	



RENISON LIMITED

AREA 116 HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 3000 N

143116

P.D.

DEPTH (m)	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni	Mo Sulfide
00	25	45	10	50	45		
25	25	45	10	50	70		
50	20	45	5	20	80		
75	20	45	5	10	10		
100	45	45	5	10	20		
25	15	10	10	10	50		
50	10	45	5	10	20		
75	15	45	5	20	25		
200	90	45	5	20	15		
25	100	45	5	5	10		
50	100	45	5	5	5		
75	25	45	45	10	15		
300	110	45	45	5	5		
25	40	45	45	5	10		
50	50	45	45	5	5		
75	50	45	5	10	10		
400	50	45	45	5	5		
25	50	45	45	5	5		
50	140	45	5	15	35		400.
75	120	45	5	10	30		
100	P	P	P				
25							
50							
75							
100							
25							
50							
75							
100							
25							
50							
75							

117

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 3000 N

143117

P.1

DEPTH LOCATION	(Sd)	(As)	(Cu)	(Pb)	(Zn)	HI
19 00	Sampled previously					
25	15	<5	15	35	100	
50	20	<5	20	50	125	
75	20	65	580	2200	1380	
200 00	15	<5	85	145	470	
25	5	<5	95	140	300	
50	<5	<5	35	50	145	
75	<5	<5	30	65	220	
21 00	35	5	40	80	190	
25	<5	<5	25	60	2500	
50	5	5	135	240	595	
75	<5	15	140	320	875	
22 00	10	15	40	220	515	
25	<5	30	150	470	720	
50	5	5	40	160	240	
75	20	5	125	45	45	
23 00	15	<5	115	70	40	
25	15	<5	80	45	45	
50	25	5	75	65	55	
75	15	5	130	35	35	
24 00	20	<5	35	25	25	
25	25	<5	120	45	35	
50	5	10	250	35	35	
75	20	20	150	170	25	
25 00	5	10	215	55	40	
25	<5	5	80	40	30	
50	5	<5	170	35	45	
75	25	<5	180	35	40	
26 00	25	<5	120	40	35	
25	<5	5	65	40	40	
50	15	<5	160	30	35	
75	20	<5	105	25	20	

118

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LIVE NO. 3000 N

143118

P.P.

DEPTH (m)	Sn	As	Cu	Pb	Zn	Ni
00	25	<5	105	30	25	
25	10	5	120	30	30	
50	<5	<5	25	25	20	
75	15	15	140	25	25	
28 00	5	<5	175	25	30	
25	15	<5	200	30	40	
50	5	10	225	50	40	
75	15	20	115	20	25	
29 00	10	10	155	120	155	
25	15	10	145	40	45	
50	15	<5	315	25	165	
75	10	10	115	30	45	
30 00	5	<5	120	30	40	
25	10	<5	120	35	50	
50	20	<5	195	40	65	
75	15	<5	105	25	35	
31 00	15	<5	185	35	60	
25	20	<5	115	25	35	
50	<5	<5	425	40	190	
Interval not sampled due to swamp						
36 00	<5	<5	10	10	45	
75	<5	<5	10	15	30	
37 00	<5	<5	15	10	60	
25	<5	<5	10	15	60	
50	20	<5	25	20	265	
75	<5	<5	5	10	25	
38 00	<5	<5	10	15	70	
25	<5	<5	5	15	15	
50	<5	<5	25	20	45	
75	5	<5	5	25	10	

119

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-150µm MESH FRACTION

LINE NO. 3000 N

143119

P-2

DEPTH LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	NI
3900	10	<5	70	85	120	
25	<5	<5	5	25	15	
50	<5	<5	10	55	580	
75	<5	<5	5	70	20	
4000	<5	<5	55	45	110	
25						
50						
75						
00						
25						
50						
75						
00						
25						
50						
75						
00						
25						
50						
75						
00						
25						
50						
75						
00						
25						
50						
75						

RENISON LIMITED

AREA 120 HEEMSKIRK GRID - S.P.L 129

-189µm MESH FRACTION

LINE NO. 3200N

143120

P.P.

DEPTH LOCATION	(Sn)	(Ag)	(Cu)	(Pb)	(Zn)	Ni	Acid Soluble Tin
300	25	25	5	19	20		
25	25	25	5	10	5		
50	60	25	5	10	10		
75	60	25	5	5	10		
400	140	25	5	5	5		<100
25	1800	25	5	5	25		<100
50	120	25	10	5	20		<100
75	15	25	35	10	30		
500	90	25	50	5	20		
25	25	25	5	5	5		
50	25	25	5	5	10		
75	25	25	5	5	10		
600	20	25	5	5	10		
25	25	25	5	5	10		
50	15	25	5	5	0		
75	10	25	5	5	5		
700	15	25	5	5	5		
25	25	25	5	5	45		
50	15	5	5	15	20		
75	25	25	5	5	20		
800	25	25	5	10	15		
25	60	25	5	15	15		
50	70	25	20	25	65		
75	20	25	15	10	40		
900	25	25	15	15	20		
25	20	25	15	10	15		
50	5	25	10	10	15		
75	25	25	5	5	5		
1000	10	25	25	10	70		
25	20	10	25	15	170		
50	50	55	70	10	115		
75	15	30	165	25	155		

121

RENISON LIMITED

10 34

AREA: HEMSKIRK GRID - S.P.L (2)

-18µm MESH FRACT

LINE: 3200 N

143121

P.P

ME ICATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	RI	Acid Soluble Tm
11.00	40	100	190	20	540		
25	25	45	240	10	215		
50	70	15	130	10	75		
75	50	90	150	10	180		
12.00	300	140	475	20	480		250
25	200	50	660	35	2300		300
50	250	120	630	80	1000		250
75	160	80	240	15	250		150
13.00	40	25	20	25	630		
25	45	5	20	10	50		
50	25	<5	<5	5	15		
75	60	5	10	20	60		
14.00	75	15	60	180	600		<100
25	140	35	30	35	520		<100
50	50	15	25	45	840		
75	70	35	230	65	530		
15.00	50	15	10	35	125		
25	100	25	10	65	240		
50	60	10	20	55	560		
75	40	<5	5	25	95		
16.00	35	<5	<5	15	30		
25	25	<5	<5	15	25		
50	25	<5	5	45	45		
75	10	<5	<5	5	30		
17.00	45	40	20	25	570		
25	<5	<5	5	20	50		
50	25	<5	5	15	50		
75	<5	<5	5	10	25		
18.00	5	<5	5	20	50		
25	<5	10	10	30	55		
50	50	25	25	50	85		
75	30	<<	60	65	90		



RENISON LIMITED

AREA EAST 183 SEMSKRY GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 3400 N

143123

P. 2

ME CATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni	Moisture %
300	35	25	10	10	20		
25	10	25	5	5	10		
50	25	25	10	25	20		
75	25	25	5	5	15		
400	35	25	5	10	25		
25	40	25	5	10	20		
50	20	25	5	5	5		
75	80	25	5	5	10		
500	60	25	5	10	25		
25	30	25	5	25	20		
50	25	25	5	5	60		
75	25	25	5	5	5		
600	35	25	5	25	15		
25	25	25	5	15	20		
50	800	25	5	5	10		400
75	15	25	5	5	5		
700	50	25	5	5	5		
25	50	25	5	5	5		
50	10	25	5	20	5		
75	25	25	5	10	5		
80							
25							
80							
00							
25							
50							
75							
00							
25							
50							

124

RENISON LIMITED

- 13 05 34

AREA EAST HEEMSKIRK GRID - S.P.L 129

- 180µm MESH FRACTION

LINE NO. 3400N

143124

P.P

LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni		
100	Sampled previously							
25	20	<5	10	35	75			
50	5	<5	80	50	180			
75	10	<5	25	45	45			
2200	<5	<5	20	30	45			
25	100	<5	55	45	85			
50	35	10	35	45	80			
75	45	<5	70	40	60			
2300	20	35	880	3900	4200			
25	25	20	80	390	310			
50	25	45	10	55	20			
75	15	<5	5	55	15			
2400	5	<5	70	210	70			
25	20	<5	45	5	45			
50	10	<5	25	80	230			
75	45	<5	15	70	130			
2500	35	<5	55	45	125			
25	40	<5	55	35	140			
50	60	5	100	50	75			
75	70	<5	40	45	120			
2600	50	<5	120	40	80			
25	60	<5	120	45	65			
50	50	<5	160	45	55			
75	35	<5	110	30	45			
2700	35	<5	160	40	60			
25	50	<5	150	25	50			
50	35	<5	135	30	50			
75	50	10	130	25	50			
2800	50	<5	140	30	50			
25	45	5	155	35	60			
50	25	<5	170	25	60			
75	50	<5	250	30	75			

AREA 125 HEEMSKIRK GRID - S.P.L (2')

-180µm MESH FRAC

LINE NO. 3400N

143125

P.1

mE LOCATION	Sn	As	Cu	Pb	Zn	Ni
29 00	25	<5	120	60	90	
25	40	<5	160	25	80	
50	25	<5	175	90	100	
75	50	15	130	45	105	
30 00	30	15	70	60	135	
25	45	10	190	40	130	
50	50	<5	220	40	90	
75	30	10	125	40	95	
31 00	60	<5	165	35	75	
25	45	20	180	35	105	
50	40	5	190	30	95	
75	50	25	250	55	90	
32 00	50	5	220	155	120	
25	70	5	320	65	135	
50	30	<5	190	25	55	
75	60	5	190	20	75	
33 00	50	<5	215	25	50	
25	25	<5	180	25	50	
50	50	5	145	30	70	
75	45	15	100	40	60	
34 00	25	10	150	40	65	
25	40	<5	80	25	30	
50	35	<5	165	25	45	
75	30	5	65	20	45	
35 00	50	15	110	20	30	
25	40	5	105	20	30	
50	35	15	120	20	40	
75	35	10	130	35	125	
36 00	40	15	80	20	130	
25	45	15	105	40	55	
50	10	5	80	30	50	
75	50	15	110	20	50	



127

AREA EAST HEEMSKRUK GRID - S.P.L 129

-189m HESH FRACTURE

LINE NO. 3600 N

143127

P-R

mE 10AYTH	(Sn)	(As)	(Cu)	(Pb)	(Zn)	NI
6	10	<5	10	10	25	
10	30	<5	5	5	80	
50	25	<5	5	5	35	
15	<5	<5	10	10	25	
7 00	25	<5	5	5	10	
35	5	<5	5	5	10	
50	25	<5	5	10	10	
75	15	<5	5	5	10	
8 00	25	<5	5	10	10	
15	45	<5	15	20	10	
50	45	<5	5	10	15	
75	20	<5	5	5	15	
9 00	20	<5	5	5	20	
25	30	<5	30	15	30	
50	45	<5	5	20	30	
75	30	<5	5	15	20	
10 00	25	<5	5	10	10	
25	20	<5	5	5	20	
50	15	<5	10	35	20	
75	45	<5	10	15	10	
11 00	40	<5	5	10	10	
25	15	<5	5	10	20	
50	40	<5	5	5	15	
75	15	<5	5	15	10	
12 00	35	<5	5	5	5	
25	70	<5	5	10	10	
50	55	<5	5	10	5	
75	35	<5	5	10	45	
13 00	25	<5	5	5	45	
25	10	<5	5	5	45	
50	50	<5	25	15	35	
75	20	<5	10	10	20	

128

RENISON LIMITED

11 54

AREA EAST HEEMSKIRK GRID - S.P.L 124

-15gms FRESH FRACTIO

LEVEL NO. 3600 N

143128

P.P.

ME LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	HCC SCLD 15 Sn	WO <sub>3</sub>
100	55	45	5	10	15		
25	370	45	10	5	15	<100	
50	700	45	5	5	10	*100	
75	350	45	5	45	10	<100	
1500	210	45	20	5	15	100	
25	120	45	10	5	15		
50	55	10	25	20	40		
75							
1600	35	45	5	5	15		
25	75	45	10	5	80		
50	90	100	275	80	1000		
75	25	5	60	10	50		✓ <0.01
1700	25	5	75	5	55		✓ <0.01
25	10	25	20	25	70		✓ <0.01
50	20	100	50	130	550		
75	20	75	60	35	170		
1800	25	45	10	15	250		
25	30	45	10	10	65		
50	70	75	240	130	270		
75	100	95	230	190	160		
1900	60	95	260	220	170		✓ 0.02
25	40	95	230	150	100		✓ 0.02
50	55	65	170	350	60		✓ 0.01
75	70	90	150	120	100		✓ 0.01
2000	110	60	150	110	140		✓ 0.01
25	55	55	170	230	230		✓ 0.02
50	55	170	190	220	130		✓ 0.01
75	35	170	520	170	1060		✓ 0.02
2100	45	90	180	120	190		✓ 0.01
25	25	120	115	40	170		✓ 0.01
50	5	70	210	150	75		✓ <0.01
75	35	40	75	70	65		✓ <0.01

AREA 129 EASTERN HEMISKILL GRID - S.P.L 129

-150 μm MESH FRACTION

LINE NO. 3000 N

143129

P.P.

LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Acce Soluble 15%	WO <sub>3</sub>
2200	35	70	130	50	70		<0.01
25	60	55	120	100	80		
50	25	<5	30	40	35		
75	20	5	15	20	160		
2300	40	100	450	2300	2400		
25	20	20	5	60	40		
50	20	10	25	110	140		
75	25	5	90	380	320		
2400	25	70	130	290	430		
5	35	65	60	100	200		
50	190	30	20	65	520	<100	
75	30	5	15	40	140		
2500	35	<5	20	25	110		
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RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 100 3800 N

143130

P. 0. 0.

LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	HCl Soluble %	(NO <sub>3</sub> ) %
2400	80	80	180	80	140		<0.01 ✓
25	5	40	45	60	75		<0.01 ✓
50	145	70	135	55	195	100	<0.01 ✓
75	25	170	95	535	585		<0.01 ✓
2500	15	140	70	45	115		<0.01 ✓
25	10	290	100	395	195		<0.01 ✓
50	15	5	30	40	35		<0.01 ✓
75	5	<5	31	65	95		0.01 ✓
2600	10	<5	5	20	15		0.01 ✓
25	40	20	20	60	40		0.01 ✓
50	25	85	50	230	220		<0.01 ✓
75	5	15	25	65	95		
2700	<5	<5	25	40	40		
25	<5	5	110	60	85		
50	5	<5	20	60	80		
75	<5	<5	20	58	115		
2800	10	10	25	35	80		
25	<5	<5	25	30	340		
50	<5	5	20	50	65		
75	<5	5	15	50	105		
2900	35	<5	15	40	40		
25	<5	<5	25	30	20		
50	<5	<5	25	50	80		
75	<5	<5	10	10	30		
3000	<5	5	15	55	75		
25	<5	<5	10	45	65		
50	<5	<5	20	45	195		
75	<5	110	20	35	240		
3100	<5	5	75	40	190		
25	<5	10	15	60	130		
50	<5	10	10	50	105		
75	<5	5	5	5	5		

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTIO

LINE NO. 8800 N

143131

P.R.

ME LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	NI
3200	<5	10	5	40	95	
25	<5	10	10	40	80	
50	<5	5	10	45	105	
75	<5	5	10	60	120	
3300	<5	5	10	50	200	
25	5	5	10	45	160	
50	<5	5	10	40	115	
75	<5	10	15	70	85	
3400	10	20	85	65	270	
25	5	<5	5	35	140	
50	5	<5	5	70	280	
75	<5	5	10	40	160	
3500	<5	<5	5	35	130	
25	<5	5	5	50	110	
50	<5	<5	<5	15	30	
75	<5	<5	5	25	60	
3600	<5	<5	<5	10	10	
25	<5	<5	<5	10	15	
50	<5	<5	<5	15	5	
75	<5	<5	<5	10	5	
3700	<5	<5	<5	10	20	
25	<5	<5	<5	5	5	
50	<5	<5	<5	15	5	
75	<5	5	<5	15	5	
3800	<5	5	<5	25	10	
25	<5	<5	<5	15	5	
50	<5	<5	<5	40	10	
75	<5	<5	<5	165	10	
3900	<5	5	<5	10	5	
25	<5	<5	<5	10	<5	
50	10	<5	<5	130	10	
75	35	<5	<5	300	50	
100	<5	<5	<5	300 330	50 15	

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RENISON LIMITED

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AREA EAST HEEMSKIRK GRID - S.P.L 129

-189µm MESH FRACTIO

LINE NO. 4000 N

143132

P.P.

DEPTH LOCATION	(Sn)	(Ag)	(Cu)	(Pb)	(Zn)	NI		
100	<5	25	5	15	35			
25	<5	5	5	10	15			
50	<5	10	5	15	10			
75	<5	5	5	10	10			
800	5	<5	5	10	10			
25	10	5	<5	5	5			
50	20	<5	5	30	15			
75	10	5	5	45	10			
900	20	<5	5	10	5			
25	20	<5	5	5	5			
50	<5	<5	5	10	10			
75	20	<5	5	15	10			
1000	<5	<5	5	10	10			
25	<5	<5	5	5	5			
50	15	<5	5	10	5			
75	10	<5	5	15	5			
1100	<5	5	5	5	5			
25	5	<5	5	30	5			
50	5	10	5	5	5			
75	<5	<5	5	5	5			
1200	10	<5	5	10	10			
25	<5	<5	5	5	10			
50	<5	5	5	10	70			
75	<5	5	5	10	5			
1300	5	5	5	10	20			
25	5	5	5	10	10			
50	<5	5	<5	10	5			
75	<5	<5	<5	5	5			
1400	5	5	<5	<5	<5			
25	<5	10	<5	5	20			
50	<5	10	<5	<5	10			
75	15	<5	<5	<5	10			

AREA EAST HEEMSKIRK GRID - S.P.L 129

-189µm MESH FRACTION

LINE NO. 4000 N

143133

P.P

DEPTH (m)	(Sn)	(As)	(Cu)	(Pb)	(Zn)	HCl Soluble Sn	WO <sub>3</sub>
1500	5	<5	5	<5	10		<0.01 ✓
25	<5	5	5	10	10		<0.01 ✓
50	120	70	35	10	75		0.01 ✓
75	630	1080	140	50	225	700	0.03 ✓
1600	150	400	50	10	205	400	0.01 ✓
25	35	10	40	30	130		<0.01 ✓
50	<5	25	70	40	10		<0.01 ✓
75	<5	15	70	10	10		
1700	5	10	20	10	10		
25	50	20	30	60	75		
50	15	<5	55	20	30		
75	<5	5	10	15	20		
1800	85	180	190	525	700		
25	5	60	30	100	75		
50	95	20	30	25	30		
75	5	<5	5	15	10		
1900	10	10	10	10	40		
25	<5	5	<5	5	10		
50	5	<5	5	5	5		
75	10	<5	5	<5	5		
2000	10	<5	5	5	<5		
25	<5	5	30	5	10		
50	<5	<5	10	<5	5		
75	<5	<5	10	5	25		
2100							SAMPLED PREVIOUSLY
25	<5	5	<5	5	<5		<0.01 ✓
50	<5	5	5	5	<5		<0.01 ✓
75	<5	65	145	1120	200		<0.01 ✓
2200	10	60	135	945	375		<0.01 ✓
25	20	65	25	80	70		<0.01 ✓
50	80	100	35	35	70		0.01 ✓
75	35	30	40	55	40		

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 4000N

143134

P.P.

DEPTH LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Acc Soluble µg/g	Wd <sub>3</sub>
000	10	10	20	45	30		<0.01 ✓
25	30	20	25	45	30		<0.01 ✓
50	10	5	15	40	25		<0.01 ✓
75	20	25	25	110	70		<0.01 ✓
2400	170	70	65	455	200	✓200	0.01 ✓
25	40	90	45	810	125		0.01 ✓
50	20	100	45	45	65		0.01 ✓
75	45	90	20	30	185		<0.01 ✓
2500	25	270	25	235	300		0.01 ✓
25							
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RENISON LIMITED

135

AREA EAST HEEMSKIRK GRID -- S.P.L 129

-180µm MESH FRACTIO

LINE NO. 4200 N

143135

P-P-

LOCATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni	NO <sub>3</sub> %
00	Sampled	previously					
25 25	<5	5	<5	5	30		
50	5	20	100	35	35		
75	<5	20	130	30	25		
2600	40	10	35	30	85		
25	<5	<5	145	30	65		
50	<5	10	5	10	30		
75	<5	<5	70	45	8		
2700	<5	<5	20	10	20		
25	<5	10	45	420	45		
50	<5	<5	5	15	20		
75	<5	<5	5	5	10		
2800	<5	5	5	65	15		<0.01 ✓
25	<5	<5	5	30	25		<0.01 ✓
50	<5	<5	20	50	45		<0.01 ✓
75	30	5	70	2000	175		
2900	30	20	45	1300	130		<0.01 ✓
25	30	70	40	590	195		<0.01 ✓
50	25	150	55	1100	540		0.01 ✓
75	<5	5	10	60	35		<0.01 ✓
3000	<5	<5	5	60	10		<0.01 ✓
25	<5	20	10	100	15		
50	15	50	70	60	85		
75	<5	<5	5	10	5		
3100	<5	<5	5	25	5		
25	<5	<5	45	5	5		
50	<5	15	5	70	10		
75	<5	25	25	85	25		<0.01 ✓
3200	5	60	70	400	110		0.01 ✓
25	<5	60	15	150	120		<0.01 ✓
50	<5	10	15	80	50		
75	5	<5	5	70	5		

AREA EAST HEEMSKIRK GRID - S.P.L 129

-189µm MESH FRACTION

LINE NO. 4200. N

143136

P.P.

DEPTH (m)	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni
200	<5	<5	5	75	5	
25	15	<5	5	65	5	
50	<5	5	5	115	10	
75	5	10	5	50	10	
3400	<5	<5	5	10	5	
25	<5	<5	5	40	10	
50	<5	<5	<5	30	5	
75	<5	<5	<5	25	10	
3500	<5	<5	5	25	5	
25	<5	5	5	60	10	
50	5	10	35	20	5	
75	<5	95	20	380	5	
3600	5	<5	5	30	10	
25	15	<5	<5	25	10	
50	50	175	130	165	100	
75	5	<5	5	45	20	
3700	10	<5	<5	50	10	
25	10	<5	<5	190	20	
50	5	<5	<5	10	10	
75	5	<5	<5	210	5	
3800	10	<5	<5	1400	5	
25	10	<5	5	90	20	
50	<5	<5	5	420	5	
75	<5	<5	<5	70	5	
3900	5	<5	5	310	5	
25	5	<5	5	560	130	
50	<5	<5	<5	130	<5	
75	10	<5	15	4800	25	
4000	5	<5	<5	200	10	
25						
50						
75						

137

RENISON LIMITED

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTIC

LINE NO. 4400N

143137

P.P.

MEGALITON	(S)	(As)	(Cu)	(Pb)	(Zn)	Non Soluble Mg	WO <sub>3</sub> %
1100	5	<5	5	5	10		
25	<5	<5	10	10	10		
50	<5	<5	5	5	10		
75	<5	<5	5	10	10		
1200	<5	<5	5	10	10		
25	5	<5	5	5	5		
50	5	<5	5	10	5		
75	10	<5	5	10	5		
1300	<5	<5	5	5	5		
25	<5	<5	5	5	5		
50	<5	<5	5	5	5		
75	<5	<5	10	5	10		
1400	<5	<5	<5	5	5		
25	25	<5	5	5	5		
50	20	<5	10	15	5		
75	20	<5	5	10	5		
1500	15	<5	70	15	10		
25	20	<5	10	5	5		
50	15	<5	5	5	5		
75	35	<5	5	10	5		
1600	10	<5	25	35	20		
25	10	<5	5	15	10		
50	10	<5	5	10	10		
75	20	<5	5	10	10		
1700	30	<5	5	5	20		
25	5	<5	5	10	10		
50	35	<5	20	15	30		
75	120	10	10	15	30		
1800	10	50	30	70	300		0.01 ✓
25	50	45	30	50	185		<0.01 ✓
50	260	190	40	110	200		0.01 ✓
75	30	<5	10	15	15	300	<0.01 ✓

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RENISON LIMITED

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AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm FRESH FRACTION

LINE NO. 4400N

143138

P.P.1

DEPTH (M)	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Free Soluble Mg	WO <sub>3</sub> %
00	10	<5	10	15	5		
25	<5	<5	10	15	15		
50	<5	30	280	25	30		
75	15	<5	5	15	25		
2000	15	<5	10	25	150		<0.01 ✓
25	20	<5	15	20	20		<0.01 ✓
50	130	30	60	35	60	✓ 100	0.01 ✓
75	40	10	30	20	20		<0.01 ✓
2100			140	20	25		SAMPLED PREVIOUSLY
25	15	<5	80	15	10		
50	15	<5	150	25	25		
75	10	<5	5	10	10		
2200	10	<5	5	15	5		
25	20	<5	5	5	5		
50	15	<5	10	15	5		
75	15	<5	25	15	65		
2300	10	<5	5	10	10		
25	20	5	10	10	110		
50	35	20	40	35	15		
75	15	<5	10	15	25		
2400	55	<5	5	5	20		
25	40	20	22000	15	45		
50	55	80	400	25	50		
75	15	<5	5	5	35		
2500	15	<5	5	5	50		
25	25	<5	10	10	15		
50	25	15	90	85	25		
75	50	15	20	40	15		
2600	120	110	20	45	115	100.	
25	50	<5	5	40	15		
50	30	10	10	45	25		
75	15	15	15	40	15		

AREA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACT

LINE NO. 4400N

143139

P.

mE LOCATION	Sn	As	Cu	Pb	Zn	Ni
2700	50	<5	5	5	15	
25	35	<5	5	5	10	
50	35	5	5	70	20	
75	35	<5	10	10	30	
2800	25	<5	5	5	20	
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25						
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75						
00						
25						
50						
75						

140

NEAR EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTION

LINE NO. 4600 N

143140

P.P.

DEPTH	(Sn)	(As)	(Cu)	(Pb)	(Zn)	Ni
25 25	15	<5	5	5	10	
50	<5	<5	5	10	35	
75	<5	<5	<5	5	10	
26 00	5	<5	<5	15	10	
25	<5	<5	<5	50	<5	
50	<5	<5	5	20	70	
75	<5	<5	<5	5	10	
27 00	5	<5	<5	5	5	
5	<5	<5	<5	45	5	
50	<5	<5	<5	65	40	
75	5	<5	<5	5	5	
28 00	<5	<5	<5	5	10	
25	<5	<5	<5	20	15	
50	<5	25	20	35	70	
75	<5	<5	10	85	65	
29 00	<5	<5	5	15	10	
25	5	5	30	20	10	
50	<5	<5	5	20	25	
5	10	<5	<5	25	10	
30 00	5	<5	<5	15	10	
25	15	<5	<5	15	<5	
50	5	<5	<5	15	5	
75	15	<5	<5	60	10	
31 00	5	<5	<5	20	5	
25	<5	<5	5	30	15	
50	10	<5	<5	15	10	
75	<5	<5	<5	15	5	
32 00	<5	15	25	30	10	
25	10	<5	10	90	10	
50	10	<5	<5	100	10	
75	30	120	85	200	35	

141

AREA EAST HEEMSKIRK GRID - S.P.L. 129

-180µm MESH FRACTION

LINE NO. 4600 N

143141

P.P.

DEPTH (m)	Sn	As	Cu	Pb	Zn	RI
33.00	20	<5	5	170	10	
35	30	<5	65	400	25	
60	20	<5	5	60	5	
75	20	<5	<5	60	35	
34.00	25	<5	<5	150	5	
X	25	<5	<5	80	5	
50	25	<5	5	80	5	
75	15	35	15	500	20	
35.00	20	<5	5	130	10	
(E)	35	30	10	1830	15	
50	25	<5	<5	620	5	
75	20	<5	10	130	60	
36.00	15	<5	<5	50	20	
25	20	<5	<5	25	5	
50	80	<5	<5	20	5	
75	15	<5	15	95	5	
37.00	30	<5	<5	100	15	
25	30	<5	15	45	5	
50	20	<5	<5	45	5	
(E)	65	<5	55	1880	10	
38.00	30	<5	5	60	10	
25	50	<5	5	30	5	
50	30	<5	<5	5	5	
75	50	35	40	200	95	
39.00	40	55	60	165	145	
25	15	15	25	80	65	
50	60	30	80	85	90	
75	45	20	100	110	115	
40.00	25	85	95	110	45	

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RENISON LIMITED

SEA EAST HEEMSKIRK GRID - S.P.L 129

-180µm MESH FRACTIO

LINE NO. 4800 N

143142

P.P.

