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GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LIMITED

PROGRESS REPORT E.L. 1/77

GRANVILLE EAST PROSPECT

COURLEYS CREEK PROSPECT

83-1961

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DEVONPORT
JUNE, 1982

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CONTENTS

Page No

1.	INTRODUCTION	5.
2.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	6.
3.	PREVIOUS WORK	10.
	3.1 Granville East	10.
	3.2 Gourlays Creek	10.
4.	REGIONAL EVALUATION	11.
	4.1 Regional Geology	11.
	4.2 Aeromagnetics	13.
5.	DETAILED PROSPECT EVALUATION: GRANVILLE EAST	14.
	5.1 Granville East Prospect	14.
	5.2 Geology	14.
	5.3 Geochemistry	18.
	5.4 Geophysics	23.
	5.5 Costean Programme	26.
	5.6 Results of DDH 1	29.
6.	SYNTHESIS: GRANVILLE EAST	32.
7.	DETAILED PROSPECT EVALUATION: GOURLAY'S CREEK	38.
8.	SYNTHESIS: GOURLAYS CREEK	41.

REFERENCES

APPENDICES

102

LIST OF FIGURES

1. PROSPECT LOCATION MAP
2. GEOLOGICAL AND GEOCHEMICAL SUMMARY COSTEAN LINE 9990N
3. GEOLOGICAL AND GEOCHEMICAL SUMMARY COSTEAN LINE 9700N
4. THEORETICAL CROSS SECTIONS TO EXPLAIN MAGNETIC AND
SELF POTENTIAL RESPONSE

03

589004

LIST OF PLANS: GRANVILLE EAST

PLAN NO

1.	Heemskirk Granite Contact, Regional Geology	1:10,000
2.	<i>A total mag. intensity</i> Granville Aeromagnetic Contours	1:25,000
	<i>B Flight Path</i>	
3.	Granville East Geology	1:2,500
	Granville 'C' Horizon Geochemistry	1:2,500
4.	Sn Contours /	
5.	Cu Contours /	
6.	Pb Contours /	
7.	Zn Contours /	
8.	Mo Contours /	
9.	Fe Contours /	
10.	As Contours /	
11.	Sample Location Map /	1:2,500
12.	Rock Chip Geology Map	1:2,500
13.	Granville East Ground Magnetism Contours	1:2,500
14ABC	Ground Magnetism Profiles	
15.	SP Contours	1:2,500
16AB	SP Profiles	
17.	Geological and Geochemical Profile DDH 1	1:500
18.	Anomaly Evaluation Map	1:2,500
19.	DDH 2 Proposal	1:2,500
20.	DDH 3 Proposal	1:2,500
21.	DDH 4 Proposal	1:2,500

004

589005

LIST OF PLANS: GOURLAYS CREEK

1. Geology 1:5000
2. Ground Magnetics 1:5000
- 3a Magnetic Profiles 9800N - 10400N
- 3b Magnetic Profiles 10600N - 11600N
- 3c Magnetic Profiles 200E - 10400E
- 3d Magnetic Profiles 1600E - 2600E
- 3e North-South Magnetic Profiles
- 3f East-West Magnetic Profiles
4. Geology 1:2500
5. Geochemistry Sn 1:2500
6. Geochemistry Fe 1:2500
7. Geochemistry Cu 1:2500
8. Geochemistry Zn 1:2500
9. Geochemistry Pb 1:2500
10. Ground Magnetics 1:2500

005

589006

LIST OF APPENDICES

- Appendix 1. Petrographic Descriptions
- Appendix 2. Report on Heemskirk Granite Contact, by M. Effler
- Appendix 3. DDH 1. Geological, Geochemical and Geophysical Log
- Appendix 4. Geochemical Ledger Sheets

006

1. INTRODUCTION

The Granville East and Gourlays Creek Prospects lie at the southern end of the Rocky Cape E.L. 1/77, which is held by CRAE in joint venture with Geopeko.

Granville Harbour is a coastal shack settlement 27km WNW of Zeehan in Western Tasmania. This was used as a base, while the field programme was carried out. Access to the prospects is by H.E.C. roads originating in Zeehan.

This report documents progress by Geopeko for the joint venture over the period from January to June 1982.

2. SUMMARY CONCLUSIONS AND RECOMMENDATIONS

A detailed investigation involving gridding, geological mapping, soil/rock geochemistry and geophysical surveys, was carried out over the large aeromagnetic anomalies in the Granville Harbour area, designated Granville East and Courlays Creek.

Granville East

Results from Granville east indicate that there are several horizons of calc silicate and carbonate assemblages with anomalous Sn geochemistry. These horizons have been shown to be mineralized in part with magnetite and pyrrhotite and very anomalous values of Sn being returned from the costean on line 9990N.

The results from this costean led to the drilling of DDH 1. This hole intersected 4 metres of massive, oxidised pyrrhotite. The interval assayed 4m at 0.11%Sn with one section between 39m and 40m assaying 0.36%Sn. At least 85m of calcsilicate/carbonate rock was intersected in the hole. This indicates that there are significant thicknesses of rock with 'skarn' like affinities in the sequence.

These favourable horizons are demonstrably associated with excellent magnetic character, hence are very likely to incur a facies change at depth to tin bearing magnetite/pyrrhotite.

In the light of information collected to date, it is considered that the style of orebody being sought has certain definable characteristics. As a result, a priority system has been proposed using these characteristics, in order to assign drill targets.

The priority system is as follows:

- Priority 1: Coincident Sn, Cu, As, soil anomalies. Coincident magnetic and SP anomalies. Calcsilicate/carbonate rocks mapped with strike continuity.
- Priority 2a: Coincident Sn, Cu, As soil anomalies. Coincident with anomalous magnetic and SP response.
- Priority 2b: Coincident Sn, Cu, As soil anomaly. Coincident with anomalous magnetic response. SP anomaly adjacent.
- Priority 3: Coincident Cu, As soil anomalies (with some Sn response) coincident with magnetic and or SP anomaly.
- Priority 4: Magnetic and/or SP anomalies with some geochemical character.

Recommendations

1. The existing grid should be infilled with crosslines at 50m spacings and read with ground magnetics.
2. Three drill holes are proposed initially to test Priority 1 areas. These are:

DDH2

Coord:	9700N 9950E
Declin:	50°
Azimuth:	231°
Final Depth:	250m

009

DDH 3

Coord: 9875E 10,200N
Declin: 50°
Azimuth: 231°
Final Depth: 250m

DDH 4

Coord: 10,400N 9625E
Declin: 50°
Azimuth: 51°
Final Depth: 250m

3. Priority 2b areas warrant 3 diamond drill holes on present indications. However, any drill targets will be influenced by results from the first phase of drilling, consequently no detailed proposals will be made at this stage..
4. Reconnaissance grid lines should be established north of the existing grid, to close off the Granville East anomaly.
4. The testing of drill core and other oriented samples for magnetic properties. i.e. susceptibility and remnance.
6. A ground EM technique should be employed over the grid.
7. A reassessment of soil sample method needs to be undertaken.
8. Studies into the mineralogy of the various Sn species present in mineralization needs to continue.
9. Efforts should be made to increase our data base with respect to this type of deposit.

Gourlays Creek

Preliminary work, has delineated several discrete magnetic horizons within the Gourlays Creek project. Several occurrences of massive magnetite have been found being associated with copper mineralization. Limited soil sampling demonstrated coincidence between anomalous Sn values and near surface magnetite.

Recommendations

1. The extended grid should be geologically mapped.
2. Selected 'C' horizon soil samples should be taken by power auger, to directly assess the Sn potential of this prospect.
3. Limited costeaming over near surface magnetite horizons.
4. Upon completion of this programme, further infill gridding and assessment, will lead to target definition for diamond drilling.

3. PREVIOUS WORK

3.1 Granville East

Porter (1980) selected the Granville East magnetic anomaly from the 1957 Rio Tinto Aeromagnetic survey. He noted that the anomaly lay on a similar trend to St Dizier, a known tin bearing magnetite pyrrhotite skarn deposit. Reconnaissance of the prospect defined the trend of the Granville East anomaly. Rock chip samples close to the magnetic anomaly returned moderately anomalous values of 15 to 40ppm Sn.

3.2 Gourlays Creek

The Gourlays Creek Prospect, formerly Granville West is a conspicuous 3.5km aeromagnetic anomaly first outlined in the 1957 Rio Tinto survey. Reconnaissance lines defined the anomaly and thin massive magnetite beds were recorded with rock chips assaying 4ppm Sn. Anomalous pyritic quartzites assaying 15 to 140ppm Sn were also documented. Where the magnetic trend intersected the coast, dolomitic siltstones were mapped. (Porter, 1980).

4. REGIONAL EVALUATION

4.1 Regional Geology (Refer Plan 1)

The Adelaidean aged rocks which make up the Granville Harbour area can be broken into two zones. The sequence directly north of Granville Harbour, confined mainly to the coast, is possibly a southern extension of the Whyte Schist, part of the Arthur Lineament (Corbett and Brown 1973). The sequence exposed on the coast consists dominantly of deformed hornfels mica schists, and massive quartzites. In contrast the rocks in the Granville East area consist of quartzites micaceous quartzites, black shales, mudstones and carbonates. These rocks are deformed and metamorphosed, but to a far less degree than those exposed on the coast. This sequence corresponds to the Oonah Quartzites and Slates of Spry (1958).

Recent work by A. Brown of the Tasmanian Department of Mines suggests that the Oonah Quartzites and slates may be subdivided into an upper and lower sequence. The lower sequence consists dominantly of grey quartzite, thin bedded micaceous quartzite, siltstones and black shales. The upper sequence consists of black mudstones and shales, quartzite units, carbonates and volcanics. These upper and lower sequences may be represented in the Granville East area.

During the Late Devonian, at the end of the Taberabberan Orogeny, an episode of granite intrusion occurred in Western Tasmania. The Heemskirk Granite is one such intrusion. It consists of an upper subhorizontal layer of red granite overlying white granite. At the contact zone between these two types abundant quartz tourmaline nodules occur. (Klominsky, 1972)

Sub basalt fluviatile deposits of boulder beds and sand and grit beds crop out to the north and east of Granville Harbour. Olivine and magnetite bearing Tertiary basalt forms a low undulating plateau which covers a large proportion of the Gourlays Creek Grid.

The contact of the Heemskirk Granite and the Precambrian sediments was mapped by M. Effler and his report is included as Appendix 1. Permission was given by Aberfoyle to undertake this study as the bulk of the contact lies in their E.L. 47/71. Effler's conclusion was that the northern contact of the Heemskirk granite seems to be a complex contact with apophyses, subdomes and troughs. Contact metamorphic effects include:

1. Intensive tourmaline replacement of argillaceous layers in the quartzites close to the granite together with tourmaline infilling cracks and joints.
2. An increase of quartz veins in the quartzites near the contact.
3. Formation of small magnetite/calcsilicate skarn bodies on the contact.

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4.2 Granville Harbour Aeromagnetic Survey (Refer Plan 2)

The Aeromagnetic Survey of the southern part of the E.L. 1/77 was flown by Georex Ltd. in September 1981. The processing and plotting of the data was undertaken by Austirex Aerial Surveys. The purpose of the survey was to better define and locate the anomalies detected on the 1957 Rio Tinto survey, and improve on the quality and presentation of the data from this survey. Further details of the survey can be obtained from Plan No 2.

Broadly the magnetic anomaly patterns can be divided into two classes. Large complex magnetic highs which cannot be resolved into their component sources from the airborne data, and discrete 'bullseye' style anomalies more likely to come from one source or a collection of closely related sources within a small area. The major anomalies which fall into the discrete class have been designated Granville East; Duck Creek; Gourlays Creek South and Stingray. Outside the boundary of E.L. 1/77 but covered by the survey and falling within the discrete class are the anomalies over the St. Dizier and 'Big H' skarn deposits. The major anomalies which fall into the broader compound class are designated the Gourlays Creek and the Big Rocky Creek anomalies. Both these anomalies bend to the west at their northern extremities, where they are truncated at a major cross feature, possibly a fault, which extends off the survey area. South of this feature there is a consistent north-west/south-east trend evident along which most anomalies lie. To the north the Stingray Beach and Duck Creek anomalies lie on no such trend. The Heemskirk Granite appears as a large magnetically quiet area in the south of the survey area.

5. DETAILED PROSPECT EVALUATION: GRANVILLE EAST

5.1 Granville East Prospect

After preliminary reconnaissance, the best development of the Granville East magnetic anomaly was located and a 1.4km by 1.2km grid was established. Crosslines were spaced at 100m intervals. Detailed evaluation to date involved geological mapping, 'C' horizon soil geochemistry and geophysical techniques, (ground magnetics and SP). Three costeans and one diamond drill hole have also been completed.

5.2 Geology (Refer Plan 4)

5.2.1. Stratigraphy

While outcrop is poor in this area, a good geological understanding was achieved with a combination of outcrop mapping and by logging rock chips, obtained in the soil sampling programme.

Two main lithotypes were encountered in the grid area. Lithotype 1 dominates the eastern half of the grid. It consists of white, massive, saccharoidal quartzites, micaceous quartzites, and quartzites with thin shale interbeds. These thinly laminated shale beds become more common in the western part of the sequence, near the contact with Lithotype 2.

The quartzites only rarely exhibit sedimentary current features such as cross bedding and scour and fill structures. Limited observations of younging criteria suggests the sequence youngs to the west.

The micaceous quartzites are commonly crenulated and exhibit complex small scale folds. Crenulated beds commonly partition to form the cleavages present.

Quartz veining is noticeable in some outcrops. Veining rarely exceeds 1cm in thickness. Veins are predominantly 'sweat out' veins formed during deformation. A hydrothermal origin for some of the veins cannot be discounted, however. The veins are dominantly quartz, with occasional small selvages of muscovite.

Logging of rock chips delineated areas in the quartzite where tourmaline -mica mixtures define thin laminae. This indicates that tourmaline is replacing argillaceous layers within zones in Lithotype 1. This is possibly indicating the proximity of granite beneath Lithotype 1.

Lithotype 2 consists dominantly of pyritic black shales and mudstones. The black shales are very carbonaceous and finely laminated. Bedding is often very difficult to distinguish from the well developed cleavage.

Some rock types exposed in costeans include black hard flinty rocks which may be described as hornfelsed equivalents of black shales.

The black shales commonly have pyrite along bedding and cleavage planes. Black shales intersected at depth by DDH 1, contain pyrrhotite rather than pyrite.

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Within the Lithotype 2 sequence are beds of carbonate and contact metamorphosed carbonates. Mapping has delineated a calcsilicate/carbonate unit which strikes grid north for over 900m. A costean on line 9990N has exposed at least 10m of this calcsilicate/carbonate assemblage. In general it varies between a complex siderite, tremolite/actinolite, diopside serpentine rock with varying amounts of magnetite, pyrrhotite, pyrite, arsenopyrite and cassiterite, to a fairly simple tremolite, arsenopyrite rock.

Apart from this linear horizon, three other carbonate occurrences have been mapped which are probably linked by complex folding. The sequence intersected by DDH 1, allows the examination of altered and unaltered carbonates. DDH 1 penetrated 85 metres of calcsilicate/carbonate rock. The unaltered carbonate appears as a silicified carbonaceous siltstone or shale. Petrography (Appendix 1, KR 11459) reveals it to be a finely laminated carbonate mudstone with carbonaceous material defining the laminae.

Thin quartzite units appear at the top of the lithotype 2 sequence.

Overlaying the Precambrian sequence are flat lying Tertiary iron rich grits with fluviatile boulder and grit beds. These Tertiary sediments predominate in the north western corner of the grid with remnant patches in the south.

5.2.2. Structure

Bedding exhibited in the Lithotype 1 quartzites dominantly dips to the east. A small flexural antiform and synform occurs in the central grid area. Small scale folds associated with this feature, suggest that the structure plunges at a shallow angle (approx 35°) to the north. At least 2 and possibly 3 cleavages are present in outcrop with a dominant cleavage direction of between 280° to 300° magnetic (Plan 1). This cleavage represents the last deformation which caused the observable structure in the area.

Deformation in the black shales and calcsilicates of Lithotype 2 is very difficult to decipher. The predominant fabric of the black shales can be shown in drill core to be both S₀ (lithological layering) and S₁ (or perhaps S₂ or S₃) which is a cleavage.

The ground magnetic picture strongly suggests complex folding of the shales south of line 9800N. Outcrop is however, too poor in the area to form definite conclusions. Proposed drill holes in this area, will greatly assist in structural interpretation.

A major fault trending NNE Mag. terminates Lithotype 2 around line 9500N.

Facing criteria is very sparse, however limited crossbedding evidence suggests that the sequence youngs from east to west. This implies that the entire sequence is overturned.

019

5.2.3. Surface Mineralization

Two discoveries of surface mineralization have been made. The first was located by soil sampling at coordinate 9500N 9750E. Pitting uncovered a sequence of massive arsenopyrite and pyrite with up to 50% of the rock made up of white fibrous tremolite. Chip samples only assayed around 45ppm Sn (examples KR 6728 KR 6729), however close spaced (5m) infill soil sampling next to this occurrence returned anomalous tin values of up to 700ppm Sn; indicating the excellent potential of this horizon.

A second discovery of surface mineralization at coordinate 10,000N 9770E consists of boulders of magnetite-geothite gossan associated with a white silicified calc-silicate rock in which coarse crystals of cassiterite (up to 3mm in the long axis) are evident. A typical sample of the magnetite gossan (KR 5975) assayed 6.35% Sn, and an example of the silicified calcsilicate rock (KR 7971) returned 2.1% Sn.

5.3 Geochemistry

5.3.1. Method

In accessible ground, a Bombardier mounted Jacro auger was used to retrieve a good 'C' horizon, or if possible, bedrock sample. Sample depths ranged from 0.5m to 10m, but the median was 2 metres. In less accessible areas, a two man, portable power auger was used. A median sample depth of 2m was also achieved.

Particular care was taken, to avoid contamination from surface alluvial material. Where it was thought contamination could not be avoided, it was duly noted in the geochemical ledger sheets. The initial sample interval was 25m, however where further detailed was required, 5m spacing infill work was carried out.

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The samples were assayed for Sn, W, Cu, Pb, Zn, Fe, Ag, Bi, Mo and As. Samples were submitted to Analabs in Coee, Tasmania. Sn and W were analysed by XRF methods, Cu, Pb, Zn, Fe, Ag, Bi, Mo, As were determined by A.A.S. methods. The -80 mesh sample fraction was used for analyses. The results are documented on ledger sheets in Appendix 3.

Contour intervals were determined by 'eyeballing' the data rather than by any statistical method. Statistical manipulation of the data may be warranted at a later date in order to 'fine tune' the relationship between geochemistry and geology.

Sn Geochemistry (Refer Plan 4)

Values in excess of 20ppm are considered anomalous above a background of 0 to 10ppm. At 25 metre spacing the maximum value of Sn was a single sample of 1000ppm.

Five metre infill sampling on line 10,000N, returned two assays of 2.0% Sn and 1.4% Sn respectively along strike from the magnetite gossan outcrop. It is noteworthy that at 25m spacing no Sn anomaly was generated in the vicinity of the stanniferous magnetite gossan.

The major feature is a linear anomaly defined between 9700E and 9800E, which extends from 9500N to 10,400N over a strike length of 900m. A second narrow anomaly extends from 9500N to 9900N around 9900E. Several other first order anomalies are confined to the north west and northern parts of the grid. A large, diffuse, low order anomaly occurs to the east of 10,100E. This can possibly be related to tourmalinised quartzites mapped in the area. Infill soil sampling on lines 9500N, 9600N, 9700N enhanced existing anomalies and defined high values of Sn on line 10,000N.

021

The dominant linear zone can be matched uniquely to a mapped calcsilicate horizon outlined in geological mapping. The lack of dispersion by Sn suggests that no significant secondary remobilization has occurred.

Cu Geochemistry (Refer Plan 5)

Background values fall within the 5 to 20ppm range. A first order anomaly is deemed greater than 50ppm. A maximum value of 1750ppm Cu occurs at 9400N, 9775E. A cluster of anomalies occur south of 9900N between 9700E and 10100E. The contoured pattern suggests a folded copper rich horizon. A linear anomaly is apparent between 10,100N and 10,400N and, perhaps significantly, lies close to the Lithotype 1, Lithotype 2 boundary. A number of lower order anomalies occur west of 9700E.

Pb Geochemistry (Refer Plan 6)

Greater than 20ppm is considered anomalous with background values occurring in the 0 to 15ppm range. Maximum value of Pb in the soil geochemistry was 150ppm. Again a cluster of anomalies occurs south of line 9900N, however they are more discrete, suggesting several anomalous horizons. A broad anomalous zone appears on the western edge of the grid.

Zn Geochemistry (Refer Plan 7)

Greater than 30ppm Zn is considered anomalous while 10-20ppm Zn appear as background values. The maximum value of 5900ppm Zn occurred at 9500N 9770E.

Zn geochemistry appears to give a broader dispersion pattern than other elements. The cluster south of 9900N reappears, with some suggestion of a continuous horizon making up to a fairly broad anomaly between lines 10,100N and 10,400N. An interesting, but limited anomaly occurs on line 9800N between 9500E and 9600E.

As Geochemistry (Refer Plan 10)

Background values in the Lithotype 2 sequence range between 5 to 10ppm As while values in Lithotype 1 approach zero. A first order anomaly is considered greater than 20ppm As. The maximum value of 2.7% As at 9500N, 9775E relates to the exposed massive arsenopyrite, pyrite, tremolite mineralization. The geochemical pattern is complex, however the southern folded? cluster of anomalies is clear, together with a broad zone between 9900N and 10450N. The highest As values occur at the southern end of the grid.

Fe Geochemistry (Refer Plan 11)

The data suggests that greater than 2% Fe is anomalous. Background values of Fe within the black shales of Lithotype 2 appear to fall in the 0.3 to 1% range. Fe values in the quartzites of Lithotype 1 range between 0.1% to 0.4% Fe.

Anomalies generated east of line 9600E form linear, ill-defined anomalies. The broad zone on the western edge of the grid reflect Fe rich Tertiary grits and sands.

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Mo Geochemistry (Refer Plan 8)

Background values in the Lithotype 1 sequence generally approach zero. Within Lithotype 2, they appear to range from 1ppm to 1.5ppm although at these low values, this may not be meaningful. However using a 2ppm, first contour interval, coherent results emerge.

The linear trend exhibited by the Sn results is reinforced by Mo values. Similarly, the apparently folded complex south of 9900N is further reinforced.

Ag, W, Bi results do not form a coherent picture in this environment.

General Comments (Refer Plan 18)

In summary, the soil geochemistry forms a grid north-south corridor which merges with a complex zone south of Line 9900N. Contours generated by Cu, As, Mo and Zn suggest folding and/or faulting of geochemically active horizons. Empirically Sn bearing horizons are coincident with As, Mo, Cu and Zn anomalies. An interesting collection of anomalies occurs between 10,500N and 10,300N and 9450E and 9650E. Similarly a coincident Cu, Pb, As, Zn anomaly in the south western corner of the grid is noteworthy.

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5.4 Geophysics

Detailed ground magnetic and Self-Potential surveys have been completed on the Granville East grid. The magnetic survey was undertaken to locate the Granville East aeromagnetic anomaly, and determine the nature and distribution of magnetic sources within the area, and to aid in the interpretation of geology. The survey is described in detail elsewhere (Sumpton 1982). Subsequent to the drilling of DDH 1 and the observation that significant concentrations of sulphides were likely to be associated with Sn mineralization, and SP survey was designed to attempt to locate other such concentrations.

5.4.1. Magnetics (Refer Plans 13 and 14 A, B, C)

The southern area of the grid, south of line 10100N presents a complex picture which cannot be explained by a single source or a simple collection of individual sources, but rather by an interplay of folded units bearing variable concentrations of magnetic minerals. Where these units intersect the surface they produce magnetic 'spikes', elsewhere they appear deeper. From the evidence of these near surface features, the zones appear to be of limited thickness. However the magnetic profiles imply that whether because of the composite effect of a number of units, or of a real increase in the width of individual magnetic units, greater thicknesses of magnetic material should be encountered at depth.

Such a magnetic 'spike' as mentioned above is present over the zone of stanniferous gossan on line 9990N where subsequent costeaning confirmed, at least in this particular case, the relationship between magnetic material and Sn mineralization. The pyrrhotite/Sn zone intersected in DDH 1 is consistent with anomaly.

North of line 10100N the situation seems much simpler. The magnetic picture is dominated by a low amplitude but persistent anomaly which has as its source a dyke like body apparently dipping steeply to the west.

Without exception all deep sourced magnetic anomalies which are well formed enough to show evidence of dip have implied that the source dips to the west, which is contrary to the geological evidence. Whether this is due to ambiguity in the magnetic profiles, some structural complexity which allows both interpretations to be correct, or the affects of a significant remnant magnetization vector not parallel to the current field direction, has not yet been determined.