DEPTH	Sn	As	Cu	Pb	Zn	NI		
00	25	<5	5	10	10			
25	30	<5	5	10	5			
50	25	<5	5	10	10			
75	30	<5	5	15	10			
1100	15	<5	5	10	5			
25	35	<5	5	15	15			
50	10	<5	5	10	5			
75	20	<5	5	10	10			
1200	20	<5	5	5	15			
15	15	<5	5	5	10			
50	15	<5	<5	10	10			
75	25	<5	<5	10	10			
1300	20	<5	<5	10	10			
25	25	<5	<5	5	10			
50	35	<5	5	10	10			
75	25	<5	<5	10	10			
1400	5	<5	5	15	15			
25	25	<5	5	10	10			
50	35	<5	5	5	10			
15	30	<5	5	5	30			
1500	40	<5	5	15	30			
25	35	<5	5	15	25			
50	30	<5	60	20	20			
75	15	<5	5	40	15			
1600	15	<5	5	10	10			
25	25	<5	5	25	15			
50	15	<5	5	25	10			
75	15	<5	5	30	15			
1700	20	<5	5	20	20			
25	15	<5	5	20	20			
50	20	<5	5	20	15			
75	10	<5	5	10	5			

AREA EAST HEEMSKIRK GRID - S.P.L 129

-150µm MESH FRACTION

LINE NO 4800 N

143143

P.P.

DEPTH	Sn	As	Cu	Pb	Zn	Moisture	WO <sub>3</sub>
1800	25	<5	5	5	15		
25	10	<5	50	25	40		
50	5	5	30	30	30		
75	20	<5	5	10	20		
1900	15	<5	<5	<5	45		
25	60	30	25	60	30		
50	25	5	15	60	590		
75	<5	<5	60	15	570		
2000	25	<5	10	20	170		
25	10	<5	350	15	180		
50	10	<5	75	10	25		
75	20	<5	10	10	40		
2100	20	15	<5	15	20		SAMPLED PREVIOUSLY
25	300	5	<5	<5	25	200	✓
50	25	25	35	15	200		✓
75	35	65	10	5	40		✓
2200	40	<5	15	25	25		
25	35	<5	5	10	15		
50	25	<5	5	10	15		
75	35	<5	5	<5	10		
2300	25	<5	5	15	15		
25	35	<5	10	35	55		
50	40	<5	5	10	40		
75	30	<5	5	<5	15		
2400	45	<5	<5	<5	15		
25	20	<5	5	15	10		
50	25	<5	5	45	10		
75	35	<5	10	5	10		
2500	20	<5	5	5	10		

4 N

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KENISON LIMITED

-180µm MESH FRACTIO

AREA EAST HEEMSKIRK GRID - S.P.L 129

LINE NO. 5000N

143144

P. 11.

ME IGATION	(Sn)	(As)	(Cu)	(Pb)	(Zn)	NI		
24 25	30	<5	<5	5	15			
50	40	<5	5	5	15			
75	20	<5	5	5	10			
25 00	30	<5	30	5	5			
25	35	<5	<5	<5	5			
50	15	<5	10	15	5			
75	10	<5	15	15	<5			
26 00	30	<5	5	5	5			
15	20	<5	5	5	10			
50	25	<5	<5	<5	10			
75	30	<5	5	5	10			
27 00	30	<5	10	30	5			
25	50	50	5	10	5			
50	20	5	40	5	10			
75	30	<5	<5	<5	<5			
28 00	45	<5	<5	10	5			
25	10	<5	<5	10	5			
50	30	<5	5	5	10			
15	25	<5	<5	<5	15			
29 00	30	<5	20	5	20			
25	30	<5	10	5	10			
50	20	<5	<5	15	5			
75	50	<5	<5	5	5			
30 00	30	<5	<5	5	10			
25	25	<5	<5	10	10			
50	35	<5	5	5	20			
75	30	<5	5	5	15			
31 00	30	<5	<5	60	10			
25	25	<5	<5	5	5			
50	40	<5	<5	10	10			
75	20	<5	<5	5	10			

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RENISON LIMITED

34 of 34

AREA: EAG. HEEMSKILN GRID - S.P.L 129

-18µm MESH FRACT

PLATE NO. 5000 Nv

143145

P-1

DEPTH	(Sn)	(As)	(Pb)	(Cu)	(Zn)	NI
3200	30	<5	20	5	10	
25	25	<5	5	5	10	
50	40	<5	5	40	10	
75	45	<5	5	45	10	
3300	35	<5	5	40	15	
25	35	<5	5	80	5	
50	35	<5	5	25	15	
75	65	10	5	75	10	
3400	40	<5	<5	15	5	
25	35	<5	<5	20	5	
50	35	<5	<5	20	10	
75	25	<5	<5	15	15	
3500	35	<5	<5	10	5	
25	30	<5	5	5	5	
50	35	<5	5	30	5	
75	30	<5	5	40	30	
3600	30	<5	<5	35	10	
25	35	<5	5	70	10	
50	35	<5	<5	130	20	
75	20	<5	<5	40	10	
3700	20	<5	5	110	10	
25	30	<5	5	35	5	
50	40	<5	<5	5	10	
75	30	<5	<5	160	5	
3800	50	25	15	30	5	
25	35	<5	<5	155	5	
50	30	<5	<5	85	5	
75	25	<5	<5	70	5	
3900	50	<5	15	15	10	
25	35	<5	<5	50	10	
50	25	<5	<5	10	10	
75	35	<5	<5	10	10	
4000	35	<5	<5	10	10	



## DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.F.R.

147

INTERVAL (m)	RECOVERY		DESCRIPTION	FORM.	% S.												
	FROM	TO			m	%	FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
0	127.4																
0	3	0	0														
3	6	2.5	83														
6	7.5	1.5	100														
7.5	9.2		100														
9.2	13.3		100														
13.3	18.5		100														
18.5	21.6		100														
21.6	24.5		100														
24.5	26.05		100														
26.05	31.9		100														

143147

DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.F.R.

148

INTERVAL (m)	RECOVERY		DESCRIPTION	FORM.	% Sn.												
	FROM	TO			m	%	FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
31.9	33.1		100	Non magnetic dark brown to black tuff sandstone. Hornfelsed, no significant metasomatic alteration.													
33.1	34.7		100	Weakly magnetic tuff sandstone and minor siltstone. Weak alteration Massive.													
34.7	36.0		100	Moderately magnetic dark brown to black siltstones, sandstones with rare actinolite veinlets and very rare mottling. Trace sulphide films on joint surfaces.													
36.0	38.0		100	Core becoming very broken, due to chlorite on joint surfaces, which are common. Moderately magnetic with rare magnetite/actinolite veinlets with trace sulphide. Magnetite occurs as primary sedimentary feature?													
38.0	41.2		100	Non magnetic hornfelsed dark brown to black massive siltstone, with fine green irregular actinolite alteration. Very rare fleck pyrite.													
41.2	46.2		100	As above, very irregular greenish alteration. Bedding discernible. B.C.A. 40°. Trace pyrite, pyrrhotite.													
46.2	46.5		100	As above, with coarse magnetite in two actinolite veins.													
46.5	48.2		100	As before, dark brown to black hornfelsed siltstone and interbedded tuff sandstone Irregular, cross cutting and sub-parallel to bedding, veinlets with trace fine sulphide.													
48.2	48.7		100	Lower BCA'S, 30-35° Irregular light green actinolite vein with minor carbonate, trace pyrite. Minor hornfelsed sediment.													
48.7	52.2		100	Core becoming very broken. Highly jointed hornfelsed dark brown to black siltstone, minor sandstone. Actinolite alteration not as common. Minor silty layers BCA 40°													
52.2	55.0		100	More intense alteration - Actinolite patches, some with fine disseminated sulphide. Buff chert common. Non magnetic													
55.0	56.1		100	As above. Actinolite alteration not as intense. BCA'S 40.													
56.1	61.4		100	Irregular actinolite alteration increasing. Whitish green chert occurring as very minor beds (<1 cm) in dark brown siltstone. Numerous joint surfaces at 50° to CA, often with light green amorphous mineral (diopside ?) coating. Very irregular quartz veinlets are common.													
61.4	63.1		100	Alteration not as intense. Non-magnetic brown to black hornfelsed siltstone. Finely bedded in part. BCA'S 40 - 45°. Filmy pyrite on broken surfaces. Overall sulphide content low. (Petrology description 62.1m)													
63.1	63.2		100	Buff to light green microfractured chert, infilled with actinolite. Trace pyrite films.													
63.2	66.8		100	Var:ably altered, hornfelsed dark brown to black siltstone. Alteration is usual actinolite veinlets, subparallel to bedding and crosscutting. At 65.5m is a more intensely altered zone (15cm) with trace pyrite, chalcopyrite. Fine black mineral common (ilvaite?).													

143148

DIAMOND DRILL RECORD

HOLE NUMBER : TB 3  
 LOGGED BY : A.F.R.

149

NWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
				Similar alteration at 66.7m. Trace carbonate veins.												
66.8	70.0		100	Slightly less actinolite alteration. Brown to dark brown hornfelsed siltstone. Carbonate veinlets becoming common.												
70.0	70.7		100	Light to dark brown tuff sandstone and siltstone. Minor carbonate veinlets. Rare filmy pyrite.												
70.7	70.9		100	Irregular carbonate-actinolite vein with later veinlets of very fine pyrite, chalcopyrite throughout. Carb. vein 30° to CA.												
70.9	80.0		100	Monotonous interval of black hornfelsed siltstone with irregular green actinolite vein alteration. Very sparse flecks of pyrite. Massive bedding with finer layers indicating BCA 40°.												
80.0	83.5		100	As above but more intensely silicified. Dark brown cherty hornfelsed siltstone. Actinolite alteration very common. Rare buff cherty fragments. Very fine disseminated pyrite/pyrrhotite in actinolite vein at 83.4m. Microfracture at 0° to CA, with trace sulphide from 81.0 to 81.8m.												
83.5	83.9		100	More intensely altered zone. Actinolite, minor carbonate vein with trace disseminated pyrite, pyrrhotite. (Petrology description 83.9m).												
83.9	84.7		100	As before. Brown, very siliceous, cherty siltstone with irregular actinolite veins and veinlets. Rare buff cherty microfractured zones.												
86.7	88.4		100	As above but with late stage calcite veinlets and veins very common. Vein to CA is 70°. Microfractured to brecciated zone at 87.1 to 87.2m. No sulphides. BCA's 40-45. Bedding becoming fine.												
88.4	93.6		100	Variably altered brown cherty siltstone, mudstone, but without late stage calcite veins. Fine pyrite infilling veinlet at 90.4m. Overall appearance becoming fragmental, with irregular actinolite alteration. Low angle (5° to CA) pyrite veinlets very common from 92.2 to 92.8m.												
93.6	98.6		100	Less altered, dark brown to black interbedded massive siltstone and tuff sandstone. Bedding becoming irregular, slightly slumped. Sparse quartz veinlets at 50-60° to CA. Actinolite alteration very rare.												
98.6	106.0		100	Colour slightly a lighter brown. Frequent veinlets of quartz carbonate throughout. (2 per 10cm). Actinolite alteration is not common. Monotonous siltstone throughout. Core broken throughout.												
106.0	110.3		100	Becoming cherty. Colours include buff, dark brown, grey, light green. Microfractured, infilled with weak actinolite alteration common. Sparse pyrite, pyrrhotite veinlets throughout. Trend to mottled alteration.												
110.3	115.1		100	Lesser cherty content in this zone. Still very hornfelsed, dark brown siltstone with sparse irregular actinolite veinlets. Occasional cherty layer. Filmy pyrite occurring on the odd joint. Sparse pyrite pyrrhotite in irregular veinlets.												

143149

# DIAMOND DRILL RECORD

HOLE NUMBER : TH 3

LOGGED BY : A.F.R.

150

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% Al.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
115.1	120.0		100	Core becoming very broken. Lithology is a lighter brown cherty siltstone with intense microfractures, microfaulting. Numerous veinlets of fine carbonate. However, no sulphides. Approaching fault?												
120.0	120.4		100	Intensely brecciated light brown siltstone infilled with carbonate Breccia fragments common. Infilled fault? Crude layering at 40° with set of carbonate veinlets at 80° to this plane. Mottled green brown colouration.												
120.4	122.2		100	Mottled colouration of light brown bedded siltstone and sandstone. Bands and veinlets of carbonate, common. Weathered pyrite veinlet at 120.8m. Highly irregular veinlets (mottled and bleached).												
122.2	127.4		100	Much less carbonate veining. Brown cherty siltstone with much irregular actinolite alteration. Pyrite, pyrrhotite very common in these veins but the overall sulphide content of the zone is <1%. Bedding is very fine but slumping is common.												
127.4	132.6		100	<u>MOTTLED, BLEACHED ALTERED ZONE OF SILTSTONE, SANDSTONE, GRADING TO CHERT.</u>  Very pronounced change. Grades into highly slumped interbedded siltstone and sandstone, which has been intensely bleached and mottled. Colours are light grey, green, buff to dark brown. Bedding is very irregular and alteration is not confined to this feature i.e. does not selectively replace individual beds. BCA's 45. No sulphides apart from trace pyrrhotite, chalcopyrite (and pyrite?) in actinolite veins at 129.5m, 129.8m. Grades into dark brown, intense cherty siltstones, minor sandstone but without the spectacular mottling and bleached appearance of the above interval. Very minor actinolite veining with trace pyrrhotite at 133.9m. BCA or 45°. Rare rounded fragments of white, speckled black, sandstone. (Petrology description 131.5m).												
132.6	163.5			<u>EXTREMELY SILICIFIED, ALTERED SEQUENCE OF MICROFRACTURED CHERTS, SILTSTONES. ALTERATION IS IRREGULAR, RESULTING IN BLOTCHY, MOTTLED COLOURS RANGING FROM BROWN, GREEN TO WHITE, PALE GREEN.</u>												
132.6	135.8		100	Very dark green to black cherty siltstones with trace pyrrhotite, pyrite (possibly very fine tourmaline ?) in actinolite veins. BCAs average 45°.												
135.8	138.6			White to green slumped, mottled chert, siltstone. Trace pyrite, pyrrhotite in actinolite veins & patches. Minor brown, slumped but												

143150

DIAMOND DRILL RECORD

HOLE NUMBER : T.R. 3

LOGGED BY : A.F.R.

151

MWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
				fine bedded siltstones. Disseminated pyrrhotite common in actinolite vein at 137.2m.												
138.6	138.9		100	Fault? Fracture infilling. Irregular calcite veins with minor quartz and common black mineral (tourmaline?).												
138.9	141.5		100	Mixture of brown to buff cherts, siltstones with irregular mottled white-green alteration. Sulphides not seen.												
141.5	146.2		100	Overall, colours becoming lighter greens and browns. Irregularly bedded, slumped cherts, siltstones with mottled alteration. Calcite vein at 142m at 30° to CA with fine black mineral as above (138.6 - 138.9m). Trace to very rare, pyrite pyrrhotite in actinolite veins or in rare veinlets. Lithic fragments, subangular chert common (1mm to 2 - 3cm).												
146.2	150.3		100	Dark brown to green, mottled hornfelsed siltstones and buff cherts. Disseminated pyrite, pyrrhotite, chalcopyrite traces in actinolite veins at 147.2m, 150.9m. Pyrite films on some joints.												
150.3	153.15		100	Grades into lighter coloured sequence of siltstones. Colours white/light green to light brown (in part). Very fine disseminated pyrrhotite common at 151m to 152m, in white chert. Crude "blobs" of pyrrhotite in fine actinolite zones at 152.3m. Microfractures at 40° to CA, common throughout. Calcite-tourmaline veins at 151.8m with trace sulphide (Petrology description 152.9m)												
153.15	157.6		100	Grades into darker brown, less slumped, well bedded siltstones (pyrite veinlets common to 154.3m) and minor chert. Colours dark brown through to light brown to light green, mottled appearance. Pyrrhotite, pyrite veinlets and disseminations common throughout. Diffuse pale alteration veinlets (some with quartz) are common from 157m (at 40° to CA and normal bedding). BCA averages 40°. Diopside in veinlets?												
157.6	160.7		100	Increase in microfractured, slumped pale green to brown chert in a siltstone rich sequence. Late stage calcite veinlets (at 50°) becoming common. Trace pyrrhotite in actinolite veinlet.												
160.7	160.8		100	Fault? Broken zone, consisting of cream to pale green actinolite, slight clay development, altered siltstone. Carbonate veinlets common.												
160.8	163.5		100	Highly slumped, irregularly altered pale green to light brown chert and siltstone. Rare, later stage carbonate veinlets at 20 - 30° to CA. Sulphides very rare. At 163m, fine quartz on joint surface.												

143151

DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.F.R.

152

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
163.5	230.0			MONOTONOUS SEQUENCE OF VERY DARK BROWN TO BLACK HORNFELSED SILTSTONES & MINOR TUFFACEOUS SANDSTONES. OVERALL ALTERATION IS NOT AS INTENSE OR SPECTACULAR AS THE ABOVE ZONE. MODERATE TO STRONGLY MAGNETIC FROM 185m TO 223m. TRACES PYRRHOTITE, PYRITE, MAGNETITE IN METASOMATISED VEINS AND PATCHES.												
163.5	171.8		100	Dark brown with minor light brown to grey massive to thick bedded siltstones and minor sandstone. Several minor (< 5cm) zones of bleached or mottled alteration. Trace, irregular pyrite veinlets, especially at 168.5m. Very rare carbonate veinlets.												
171.8	176.9		100	Becoming slightly altered. Same lithology as above. Pale green to blue-grey irregular zones with numerous fine wispy veinlets, some of which are carbonate. One cm wide carbonate-tourmaline? vein at 173.8m. Trace disseminated pyrite in wispy veinlets throughout.												
176.9	179.9		100	Less alteration. Dark brown massive to thick bedded siltstones B.C.A. 45°.												
179.9	181.7		100	As before. Increase in alteration, consisting of irregular patches of blue-grey alteration. Rare pyrite veins, and trace pyrrhotite occurring along bedding at 179.6m. Sparse carbonate veinlets, with largest vein at 178.9m. Slumped bedding from 180.0 to 180.3m, around lithic fragments. Tourmaline-sulphide veinlets common at 180.0m, 180.3m.												
181.7	183.7		100	Altered sequence as before. Siltstone to lithic siltstone with numerous tourmaline, minor carbonate veins throughout. No preferred attitude - very irregular and associated with actinolite. Trace pyrrhotite in actinolite vein at 183m.												
183.7	190.8		100	Lesser alteration. Black to dark brown massive siltstone with irregular patches of pale green brecciated chert from 185.6 to 186.0m. After this, only rare actinolite veinlets. Sulphides very rare. (Petrology description 183.9m).												
190.8	195.9		100	Black massive siltstones with minor pelletal zones (1 - 2m), B.C.A. 45°. Several diffuse alteration veinlets without sulphide. Moderate to strongly magnetic.												
195.9	198.7		100	Increase in alteration. As above but with pale brown to blue-grey "bleached" zones common. Pale green actinolite and magnetite common in irregular veinlets at 198.5 to 198.7m.												
198.7	207.7		100	Lesser alteration. Same black moderately magnetic, thick bedded to massive hornfelses siltstone with minor slumped sandstone layers. Sparse, later stage, pale green veinlets (actinolite). Occasional narrow fractured cherty zone (20 - 30cm wide). Sulphides not seen.												

143152

## DIAMOND DRILL RECORD

HOLE NUMBER : T.B. 3

LOGGED BY : A.F.R.

153

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
207.7	223.0		100	Increase in overall alteration, consisting of white to pale green veinlets (carbonate and actinolite). These veinlets are irregular and do not maintain a persistent orientation. Lithology is still the same black siltstone to tuff sandstone sequence. Thick bedded to massive. Moderately magnetic. Core becoming very broken (pieces 10cm) with common pale green mineral? on joint surfaces. Irregular quartz veining at 210.9m, associate with actinolite. Trace sulphides, tourmaline? with actinolite veinlets, between 213 and 214.1m. Rounded to sub-angular, pale lithic fragments at 213.1m (1 - 4mm in diameter). Greenish actinolite veins common from 215.3 to 217.7m and with fine grained magnetite. (Petrology description 213.5m)												
223.0	230.0		100	Overall magnetite content low, but with occasional actinolite/magnetite vein. Still black siltstone/sandstone sequence with irregular veinlets of actinolite. Disseminated sulphides very rare. Bedding not as regular - minor slumped zones with pelletal lithic fragments. B.C.A. averages 45°. Core broken in pieces 15 - 30cm. Common joint at 40° to CA. Carbonate veinlets common from approx. 210m, and occur at irregular attitudes.												
230.0	238.0			VERY ALTERED, OFTEN CHERT, MOTTLED ZONE OF SILTSTONES, MINOR SANDSTONE, MINOR CHERT. TRACE SULPHIDE ASSOCIATED WITH ALTERATION VEINS AND PATCHES.												
230.0	236.0		100	Very mottled alteration. Browns, greens, buff colours predominate. Intensely altered sequence of well bedded, slightly slumped sandstone and minor siltstone. Numerous actinolite veins, patches, although only a few contain trace sulphide. B.C.A.s average 45°. Rare chert layers. Couple of minor carbonate veins. (Petrology description 234.7m).												
236.0	238.0		100	Grades into less spectacularly altered sandstone, siltstone. Colour brown with minor green actinolite veins, patches. Trace pyrrhotite, pyrite.												
238.0	251.6			GRADES INTO EXTREMELY ALTERED (MOTTLED COLOURS) ZONE. INTENSELY SILICIFIED SEQUENCE OF MICROFRACTURED CHERT WITH IRREGULAR CARBONATE VEINING.												
238.0	243.0		100	Mostly brown-grey bedded chert, minor siltstone with zones of intense microfracturing and infilling with quartz, minor carbonate. Trace pyrite on some broken surfaces and very rarely in actinolite veins.												
243.0	248.5		100	Increase in chert content. Variably coloured - brown, green, white, grey buff - slumped, microfractured chert. Zone intensely microfractured & with minor actinolite zones with trace pyrite, pyrrhotite												

143153

# DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.P.R.

154

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.											
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag	% WO <sub>3</sub>
248.5	248.8		100	Fault? Very broken zone. Numerous white, non calcareous amorphous veins in chert fragments.													
248.8	251.6			Brown, green, pale green chert and siltstone. Microfractured. Rare sulphides.													
251.6	254.5	1.8	62	FINELY BEDDED GREY SHALE and SILTSTONE with numerous pyrite, lesser pyrrhotite veinlets occurring in actinolite patches and as discrete veinlets along bedding and as irregular veinlets. Overall sulphide content less than 5%. Core loss from 251.9 to 253m.	250	251	0.11		<0.05	<0.10							
					251	252	<0.01		<0.05	<0.10							
					253	254	<0.01		0.05	<0.10							
					254	255	<0.01		<0.05	<0.10							
254.5	279.4			MONOTONOUS SEQUENCE OF BROWN INTERBEDDED SILTSTONES, SANDSTONES, VARIABLY ALTERED WITH VEINS, PATCHES OF ACTINOLITE. TRACE SULPHIDE IN A FEW ALTERED PATCHES.													
245.5	255.2		100	Lithic fragments common, subangular.													
255.2	260.1		100	Mainly brown sandstone, minor siltstone. B.C.A.'S average 45°. Minor actinolite alteration. Trace sulphide only in some veins, patches. Rare, fine, irregular carbonate veinlets.													
260.1	260.3		100	Intensely carbonate veined with breccia fragments. Trace pyrrhotite													
260.3	261.9		100	As before, with numerous carbonate veinlets. Trace pyrite, pyrrhotite in actinolite patches. Pale green clayey vein at 261.5m, at 40° to CA with trace pyrite, pyrrhotite.													
261.9	279.4		100	Monotonous brown sandstone with patches of rare actinolite veins, with pyrrhotite, pyrite. Minor interbedded siltstone. B.C.A.'s average 45°. Rare irregular carbonate veinlets.													
279.4	281.0		100	WELL BEDDED, TUFF SANDSTONE WITH COMMON LITHIC FRAGMENTS (SUB-ANGULAR) UP TO 2cm IN DIAMETER. NOT CORRELATABLE WITH "SHEARED CONGLOMERATE" AS IN T.H. D.D.H. 2 (Petrology description 279.7m).	280	281	<0.01		<0.05	<0.10							
					281	282	<0.01		<0.05	<0.10							
281.0	290.6			BLUE GREY INTERBEDDED SHALE, SILTSTONE AND SANDSTONE. WELL BEDDED IN PARTS. B.C.A.'s AVERAGE 45°. OVERALL, LESS ACTINOLITE ALTERATION.													
281.0	281.5		100	Intense actinolite alteration with numerous veinlets of pyrite.													
281.5	287.0		100	Blue-grey shale, siltstone with numerous irregular veinlets and patches of pyrite, pyrrhotite. No significant actinolite alteration. B.C.A.'s average 45°.													
287.0	288.3		100	As above, but without significant sulphides.													
288.3	290.4		100	Thicker bedded, dark brown to black siltstone with minor pyrite veinlets. No actinolite alteration.													

143154

# DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.F.R.

155

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
290.4	290.6		100	Irregular quartz vein with trace pyrite, pyrrhotite. Slight green chlorite.												
290.6	351.5			OVERALL CHANGE IN SEDIMENTARY SEQUENCE. LESS VOLCANICLASTIC, BASIC CONTENT AND CHANGE TO GREY SILTSTONES, PINK-BROWN SANDSTONE, GRITS, AND QUARTZITE. NUMEROUS, IRREGULAR BANDS OF PINK BROWN ALTERATION. NUMEROUS IRREGULAR QUARTZ LAYERS.												
290.6	295.2		100	Numerous, irregular pyrite veinlets in sequence, but overall the content is low.												
295.2	298.0		100	As above, without sulphide veinlets. Several rare basic, fine grained tuff siltstone fragments. Rare carbonate veins with minor sphalerite, galena and parallel to and replacing bedding. B.C.A.s 45°.												
298.0	302.0		100	Numerous ptymatic? quartz veins or discrete quartzite bands. Grey-brown sandstones with pink brown alteration. Very rare pyrrhotite veinlets. Bedding slumped. (Petrology description 301.3m)												
302.0	308.8		100	Highly slumped sequence of brown-grey siltstone and sandstone/quartzite with numerous microfractures. Rare pyrite/quartz veinlets. Carbonate sphalerite galena vein at 303.5m.												
308.8	313.0		100	Grading into grit rich sequence. Minor sandstone. Rare, irregular quartz veins, subparallel to bedding. B.C.A.s average 50°. Sequence very slumped. Colours pink brown to grey brown.												
313.0	314.3		100	Less grit in sequence. Large quartz vein at 300 to C.A., at 313.8m with trace pyrite, followed by breccia fragments.												
314.3	321.5		100	As before. Mixed sequence of sandstone grits, minor siltstone. Several irregular tourmaline, pyrite patches. Lithic fragments becoming common. Several fine pyrite veinlets. Pink brown alteration common. (Petrology description 315.0m)												
321.5	322.9		100	B.C.A.s 45°. Well bedded grey siltstones, quartzite. Rare, sub-angular quartzite clasts, up to 2cm in diameter. Very minor, irregular pyrite veinlets. Minor quartz pyrite veinlets cross-cutting bedding.												
322.9	323.7		100	Core very broken. Lithology as above. Brown-grey quartzite and spotted siltstones. Trace pyrite in very minor veinlets.												
323.7	325.3		100	Mixed dark brown to black tuff sandstone and finely bedded siltstone. B.C.A.s 45°. Irregular quartz veinlets, most commonly parallel to bedding, but also normal or cross-cutting. Trace pyrite in irregular veinlets.												
325.3	325.35		100	Large quartz vein at 45° to C.A. With siltstone fragments. Trace disseminated pyrite.												