5.4.2. Self Potential (Refer Plans 15 and 16 A, B)

The SP survey located a sizeable number of intense anomalies, most of which can be related to sharp, near surface, magnetic features. These anomalies are generally in the range -300 to -800mV and where they are well shaped show evidence that the source dips to the east, i.e. in agreement with geological indications. The responses in this category which do not have magnetic character notably those centred on 9800N 9875E are nevertheless likely to be caused by near surface sulphide mineralization.

The relationship between SP and magnetic responses is less clear on the western side of the grid (circa 9400E) between lines 9900N and 10200N. Here the SP anomalies are less intense and broader, while the magnetics, though showing evidence of near surface sources, shows few well defined spikes and does not correlate exactly with the SP. This suggests a more diffuse and erratic source for both responses.

Further to the north there is a well developed SP anomaly (-200mV on line 10400N, 9512E) in an area mapped as Tertiary cover. This cover may well be the reason for the reduced amplitude of the anomaly and the lack of near surface magnetic response.

In general the effect of the pyritic black shale is to increase the noise level over its area of outcrop compared with that over the quartzites.

026

The SP survey has better defined those areas which are likely to reveal near surface mineralization, including some which were without noticeable magnetic expression. The distribution of the SP anomalies reinforces the relative complexity of the area south of line 10100N. Figure 4 is an attempt to show the sort of relationships which may exist between magnetic sources in this area. It is not meant to be a rigorous interpretation but it does to a large extent satisfy the constraints of the observed surface magnetic and electrical potential fields.

5.5. Costean Programme

Three costeans were excavated to obtain more geological information.

1. Costean Line 9990N between 9740E and 9766E.

This was designed to expose more of the stanniferous magnetite gossan located during geological mapping. Results of this exercise are depicted in Fig 2. The costean exposed typical black shales and, significantly 10m of mineralized carbonates and calcsilicate rocks. The sequence dips fairly steeply to the east with a small, north plunging antiform at the western end. No facing criteria could be seen. In detail, passing from west to east, using 9740E as a datum the sequence is as follows:

0-7.2m	Hard, finely laminated, pyritic black shale.
7.2m-8.5m	White, altered sandstone with abundant Fe staining.
8.5-13.7m	Hard, finely laminated black shale. Pyrite along bedding and cleavage planes.
13.7-15.8m	Highly weathered sequence with layers of diopside rich rock with arsenopyrite and some magnetite veinlets.
15.8-17.5m	Complex siderite, diopside, tremolite rock with coarse clusters of magnetite, pyrrhotite and arsenopyrite capped by magnetite gossan. Petrology reports that tin occurs in the form of coarse to very fine crystals of cassiterite intergrown with magnetite. Similarly other Sn compounds such as wickmanite or schoenfliesite are highly probable (hydroxides of Sn with Fe/Mn or Mg). (Refer Appendix 1)

U28

17.5-20.5m Siderite rock containing disseminated pyrrhotite, pyrite, magnetite and arsenopyrite. Veins of green serpentine noted.

20.5-24m White silicified carbonate/calcsilicate rock with siliceous bands. Some specimens exhibit coarse clusters of cassiterite.

Rock chip samples taken across this horizon returned the following values for Sn.

Metres	Sn%	Metres	Sn%
12-13	0.04	19-20	0.70
13-14	0.04	20-21	0.62
14-15	4.80	21-22	11.22
15-16	4.71	22-23	0.53
16-17	1.91	23-24	0.05
17-18	0.81	24-25	0.01
18-19	2.89		

The magnetite gossan zone was followed by trenching along strike to the south for 10m. Spongy oxidized magnetite, siderite rock was exposed. Rock chip samples along this costean returned the following Sn assays.

Metres	Sn%
0-1m	8.79
1-2m	2.51
2-3m	3.14
3-4m	0.962
4-5m	2.63
5-6m	3.61
6-7m	4.93
7-8m	3.67
8-9m	4.44
9-10m	7.02

The geochemical profiles indicate that the Sn mineralization is associated with anomalous values of Fe, As and Cu. (Refer fig 2.)

- 2. Costean (Line 9700N, between 9830E and 9857E) was dug across the major magnetic anomaly and designed to expose the magnetic source rock. The ground magnetic profile suggests that magnetic material comes close to the surface at this point. Details are illustrated in Figure 3.

The costean exposed the following sequence using 9830E as a datum on zero point.

- 0-12m Finely laminated black shale. Flinty texture in part. Pyrite is common on bedding planes.
- 12-27m Banded diopside 'skarn' containing distorted layers of cream white diopside with layers of muscovite and phlogopite and pyrite and arsenopyrite grains throughout. Thin layers of cherty silica are common.

Sn geochemistry was very low over the calcsilicate interval. Zn and Fe show some character, however, significantly no magnetic material such as magnetite or pyrrhotite could be found. However the likelihood of magnetic material at depth in this horizon is high.

3. Costean on line 9500N, (between 9825E and 9850E) was planned to uncover skarn assemblages along strike from the massive arsenopyrite, tremolite mineralization discovered on line 9500N. Excavation failed to penetrate the Tertiary alluvial boulder beds.

Geochemical results from all three costeans are recorded in the geochemical ledger sheets in Appendix 3.

5.6 Results of DDH 1 (Refer Plan 17 and Appendix 3)

In view of the encouraging results obtained from the line 9990N costean, a short drill hole was planned to intersect the mineralized horizon at depth.

It should be noted that the ground magnetic response over the mineralized sequence was a narrow spike on the flanks of a much broader magnetic anomaly. A self potential survey, which was undertaken after the drill hole was completed, revealed a -577mV anomaly, coincident with the narrow magnetic spike.

The hole was terminated at a depth of 156.4m. A summary of the rock sequence intersected is as follows:

0-8.7	Fine grained, silicified sandstone. Fine quartz veination. Pyritic.
8.7-11	Total core loss.
11-37.5	Unconsolidated tremolite, pyrite rock. Obviously brecciated below 22m. Possible fault zone.
37.5-41.5	Massive, pyrrhotite, goethite rock. Brown fibrous radiating crystals of goethite after pyrrhotite. Remnant zones of less oxidised pyrrhotite occur. Approximate breakup of this mineralized zone is as follows;

031

- 37.5-38.9 Dominantly goethite.
- 38.9-39.7 Massive pyrrhotite, slightly oxidised.
- 39.7-41 Dominantly goethite with remnant pyrrhotite.
- 41-41.5 Massive pyrrhotite.
- 41.5-46 Tremolite? actinolite 'skarn' rock. Crosscutting veins of serpentine. Coarse clusters of pyrrhotite.
- 46-55.1 Silicified grey siltstone.
- 55.1-68.8 Black shale with banded calcsilicate interbeds.
- 68.8-76.9 Banded calcareous or dolomitic siltstone. Siliceous banded rock with fine lamellae of carbonate. Calcsilicate veins common.
- 76.9-115.2 Calcsilicate 'skarn' rock. Bands of silica and white diopside with crosscutting veins with pyrite, pyrrhotite, tremolite, actinolite and serpentine. Complex small scale folding common.
- 115.2-134.51 Finely laminated black shale with carbonate and calcsilicate interbeds. Pyrrhotite clusters common in calcsilicate layers.
- 134.51-156.4 Finely laminated black shale. Up to 5% disseminated pyrrhotite throughout.
- 156 E.O.H.

The best intersection occurred at:
 37.5m - 41.5m 4m at 0.11% Sn

This included 1m between 39-40m which assayed 0.36%Sn.
 This zone is dominantly massive pyrrhotite.

The results of this hole indicated the following.

1. The mineralized horizon exposed in the costean was intersected at a vertical depth of 25m. The grades of Sn intersected were, however, not compatible with those indicated by the costean. This notwithstanding, it is clear that the massive pyrrhotite zone in DDH 1 is highly anomalous in Sn.

032

2. At least 85m of calcsilicate/carbonate rock was intersected in the hole. This indicates a significant thicknesses of reactive carbonate rock which has been contact metamorphosed to skarn-like assemblages. This fact coupled with the well defined magnetic pattern in the area, suggests that the probability of finding skarn related magnetite and pyrrhotite bodies is high.

033

6. SYNTHESIS GRANVILLE EAST

The main target in the Rocky Cape E.L. 1/77 is a Renison Bell style pyrrhotite, cassiterite orebody. Renison Bell in Western Tasmania is reported to have probable reserves of 24 million tonnes at 1%Sn (Patterson, 1981). The presence of the St. Dizier Sn deposit 7 km south-east of Granville East enhances the potential in this area. St. Dizier is a magnetite, pyrrhotite skarn-type deposit which in 1979 had reserves of 1 million tonnes at 0.7%Sn (CRAE report). The host rock is a serpentinised forsterite marble. Recoverable tin occurs as cassiterite within pyrrhotite and magnetite, in a host rock which is essentially serpentine. The similarities between the aeromagnetic signatures of the Gourlays Creek and Granville East prospects, with that of St. Dizier was suggested by the 1957 Rio Tinto survey and strongly reinforced by the CRAE/Geopeko aeromagnetic survey of 1981.

Subsequent ground magnetic surveys at Granville East have revealed magnetic anomaly patterns, although diverse in their size and concentration, of magnetic material and complex in their inter relationships, are consistent magnetite/pyrrhotite bodies. Geological mapping with subsequent costeaning and diamond drilling, has conclusively defined significant units which contain skarn mineralogies, unaltered carbonates and, most importantly, anomalous values of tin. In detail, these horizons have been demonstrated to be mineralized in part. Clearly, the mineralized sequence uncovered by the costean on line 9990N, returned extraordinary assays of Sn. The intersection of DDH 1 has shown that these skarn horizons will have depth extent. However the disappointing assay results from DDH 1 indicates erratic grades, which is commonly a feature of skarn and replacement styles of mineralization (e.g. Cleveland and King Island).

The SP survey, completed in the latter part of this field programme, has revealed anomalies coincident with the defined pyrrhotite zone and other magnetic features with a large sulphide component, at least in the near surface. This implies that the coincident magnetic/SP anomalies almost probably reflect near surface pyrrhotite.

The programme outlined in this report, has substantially upgraded the Granville East Prospect. The data base established to date, will allow future exploration for magnetite-pyrrhotite tin mineralization to proceed with a high probability of success.

Anomaly Evaluation

It is considered that the style of orebody being sought at Granville East should have the following:

- a. A geochemically anomalous response in the 'C' horizon soils of one or more of the following elements. Sn, Cu, As, Fe.
- b. A magnetic response with or without an associated SP response.

An association of these factors with a mapped carbonate/calcsilicate horizon is seen as a bonus. It is also considered, that if the mineralization has a large pyrrhotite component as is indicated then a good EM response over significant mineralization could be expected. However with the current database, the following priority checklist is proposed:

Priority 1 anomaly:

Coincident Sn, Cu, As soil anomalies. Coincident magnetic, SP anomalies. Calcsilicate rocks mapped with strike continuity.

Priority 2a:

Coincident Sn, Cu, As soil anomaly. Coincident with anomalous magnetic response. SP anomaly coincident.

Priority 2b:

Coincident Sn, Cu, As soil anomaly. Coincident with anomalous magnetic response. SP anomaly adjacent.

Priority 3:

Coincident Cu, As soil geochemistry (with some Sn response) coincident with magnetic and/or SP anomaly.

Priority 4:

Magnetic and/or SP anomalies, with some geochemical character.

Plan 18 summarises important geological and geochemical features and should be assessed in conjunction with the ground magnetic contour map and SP contour map. The map has been divided into priority areas based on the existing data.

Recommendations for future work

1. The existing grid be infilled with crosslines established and read with magnetics.
2. Reconnaissance lines to be established north of the existing grid, to evaluate the northern extension of the magnetic anomaly.
3. The testing of drill core and other oriented samples for magnetic properties i.e. susceptibility and remnance characteristics. This is particularly important in view of the conflict between the interpreted dip of the magnetic structures and the geological dip.

- 4. A ground EM technique should be considered for the Granville East area. If the mineralization in this prospect is dominantly pyrrhotite, it is conceivable that deeper seated bodies may not give magnetic or SP responses. An EM system, will, however detect these bodies. This action may generate new anomalies and will certainly enhance our knowledge of known targets.