143155

# DIAMOND DRILL RECORD

HOLE NUMBER : T.H. 3

LOGGED BY : A.F.R.

156

NDPPE

INTERVAL (m)	RECOVERY		DESCRIPTION	FORM	% Sn.																
	FROM	TO			m	%	FROM	TO	TOTAL	ACID SOL.	% Cu.	% Al.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag	% WO <sub>3</sub>			
325.35	328.0		100	Less broken core. Brown to grey, well bedded sandstones and less siltstone. Trace, very fine disseminated pyrite in rare alteration (quartz-chlorite) veinlet.																	
328.0	329.5		100	Core very broken. Lithologies generally as above. Interbedded sandstones, siltstones with rare cleats of pink brown sandstone. Trace pyrite in irregular veinlets.																	
329.5	331.0		100	Mainly massive to thick-bedded pale brown sandstones, grits and much less grey bedded siltstones. Very rare, quartz veinlets with trace green chlorite?																	
331.0	335.0		100	Brown sandstones (generally thick bedded) with minor grey well-bedded siltstones with numerous irregular quartz veins, generally at 30° to C.A. Few specks pyrite in quartz veins. B.C.A.s 45° - 50°.																	
335.0	336.05		100	Brown and grey sandstones, siltstones with well developed, slumped bedding. Quartz veins or layers parallel to bedding, becoming common. Few specks pyrite.																	
336.05	336.65		100	Very contorted zone of blue-grey sandstones, siltstones, buff chert, with irregular, diffuse margined quartz veinlets and associated fine pale green chlorite, brown mica. Trace very fine pyrite and pale brown sphalerite? Slightly weathered, vuggy pyrite associated with pale-green fine grained mica.	336	337	<0.01	<0.05	<0.10												
					338	<0.01	<0.05	<0.10													
					339	<0.01	<0.05	<0.10													
					340	<0.01	<0.05	<0.10													
					341	<0.01	<0.05	<0.10													
336.65	339.2		100	Less contorted, still slumped and with numerous irregular veinlets, pyrite, pyrrhotite (some with very fine tourmaline). Very minor brecciated zones. Grey to light brown quartzite, laminated siltstone, and minor chert. B.C.A.s 25° - 45°.	342	<0.01	<0.05	<0.10													
					343	<0.01	<0.05	<0.10													
					344	<0.01	<0.05	<0.10													
					345	<0.01	<0.05	<0.10													
339.2	342.3		100	Very slumped sequence of pale brown to grey siltstone, minor chert, quartzite. Numerous veinlets of pyrite, pyrrhotite throughout. Overall, intensely microfractured, irregularly bedded. B.C.A.s average 45° - 60°. Vuggy pyrite veins at 5° to C.A., very common between 341.0 and 342.3m.																	
342.3	345.4		100	Less slumped, grey to pale brown sandstone, minor quartzite. Pyrite and pyrrhotite veinlets common.																	
345.4	347.0		100	Grey to light brown quartzite (generally finely bedded) and becoming slumped. Less sulphide veinlets (trace pyrite, pyrrhotite).																	
347.0	348.1		100	Highly brecciated, slumped grey to brown quartzites. Rare irregular veinlets of pyrite, one associated with fine brown mineral?																	
348.1	349.8		100	Yellow brown mudstone, brown brecciated to slumped quartzite and bedded siltstone. Few specks disseminated pyrite. (Petrology description 349.6m).																	
349.8	351.5		100	Darker brown bedded siltstone and buff sandstone. B.C.A.s 45°.																	
				END OF HOLE																	

143156

CMS REPORT 78/12/7

The twelve drill-core intersections were thin-sectioned and examined in the usual way; they are briefly described below.

- 17.7a** (T.S. 26318) Distinctly magnetic. This is a severely hornfelsed fine-grained tuffaceous sediment; the development of abundant biotite has obscured or obliterated many details, but the rock can be correlated with the Crimson Creek formation.
- Surviving (i.e. unreplaced) clastic grained are mainly quartz, minor feldspars (including plagioclase), chert and felsite. New minerals too have formed, by recrystallisation (contact-metamorphism) and metasomatism, include abundant dark, fine biotite flakes, small magnetite crystals, and patches of finely-fibrous ?diopside. Thin quartz-chlorite-tourmaline veinlets cut the rock, and there are traces of pyrite.
- 62.1a** (T.S. 26319) This is a fine-grained biotite-hornfels, or strongly biotitised fine-grained metasediment; its dark colour is partly due to abundant carbonaceous (?graphitic) material, partly due to the dark biotite.
- The rock was very probably a carbonaceous, argillaceous siltstone; most of the constituents have been recrystallized to fine, red-brown biotite, and only the coarser clastic grains of quartz, feldspar, chert and felsite have survived. Very small, fibrous ?diopside patches have developed, providing evidence of metasomatism as well as contact-metamorphism. Quartz-pyrite veinlets cut the rock.
- 83.9a** (T.S. 26320) Weakly magnetic. A completely metasomatised rock, now composed principally of actinolite and phlogopite; the nature of the original rock is not known, but it was presumably a fine-grained, argillaceous sediment.
- There are wedges and lenses of dense, matted fine phlogopite containing apatite porphyroblasts and dendritic leucoxene patches; bands of phlogopite-tourmaline occur. The bulk of the rock consists of matted fibrous-acicular actinolite bundles; some of the coarser crystals have a colourless, tremolite core. Sulphides are interspersed and consist of pyrrhotite and chalcopyrite.
- 131.9a** (T.S. 26321) This is a fine-grained calc-silicate hornfels; some of the components are too fine-grained to be readily identifiable. No primary sedimentary characteristics are now recognisable, but the rock was presumably a fine-grained calcareous sediment, probably impure and argillaceous.
- The major calc-silicates are fibrous actinolite and microgranular diopside, with abundant fine sphene throughout, and occasional patches of relatively coarse axinite. Fine magnetite is present in parts of the rock. Fine-grained quartz occurs interstitially. The mineral assemblage indicates a medium-to-high temperature contact-metasomatic situation.
- 152.9a** (T.S. 26322) This calc-silicate rock is almost monomineralic and may be termed a diopside-hornfels; as in the previous intersection, it presumably represents a semi-calcareous sediment.
- The rock consists of microcrystalline diopside, with haphazardly distributed and randomly orientated clusters of coarser diopside crystals, and occasional granular sphene patches. Faint banding is apparent and is probably inherited; the banding is accentuated by parallel streaks of whitish leucoxene/sphene.
- 183.9a** (T.S. 26323) Essentially a chert, cut by veins of tourmaline, (this is a good example of the lack of reactivity of siliceous sediments; very little recrystallization or replacement has taken place, and the introduced minerals are virtually confined to veins.
- The rock consists of featureless, microcrystalline quartz, with occasional small patches of cloudy sphene; tourmaline veins cut the rock. They are composed almost entirely of tourmaline with minor interstitial chlorite and occasional, coarse calcite; the tourmaline is conspicuously zoned, with wide colour variations from pale brown, green, dark smoky greenish-brown to black. Traces of sphene are associated with these veins, and no cassiterite was identified, though there are occasional semi-opaque inclusions in tourmaline which could be cassiterite. It is more likely that the mineral is a complex oxide.
- 213.5a** (T.S. 26324) A thoroughly metasomatised, banded sediment, which from its present assemblage is deduced to have been a shale or siltstone; however, apart from the banding (probably inherited bedding) there are no recognisable primary features.
- The rock is composed of bands of fine, textureless sericite, alternating with bands of intergrown phlogopite, actinolite and magnetite in various proportions; there are random patches of quartz, fibrous diopside, and chlorite, and the whole assemblage has a confused fabric.
- 234.7a** (T.S. 26325) A biotitised, fine-grained metasediment, originally an impure, carbonaceous chert and broadly resembling the intersection at 62.1a, though more siliceous.
- The rock consists of microcrystalline quartz, thin parallel streaks of fine carbonaceous matter (possibly sub-graphitic) and small lenses of poorly developed feldspar. Small, orange-brown biotite flakes are haphazardly distributed as small patches, discontinuous veinlets and larger replacement masses in places. The fabric suggests that the rock was brecciated prior to biotitisation.

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143157

RENISON LIMITED  
DIAMOND HOLE PLOT279.7m

(T.S. 26326)

This is an impure, carbonaceous metachert, with evidence of minor metasomatism.

The main constituents are microcrystalline quartz, ultrafine chlorite, sericite and carbonaceous matter. Small spots of cloudy leucoxene occur throughout. Lenses and veinlets of biotite aggregates, and small intergrowths of quartz and tourmaline, have formed sporadically. Thin wisps of carbonaceous matter accentuate the preferred orientation of the rock.

Veins of quartz and stilbite, carrying traces of pyrite, cut the rock, and there are other veins composed of chlorite and carbonate.

301.3m

(T.S. 26327) Weakly magnetic.

This carbonaceous, impure metachert closely resembles the intersection at 234.7m; it contains sufficient fresh pyrrhotite to respond to a hand-magnet.

The major constituents are microcrystalline quartz and subparallel streaks and clusters of fine carbonaceous matter. Reddish-brown biotite aggregates are haphazardly distributed as bands and patches, often cutting across the orientation. There are lenses of completely recrystallized, mosaic quartz intergrown with biotite, pyrrhotite, pyrite and ?chalcopyrite, as well as sericite (?altered feldspar) and chlorite.

The mineral assemblage suggests relatively low-temperature metasomatism following low-grade metamorphism.

315.0m

(T.S. 26328)

This is a biotite-hornfels or biotitised metasediment, possibly of mixed clastic/chemical origin and with ?tuffaceous components. It resembles the core at 17.7m.

Angular, clastic grains of quartz, feldspar, chert and felsite are fairly common; most have a thin rim of chalcedony. They are set in a cloudy, microcrystalline, poorly-defined matrix of quartz, sericite, carbonaceous matter, biotite and leucoxene. There are rafts or tabular bodies of such finer-grained rock, providing evidence of intraformational brecciation.

The rock is cut by chlorite-carbonate veins carrying minor sphene; there is a possibility that cassiterite is also present but is too poorly-defined to be optically identified.

349.6m

(T.S. 26329)

There is a laminated, impure metachert, pervasively metasomatized and with traces of sulphides.

The laminations are caused by thin streaks of pale brownish leucoxene-rutile, representing TiO<sub>2</sub>, precipitated with the chert and subsequently recrystallized to ultrafine rutile. The rock consists of microcrystalline featureless quartz, typical of recrystallized chert, and numerous small flakes of sericite which have developed partly by replacement, partly by recrystallization of existing clays. There are poorly-defined patches of fine ?andalusite or a related mineral, occurring as spots throughout the rock.

Small irregular grains of pyrrhotite, and cubic crystals of pyrite, are disseminated with the sericite, generally where sericite is coarsest and most abundant.

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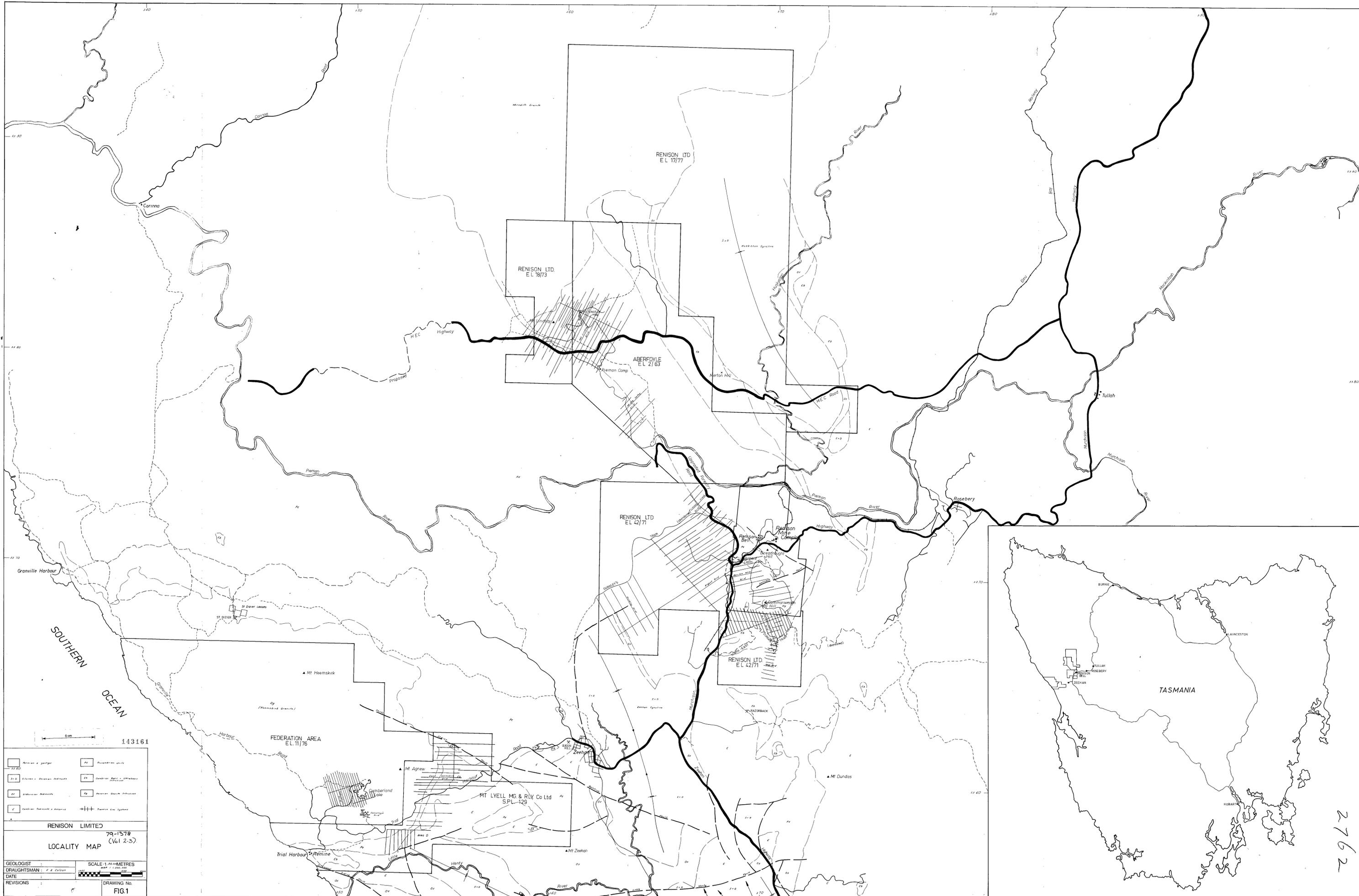
Assays carried out by Mt. Lyell in 1975 on two Tasmanian Mines Department drill holes in the Tenth Legion area. (in p.p.m.) Tungsten assays carried out 12/2/79 by Renison.

		Sn	W <sub>2</sub> O <sub>3</sub>	As	Cu	Pb	Zn	Ba	Mo
T.L. 1	8'	160		30	< 10	10	185	80	< 10
	20'	60		20	95	60	65	200	< 10
	30'	40		15	70	15	35	200	< 10
	40'	40		45	145	15	120	200	< 10
	50'	20		30	135	20	75	240	< 10
	60'	40		45	25	< 10	45	120	< 10
	70'	70		20	85	120	60	200	< 10
	80'	50	< 100	65	< 10	10	120	120	< 10
	90'	740	< 100	65	10	65	270	80	< 10
	100'	500	< 100	30	10	35	720	160	20
	110'	20	< 100	15	10	< 10	410	240	40
	120'	20		130	80	25	170	80	< 10
	130'	330		65	40	25	115	200	< 10
	140'	50		20	< 10	460	750	760	< 10
	150'	20		20	35	70	115	680	< 10
	160'	50		10	15	10	75	80	< 10
	170'	20		50	10	30	170	80	< 10
	180'	20		10	< 10	15	30	80	< 10
	190'	20		15	< 10	160	255	120	< 10
	200'	240	< 100	125	50	30	265	120	< 10
	210'	700	100	165	15	370	900	120	< 10
	220'	800	100	65	75	125	125	120	< 10
	230'	1 100	100	55	15	400	170	80	< 10
	240'	780	100	55	30	< 10	700	80	< 10
	250'	340	< 100	70	30	< 10	285	120	< 10
	260'	210	100	65	35	25	240	560	< 10
	270'	50	< 100	45	< 10	20	590	1240	< 10
	280'	50		15	< 10	10	65	280	< 10
	290'	80		20	10	< 10	370	1020	< 10

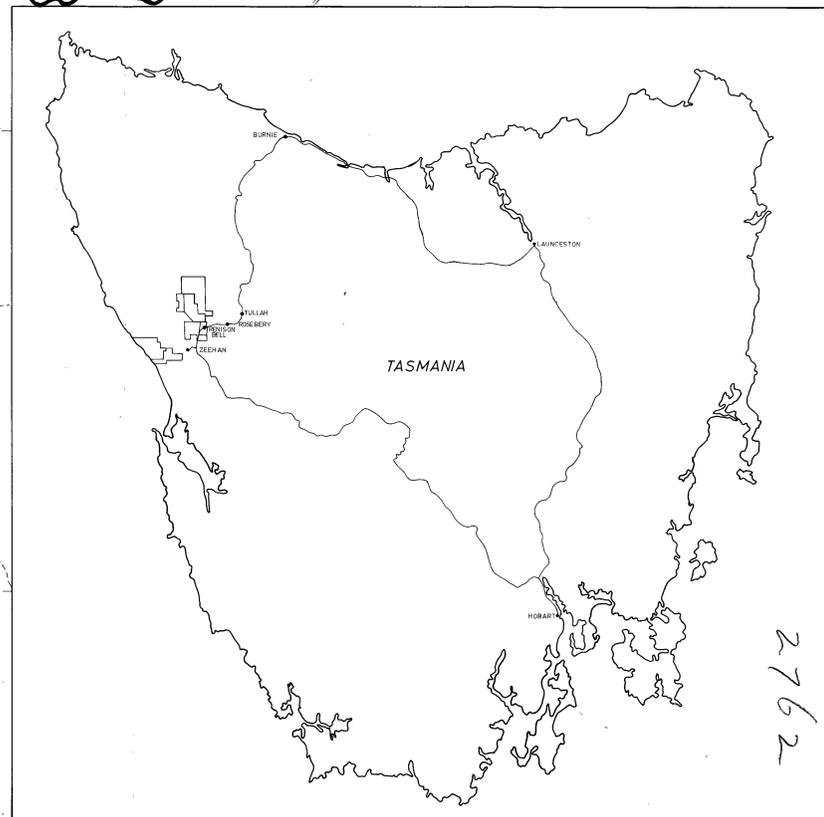
T.L. 2

	Sn	WO <sub>3</sub>	As	Cu	Pb	Zn	Ba	Mo
10'	20		20	*2000	65	75	520	620
20'	20		280	*103	< 10	455	1860	< 10
30'	40		10	*1180	25	85	360	80
40'	40		10	10	20	90	640	< 10
50'	60		20	165	10	70	180	< 10
60'	40		20	10	75	160	1140	< 10
70'	80		30	< 10	10	45	1160	< 10
80'	60	< 100	10	10	10	480	180	< 10
90'	60	< 100	250	20	80	55	880	< 10
100'	20	100	280	35	20	200	120	< 10
110'	20		200	30	10	345	260	< 10
120'	40		70	15	190	520	180	< 10
130'	20		80	20	< 10	130	150	< 10
140'	60		540	20	40	170	360	< 10
150'	20		170	< 10	30	50	240	< 10
160'	80	< 100	20	15	< 10	135	160	< 10
170'	60	< 100	70	70	< 10	80	160	< 10
180'	20		170	15	40	35	640	< 10
190'	60		90	65	< 10	55	1300	< 10
200'	100	1	060	45	< 10	85	120	< 10
210'	20	< 100	120	10	< 10	280	200	< 10
220'	250	100	40	35	10	760	180	< 10
230'	20	< 100	70	300	545	990	2600	10
240'	20	< 100	120	15	10	75	180	< 10
250'	3 030	100	70	60	< 10	250	200	< 10
260'	20	< 100	120	< 10	< 10	330	260	< 10
270'	20		130	< 10	< 10	550	260	< 10
280'	20	< 100	140	15	< 10	420	240	< 10
290'	50	< 100	70	85	< 10	250	180	> 10
300'	90	< 100	20	45	65	260	950	< 10

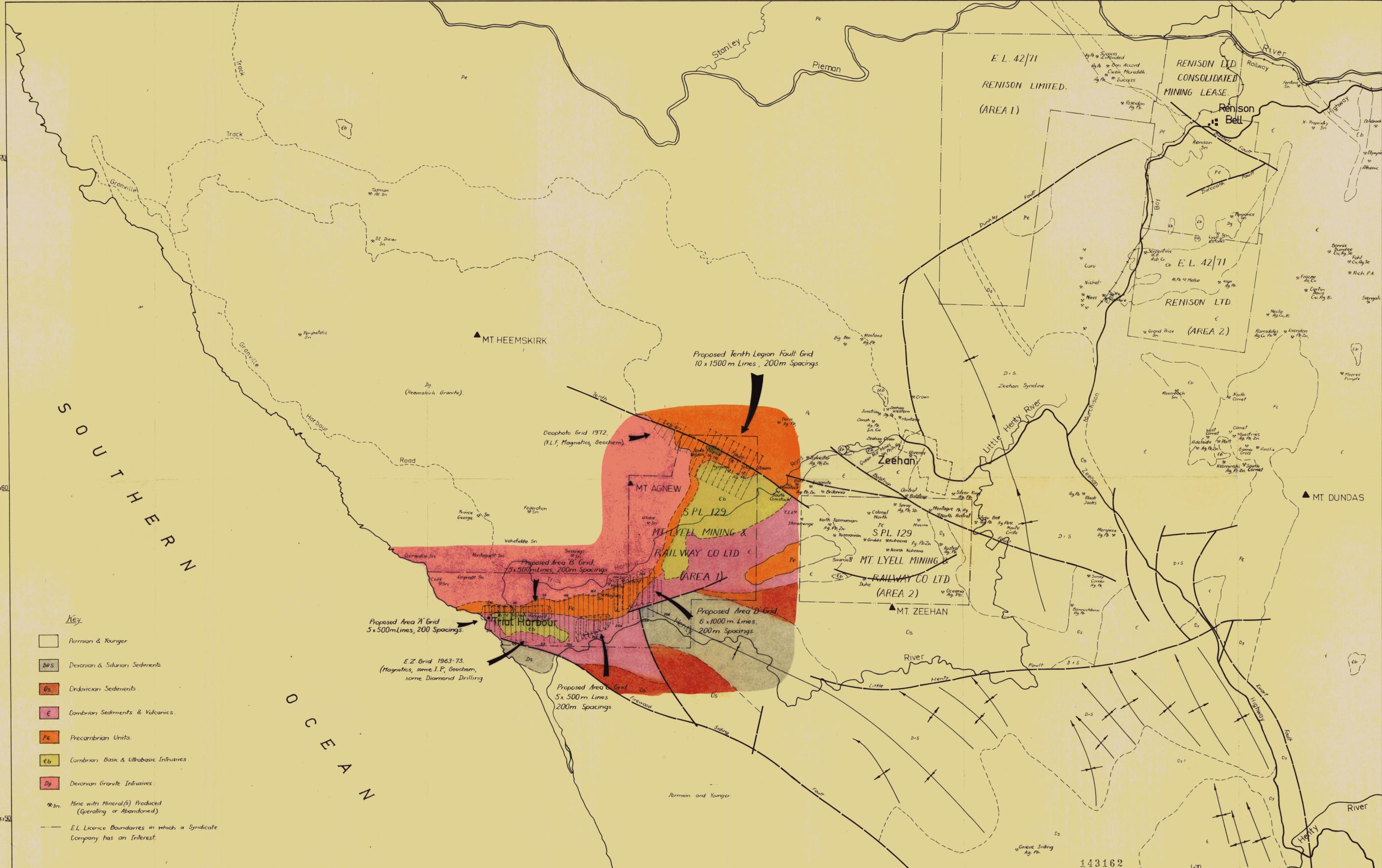
\* High copper values. Contamination from Mount Lyell sample mill?



<ul style="list-style-type: none"> <li> Alluvium &amp; gravel</li> <li> Sandstone</li> <li> Shale &amp; siltstone</li> <li> Sandstone &amp; siltstone</li> <li> Sandstone &amp; siltstone</li> <li> Sandstone &amp; siltstone</li> </ul>	<ul style="list-style-type: none"> <li> Sandstone &amp; siltstone</li> </ul>
<b>RENON LIMITED</b> 79-1578 (Vol 2-3) <b>LOCALITY MAP</b>	
GEOLOGIST : _____ SCALE 1:25,000 METRES DRAUGHTSMAN : _____ DATE : _____ REVISIONS : _____ DRAWING No. <b>FIG 1</b>	



2762



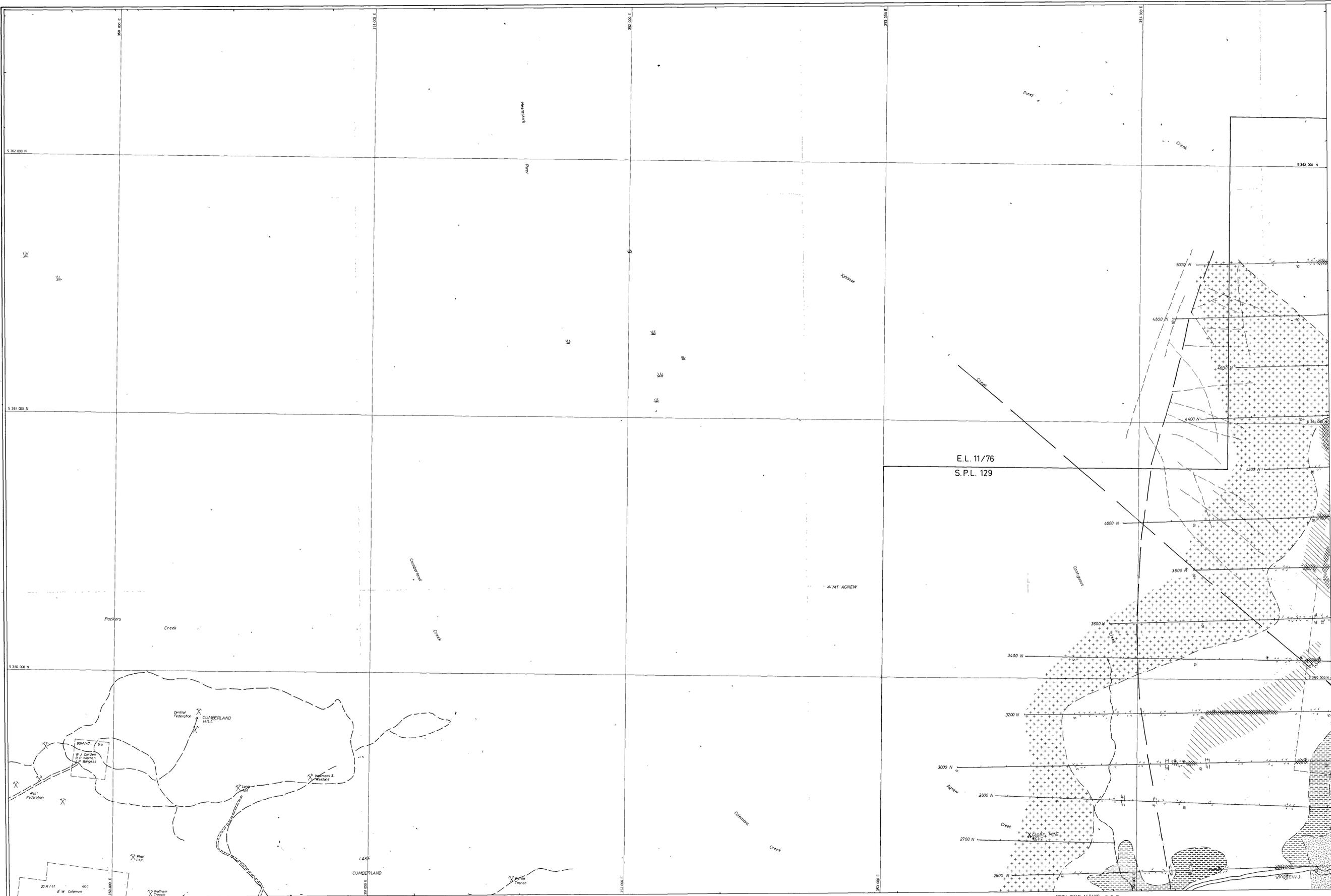
- Key**
- Permian & Younger
  - D+S Devonian & Silurian Sediments
  - Os Ordovician Sediments
  - E Cambrian Sediments & Volcanics
  - Pc Precambrian Units
  - Eb Cambrian Basic & Ultrabasic Intrusives
  - Dg Devonian Granite Intrusives
  - \*S.M. Mine with Mineral(s) Produced (Operating or Abandoned)
  - E.L. Licence Boundaries in which a Syndicate Company has an Interest.



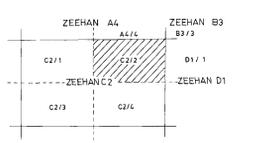
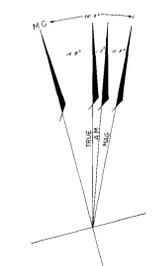
SANDY CAPE	ARTHUR RIVER	HELLYER
CONICAL ROCKS	PIEMAN	SOPHIA
CAPE SORELL	FRANKLIN	

RENONSON LIMITED		DRAWN	RJP
S.P.L. 129.		TRACED	
TRIAL HARBOUR AREA.		DATE	
MAP 1.		SCALE	1:50000
004		DRAWING No.	
SCALE. 1:50000 METRES			

79-1378



- LEGEND**
- Alluvium and swamp
  - Tertiary - iron rich siltstone sandstone. Ferritic development?
  - Devonian - Granite intrusives. Predominantly coarse to medium grained. Heenan's Granite. Fine grained younger phase in Globe Mine area.
  - Cambrian - Gabbro intrusives. Gabbro and associated basic rocks. May include basic sills of Crutson Creek formation.
  - Cambrian - Fine Cambrian Sediments. Crutson Creek volcaniclastics and Gabbro quartzite. Locally hornfelsed, metamorphosed. A. altered. Sediments hornfelsed, pyrometamorphosed. (Tourmaline, actinolite). May include Gabbro-siliceous rocks derived from basic intrusions.
  - Ironstone outcrop. Some includes magnetite, limonite, ferruginous wax, gossan.
  - Rock chip sample location
  - Magnetic trend
  - Fault lineament, fracture
  - Probable fault
  - Approximate contact
  - Joint pattern (in granite)



2763 142163

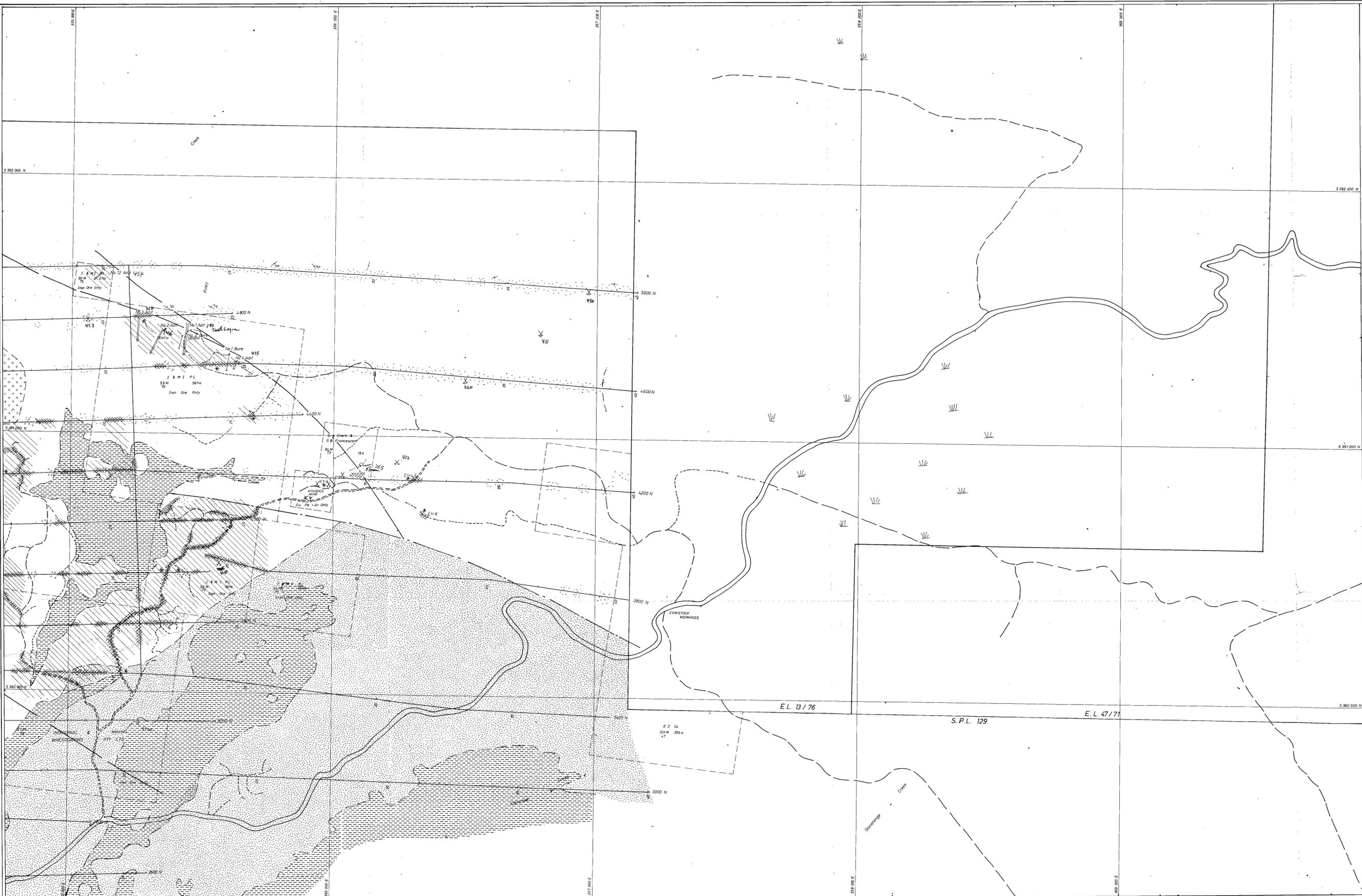
RENISON LIMITED 79-128  
ZEEHAN C2/2 (Vol 2/3)

INTERPRETATIVE GEOLOGY

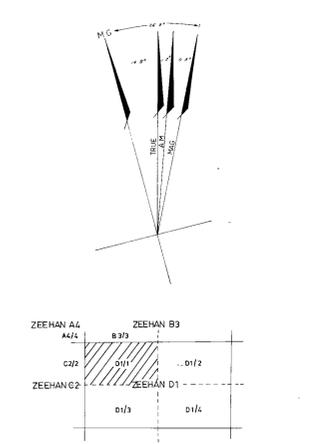
GEOLOGIST A. ROSS SCALE 1:5000 METRES  
DRAUGHTSMAN J. MATTHEWS  
DATE JULY '79  
REVISIONS  
DRAWING No. FIG. 3(a)

ROCK CHIP ASSAYS P.D.B.

Location	Sn Tot.	Sn Sol.	As	Cu	Pb	Zn	Comments	Location	Sn Tot.	Sn Sol.	As	Cu	Pb	Zn	Comments
3400N 1300E	25	30	80	30	10	10	Ironstone	61	520	<100	240	1800	300	650	G1-7 Mineralised.
1440E	320	140	230	30	110		Ironstone	2	190	<100	4.5	130	425	4500	Samples from old dump.
1512E	700	35	40	30	110		Altered diorite with magnetite.	3	290	<100	50	220	410	100	Globe Mine
3200N 1050E	60	70	315	15	210		Magnetite rich ironstone.	4	260	<100	25	15	500	35	"
3000N 900E	320	110	25	170	20	260	Diopside-actinolite skarn.	5	540	<100	45	15	290	50	"
930E	2300	500	550	290	20	230	Ferruginised metasediment.	6	210	<100	220	3000	130	1000	"
550E	500	200	150					7	20	<100	4.5	155	45	55	"
1415E	20	50	250	30	520		Magnetite gossan (pyrometamorphic)	8	30	300	55	30	200		Ironstones near gabbro contact.
2600N 1140E	180	<10	<5	10	<10	10	Tourmalinised silty sandstone.	3	35		170	10	20	80	"



- LEGEND**
- Alluvium and swamp
  - Tertiary - iron rich soils, ironstone scree, lateritic development?
  - Devonian - Granite intrusives. Predominantly coarse to medium grained with Reservoir Granite. Fine grained younger phase in Globe Mine area.
  - Cambrian - Gabbro intrusive Gabbro and associated basic rocks. May include basic tuffs of Crinson Creek Formation.
  - Cambrian - Pre-Cambrian Sediments Crinson Creek volcanoclastics and Devon quartzite. Locally hornfelsed, metasandstone or altered (serpentine, talc, pyroxenite, hornfelsed, schistose). May include calc-silicate rocks derived from basic intrusions.
  - Ironstone outcrop, some includes magnetite, limonite, ferruginous wad, goossan.
  - Rock chip sample location
  - Magnetic trend
  - Photo lineament, fracture
  - Probable fault
  - Approximate contact
  - Joint pattern (in granite)

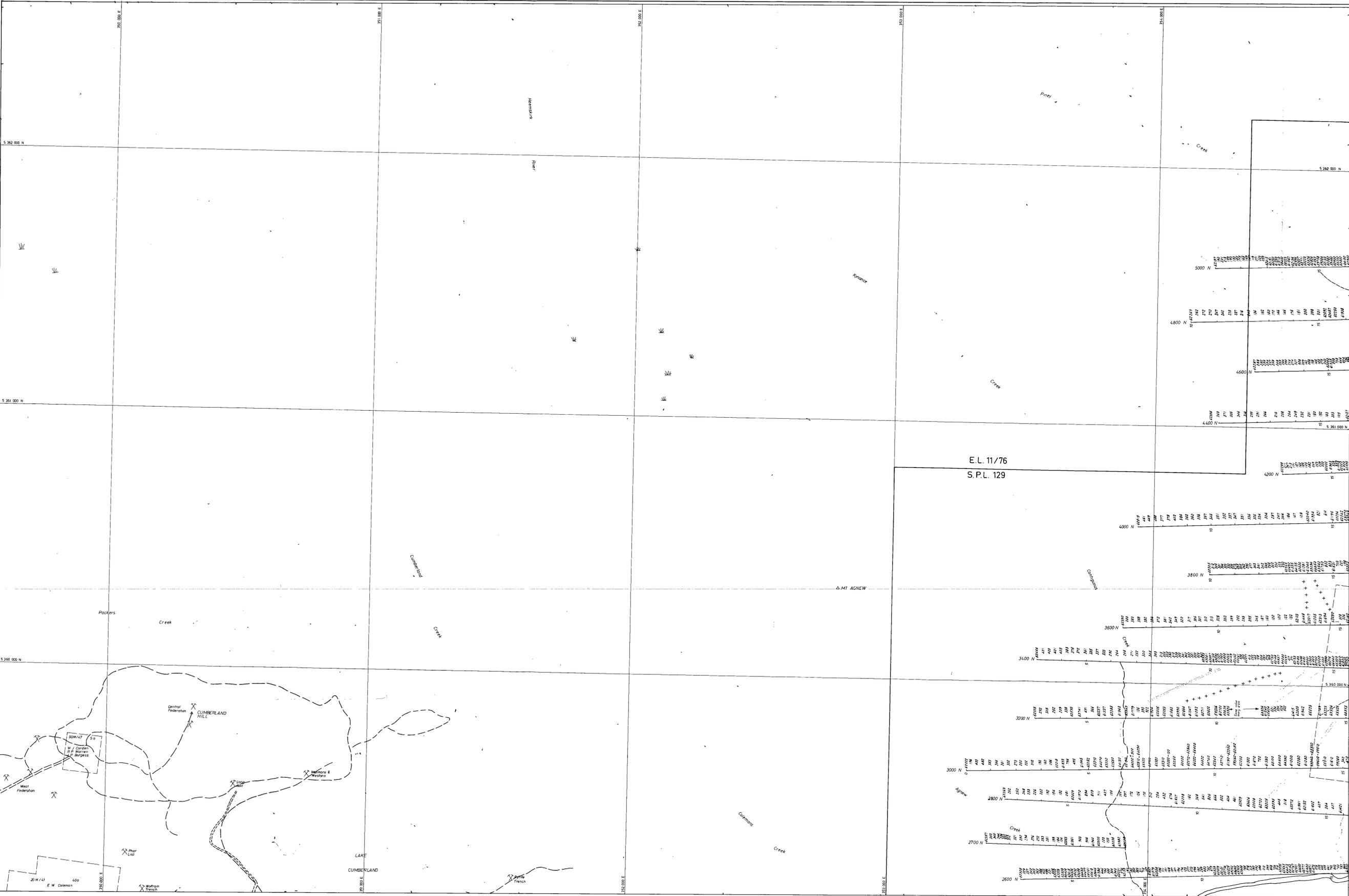


2764

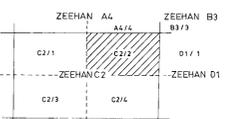
142164  
REINSON LIMITED  
ZEEHAN D1/L  
(V.1/3)78  
(V.1/2/3)

Location	Sn Tot.	Sn Sol.	ROCK CHIP ASSAYS P.P.E.				Comments
			As	Cu	Pb	Zn	
4600N 10th Leg.	100		150	70	130	210	Magnetite, limonite rock.
4400N 2600E	80		200	80	35	215	Ferruginous float?
4200N 1575E	5700		60	350	30	400	Ferruginous calc-silicate
	9600			360			N.B. high soluble tin content
3800N 2200E	40		57	2800	150	660	Ironstone
2270E	15	30	5	10	120	300	Calc-silicate hornfels.
3400N 2040E	17		135	200	90	410	Ironstone near calc-silicate.
BR4	70		110	185	800	150	Ferruginous wad.
	30		200	175	700	1700	Ferruginous wad.
	6		220	95	800	1100	"
K1	2200		50	16200	121000	90000	Kynance workings - mixt
5	1700		100	5300	142000	100000	Mineralization - galena, sphalerite
3	1700		50	3600	2000	6000	Goossan.

GEOLOGIST: A ROSS  
 DRAUGHTSMAN: J MATTHEWS  
 DATE: JULY 79  
 REVISIONS:   
 SCALE: 1:5000 METRES  
 DRAWING No: FIG 3(b)



E.L. 11/76  
S.P.L. 129

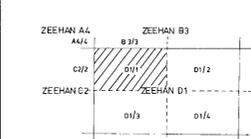
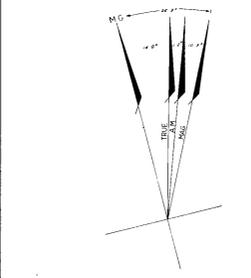
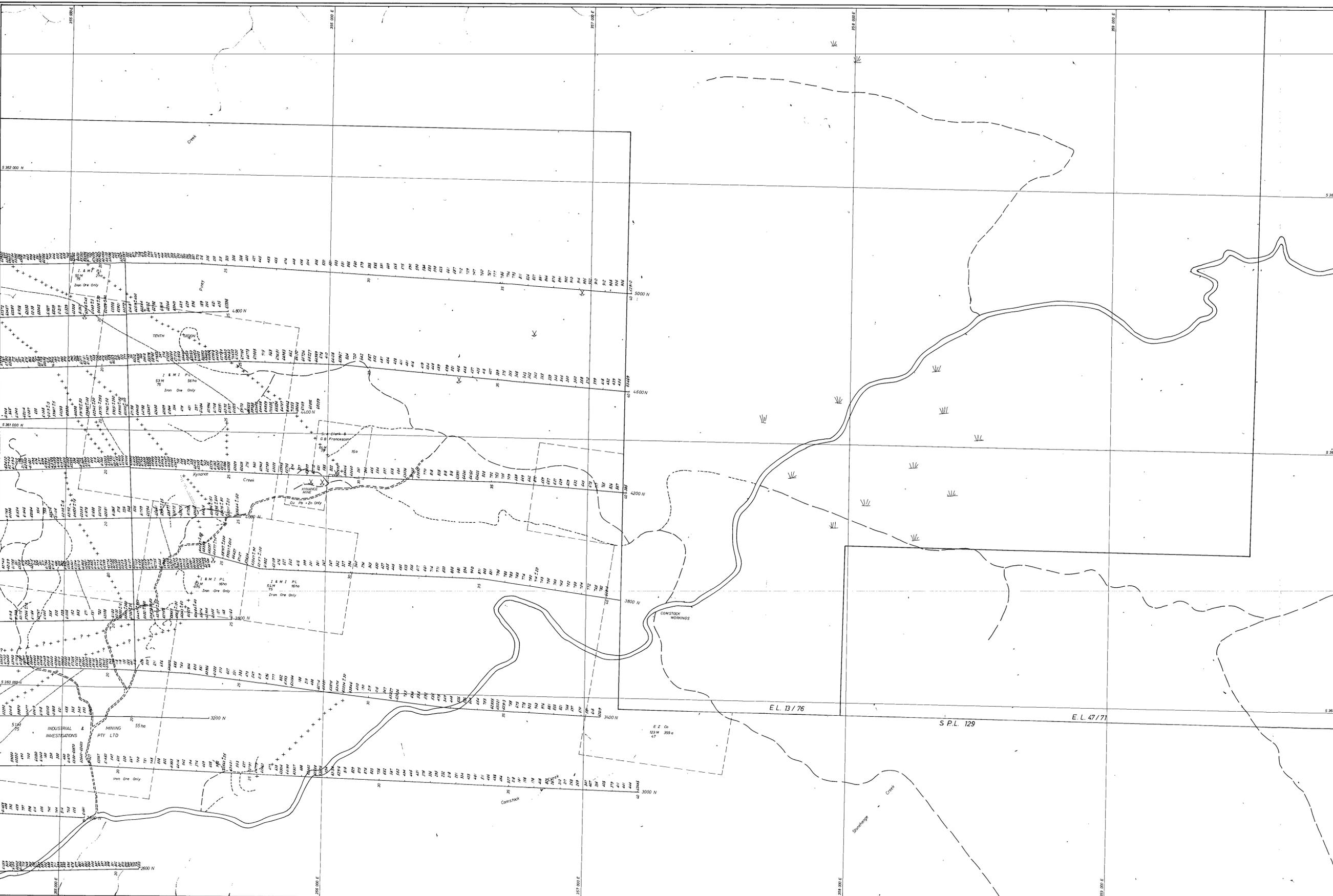


2765

RENISON LIMITED  
ZEEHAN C2/2  
GROUND MAGNETICS

TOTAL FIELD (Gauss)

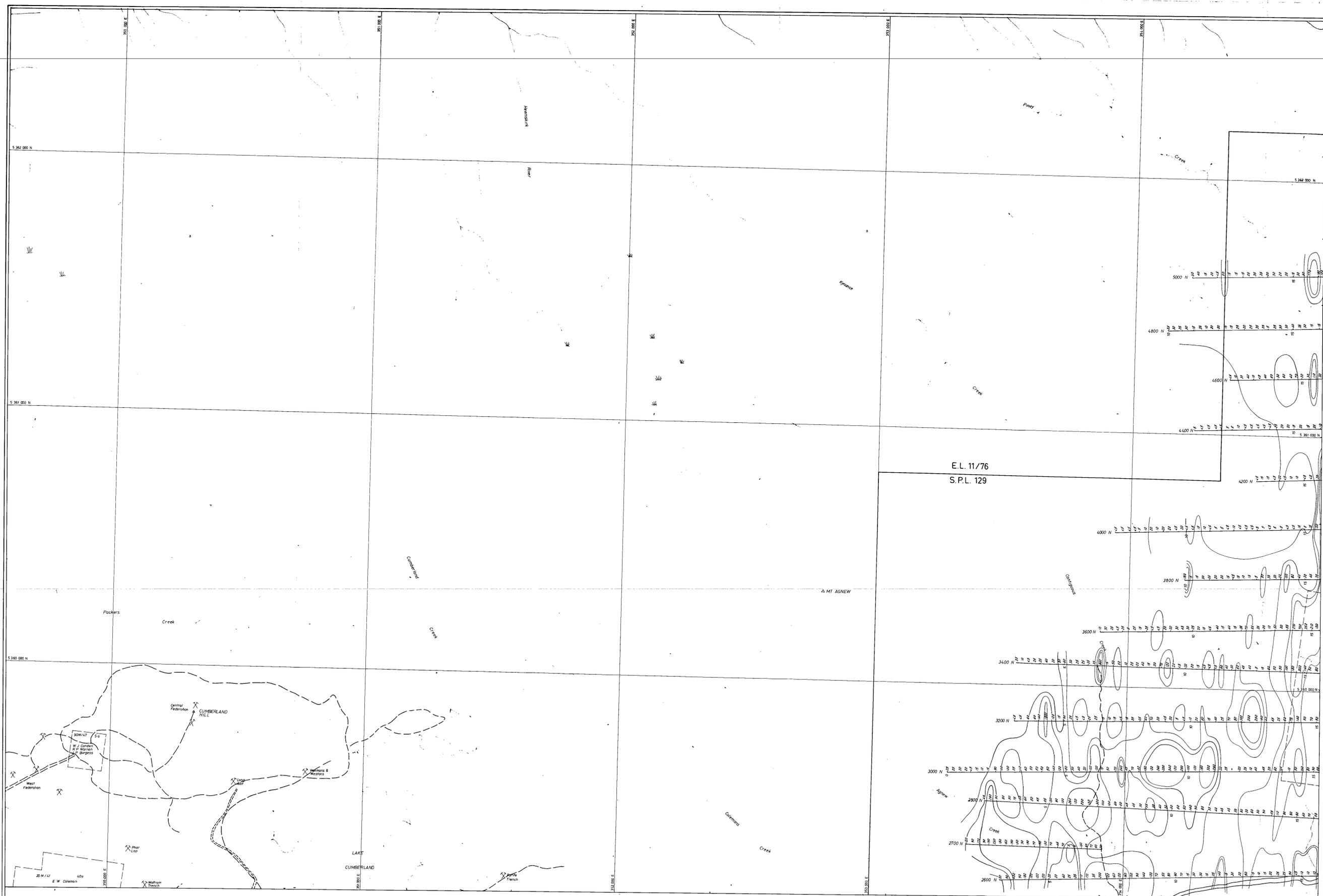
GEOLOGIST	SCALE 1:5000 METRES
DRAUGHTSMAN	DATE
DATE	REVISIONS
DRAWING No. FIG 4(a)	



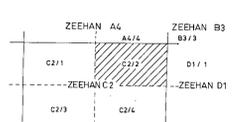
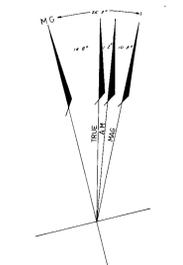
2766  
143166

RENISON LIMITED 79-1379 (Vol 2/3)	
ZEEHAN D1/1 GROUND MAGNETICS TOTAL FIELD (gamma)	
GEOLOGIST	SCALE 1:5000 METRES
DRAUGHTSMAN T.O.D.	DATE
DATE	JUNE 1979
REVISIONS	DRAWING No F16.4(b)

Key  
 +++++ POSITIVE AXIS  
 ----- NEGATIVE AXIS  
 ..... TREND



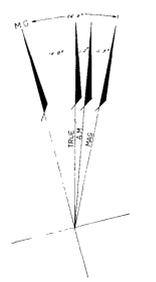
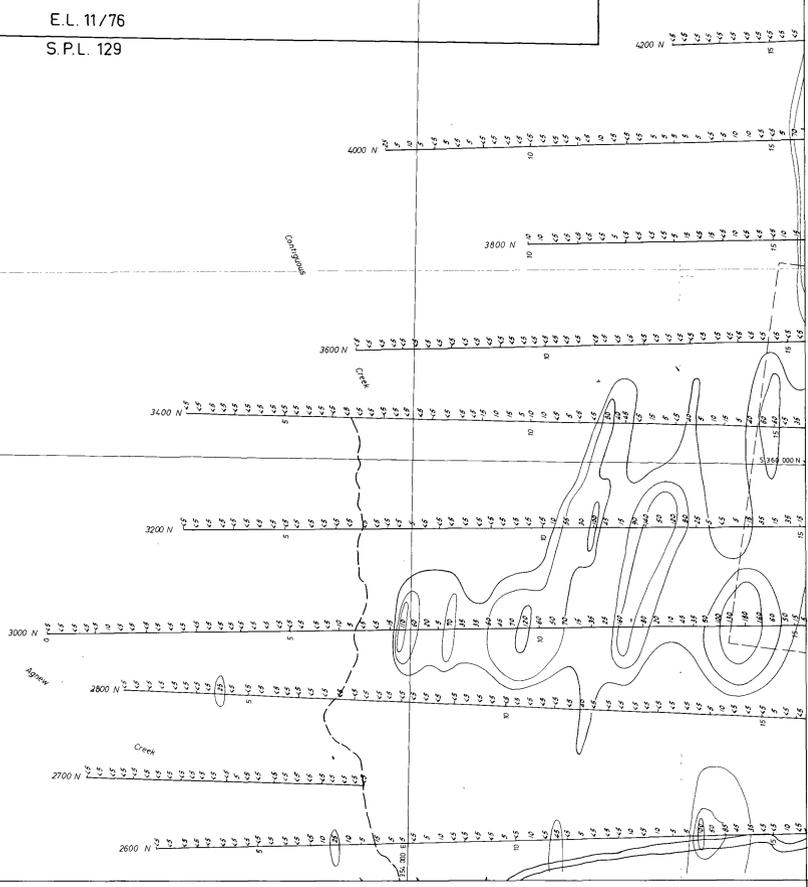
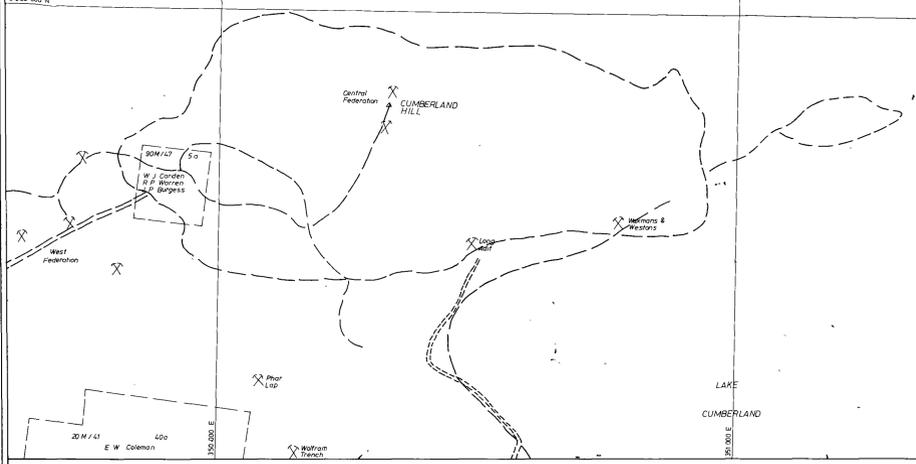
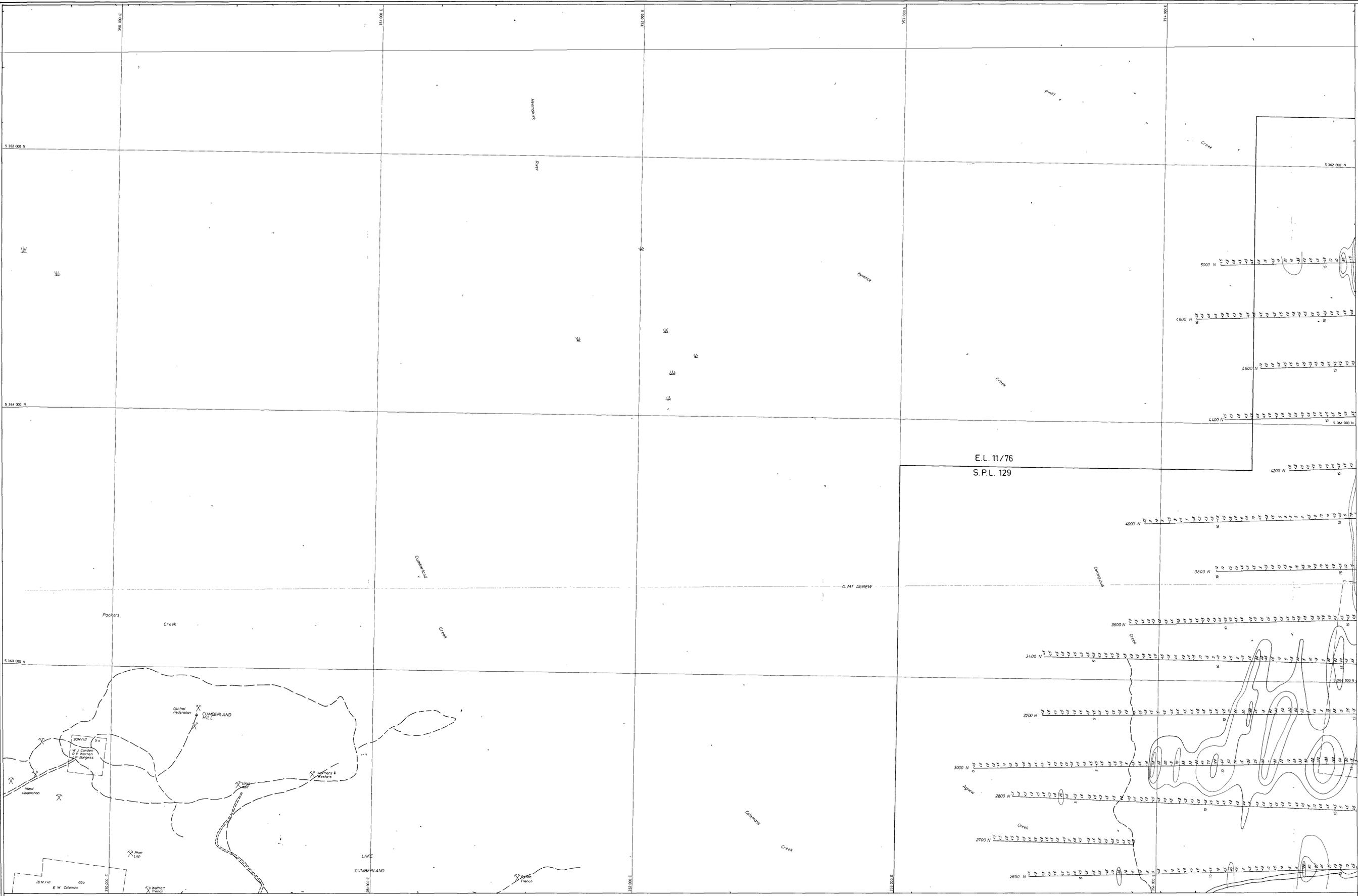
E.L. 11/76  
S.P.L. 129