- 5. Selected 'B' samples from the soil sampling programme should be pulped and reassayed. This is because cassiterite found in hand specimens and in stream sediments has been quite coarse and would be missed in the -80 mesh fraction. Reassaying whole samples may give new anomalies in areas where companion elements has shown geochemical character and similarly enhance known anomalies.

- 6. Studies have began into examining the mineralogy of the various Sn species present in mineralization found to date. This may shed some light on the difference between results from the Line 9990N costean and the intersection in DDH 1.

- 7. Efforts should be made to increase our data base with respect to this type of deposit. For example: reviewing core from old holes drilled at St Dizier, reviewing data from Tenth Legion and Mt Lindsay and communicating with people with experience from Mt Cleveland, Rension Bell and Mt Bischoff. Although this type of orebody is much sought after, their characteristics are not widely known.

- 8. With the knowledge gained in this field programme, the area has been divided up into zones of priority. These zones are shown on Plan 18. The criteria for anomaly selection has been described above.

037

Priority 1 areas

1. Zone between 9500N and 9850N.
 This complex zone warrants at least three holes each of 150 to 250m.
 An initial hole is proposed and collared at 9700N, 9950E with an azimuth of 231°M, declination of 50° and a planned depth of 250m.

This hole, DDH 2 will test the following features (Refer Plan 19)

1. Coincident Sn, Cu, As soil geochemistry anomaly.
2. It will test the near surface expression of the larger magnetic anomaly.
3. Coincident SP anomaly.
4. It will penetrate known calcsilicate 'skarn' horizons at depth.
5. It will allow a 3D look at the complex structure in this zone.

2. Zone between 9850N and 10650N
 Two holes are planned on lines 10200N and 10400N (refer plans 20 and 21). Further holes may be required if a high grade low tonnage resource is indicated.

DDH 3

Coordinates 9875E 10,200N

Azimuth 231°M

Dec 50°

Final depth 250m

This hole will test the following features:

1. Coincident Sn, Cu, As, Zn geochemistry.
2. A magnetic anomaly with a slightly offset SP anomaly.
3. A mapped calcsilicate, 'skarn' horizon.

DDH 4: Difficulty in resolving the geological dip in this area, makes it difficult to decide on the direction of drilling. Prior to drilling, magnetic modelling and magnetic remnance determination will resolve this problem.

Notwithstanding, proposed DDH 4 is as follows:

DDH 4

Coordinates 10,400N 9625E

Azimuth 51⁰M

Declination 50⁰

Final depth 250m

DDH 4 will test the following features:

1. Coincident Sn, Cu, As, Zn anomaly
2. Magnetic anomaly
3. Mapped calcsilicate horizon

When more data becomes available, the problem of geological dip should be resolved.

Priority 2b area

1. The triangular zone centred on 10,000E 9600N, requires 2 holes. Precise targets will be defined upon completion of infill magnetics and EM.
2. The zone south of 9800N and centred between 9425E and 9600E requires 1 hole. Similarly target definition requires infill magnetics and EM data.

Priority 4 areas

1. The priority 4 area north of 10500N will be considerably upgraded if DDH 3 and 4 encounter significant mineralization.

7. DETAILED PROSPECT EVALUATION: GOURLAYS CREEK

7.1 Gourlays Creek Prospect

Exploration of the Gourlays Creek magnetic anomalies has proceeded in two phases. In mid 1980 a small grid was established over a supposed 'window', through the Tertiary basalts which dominate the area. This area was geologically mapped and ground magnetics were read. Similarly the grid was soil sampled by hand auger. Sampling endeavoured to collect 'C' horizon soils, however deep soil horizons made this impossible, hence samples represent both 'B' and 'C' horizons. Results of this work are documented in plans GC4 to 6.

During 1982 the grid was greatly extended to encompass all the magnetic character of the prospect. To date, the main work completed on this grid, is the reading of ground magnetics and some preliminary geological mapping.

7.2 Geology (Refer Plans GC1 and 4)

The Precambrian sequence covered by the 1980 grid, consists dominantly of fine grained quartzites and sandstones with siltstones. Isolated hornfelsed outcrops usually containing pyrite and pyrrhotite are evident. At 9600N, 2400E outcrops of massive banded magnetite silica rock were discovered. This occurrence is partly responsible for the Gourlays Creek South anomalies. Rock samples of this magnetite returned low orders of Sn in assays.

046

The Precambrian rocks are intruded in the south by an apophysis of the Devonian Heemskirk Granite. Here the granite is a white aplitic variety with some parts tourmalinised. A specimen of tourmalinised granite returned 2000ppm Sn. (KR 5610) To the north, east and south, remnant Tertiary basalt predominates.

To the north, around 11500N 2100N, an old Cu prospect was found. Old Mines Department reports revealed this to be known as Vincent's Cu Prospect. Waterhouse (1915) reported a 8½ft band of 'ore' consisting of magnetite, hematite, pyrite, quartz enclosed conformably in slates and sandstones. Magnetite located there and at two other occurrences nearby, is clearly associated with fibrous calcsilicate minerals, probably tremolite. Hence a skarn origin for the magnetite appears likely. One grab sample of malachite bearing rock from the prospect assayed 10.8% Cu and 45.5ppm Ag (KR 5625).

7.3 Geochemistry

Method

All sampling was done by hand auger, with sample depths up to a maximum of 2m. The median depth was 0.5m. The sampling attempted to penetrate the 'C' horizon, however this was not always possible due to limited depth penetration of a hand auger. The sample interval was 25m. The -80mesh fraction from the samples, was assayed for Sn, W, Cu, Pb, Zn, Fe and Ag with every tenth sample assayed for gold. Pb, Ag, Au failed to return values above background, hence are only recorded in the geochemical ledger sheets.

Sn Geochemistry (Refer Plan GC 5)

Background values lie within the 5-10ppm range with 15ppm as a threshold value. At point 2400E 1300N, anomalous Sn geochemistry is coincident a magnetic high. However Sn values are generally low level, with a maximum value of 50ppm Sn.

Fe Geochemistry (Refer Plan GC 6)

Anomalous values are considered greater than 2%. Values range from 17% in basalt to less than 1% Fe in the south western part of the grid. The contours indicate a significant dispersion of iron, with no clear relationship with tin values. Similarly there is no coherent linkup with Fe geochemistry and known magnetite.

Cu Geochemistry (Refer Plan GC 7)

60ppm is considered the threshold value for Cu. the maximum value for Cu is 290ppm. Cu geochemistry is clearly associated with anomalous Sn values, but is not coincident. Anomalous values are clearly associated with known magnetite. Some of the Cu geochemistry reflects basalt.

Zn Geochemistry (Refer Plan GC 8)

Greater than 50ppm is considered anomalous with background values in the 10 to 20ppm range. Zn geochemistry exhibits a broad dispersed pattern, largely linked with basalt.

042

7.4 Geophysics (Refer Plans GC 2, 3A to 3F, 10)

The Gourlays Creek aeromagnetic anomaly is a large, complex feature with a maximum amplitude of around 1500nT. On the ground it resolves into a number of high intensity magnetic peaks coming from sources close to the surface. The bulk of the airborne anomaly seems to be generated by two parallel, long, relatively narrow bodies containing abundant magnetic material (by observation, magnetite) which strikes approximately north-south in the southern part of the anomaly and is folded to strike more in an east-west direction in the north. The section of the aeromagnetic anomaly known as Gourlays South can be seen to comprise of at least two more discrete sharp peaks, possibly connected. There is no clear geological evidence at this stage as to whether the implied north-east strike of this feature is correct or how it relates to the northern anomaly.

8. SYNTHESIS: GOURLAYS CREEK PROSPECT

The major part of the Gourlays Creek aeromagnetic anomaly appears to be generated by two parallel, long relatively narrow bodies containing abundant magnetite. Several occurrences of magnetite with pyrite and hematite have been mapped on these trends, notably Vincent's Cu Prospect. The association of magnetite with calcsilicate minerals close to an outcropping granite, suggests that the mineralization is a skarn type of deposit.

The target in this prospect is a tin bearing magnetite and/or pyrrhotite skarn. Massive magnetite occurrences found to date, have returned no Sn values in grab samples.

043

However the limited soil sampling completed to date demonstrates some coincidence between anomalous Sn values and near surface magnetite (Refer Plans 5 and 10). Highly anomalous grab samples of tourmalinised granite and tourmaline bearing quartzite breccia returned values of 2200ppm Sn and 280ppm Sn respectively. This shows that Sn is present in the system and lends optimism to the potential of the large bodies of magnetite/pyrrhotite which remain to be assessed in this prospect.

Recommendations for Future Work

1. The grid should be geologically mapped to assess the extent and character of outcropping magnetite. Similarly the Tertiary basalt contact should be mapped, in order that a soil sampling programme can effectively be implemented.
2. Selected 'C' horizon soil samples should be taken by power auger to assess directly the Sn potential of this prospect.
3. Limited costeaning should be undertaken to expose the best development of the magnetic horizons, for detailed assessment.
4. Completion of this programme will lead to infill gridding and target definition for assessment by diamond drilling.

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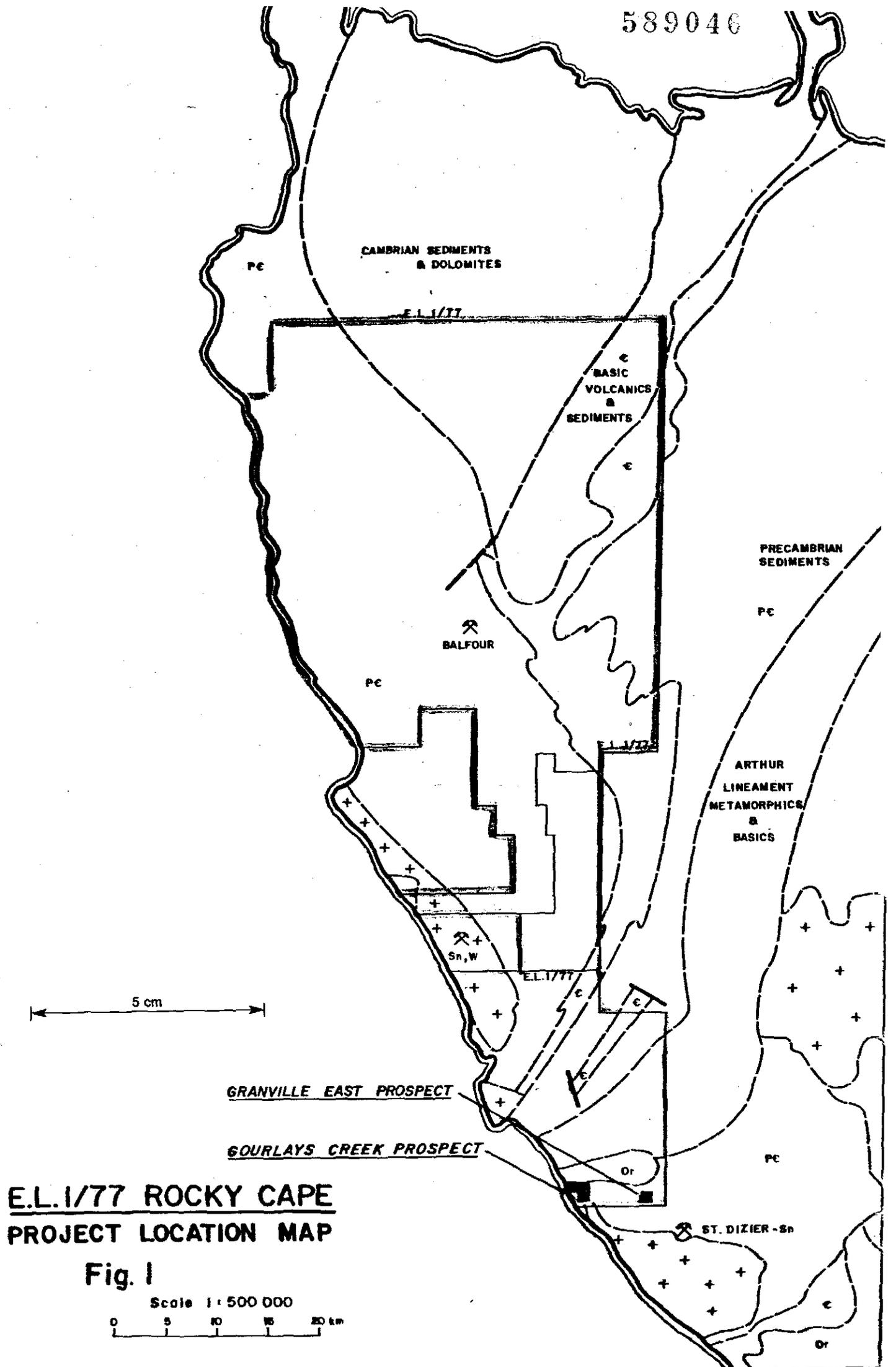
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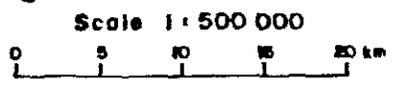
045