143167  
2767

- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED		79-1378 (Vol 2/3)
<b>ZEEHAN C2/2</b>		
SOIL GEOCHEMISTRY - 180 $\mu$ m		
TIN (TOTAL Sn) ppm		
GEOLOGIST	DRAUGHTSMAN	SCALE 1:5000 METRES
DATE	REVISIONS	DRAWING No
JUNE 1979	5cm	FIG 5(a)



2768 142108

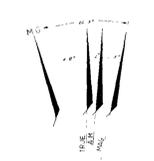
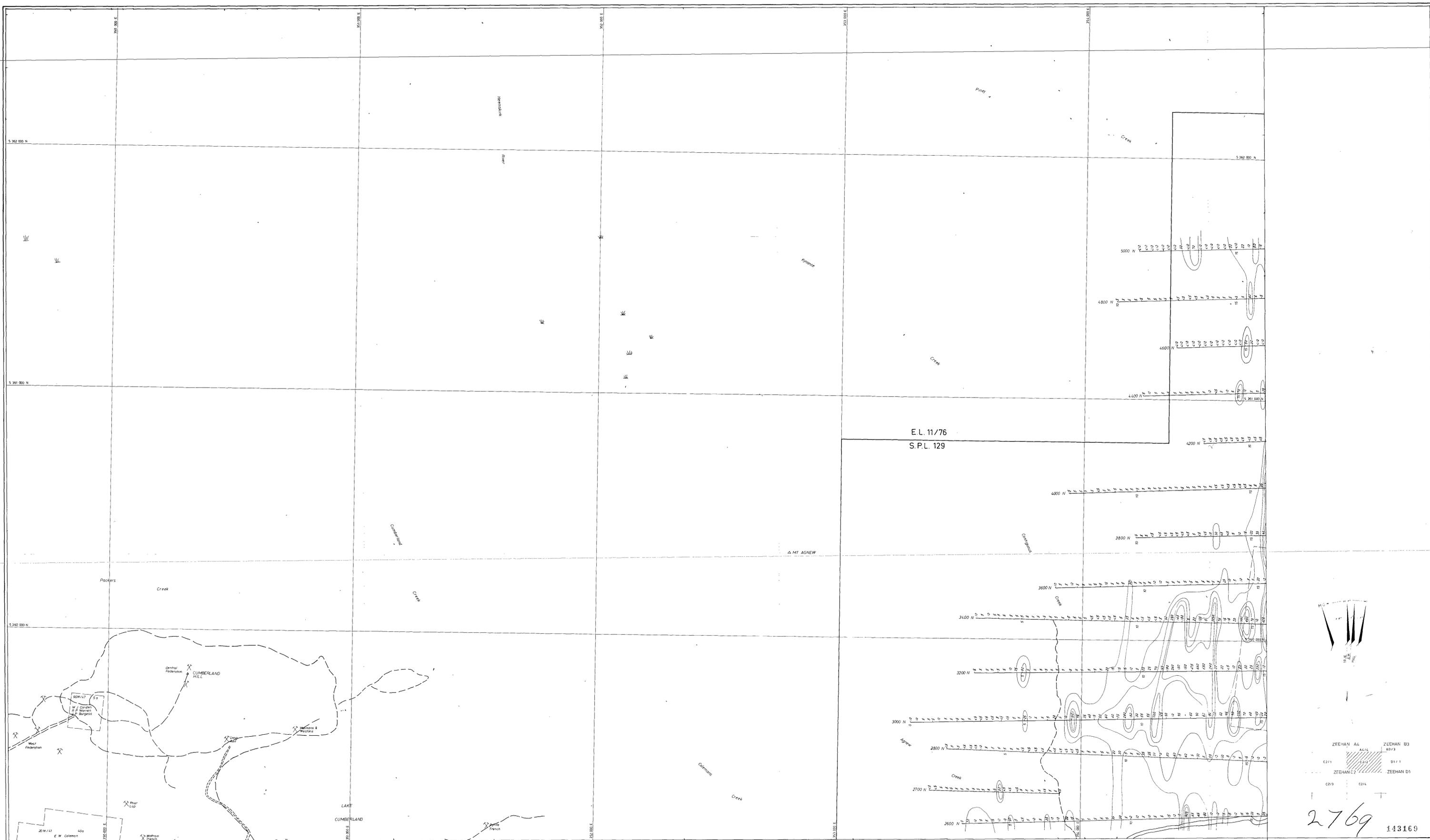
- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED 79-1578  
 ZEEHAN C2/2  
 SOIL GEOCHEMISTRY - 80 µm  
 ARSENIC (As) ppm

GEOLOGIST *W.R.* SCALE 1:5000 METRES  
 DRAUGHTSMAN T.S.S.  
 DATE JUNE 1978

REVISIONS

DRAWING No  
 FIG 5(b)



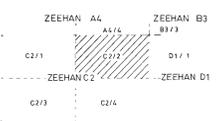
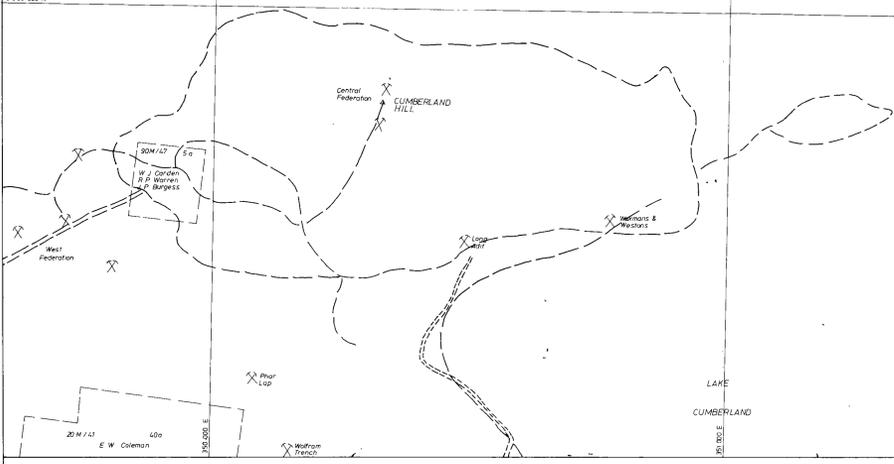
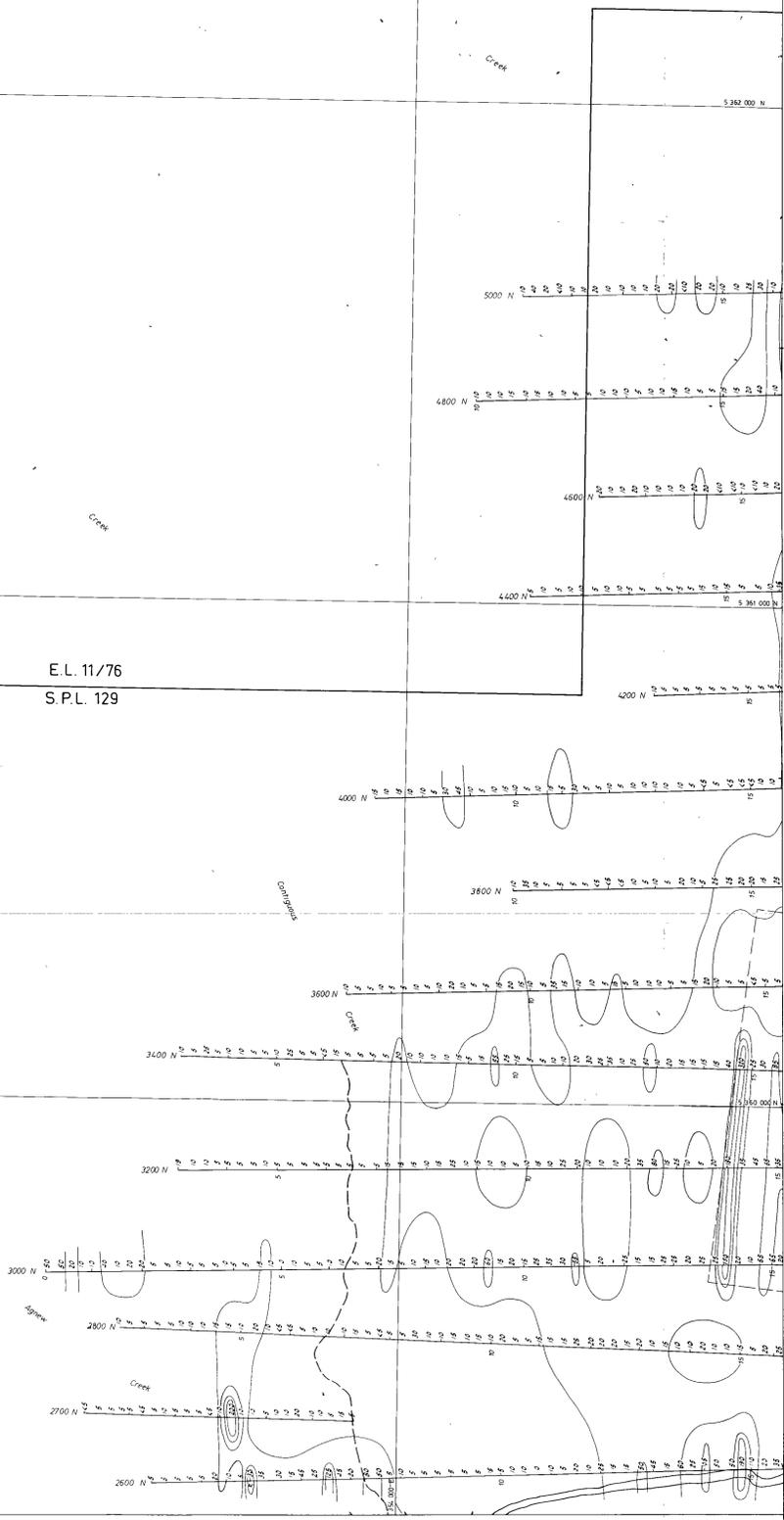
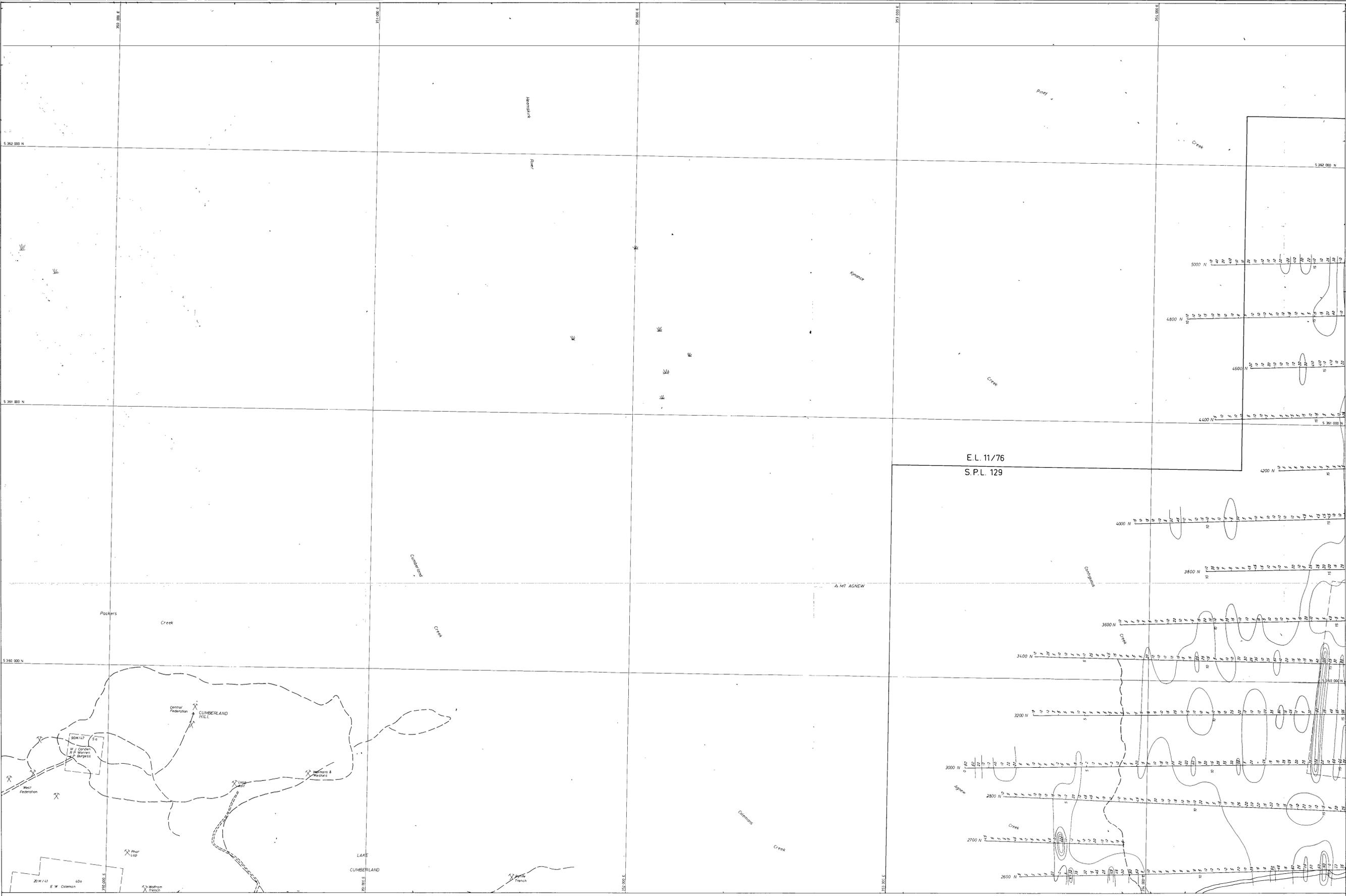
2769 143169

- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED 79-1318  
ZEEHAN C2/2 (Vol 2/3)  
SOIL GEOCHEMISTRY -180 μm  
COPPER (Cu) ppm.

GEOLOGIST: ZEK  
DRAUGHTSMAN: T.G.S.  
DATE: JUNE 1979  
REVISIONS: 1

SCALE 1:5000 METRES  
DRAWING No: FIG. 5(c)



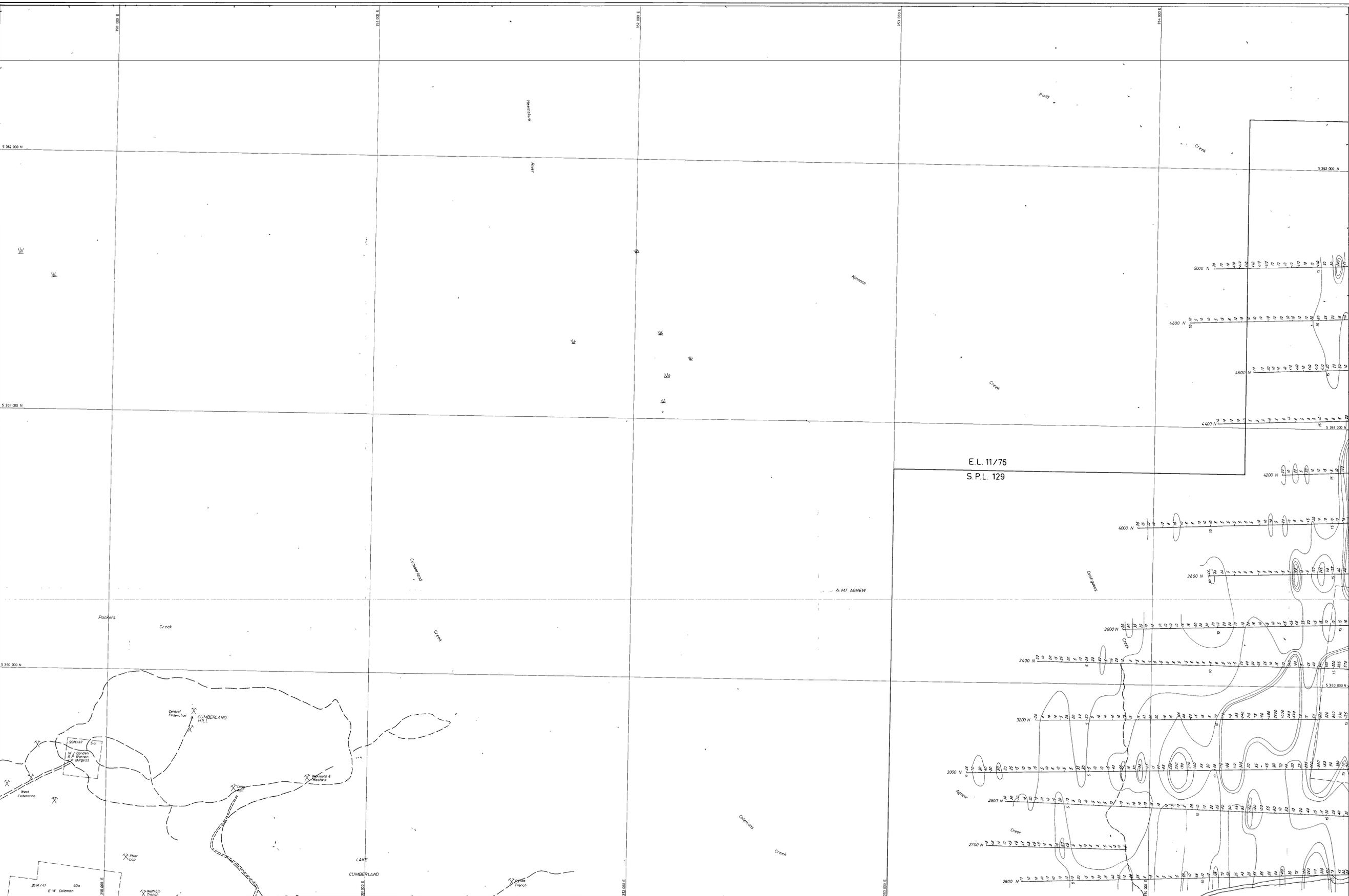
2770  
143170

RENISON LIMITED 79-1378  
(Vol 2/3)

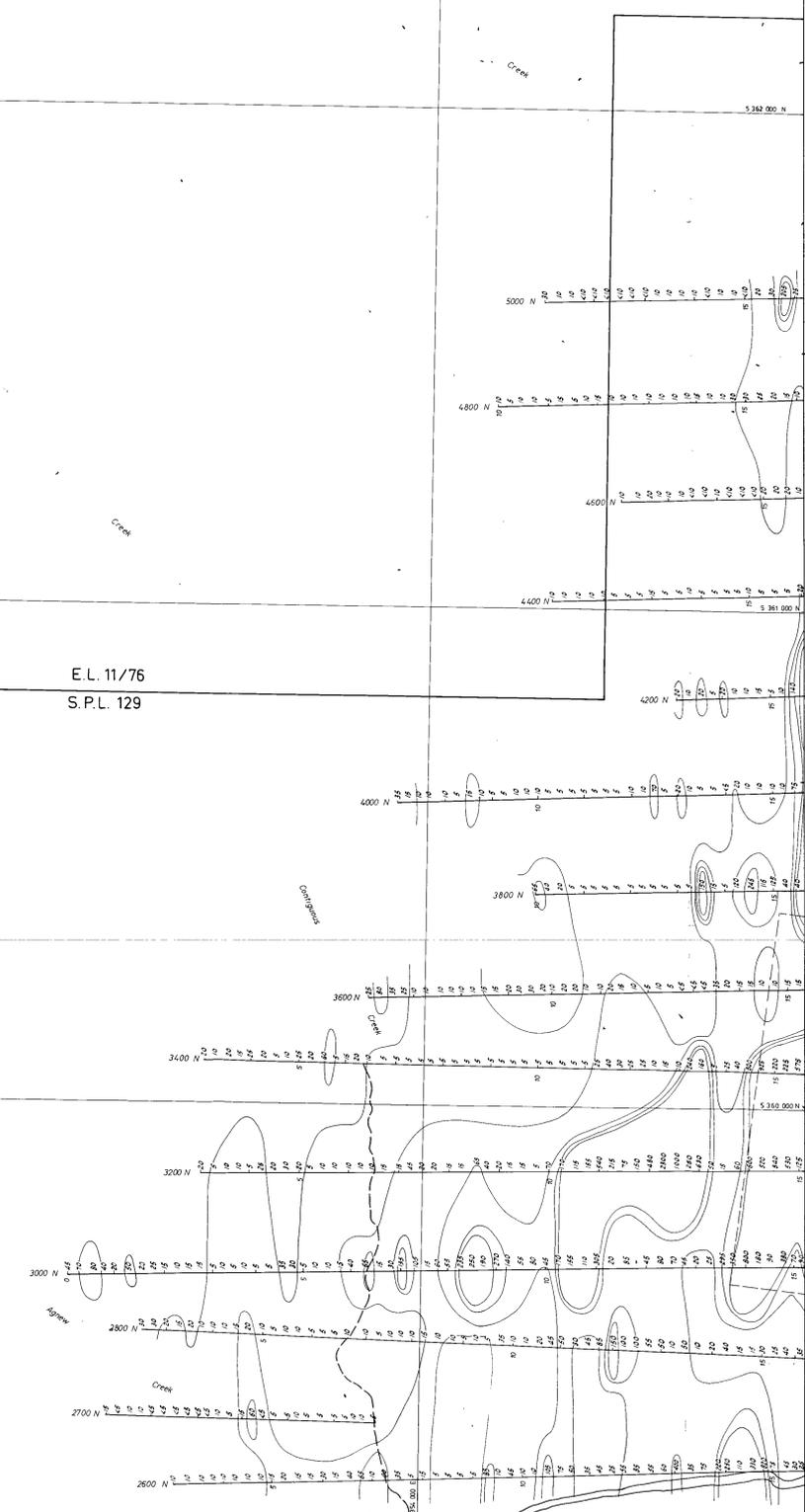
ZEEHAN C2/2  
SOIL GEOCHEMISTRY -180 μm  
LEAD (Pb) ppm

- Key
- > 100 ppm
  - 100 - 100 ppm
  - 50 - 100 ppm

GEOLOGIST: *AKR*  
 DRAUGHTSMAN: *AKR*  
 DATE: JUN 1979  
 REVISIONS:   
 SCALE: 1:5000 METRES  
 DRAWING No:   
 FIG. 5(d)

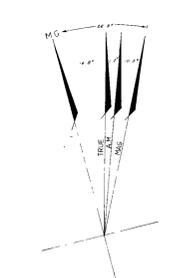


E.L. 11/76  
S.P.L. 129



Key

□	>150 ppm
□	100 - 150 ppm
□	50 - 100 ppm

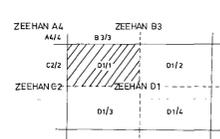
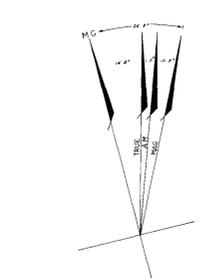


2771  
143171

RENISON LIMITED 79-1378  
(V6, 2/3)

**ZEEHAN C2/2**  
SOIL GEOCHEMISTRY - 180 µm  
ZINC (Zn) ppm

GEOLOGIST	ELK	SCALE	1:5000 METRES
DRAUGHTSMAN	T.G.S		
DATE	JUNE 1979	DRAWING No	FIG-5 (e)
REVISIONS			



2772  
148172

- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED 79-1378  
(Vol 2/3)

**ZEEHAN D1/1**  
SOIL GEOCHEMISTRY -180 μm  
TIN (total Sn) p.p.m.

GEOLOGIST R.P.K.  
DRAUGHTSMAN F.G.D.S.  
DATE JUNE 1979

SCALE 1:5000 METRES

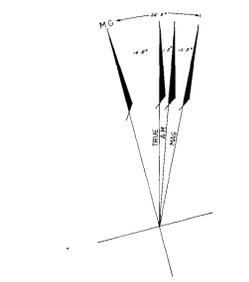
REVISIONS

DRAWING No. FIG. 6(G)



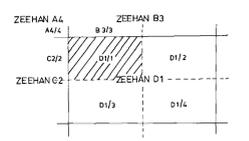
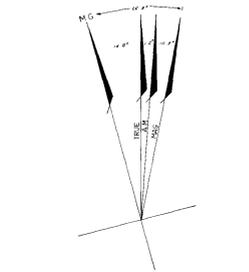
Key

- >150 ppm
- 100 - 150 ppm
- 50 - 100 ppm



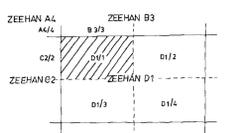
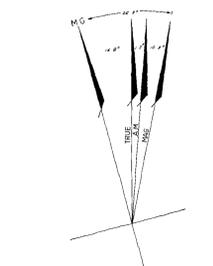
2773  
143173

RENISON LIMITED		79-1578 (Vol 2/3)
<b>ZEEHAN D1/1</b>		
SOIL GEOCHEMISTRY -180 µm		
ARSENIC (As) ppm		
GEOLOGIST	REK	SCALE 1:5000 METRES
DRAUGHTSMAN	T.C.P.	100 0 200
DATE	JUNE 1973	5cm
REVISIONS		DRAWING No. FIG 6(b)



Key  
 [Stippled Box] >150 ppm  
 [White Box] 100 - 150 ppm  
 [Dotted Box] 50 - 100 ppm

143174  
**2774**  
 RENISON LIMITED  
 ZEEHAN D1/1  
 SOIL GEOCHEMISTRY -180 μm  
 COPPER (Cu) ppm.  
 GEOLOGIST: *ASL*  
 DRAUGHTSMAN: *R.G.S.*  
 DATE: JUNE 1979  
 REVISIONS:  
 SCALE 1:5000 METRES  
 DRAWING No. FIG. 6(c)



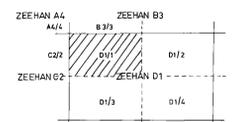
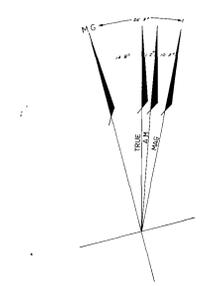
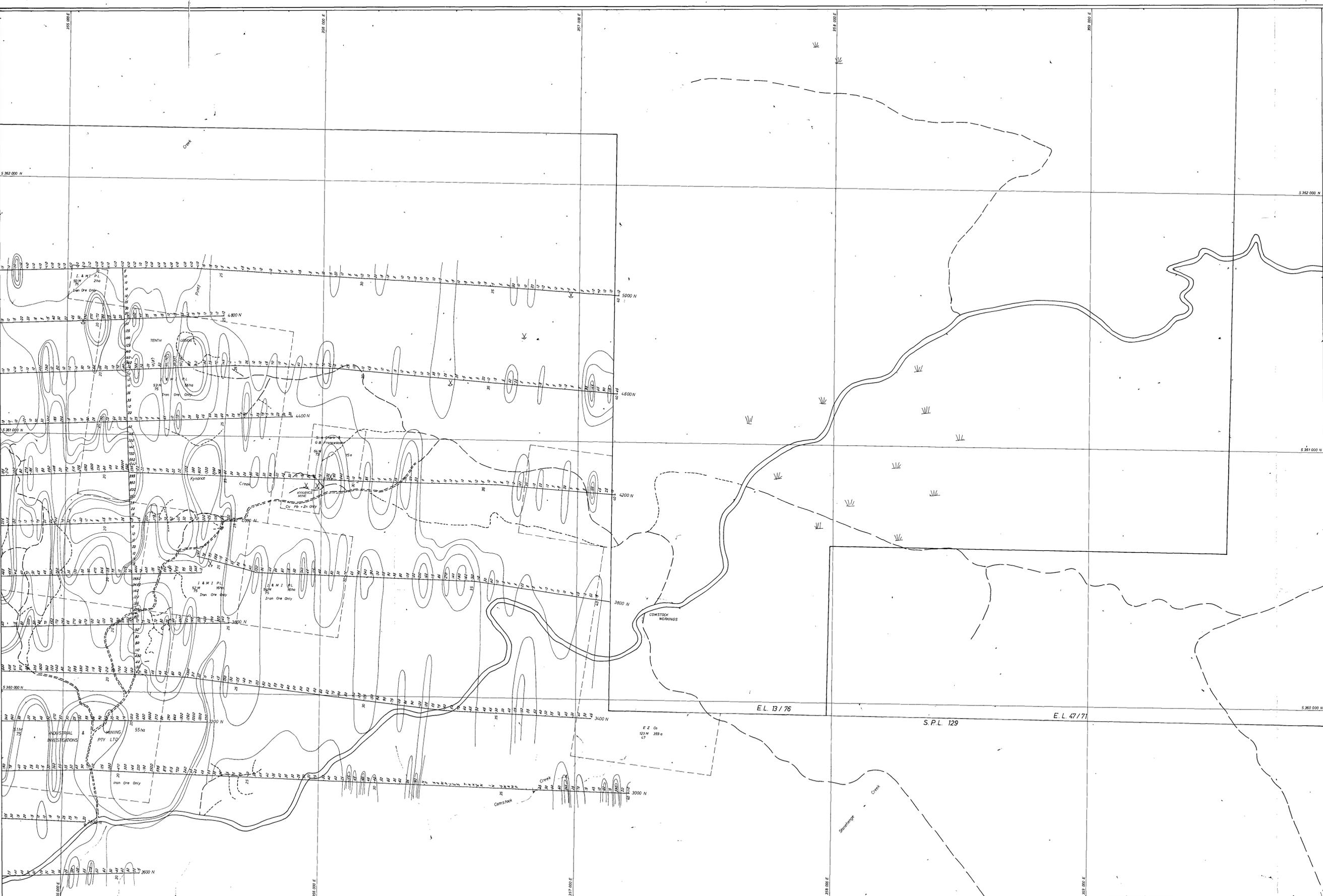
2775  
143175

- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED 79-1528  
ZEEHAN D1/1 (6/1 2/3)  
SOIL GEOCHEMISTRY -180 µm  
LEAD (Pb) p.p.m.

GEOLOGIST DRAUGHTSMAN DATE	SCALE 1:5000 METRES
REVISIONS	DRAWING No
	FIG 6(d)

5 cm



143176  
2776

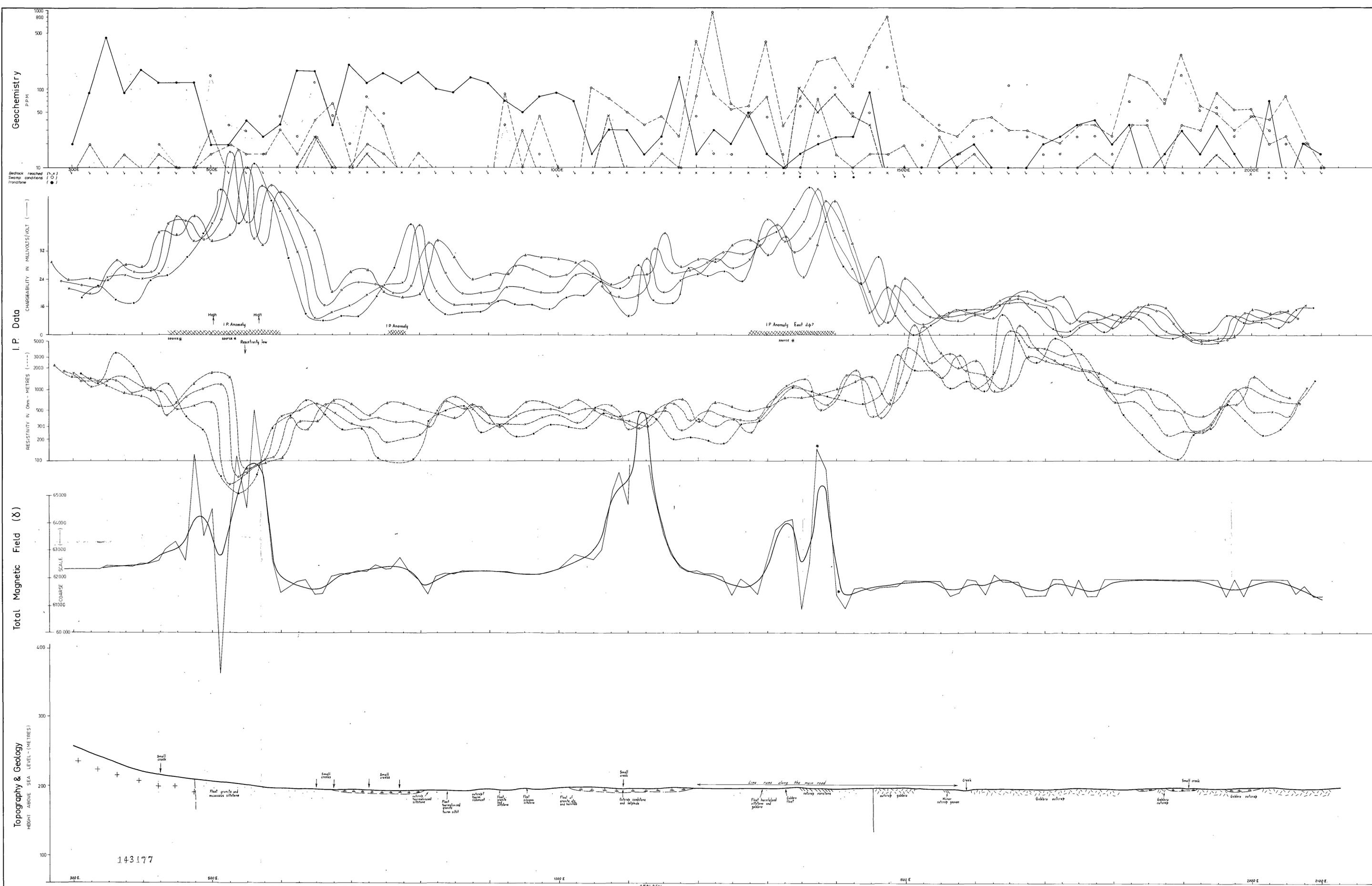
- Key
- > 150 ppm
  - 100 - 150 ppm
  - 50 - 100 ppm

RENISON LIMITED 79-1378  
(Vol 28)

**ZEEHAN D1/1**  
SOIL GEOCHEMISTRY - 180  $\mu$ m  
ZINC (Zn) ppm

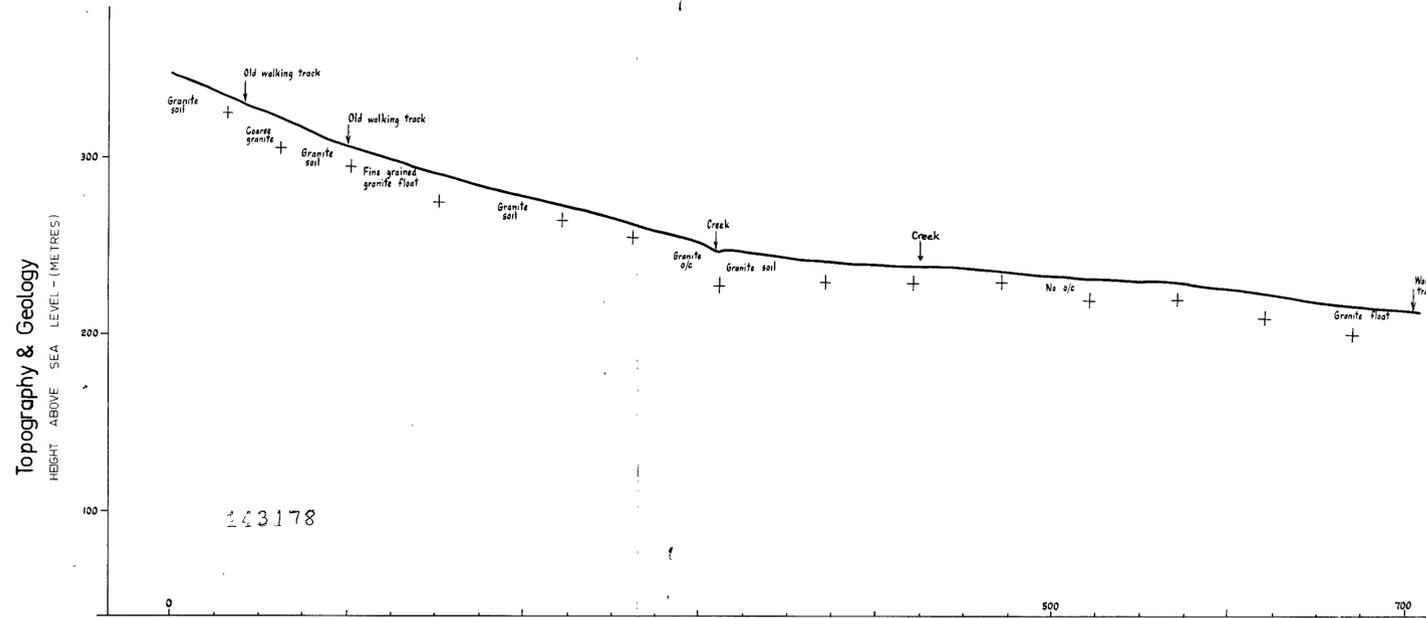
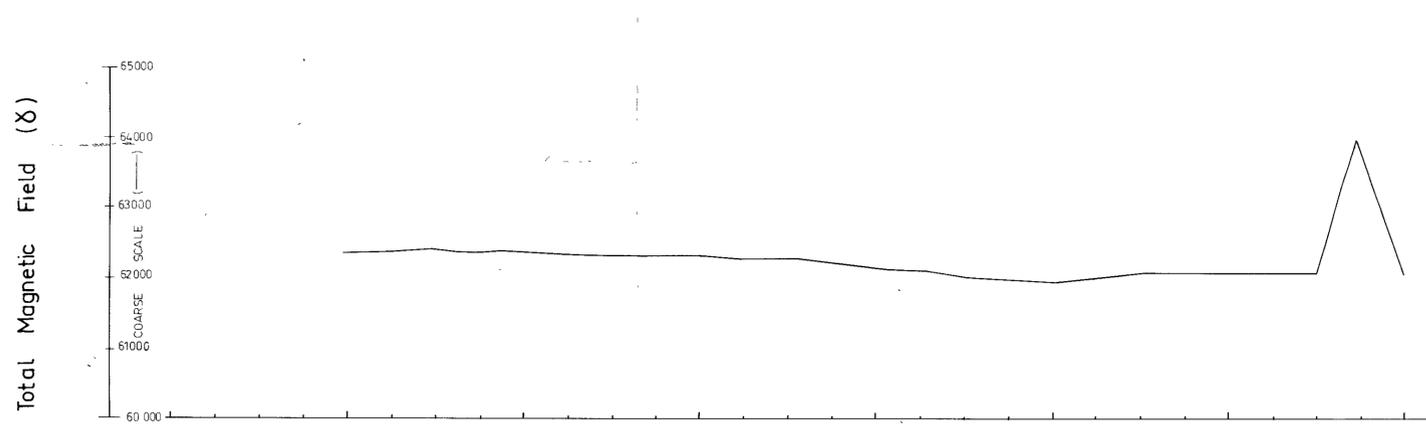
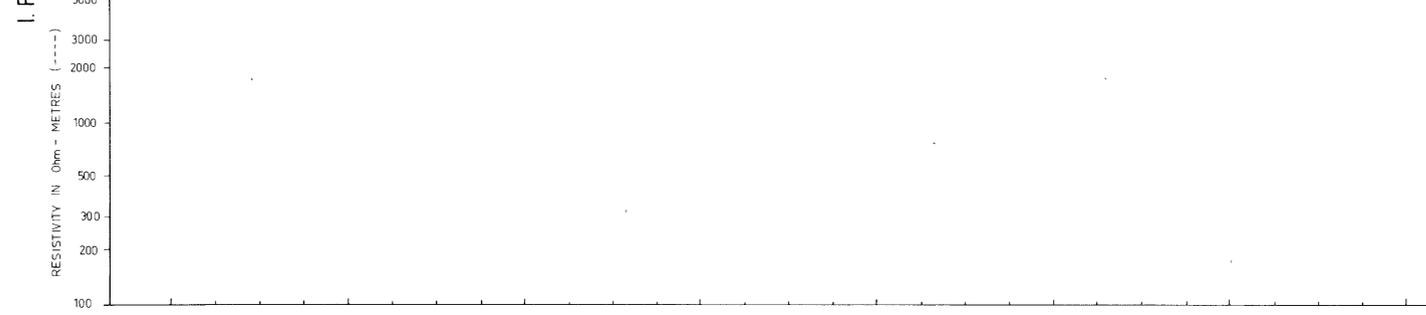
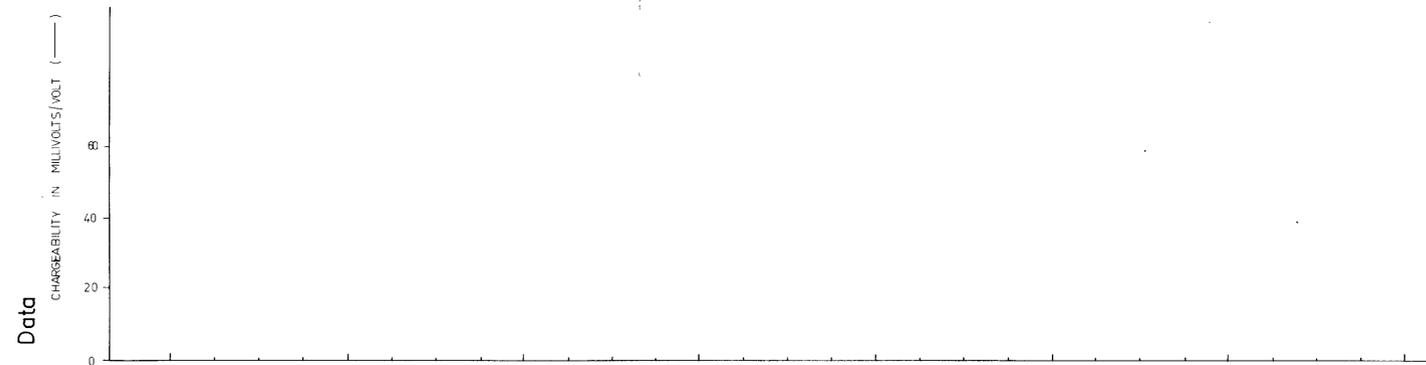
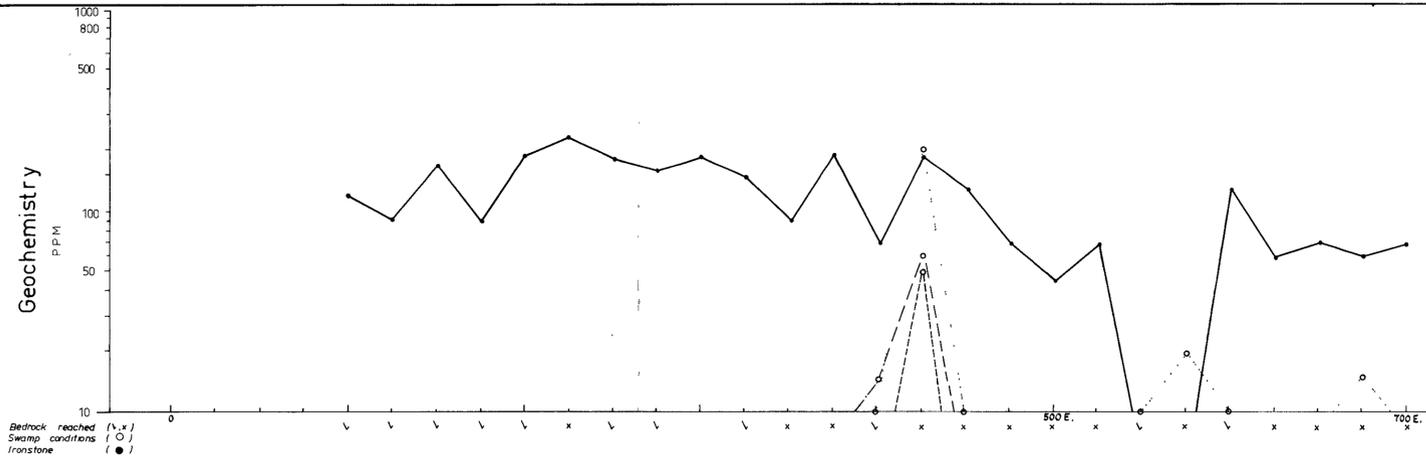
GEOLOGIST *R.P.R.* SCALE 1:5000 METRES  
DRAUGHTSMAN T.G.S. 0 100 200  
DATE JUNE 1979

REVISIONS DRAWING No. FIG. 6(e)



<b>RENISON LIMITED 79-1378</b> <b>EAST HEEMSKIRK GRID S.P.L.129</b> LINE 2600 N. 300 E. - 2100 E.		DRAWN <i>Z. Bos</i> TRACED T.S.D.S. DATE JULY 1979 SCALE 1:2000 DRAWING No. TH 373 FIG. 7(a)	<b>I.P. DATA</b> CHARGEABILITY & RESISTIVITY POLE - DIPOLE n=1 n=2 n=3 n=4 x x x x o o o o x x x x o o o o	<b>MAGNETICS</b> 5000 Scale Smoothed curve Erratic magnetometer reading	<b>GEOCHEMISTRY</b> Sn Cu Pb Zn As	<b>GEOLOGY</b> Swamp Heemskirk granite Precambrian? - Cambrian sediments. Magnetite, goethite, limonite "gossan" Hornfelsed siltstones, calc-silicates Predominantly quartzites, shales, siltstones Cambrian gabbro and related basic rocks.
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79-1378  
2777 (Vol 3/3)



RENISON LIMITED 79-1378  
 EAST HEEMSKIRK GRID S.P.L. 129  
 LINE 2700 N.  
 100 E. - 700 E.  
 SCALE: 1:2000 METRES  
 DRAWN: *L.B.W.*  
 TRACED: T.G.D.S.  
 DATE: JULY '79  
 SCALE: 1:2000  
 DRAWING No. TH 374  
 FIG. 7(b)

I.P. DATA  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 ● n=1 ● n=1  
 x n=2 x n=2  
 ○ n=3 ○ n=3 Erratic magnetometer reading  
 △ n=4 △ n=4

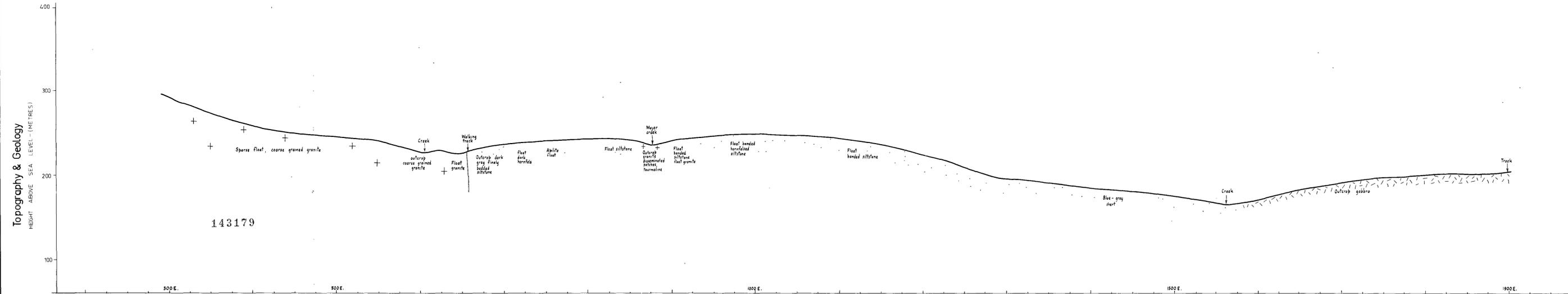
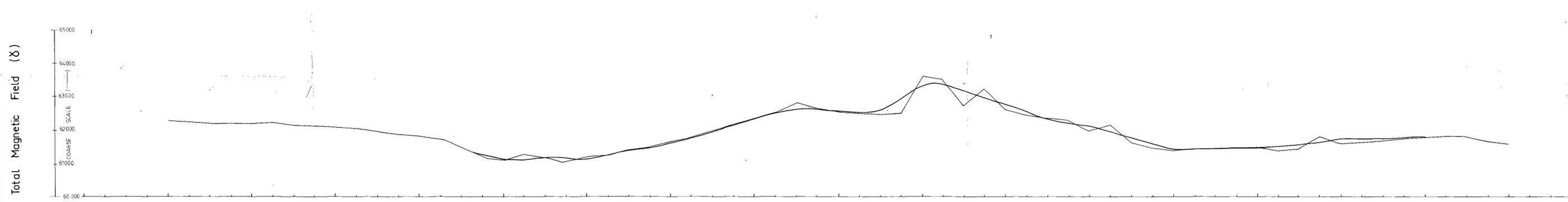
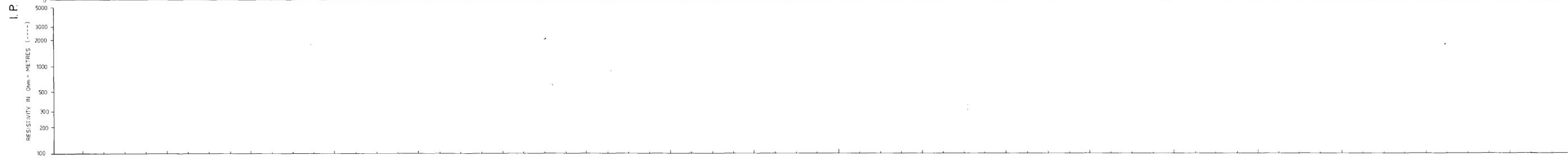
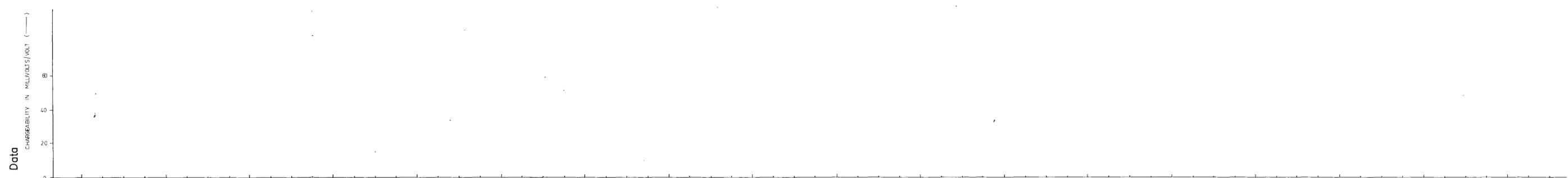
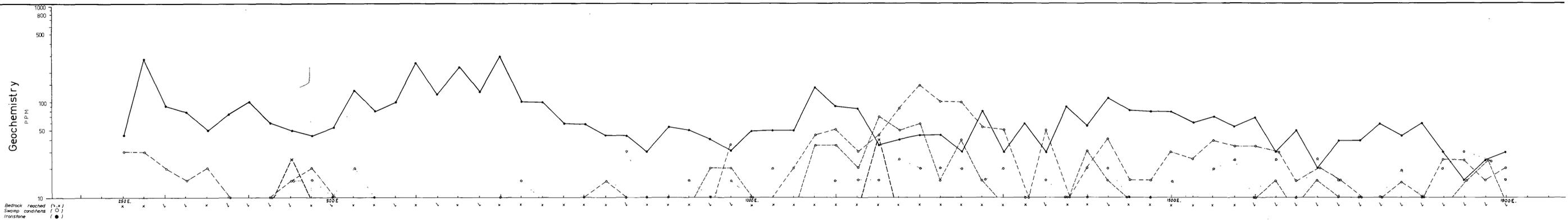
MAGNETICS  
 5000 Scale

GEOCHEMISTRY  
 Sn  
 Cu  
 Pb  
 Zn  
 As

Swamp  
 Heemskirk granite

Geology  
 Precambrian? - Cambrian sediments.  
 Magnetite, goethite, limonite, "gossan"  
 Hornfelsed siltstones, calc.-silicates.  
 Predominantly quartzites, shales, siltstones.  
 Cambrian gabbro and related basic rocks.