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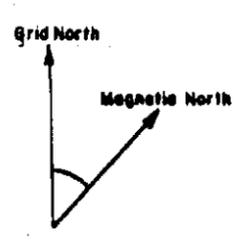
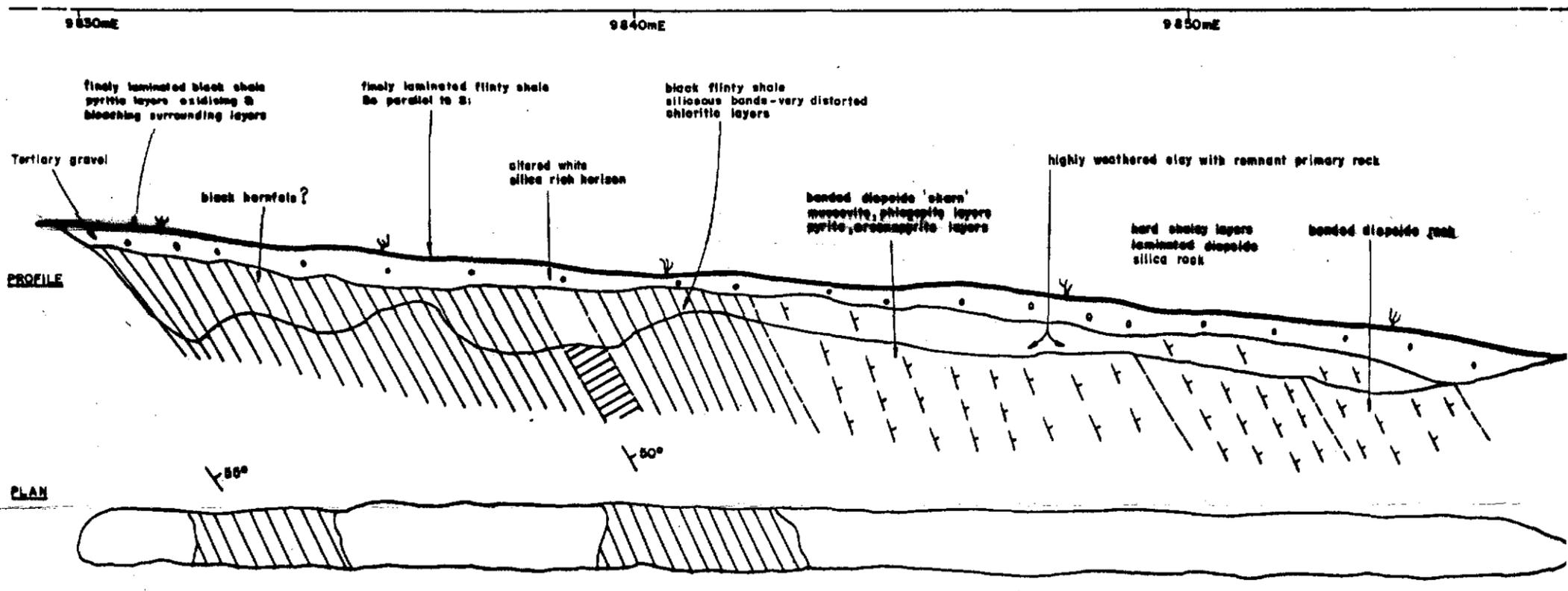
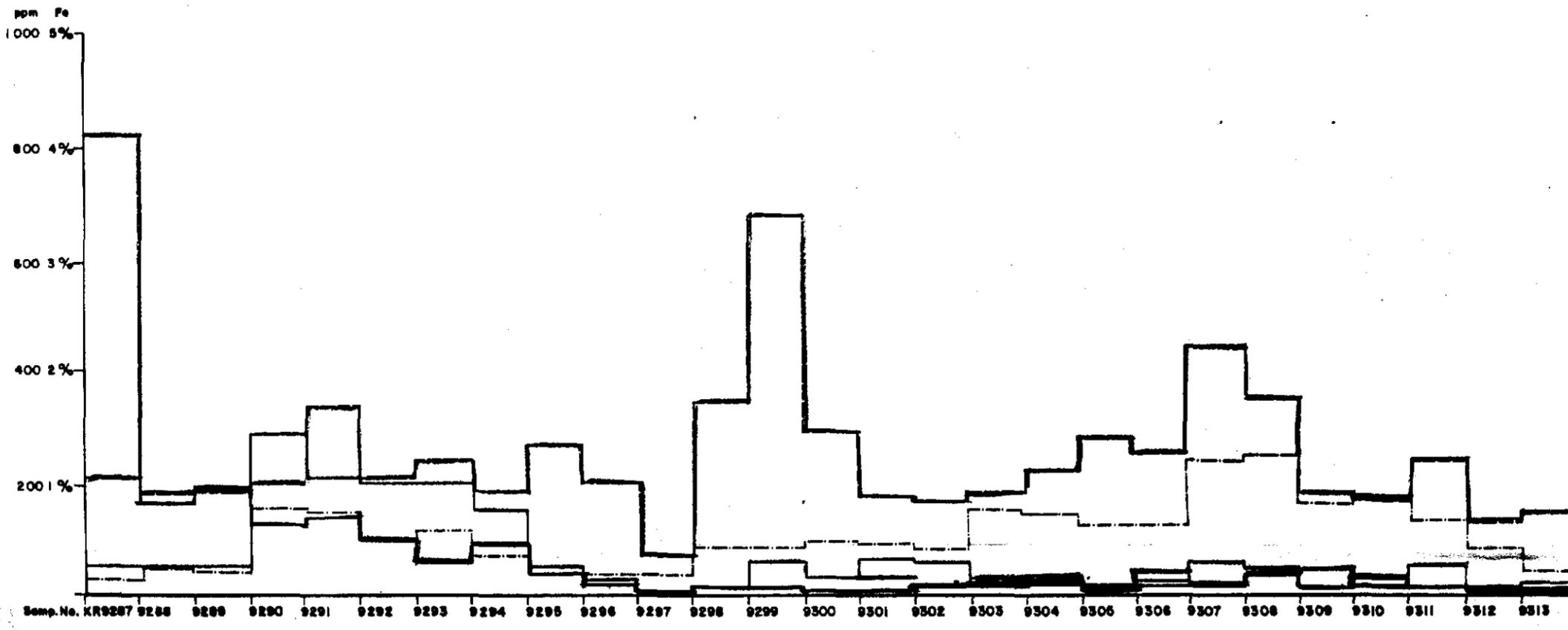


**E.L.1/77 ROCKY CAPE
PROJECT LOCATION MAP**

Fig. 1



Sn ———
 As ———
 Cu ———
 Fe% ———
 Zn - - - -



**E.L.1/77 GRANVILLE EAST
COSTEAN LINE 9 700mN
Geology & Geochemistry**

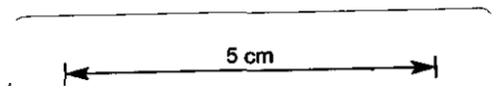
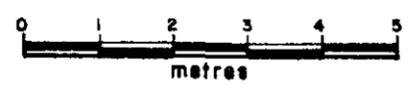
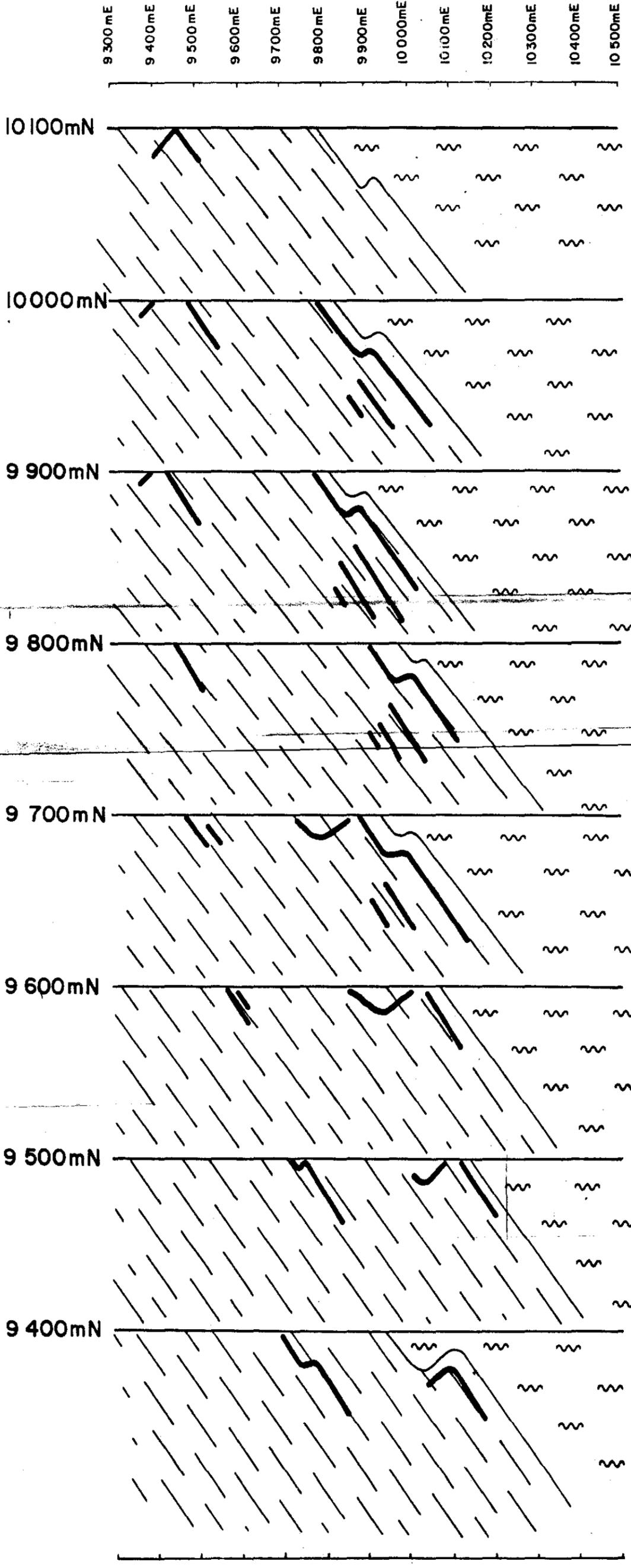


Fig 3



0 100 200 300 400 500
metres

1:10 000

— S.P. & Magnetic Response Unit
— Black Shale
~ Crenulated Quartzite

5 cm

E.L.1/77 GRANVILLE
Theoretical Cross Sections
To Explain Magnetic &
Self-Potential Response

FIG. 4

APPENDIX 1

THIN SECTION DESCRIPTIONS

KR 11353, 11354, 11360, 8515, 8516:

Descriptions by H.W. Fander of Central Mineralogical Services

KR 11451, 11452, 11454, 11455, 11459: Descriptions by the author.

049

589050

KR 11353: Sample of magnetite bearing mineralization from costean on Line 10,000N.

Macro: Dark, porous, strongly magnetic rock.

Micro: Composition: Mineralized siderite magnetite rock.

This rock broadly resembles KR 11354 in its general mineral assemblage, but is somewhat decomposed and weathered; it contains sporadic cassiterite, but by no means sufficient to explain the level of Sn assays reported.

The rock consists of coarse siderite crystals incipiently to wholly replaced by another, fine yellow carbonate along cleavages; this second carbonate is similar to that in KR 11354 and is believed to be an Fe/Mn variety. Other minerals include relatively coarse magnetite, patches of pale chlorite, and goethite boxworks after sulphides.

The sulphides comprise pyrrhotite altered in characteristic fashion to spongy pyrite, with inherited shapes and textures. Isolated cassiterite crystals were seen, and are up to 2mm in length, intergrown with magnetite; their presence indicates that at least some of the Sn occurs as cassiterite, moreover of coarse size and therefore metallurgically advantageous.

050

589051

KR 11354: Sample from costean on line 10,000N.

Macro: Brownish, fine grained carbonate rock with sulphides and magnetite.

Micro: Composition: Siderite rock.

This is essentially a siderite rock and although vaguely banded, is quite featureless; is not known from the petrography alone whether the rock is of sedimentary origin or whether it is a vein or similar introduction body; field relationships may resolve this problem.