5 cm



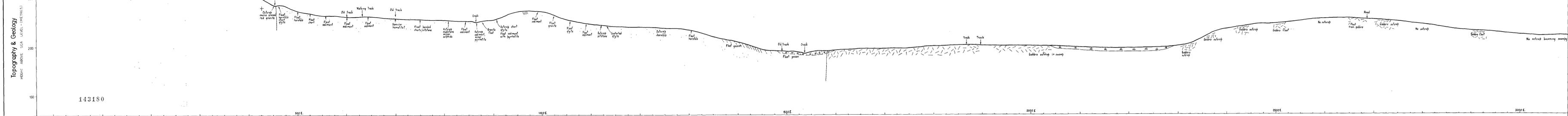
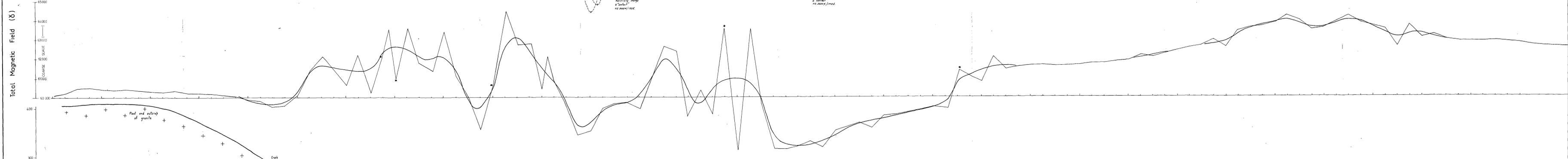
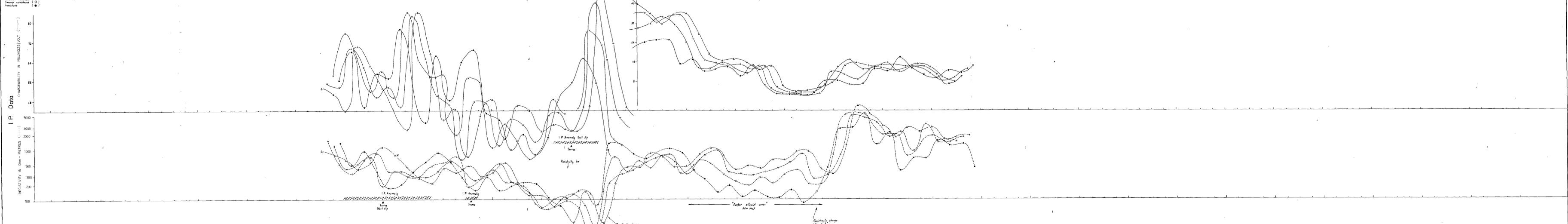
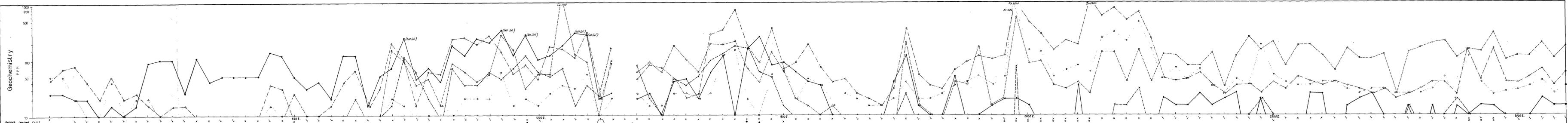
RENISON LIMITED 79-1578  
 EAST HEEMSKIRK GRID S.P.L.129  
 LINE 2800 N.  
 300 E. - 1900 E.  
 SCALE: 1:2000 METRES  
 0 40 80 120

I.P. DATA  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 n=1 n=2 n=3 n=4  
 n=1 n=2 n=3 n=4  
 Erroric magnetometer reading

MAGNETICS  
 5000 Scale  
 Smoothed curve

GEOCHEMISTRY  
 Sn  
 Cu  
 Pb  
 Zn  
 As

GEOLOGY  
 Swamp  
 Heemskirk granite  
 Precambrian? - Cambrian sediments.  
 Magnetite, goethite, limonite, "gossan"  
 Hornfelsed siltstones, calc-silicates  
 Predominantly quartzites, shales, siltstones  
 Cambrian gabbro and related basic rocks.

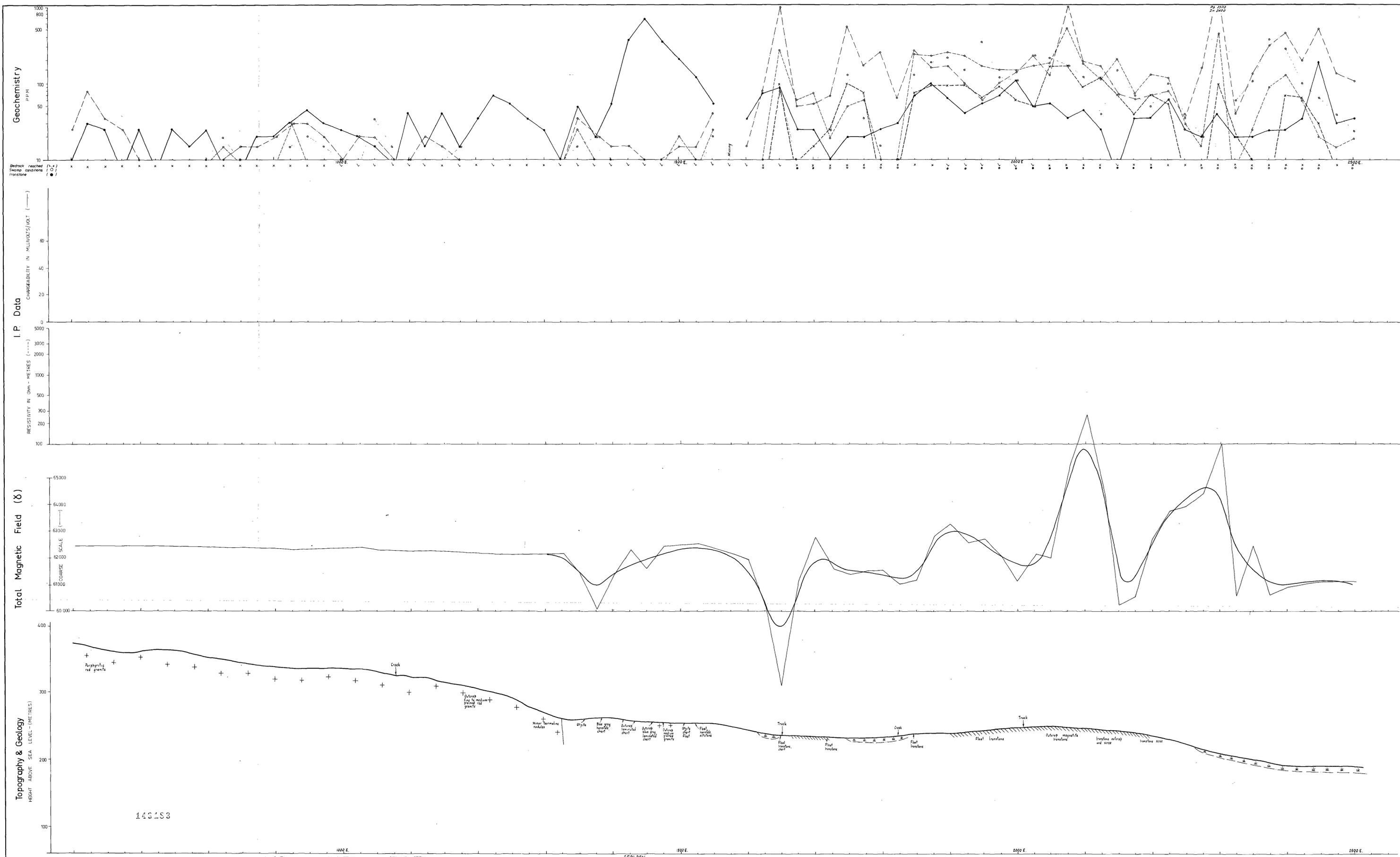


RENISON LIMITED 79-1-579	DRAWN 2/8/80	MAGNETICS	GEOCHEMISTRY	SEEDLING
EAST HEEMSKIRK GRID S.P.L. 129	DATE 2/8/80	CHARGEABILITY & RESISTIVITY	5000 Scale	Swamp
LINE 3000 N.	SCALE 1:2000	POLE - DIPOLE	Smoothed curve	Heemskirk granite
00 E. - 3100 E.	DRAWING NO. TH 376 FIG 7(d)	5000 Scale	5000 Scale	Precambrian? Cambrian sediments
SCALE 1:2000 METRES		5000 Scale	5000 Scale	Magnetite, goethite, limonite, 'gossan'
		5000 Scale	5000 Scale	Hornfelsed siltstones, calc-silicates
		5000 Scale	5000 Scale	Predominantly quartzites, shales, siltstones

2780







RENISON LIMITED 79-1378  
 EAST HEEMSKIRK GRID S.P.L.129  
 LINE 3600 N.  
 600 E. - 2500 E.  
 SCALE: 1:2000 METRES  
 DRAWN: J. B. ...  
 TRACED: T.S.D.S.  
 DATE: JULY 79  
 SCALE: 1:2000  
 DRAWING No.  
 TH 379  
 FIG 7(9)

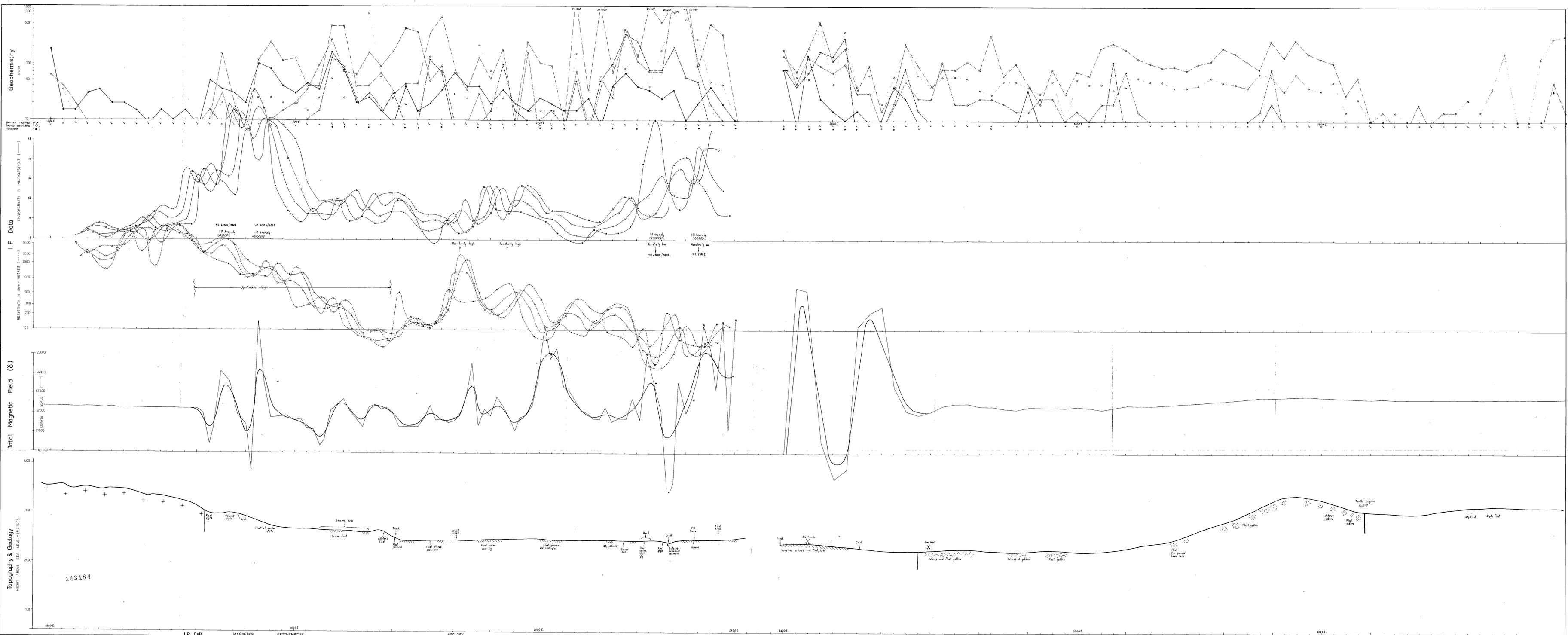
**I.P. DATA**  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 --- an=1  
 --- an=2  
 --- an=3  
 --- an=4

**MAGNETICS**  
 5000 Scale  
 Smoothed curve  
 Error: magnetometer reading

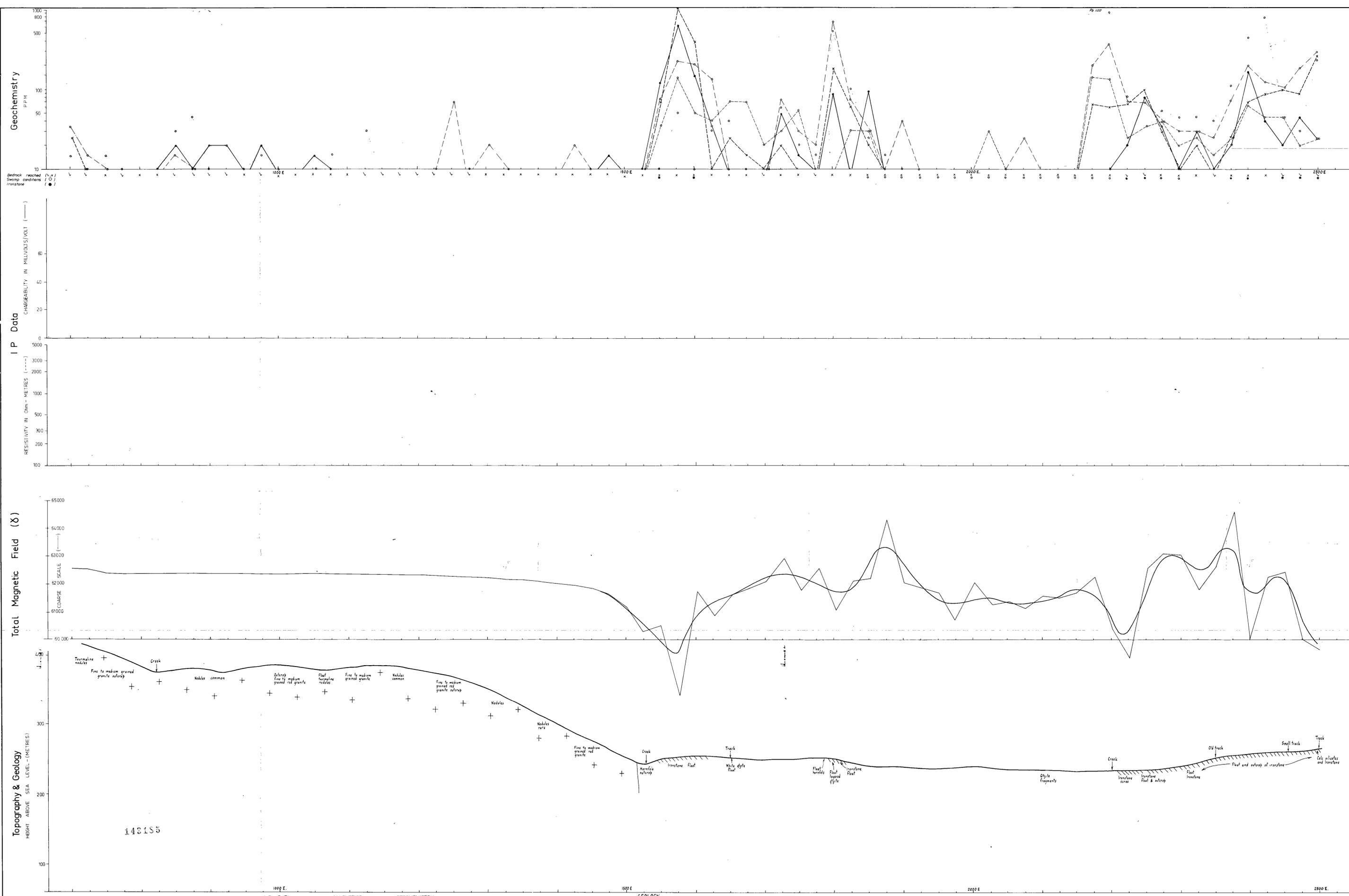
**GEOCHEMISTRY**  
 Cu  
 Pb  
 Zn  
 As

**GEOLOGY**  
 [Swamp symbol] Swamp  
 [Heemskirk granite symbol] Heemskirk granite  
 [8cm scale bar]

[Dotted pattern symbol] Precambrian?  
 - Cambrian sediments  
 [Wavy pattern symbol] Magnetite, goethite, limonite, "gossan"  
 [Horizontal lines symbol] Hornfelsed siltstones, calc.-silicates  
 [Vertical lines symbol] Predominantly quartzites, shales, siltstones  
 [Stippled symbol] Cambrian gabbro and related basic rocks



<b>RENISON LIMITED 79-1378</b> <b>EAST HEEMSKIRK GRID S.P.L. 129</b> <b>LINE 3800 N.</b> 1000 E. - 4000 E.		<b>DRAWN</b> J. B. ... <b>TRACED</b> T.B. ... <b>DATE</b> JULY '79 <b>SCALE</b> 1:2000 <b>DRAWING No.</b> TH 380 FIG 7 (1)	<b>I.P. DATA</b> CHARGEABILITY & RESISTIVITY POLE - DIPOLE --- m11 --- m12 --- m13 --- m14 --- m21 --- m22 --- m23 --- m24 --- m31 --- m32 --- m33 --- m34 --- m41 --- m42 --- m43 --- m44 --- m51 --- m52 --- m53 --- m54 --- m61 --- m62 --- m63 --- m64 --- m71 --- m72 --- m73 --- m74 --- m81 --- m82 --- m83 --- m84 --- m91 --- m92 --- m93 --- m94 --- m01 --- m02 --- m03 --- m04	<b>MAGNETICS</b> 5000 Scale Smoothed curve --- m11 --- m12 --- m13 --- m14 --- m21 --- m22 --- m23 --- m24 --- m31 --- m32 --- m33 --- m34 --- m41 --- m42 --- m43 --- m44 --- m51 --- m52 --- m53 --- m54 --- m61 --- m62 --- m63 --- m64 --- m71 --- m72 --- m73 --- m74 --- m81 --- m82 --- m83 --- m84 --- m91 --- m92 --- m93 --- m94 --- m01 --- m02 --- m03 --- m04	<b>GEOCHEMISTRY</b> --- m11 --- m12 --- m13 --- m14 --- m21 --- m22 --- m23 --- m24 --- m31 --- m32 --- m33 --- m34 --- m41 --- m42 --- m43 --- m44 --- m51 --- m52 --- m53 --- m54 --- m61 --- m62 --- m63 --- m64 --- m71 --- m72 --- m73 --- m74 --- m81 --- m82 --- m83 --- m84 --- m91 --- m92 --- m93 --- m94 --- m01 --- m02 --- m03 --- m04	<b>GEOLOGY</b> [Symbol] Swamp [Symbol] Heemskirk granite [Symbol] Devonian? Cambrian sediments. [Symbol] Magnetite, goethite, limonite, gossan [Symbol] Metasediments, calc-silicates [Symbol] Predominantly quartzites, shales, siltstones [Symbol] Cambrian gabbro and related basic rocks
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RENISON LIMITED 79-1378  
 EAST HEEMSKIRK GRID S.P.L.129  
 LINE 4000 N.  
 700 E. - 2500 E.  
 SCALE: 1:2000 METRES

DRAWN J. Ross  
 TRACED T.G.D.S.  
 DATE JULY '79  
 SCALE 1:2000  
 DRAWING No. TH 381  
 FIG. 7(i)

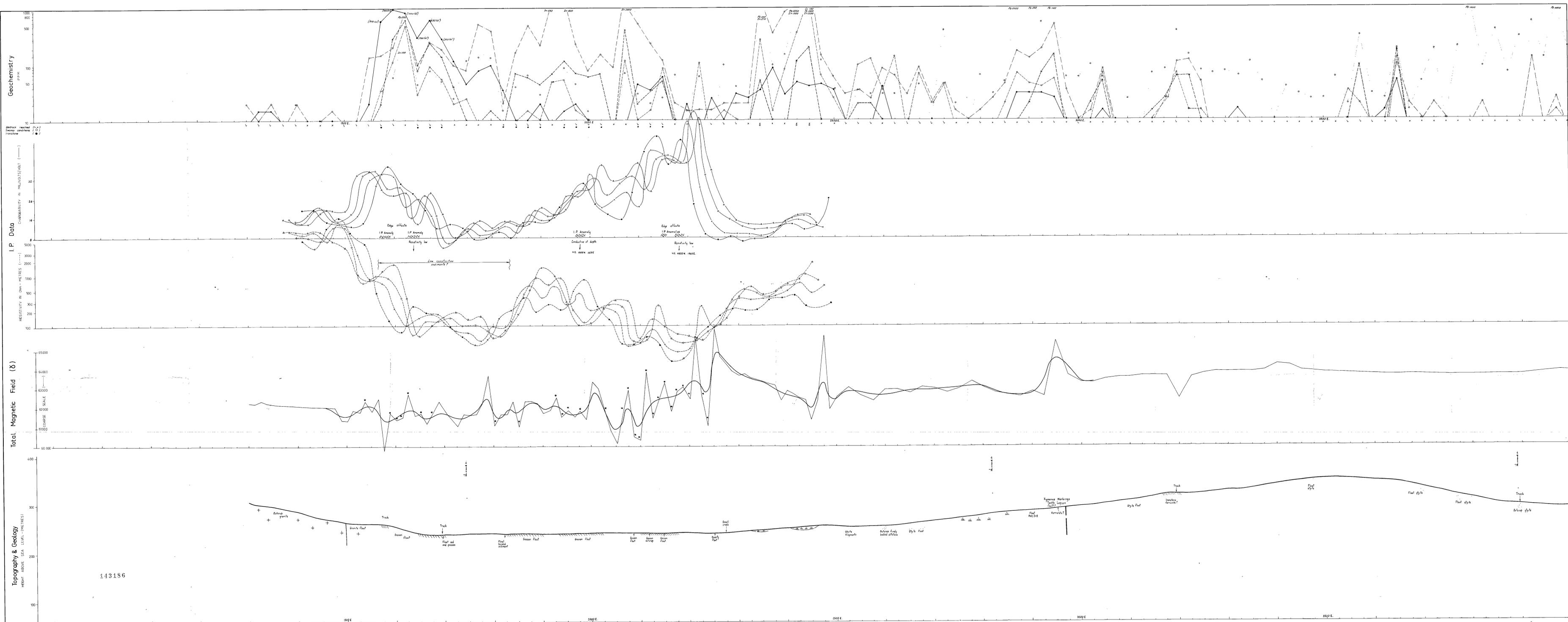
I.P. DATA  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 n=1  
 n=2  
 n=3  
 n=4

MAGNETICS  
 5000 Scale  
 Smoothed curve  
 Erratic magnetometer reading

GEOCHEMISTRY  
 Sn  
 Cu  
 Pb  
 Zn  
 As

GEOLOGY  
 Swamp  
 Heemskirk granite  
 5m

Precambrian?  
 -Cambrian sediments  
 Magnetite, goethite, limonite, "gossan"  
 Hornfelsed siltstones, calc-silicates.  
 Predominantly quartzites, shales, siltstones  
 Cambrian gabbro and related basic rocks



RENISON LIMITED 7/12/79  
 EAST HEEMSKIRK GRID S.P.L. 129  
 LINE 4200 N.  
 1800 E. - 4000 E.  
 SCALE: 1:2000 METRES  
 DRAWN: J.S.  
 TRACED: T.S.D.  
 DATE: JULY 79  
 SCALE: 1:2000  
 DRAWING No. TH 382  
 FIG. 7(j)

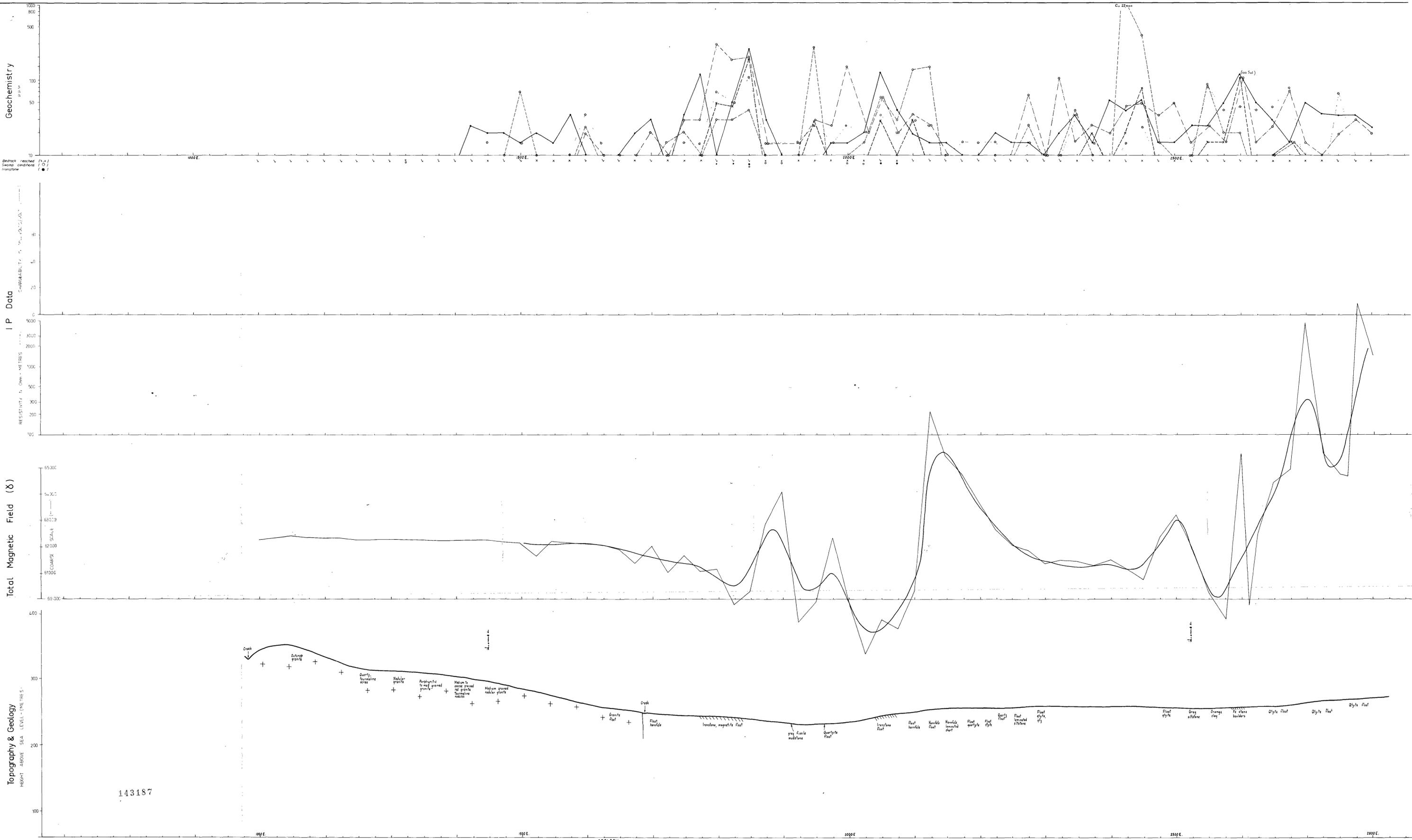
**I.P. DATA**  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 5000 Scale  
 Smoothened curve  
 Endic magnetic reading

**MAGNETICS**  
 5000 Scale  
 Smoothened curve

**GEOCHEMISTRY**  
 Si  
 Cu  
 Pb  
 Zn  
 As

**GEOLOGY**  
 Swamp  
 Heemskirk granite  
 Proterozoic - Cambrian sediments  
 Magnetic gneiss, limestone "gneiss"  
 Hornfelsed siltstones, calc-siltstones  
 Predominantly quartzites, shales, siltstones  
 Cambrian gabbro and related basic rocks

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RENISON LIMITED 79-1578  
 EAST HEEMSKIRK GRID S.P.L. 129  
 LINE 4400 N.  
 1100 E. - 2800 E.