The rock consists dominantly of microcrystalline siderite with an average grainsize of 0.05mm, and sporadic, irregular patches of subradiating chlorite aggregates, generally brown and oxidised. There are also occasional patches of yellow-brown carbonate (probably manganiferous) with different, finer texture to the enclosing siderite.

Opaque minerals include scattered magnetite and arsenopyrite crystals, with small intergranular shreds and patches of altered pyrrhotite (now mostly fine, spongy pyrite); traces of fresh pyrrhotite have survived as inclusions in arsenopyrite. No Sn minerals were detected, and there do not appear to be any potential Sn-bearing phases.

KR 11360: Example of calc silicate assemblage from costean on line 9700N.

Macro: Pale fine grained banded rock.

Micro: Composition: Banded diopside skarn.

This is a banded, fine-grained skarn consisting almost entirely of white, micro-granular diopside; the banding is almost certainly inherited from the original sediment, which was very probably an impure carbonate rock of essentially chemical origin.

Diopside occurs as very small grains and short, matted needles with random or subradiating orientation. Banding is partly due to grainsize variations, with finer, denser diopside alternating with coarser layers. There are also bands of small books of degraded phlogopite intergrown with diopside. Porphyroblasts of coarse flakes of almost colourless (or phengite) have formed sporadically.

Veins of a featureless, asbestiform mineral cut the rock. There are isolated rough crystals of apatite; no other components were detected.

KR 8515: Oxidised gossan: Location Granville East.
10,00N 9760E.

Macro: Very oxidised magnetite gossan. Remnant stringery
texture. Assay reported 6%Sn.

Micro: Compostion oxidised skarn. Surviving masses of
granular magnetite, oxidised sulphides argillised
ferruginised? actinolite patches of ultrafine
cloudy fibrous mineral with intergrown cassiterite.
Sulphides were pyrrhotite,? sphalerite. Some
carbonate present.

Fabric: Crude preferred orientation, some relict textures.
Medium-grained.

Comments: Could be termed gossan because of oxidised sulphides.
Cassiterite l-5u, fibrous; associated mineral may be
another Sn compound. This is possibly wickmanite
or schoenfliesite (hydroxides of Sn with Fe/Mn or Mg).

053

589054

KR 8516: Location Granville East. 10,00N 9760E.
Macro: White siliceous weathered rock. Voids occur with large crystals of cassiterite.

Micro: Composition
Silicified Calc-Silicate Rock. Relict textures suggest acicular? tremolite, granular? diopside, now completely replaced by quartz mosaics, lightly pigmented.

Granville East

Ultrafine clays, leucoxene pigmentation.

Fabric: Random fabric; relict textures moderately well preserved; medium-grained.

Comments: Relict textures suggest a skarn-type assemblage. Contains fine needles of unidentified mineral. Sn assay recommended.

054

589055

KR 11451: DDH 1 Example of alteration between 55.1m and 55.7m.

Macro: Vein intrudes very fine grained greeny black rock. Extending out from vein is a front which defines the beginning of a brown alteration. Numerous microveinlets are obvious.

Micro: Composition
Vein consists of corroded crystals of plagioclase containing needles of tremolite. Bulk of the vein is made up of fibrous tremolite with lesser grains of diopside (clinopyroxene). Conspicuous lozenge shape tin crystals are evident. The groundmass into which the vein is intruding is dominantly very fine grained quartz, a very fine grained dark material which is giving the dark cloudy appearance. The light brown alteration? noted in hand specimen appears to be due to tremolite/actinolite.

Fabric: Very fine grained with no distinguishable fabric.

Comments: Sn was not reported in the assay of this interval. It is noteworthy that it occurs in a vein with plagioclase and tremolite.

055

589056

KR 11452: DDH 1 Conspicuous zone of dark green and cream coloured layers.

Macro: Banded rock with lenticular dark green layers and creamy layers which are both conformable for the most part and crosscutting in some instances. Pyrrhotite noticeable in the cream layers and in crosscutting veinlets.

Micro: Composition Diopside serpentine rock.

Dominantly a pyroxene rock (Diopside) with bands of serpentine being derived from alteration of pyroxene. Some yellow coloured mineral grains occur as remnants (phlogopite?) Serpentine with characteristic low birefringence and extinction patterns is seen in the cleavage of the diopside crystals. Pyrrhotite occurs as veins and as clusters associated with serpentine.

Fabric: Banding probably reflects original bedding.

056

589057

KR 1145: DDH 1 71m. Example of relationship between calc-silicate assemblage and original carbonate.

Macro: Banded irregular layers of creamy white mineral. darker layers and light coloured carbonate. Veinlets of pyrite throughout.

Micro: Composition: Dolomite, diopside, tremolite rock.

Reasonably coarse grained granoblastic carbonate, clearly being replaced by granular diopside. A conspicuous yellow mineral forms thin layers and veinlets. Rhombs of carbonate and be seen completely replaced by tremolite.

Comments: This slide shows the relationship of calc-silicate minerals. Clearly not much material has been introduced.

057

589058

KR 11455: DDH 1. Example of calc-silicate assemblage 108m.

Macro: Grey and white banded rock with distorted layers and numerous crosscutting veinlets. Sphalerite is conspicuous as is green serpentine.

Composition: Tremolite, diopside rock.

Micro: Mixture of fibrous tremolite, granular diopside. Tremolite forms "balls" which may be after carbonate rhombs. Serpentine has altered from pyroxene. Sphalerite appears to be corroded by pyroxene.

KR 11459: DDH 1. Example of carbonaceous carbonate.

Macro: Appears as a carbonaceous black siltstone or silicified shale. Fizzes with fairly concentrated HCL

Micro: Composition

Fine grained carbonate with carbonaceous material defining the layers.

Fabric: Layers define original sedimentary layering
Quite crenulated, however, showing considerable strain.

553

589060

APPENDIX 2

Report on the Heemskirk Granite Contact

by M. Effler

EXPLANATORY REPORT OF THE GEOLOGICAL MAP OF THE
NORTHERN MT. HEEMSKIRK GRANITE/GRANVILLE HARBOUR

1. INTRODUCTION AND ROCK DESCRIPTION

The Mt. Heemskirk intruded into the Proterozoic rock sequence north-west of Zeehan in the late Devonian. These precambrian rocks near Granville Harbour can be divided roughly into two groups:-

- a) A belt of metamorphic rocks along the coastline north of Granville, which represent probably the southern continuation of the Arthur Lineament (Corbett, K.D. and Brown, A.V. 1976) and
- b) the relatively unmetamorphosed rock sequences east and north east of Granville Harbour (Granville East Grid).

The latter are mainly Quartzite, micaceous quartzite and black shale. Magnetite and layers of carbonate occurs occasionally within the black shale (Granville - East grid : 10 000N 9 725E) and of the boundary between the nearby unmetamorphosed sediments and the Mt. Heemskirk Granite (Aberfoyle-Area, point 50, Rock sample 30, on the geological map).

The black shale is often mineralised with pyrite and a small outcrop of massive pyrite with arsenopyrite has been found in the Granville East grid (N E).

The metamorphic rocks of the coastline north of Granville Harbour are mainly hornfels, micaceous hornfels and massive quartzites.

Weak pyrite mineralisation occurs in a few dark green layers of the micaceous hornfels.

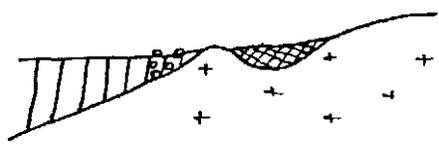
The Mt. Heemskirk granite is a fine grained, aplitic, white granite within about 2 m - 3 m at its contact and becomes towards the centre a coarse grained tourmaline rich muscovite-granite. The tourmaline occurs in the granite either as round about 5 cm - 10 cm in diameter tourmaline - rich parts or as tourmaline - rich veins in the granite body.

2. METAMORPHISM

Contrary to the rock sequences north of Granville Harbour, the sediment sequences east and north east of Granville Harbour seem not altered, or only very weakly altered. The latter still shows the sedimentary structure as a granoblastic texture in the quartzites, (compared to these rock types some of the hornfels along the coastline occurs as massive quartzites without any texture or only with layers of micas, which might show earlier chemical different sediment layers.

The only indication for a possible contact metamorphic event within the rocks east of Granville Harbour is:-

- a) the intensive tourmaline - replacement along cracks and layers in the quartzite which can be seen along the whole north eastern contact zone of the Mt. Heemskirk granite.
- b) Along this contact has been determined as well an increase of the quartzitic veins within the micaceous Quartzite.
- c) The very flat dipping and a small granitic dome of the intrusive body north of the main contact zone of the Mt. Heemskirk Granite in the Aberfoyle area (point 51, rock sample 34, on the geological map) have probably formed a calc-silicate-fels, which is slightly mineralized and a massive magnetite gossan. The magnetite occurs in this conception probably in a trough of the granite body (pictured).



- d) Another magnetite occurs in the Granville west grid at 9 615 N 2 400 E. This magnetite seems to be a replacement within a granoblastic quartzite. In this area was found as well a brecciated quartzite with a probable tourmaline rich ground mass. This tourmaline replacement and the brecciation can be probable indicators for a near granitic contact. The main apophyses of the Mt. Heemskirk Granite, which forms large outcrops north of Granville Harbour, is about 300 m away from these occurrences so that in this particular "magnetite-area" a concealed dome as a north eastern continuation of the Heemskirk Granite might be supposed.

3. TECTONIC

The main striking of the sediment sequence east of Granville Harbour is about 120° - 160° and dips to the north east. Two fold axis at about 180° and 30° - 50° dipping to the North and at about 130° and 10° - 20° dipping to south east can possibly be described (picture 2). The micaceous quartzite offer shows micro folds and kink bands.

062

The rock sequences along the coast show in the southern part an approximately uniform strike of about 160° - 180° and a flat dip generally to the east. To the north the strike of these rocks changes to more or less east-west. The main dip is about 45° to the south.

Several fold axis has been measured in the field. They range from 30°/45° NE, 95°/65° E, 120°/14° SE, 125°/70° SE, 130°/10° SE, 160°/30° S, 176°/45° S, to 110°/85° W. The main fold structure can be supposed around a fold axis striking about 100° - 110° and dipping with 10° - 30° to the east (picture 3).

The fold structures in the rocks of the coastline occur generally with amplitudes of 5 m - 10 m. A second and probably a kink foliation within these rock types is usual.

The cleavage of the latter rocks can be divided into three main generations:-

- a) 22% of the measured cleavage strike with 60° - 80°.
- b) 17% of the cleavage strike with 120° - 140° and
- c) as well as 17% cleavages strike with 0° - 20°.

The cleavage, which is distributed between these values makes a clear statement impossible.

The Mt. Heemskirk Granite shows one main cleavage between 140° and 160° with 42% of all measured cleavages. Another two secondary directions from 40° to 60° and 160° to 180° seem with 17% each not to be as important as the main cleavage (picture on geol. map).

4. GEOCHEMISTRY

From the northern contract area of the Mt. Heemskirk Granite were taken several stream-sediment samples of streams draining from the contact zone: SS/2, SS/3, SS/4, SS/5 and SS/6. There were taken as well three heavy mineral concentrations of power auger samples in the Granville East grid area: SS/1, SS/7, and SS/8.

The geochemical results of these samples, scanned at the XRF of Geopeko/Gordon are shown in the following table.

In particular, notice should be taken of the high tin values throughout, and for the higher Zr concentrations of SS/7, SS/5, and SS/3 and for the high Cr concentrations of SS/5, SS/7, SS/2 and SS/3.

The locations of these samples are shown on the geological map and in Table 1.

5. CONCLUSIONS

The northern contact of the Mt. Heemskirk granite seems to be a complex contact with apophyses, subdomes and troughs. The intrusions contact is in some areas east of Granville Harbour a very flat contact, which has formed several contact rock types as quartzites with tourmaline replacement, brecciated quartzites, magnetite replacement in weak metamorphosed quartzites and mineralised skarns.