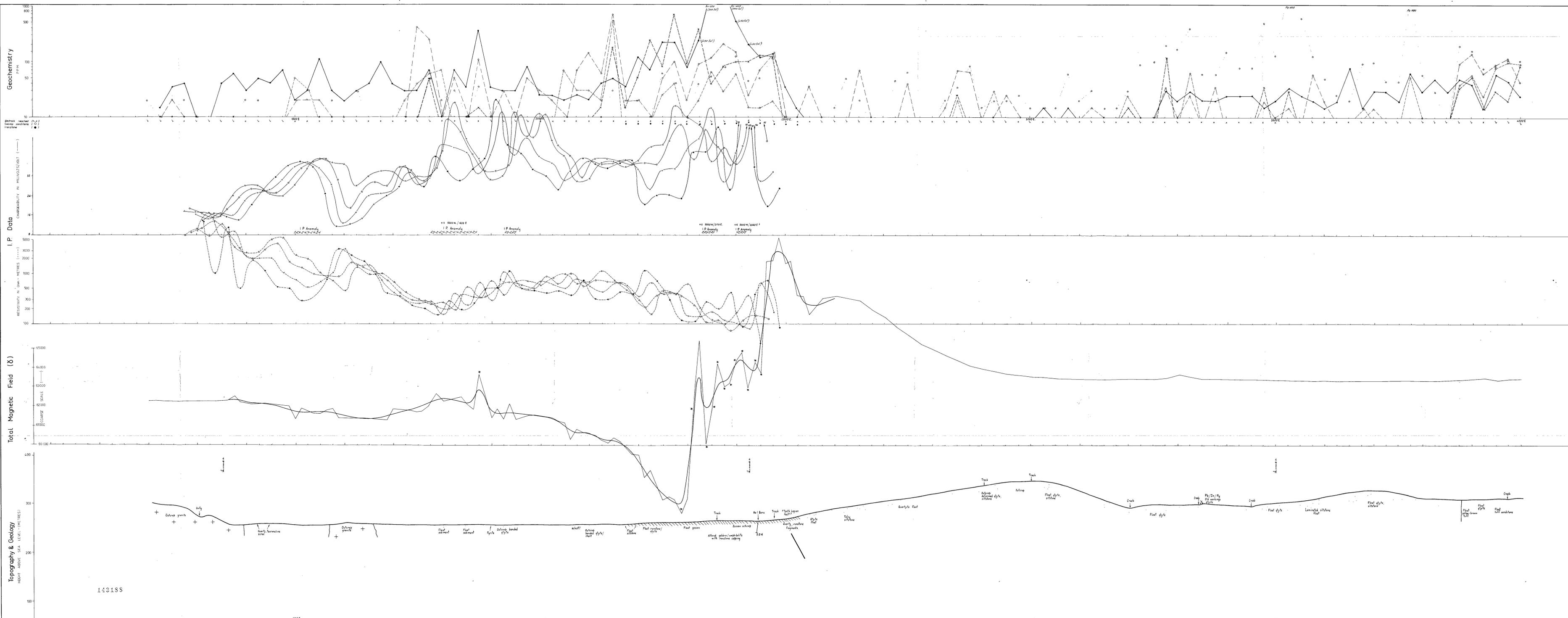
DRAWN: R. G. S.  
 TRACED: T.G.D.S.  
 DATE: JULY 79  
 SCALE: 1:2000  
 DRAWING No.: TH 383  
 FIG. 7 (K)

**I.P. DATA**  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 --- n=1 --- n=1  
 --- n=2 --- n=2  
 --- n=3 --- n=3  
 --- n=4 --- n=4  
 --- Erratic magnetometer reading

**MAGNETICS**  
 5000 Scale  
 --- Smoothed curve

**GEOCHEMISTRY**  
 --- Zn  
 --- Cu  
 --- Pb  
 --- Zn  
 --- As

**GEOLOGY**  
 [Swamp] Swamp  
 [++] Hermskirke granite  
 [ ] Precambrian? - Cambrian sediments  
 [ ] Magnetite, goethite, limonite "gossan"  
 [ ] Hornfelsed siltstones, calc-silicates  
 [ ] Predominantly quartzites, shales, siltstones



RENISON LIMITED 74378  
 EAST HEEMSKIRK GRID S.P.L. 129  
 LINE 4600 N.  
 1200 E. - 4000 E.  
 SCALE: 1:2000 METRES

**I.P. DATA**  
 CHARGEABILITY & RESISTIVITY  
 POLE - DIPOLE  
 DATE: 2007-09  
 SCALE: 2000  
 DRAWING No. TH 384  
 FIG 7 (L)

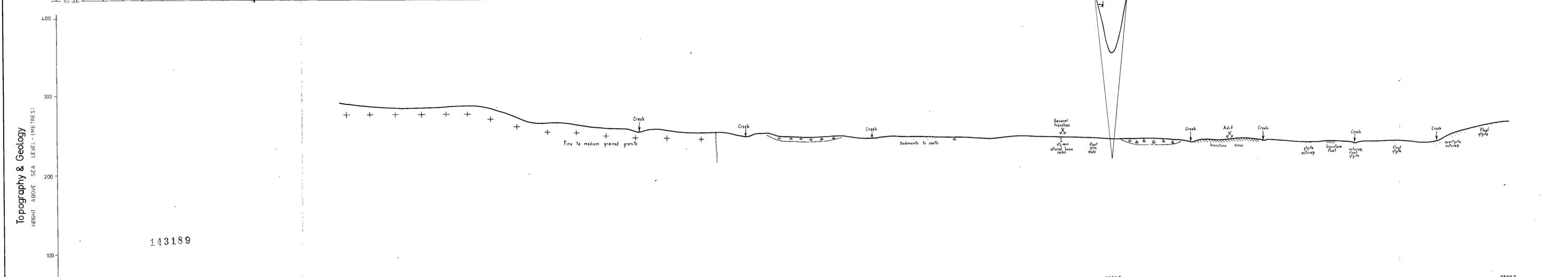
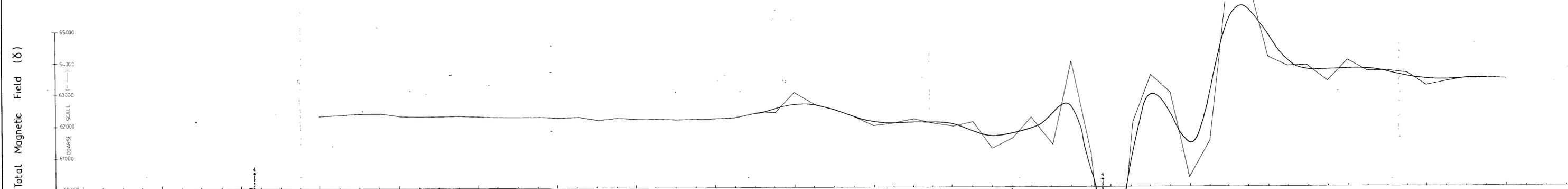
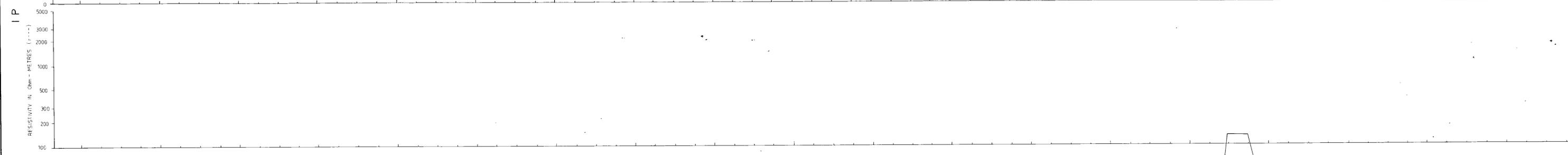
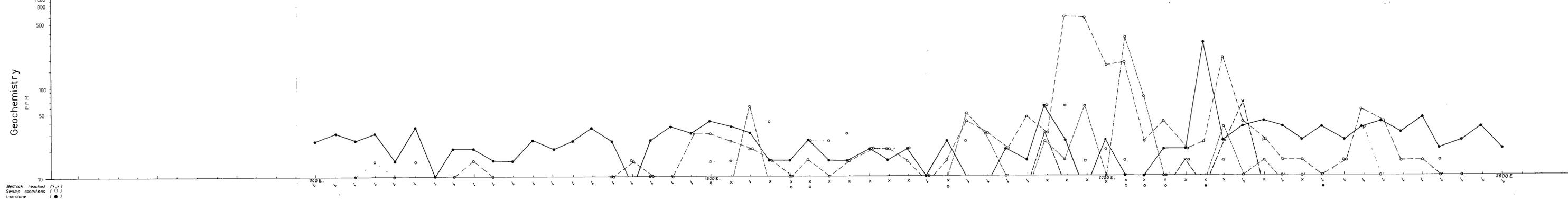
**MAGNETICS**  
 5000 Scale  
 Smoothed curve  
 Error magnetometer reading

**GEOCHEMISTRY**  
 Cu  
 Pb  
 Zn  
 As

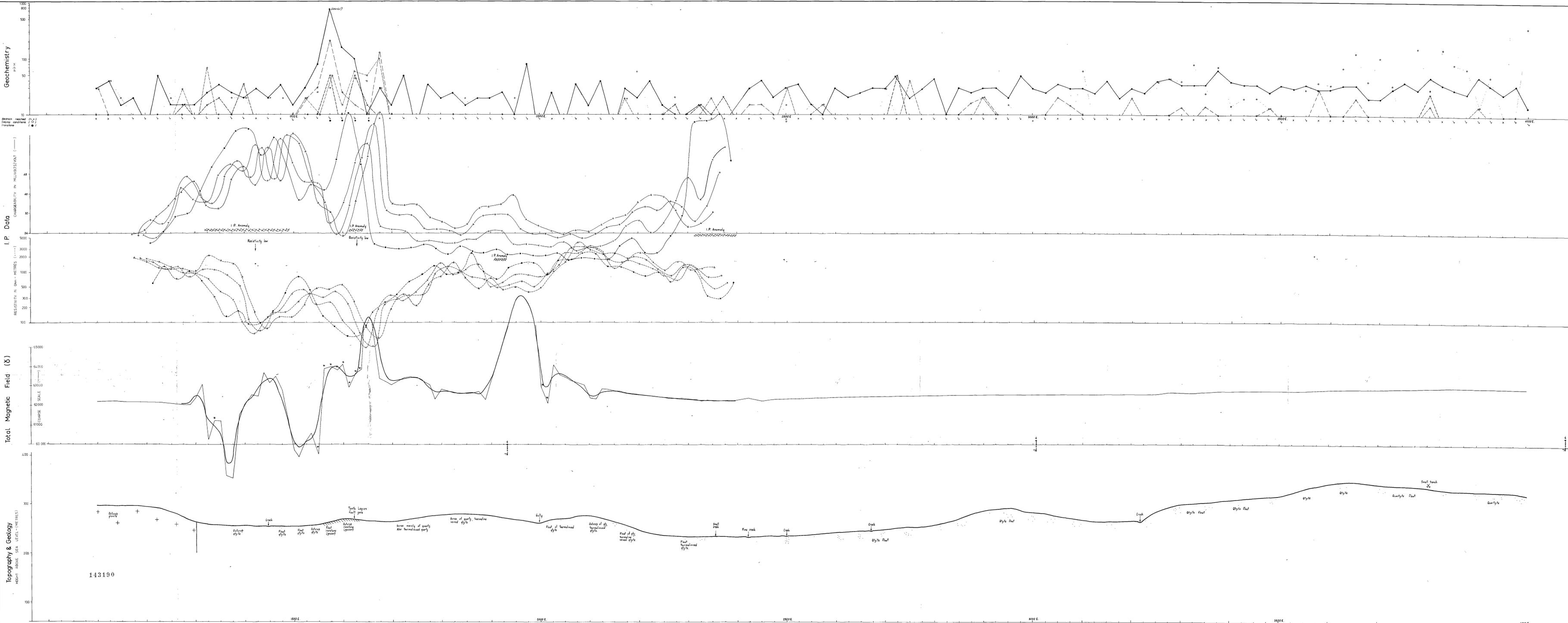
**GEOLOGY**  
 Swamp  
 Heemskirk granite  
 Precambrian? - Cambrian sediments  
 Magnetite, goethite, limonite, "gossan"  
 Hornfelsed siltstones, calc-silicates  
 Predominantly quartzites, shales, siltstones  
 Cambrian gabbro and related basic rocks



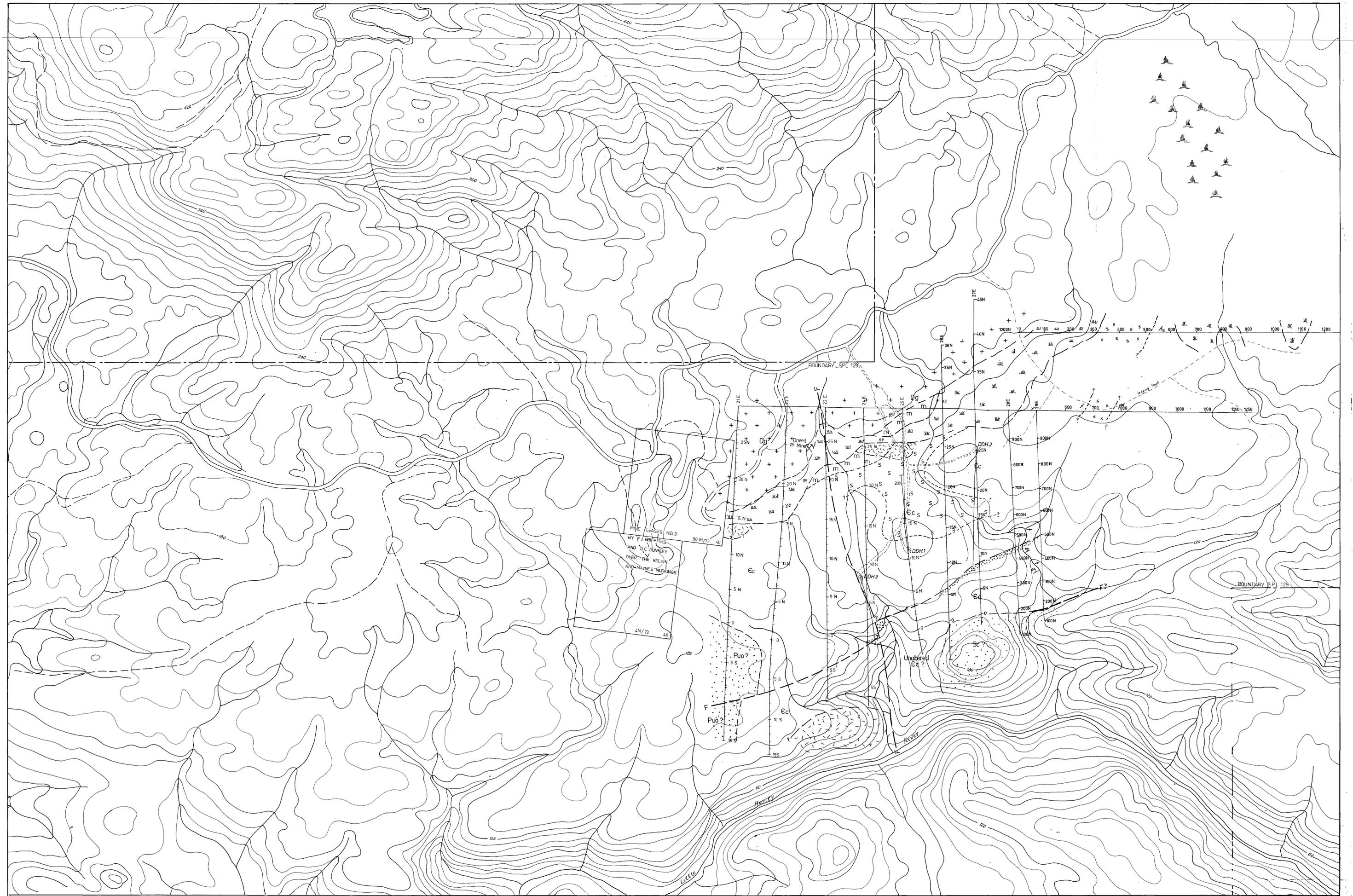
2788



<b>RENISON LIMITED 79-1578</b> <b>EAST HEEMSKIRK GRID S.P.L.129</b> <b>LINE 4800 N.</b> <b>1000 E. - 2500 E.</b> SCALE: 1:2000 METRES 40 80 120		<b>DRAWN</b> R. Ross <b>TRACED</b> T.G.D.S. <b>DATE</b> JULY 79 <b>SCALE</b> 1:2000 <b>DRAWING No.</b> TH 385 F16 7 (m)	<b>I.P. DATA</b> CHARGEABILITY & RESISTIVITY POLE - DIPOLE ● n=1    ○ n=1 × n=2    × n=2 ○ n=3    ○ n=3 △ n=4    △ n=4 * Erratic magnetometer reading	<b>MAGNETICS</b> 5000 Scale Smoothed Curve Erratic magnetometer reading	<b>GEOCHEMISTRY</b> Sn Cu Pb Zn As	<b>GEOLOGY</b> Swamp Heemskirk granite Precambrian? - Cambrian sediments. Magnetite, goethite, limonite, "gossan" Hornfelsed siltstones, calc-silicates Predominantly quartzites, shales, siltstones Cambrian gabbro and related basic rocks.
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<b>REXON LIMITED 79-57P</b> <b>EAST HEEMSKIRK GRID S.P.L. 129</b> LINE 5000 N. 1100 E. - 4000 E.		DRAWN: J.S.D. TRACED: J.S.D. DATE: JULY 79 SCALE: 1:2000 DRAWING No.: TH 386 FIG: (7)	<b>I.P. DATA</b> CHARGEABILITY & RESISTIVITY POLE - DIPOLE AN1 AN2 AN3 AN4 5000 Scale Smoothened curve Erratic magnetometer reading	<b>MAGNETICS</b> 5000 Scale Smoothened curve Erratic magnetometer reading	<b>GEOCHEMISTRY</b> Cu Pb Zn As	<b>GEOLOGY</b> Swamp Heemskirk granite Precambrian? - Cambrian sediments Magnetite, goethite, limonite "spores" Normalised siltstones, calc-silicates Predominantly quartzites, shales, siltstones
---	--	--	--	--	---	--



**INTRUSIVES**

- DEVONIAN**  
 + Dg + ADAMELLITE - HEEMSKIRK GRANITE
- CAMBRIAN**  
 - / - GABBRO / MICROGABBRO - McJUR HILL GABBRO ?

**QUATERNARY**

- # SW - SWAMP
- SILURIAN**  
 SC ? - CROTTY QUARTZITE ?

**CAMBRIAN**

- |    |    |   |
|----|----|---|
| m  | m  | Metasomatized contact altered argillaceous rocks containing up to 50% quartz-tourmaline-tremolite |
| S  | S  | Altered, partly hornfelsed, silicified argillaceous   |
| SS | SS | As above with disseminated sulphides, mainly pyrrhotite, pyrite and minor arsenopyrite.           |
| U  | U  | Unaltered seds. Volcanic component less ?   |
| C  | C  | Altered, sheared ? conglomerate   |

CRIMSON CREEK FORMATION (LOWER CAMBRIAN)

**PRECAMBRIAN**

- PuO ? QUARTZITE - OONAH FORMATION

ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN S2/2	ZEEHAN D1/3

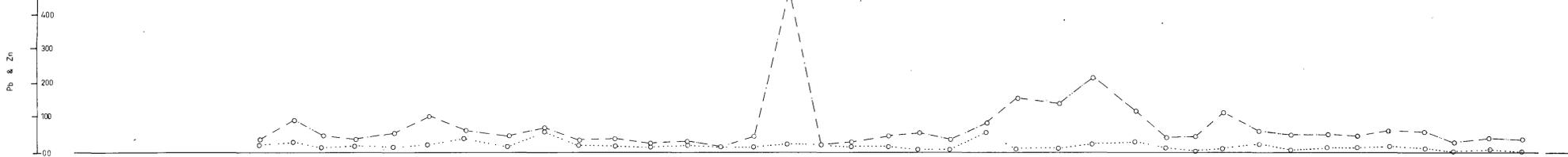
POSITIONS OF GRID LINES, 4 WHEEL DRIVE TRACK AND ORIENT MINE ESTIMATED, NOT SURVEYED

RENISON LIMITED 79-1378

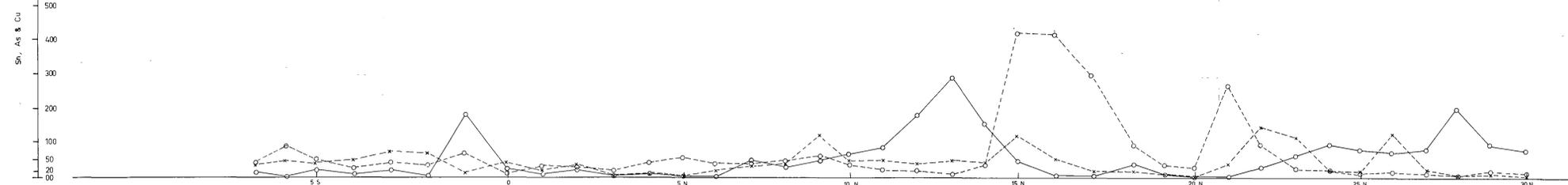
**ZEEHAN C2/4**  
 TRIAL HARBOUR AREA S.P.L. 129  
 AREA 'D' GEOLOGY MAP

SCALE: 1:5000 METRES

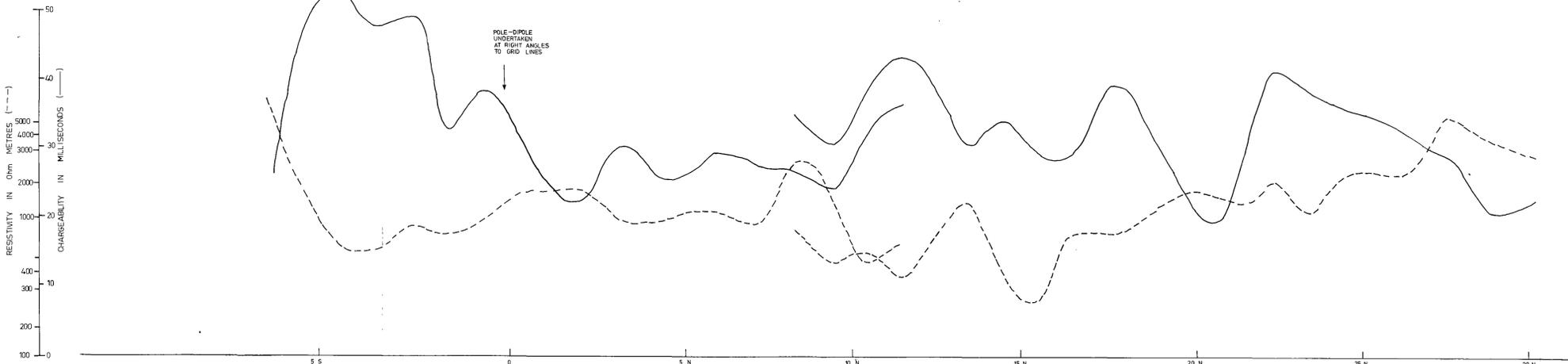
DRAWN: J.M.  
 TRACED: J.M.  
 DATE: MAY '77  
 SCALE: 7,5000  
 DRAWING No. FIG. 8



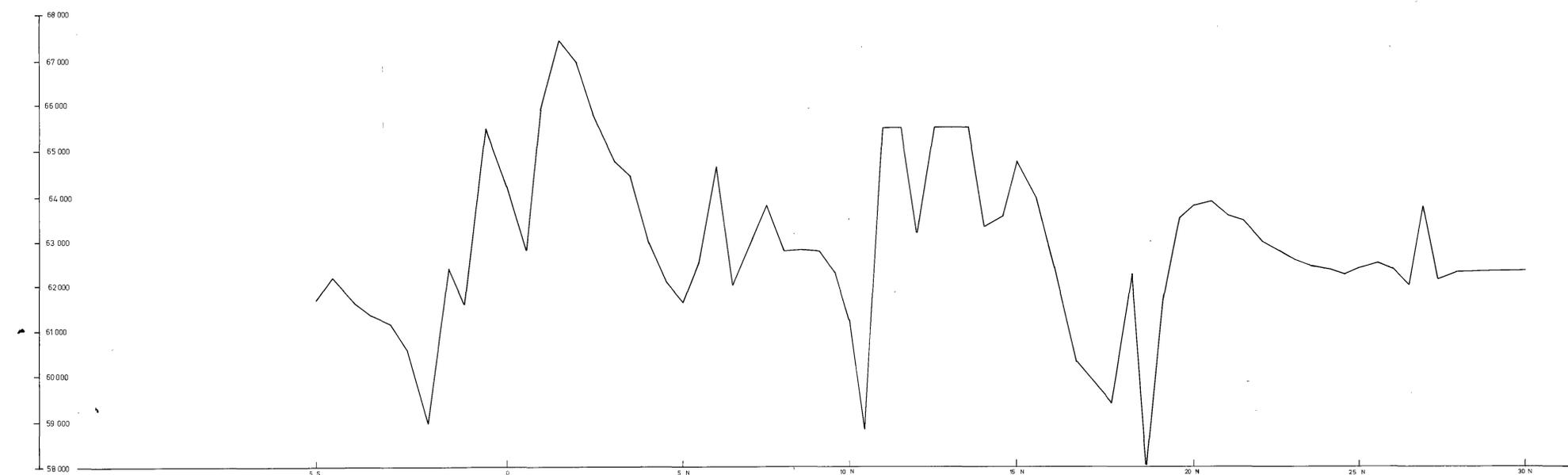
Geochemistry



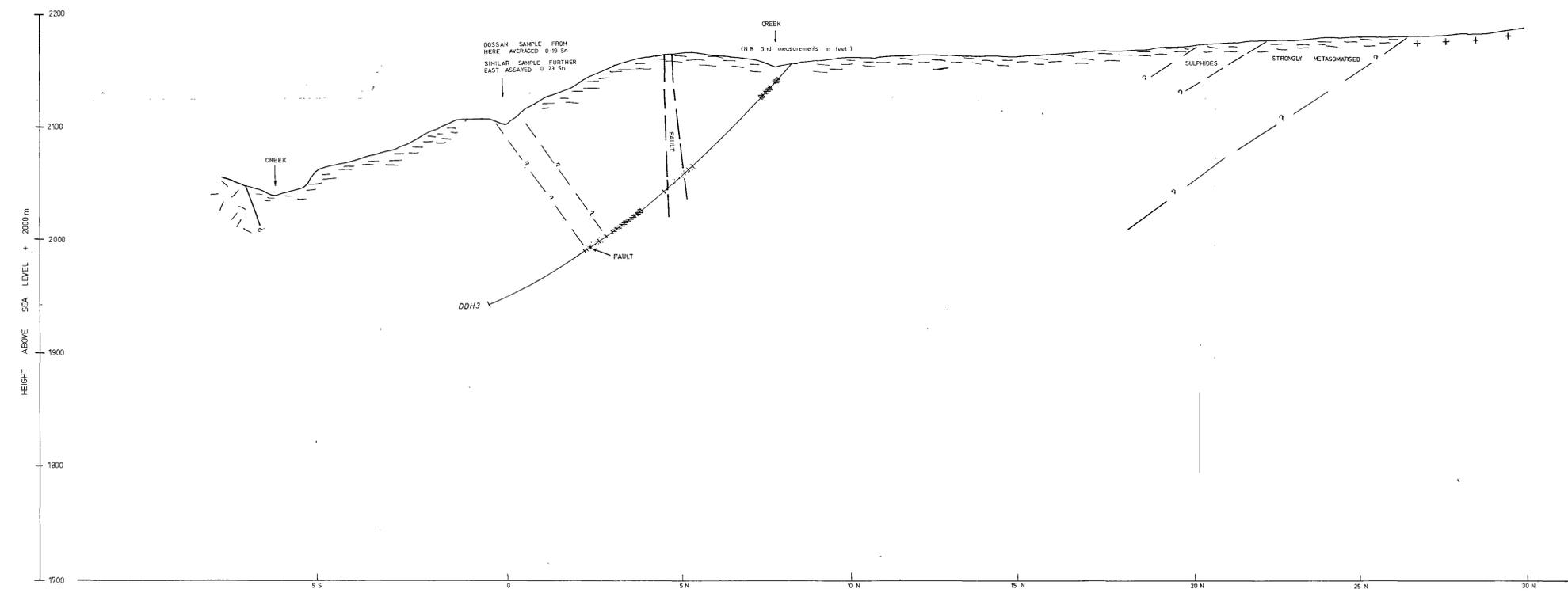
I. P. Data



Total Magnetic Field (γ)



Topography & Geology



143192

RENISON LIMITED 79-137B  
 S.P.L. 129  
 TRIAL HARBOUR AREA  
 LINE 24 E. PROFILE

GEOLOGIST K.W. A.F.R. SCALE 1:2000 METRES  
 DRAUGHTSMAN J. MATTHEWS  
 DATE MAY, 1976

REVISIONS August 1976  
 1979

DRAWING No. TH 61 FIG 2

**I.P.**  
 CHARGEABILITY  
 RESISTIVITY

**GEOCHEMISTRY**  
 Sn  
 Cu  
 Pb  
 Zn  
 As  
 W

**DEVONIAN**  
 ADAMELITE (Heemskirk Granite)

**CAMBRIAN**  
 GABBRO  
 ARGILLITES (Altered, hornfelsed and siltified) - (Crimson Creek Formation)

**IN D.D. HOLE**  
 Undifferentiated Volcaniclastic Sediments  
 Magnetic Zones  
 Mottled, Chert, Calc-Silicate Zones

5m