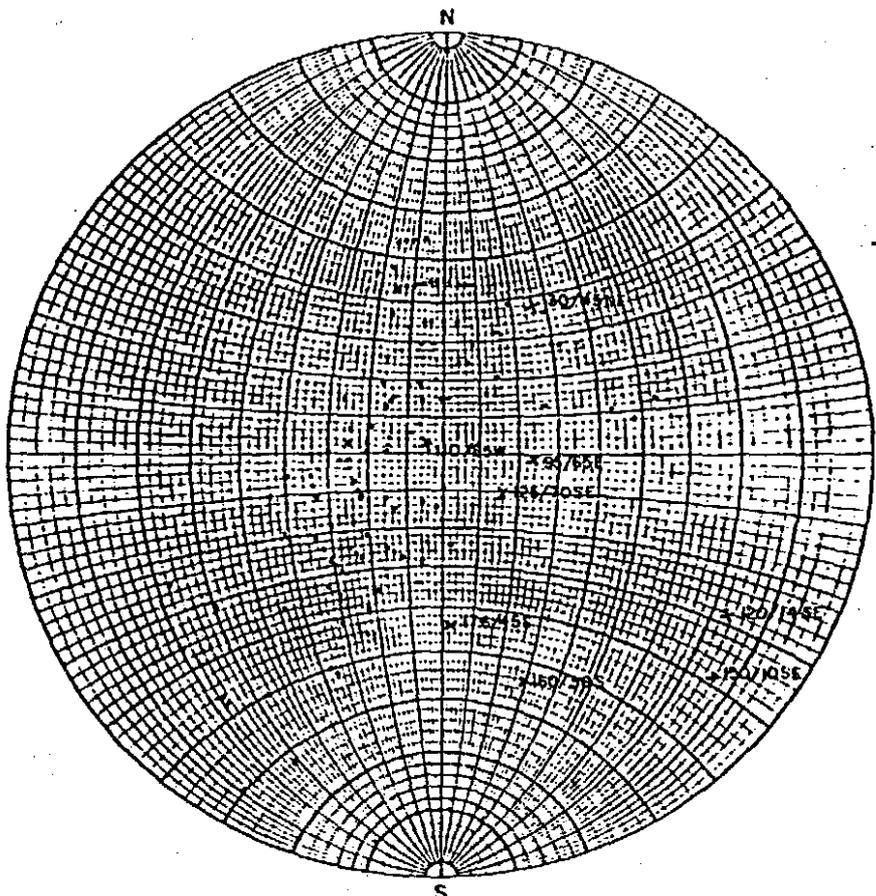
The various sediment sequence north of the Heemskirk Granite together with the complex contact area and the probable underground continuation of the granite to the north, makes research for contact metamorphic, mineralised skarns in the area north east of Granville Harbour very valuable.

MATHIAS EFFLER

3/2/82

065

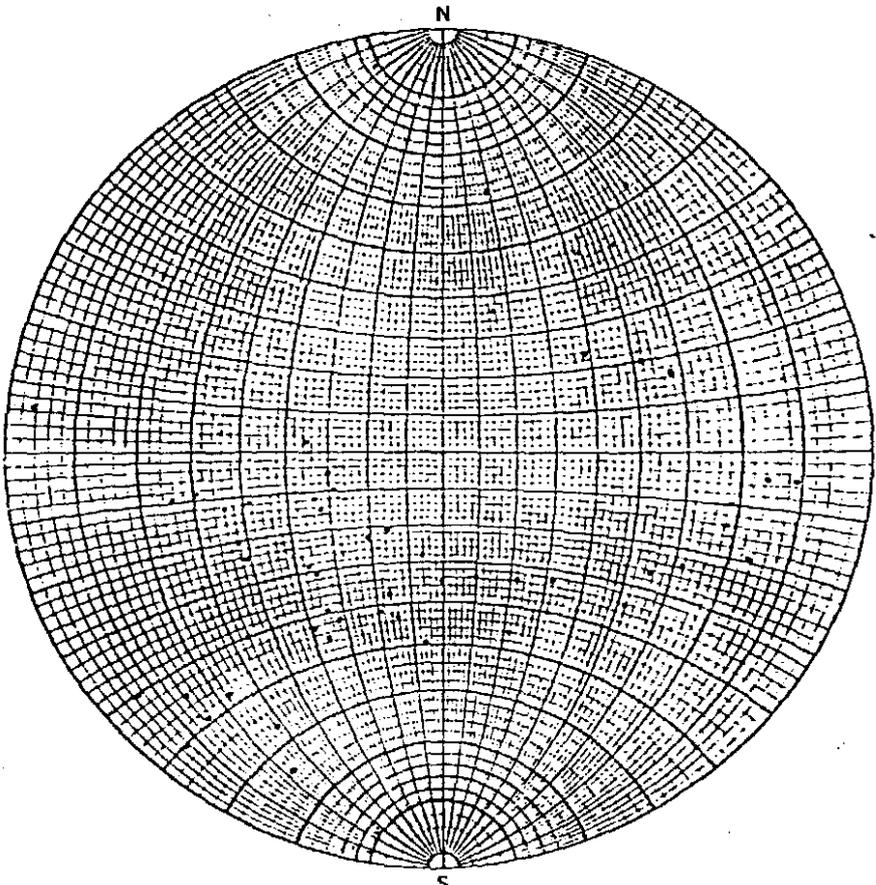
589066



WULFF NET

GRANVILLE - WEST AREA

X - Fold Axis



WULFF NET

GRANVILLE - EAST AREA

061

589067

APPENDIX 3

DDH 1

Geological, Geochemical and Geophysical Log

DDH 1GRANVILLE EAST PROSPECT E.L. 1/77

Proposed: P. Heithersay

Depth: 150m

Collar Coordinates: 9990N 9810E

Collar Inclination: -50° Collar Azimuth 231^oMag.

Final Depth: 156.4

Bore Hole Survey:	Metres	Inclination	Azimuth
	64m	-52°	241 ^o Mag
	106m	-52°	237 ^o Mag
	152m	-50°	241 ^o Mag

Note: Azimuth reading is not reliable due to magnetic interference.

068

589069

DRILLING DETAILS

Rig: Mindrill F30

Driller: Overland Drilling

Commenced: 16/4/82

Completed: 30/4/82

Casing: HQ - 0-6m
NQ - 6-45.8m

Core: HQ - 0-6m
NQ - 6-45.8m
BQ - 45.8-156.4

Drilling Conditions:

Very unconsolidated material to 35.5m which continued to cave into the hole. After 45m, coring with BQ, the ground was very good. The upper part of the hole tended to grip the rods.

GLOPEKO TASMANIA DRILL LOG

Prospect *GRANVILLE EAST* Hole No. *DDH-1*

OF 4
070

DEPTH (m)		CORRECTION LOG	ANGLE TO CORE AXIS		GEOLOGICAL DESCRIPTION	Alteration	MINERALISATION			Fracturing	Sample No.	From (m)	To (m)	Rec (m)	ASSAYS (Lab)											
From	To		Sa	Si			py	po	spinel						Sw	N	Ca	Pb	Zn	As	Fe	Mn	B	Al		
					Pyrrhotite mineral blebs occur within the matrix						11328	39	40	1	940	70	570	X	80	20	385	Mo	200			
					Siliceous bands and veins permeate the rock						11329	40	41	1	270	15	240	40	225	40	460	440	78			
45	46				Tasmanian Actinolite Schist Rock - Crumpling						11330	41	42	1	220	X	1000	X	70	1.5	295	10	13			
					veins of serpentine (Dark green and semi-opaque)						11331	42	43	1	65	X	235	X	40	1.0	10.5	6	30			
					Pyrrhotite appears in late stage veins and dendritic masses with chlorite-serpentine alteration. Blebs of pyrrhotite form irregular masses which are rimmed with quartzite						11332	43	44	1	15	45	440	X	25	X	16.0	3	16			
											11333	44	45	1	50	X	30	X	20	X	17	X	22			
											11334	45	46	1	20	X	80	X	40	X	2.9	X	20			
					Sandstone grey siltstone. Grey silicified siltstone						11335	46	47	1	7	X	30	X	20	1.0	2.6	X	41			
					Black shale. Veinlets of quartz, pyrite, pyrrhotite						11336	47	48	1	9	X	15	15	20	X	1.15	4.5	2	60		
					& tremolite/actinolite. Veinlets show brown alteration associated with them. Veinlets dominantly less than 1mm.						11337	48	49	1	6	X	20	10	20	X	1.65	1.0	2	31		
											11338	49	50	1	3	X	20	5	20	X	1.50	4.5	X	34		
											11339	50	51	1	X	X	65	895	290	0.5	1.50	50	X	32		
											11340	51	52	1	5	X	25	15	40	X	1.90	3.0	X	20		
											11341	52	53	1	X	15	40	X	20	X	1.85	2.5	X	51		
											11342	53	54	1	X	X	40	80	60	X	1.50	6.0	4	16		
51	51.04				ACTINOLITE ZONE. Silicified altered siltstone. Between 55.1 - 55.7m			✓ 2%	✓ 5%		11343	54	55	1	3	10	25	10	15	X	1.60	3.0	X	20		
					light brown alteration KANSI. Through interval layers of dark green and cream layers KR11452			✓ 2%	✓ 3%		11344	55	56	1	9	X	45	100	60	X	1.95	5.0	X	50		
70	62.1				SILICIFIED BLACK SHALE. Pyrrhotite/pyrite-disseminated and veinlets						11345	56	57	1	20	X	45	20	105	X	2.25	2.0	X	280		
											11346	57	58	1	15	X	80	20	130	X	2.30	2.0	X	23		
											11347	58	59	1	6	X	135	20	50	0.5	1.25	4.5	2	20		
											11348	59	60	1	4	15	135	30	50	0.5	1.20	10.0	X	18		
					ACTINOLITE ZONE. Banded calcareous sequence. Banded dark green serpentine cream white chlorite. Very distorted in part and banded KR11453						11349	60	61	1	X	10	135	30	60	X	1.60	8.0	8	27		
											11350	61	62	1	2.5	X	25	15	130	X	2.20	1.5	6	24		
62.5	67.9				BLACK SHALE. Variably silicified. Irregular bands of quartz with pyrrhotite, pyrite. Pyrrhotite also filling tension gashes			✓	✓ 5%		11351	62	63	1	20	X	115	70	680	X	2.45	2.5	4	170		
											11352	63	64	1	X	X	55	10	20	X	2.10	2.5	X	68		
											11353	64	65	1	X	X	80	35	80	0.5	1.70	8.5	2	20		
											11354	65	66	1	3	X	120	30	70	0.5	1.60	8.5	4	20		
69	68.8				BANDED SILTSTONE. Silicified black shale with light grey sandy layers						11355	66	67	1	6	X	135	45	155	X	1.60	6.0	X	34		
68.8	76.9				Spaced out by slumping and micaceous laminae evident						11356	67	68	1	15	X	50	15	390	X	2.10	1.5	X	14		
					BANDED CARBONACEOUS SILTSTONE. Siliceous banded rock with layers of white carbonate (Dolomite?) Dolomite layers vary from very fine lamellae (0.1mm) to banded layers			5-7%			11357	68	69	1	20	X	70	25	545	X	2.95	1.5	X	12		
					veins of tremolite & diopside & serpentine? clearly replacing carbonate. Commonly will have a core of pyrrhotite. KR11454 (71m). Spinel also noted in some veins						11358	69	70	1	10	X	90	25	65	X	1.55	2.0	X	8		
											11359	70	71	1	X	10	20	20	180	X	1.30	2.5	X	9		
											11360	71	72	1	15	X	130	25	1620	X	2.20	1.5	X	26		
											11361	72	73	1	4	15	65	20	770	X	2.35	1.0	X	30		
											11362	73	74	1	10	X	45	25	235	X	1.95	2.0	X	14		
											11363	74	75	1	75	X	110	60	380	X	2.80	0.5	X	14		
76.9					CALCAREOUS SILTSTONE. Five layers of dolomite, tremolite & actinolite						11364	75	76	1	40	X	45	15	75	X	1.10	0.5	2	16		
											11365	76	77	1	25	X	20	20	60	X	0.95	0.5	X	30		

14007

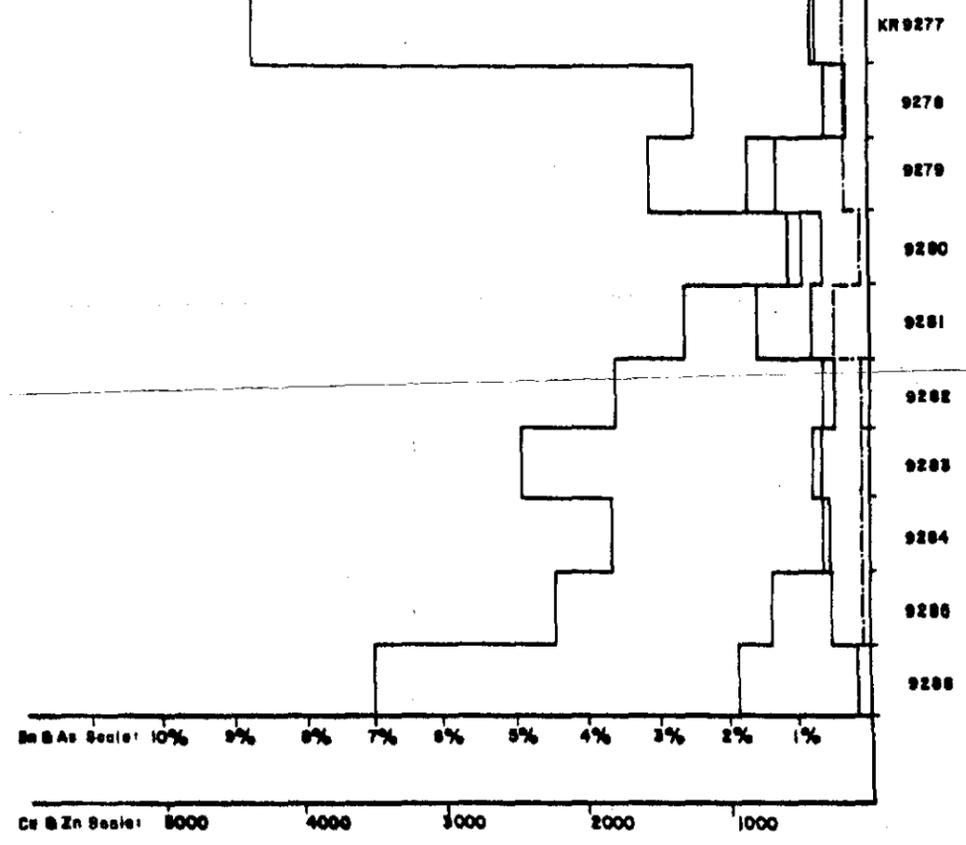
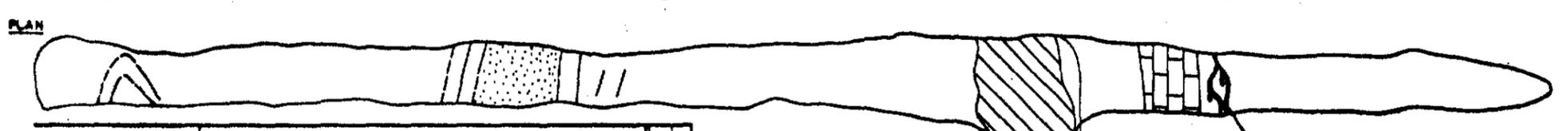
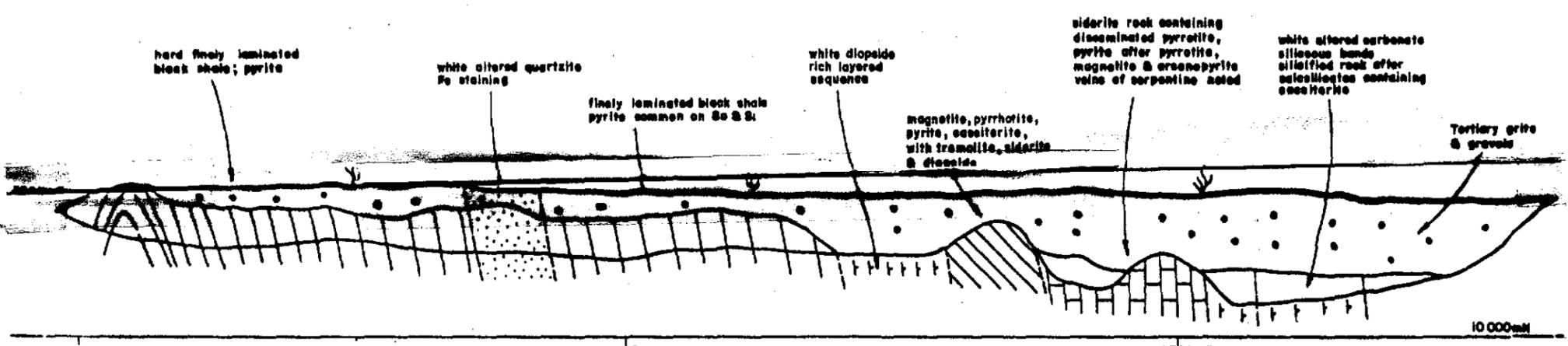
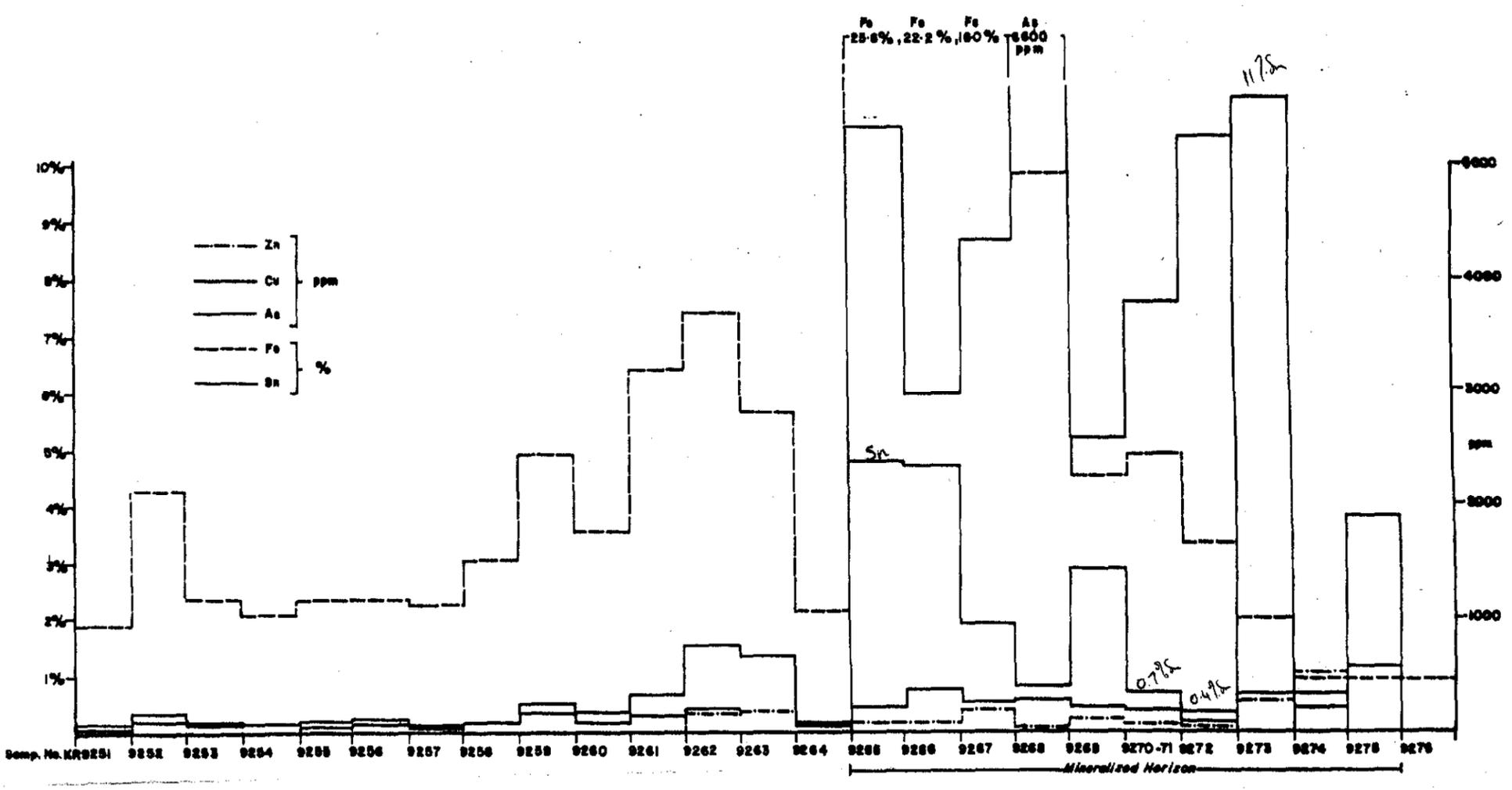
073

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APPENDIX 4

GEOCHEMICAL LEDGER SHEETS

074
4.1Ledger Sheets from Granville EastSoil Sampling Programme.



**E.L. 1/77 GRANVILLE EAST
COSTEAN LINE 9990mN
Geology & Geochemistry**

589076

ppm
 — Sn
 — As
 — Cu
 — Zn
 Note: All Fe values > 7% from 9286 - 9277



Fig. 2

U.K.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

076

Tenement name ROCKHURST AREA E.L. 1/77 No. Sample numbers Collected by GACPEKD
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference Analysed by ANALABS DPO no
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %							Grid ref	Geological Observations			
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag			Bi	Mo	As
		o/c sample type ***																		
		s sample type ****																		
T.S. 17063	C. linsen							8	x	15	x	10	2750	x	x	x	8	9400N		
17064								10	10	20	x	10	6150	0.1	x	0.5	3	9975E		
17065								8	x	15	x	15	6750	0.1	x	0.5	14	10,000		
17069								4	10	15	x	15	5900	0.2	x	2.0	13	10,100		
17070								6	x	5	x	5	1250	0.2	x	x	x	10,125		
17071								9	x	x	5	x	2950	x	x	1.0	x	10,125		
																		9500N		
17086																		9700E		
17320								15	x	10	30	25	2.00	0.3	-	2.5	22	9705	Infill Sampling	
17321								10	x	10	40	30	2.40	0.3	-	2.5	26	9705		
17322								15	x	45	35	80	6.75	0.3	-	3.5	41	9710		
17323								20	x	30	20	35	5.65	0.3	-	2.5	35	9715		
17324								15	x	20	50	55	2.25	0.2	-	0.5	8	9720		
17085								10	x	35	x	90	7800	x	x	x	26	9725		
17325								1250	x	285	80	2950	2.15	0.5	-	2.5	140	9730		
17326								30	x	165	65	940	2.75	0.5	-	4.0	80	9735		
17327								15	20	40	35	55	6050	0.5	-	12	13	9740		
17328								35	x	90	30	35	2.30	0.4	-	5.0	80	9745		
17084								70	10	210	30	1550	1.6	2.2	x	x	180	9750		
17105								15	10	275	25	225	9050	0.7	-	x	62	9755		
17106								20	x	95	x	295	1.85	0.2	-	1.5	20	9760		
17107								20	20	185	105	5900	1.65	2.3	.	x	42	9765		

589074

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type sugar hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name Rocky Cape EL 1/77 No. Sample numbers Collected by GEORGE Sheet 2
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference Analysed by ANALABS DPO no.

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations		
		ss * oc f s	fl	wi	al	co	ca		pH	Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo			As	
			o/c sample type ***																			
			s sample type ****																			
17108								100	X	435	30	255	6050	0.5	-	X	1000	9770				
17109								300		20	1100	80	535	9650	2.0	-	0.5	1900	9775			
17110								700	X	585	10	1000	1.55	0.9	-	X	2300	9780				
17111								15	X	15	X	25	1900	0.1	-	0.5	57	9785				
17112								10	10	10	5	15	1550	0.1	-	6.0	16	9790				
17113								30	15	10	X	15	1250	0.3	-	9.0	14	9795				
17082								6	X	30	15	10	2450	X	X	2.5	22	9800				
17329								15	15	10	30	25	3700	0.2	-	1.5	5	9805				
17330								15	X	15	15	15	4000	0.2	-	1.0	5	9810				
17331								10	X	10	20	25	3100	0.2	-	0.5	5	9810				
17332								X	X	5	5	15	2350	0.1	-	0.5	4	9815	Infill sampling			
17333								10	X	5	20	20	3950	0.1	-	1.0	10	9820				
17081																		9825				
17082																		9825				
17334								15	20	5	15	45	4850	0.3	-	0.5	7	9830				
17335								20	15	25	15	25	9950	0.1	-	1.0	26	9835				
17336								25	20	15	40	25	5.55	1.0	-	1.0	26	9840				
17337								90	10	20	50	40	5.95	0.1	-	1.5	38	9845				
17079								180	X	20	X	15	2.65	0.1	X	8.5	170	9850				
17338																		9855	No sample			
17339																		9860	No sample			
17340								85	X	10	65	30	4.05	0.1	-	2.0	12	9865				
17341								95	15	10	55	15	3.75	0.1	-	2.5	10	9865				

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

52
98
90
78

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name Rocky Cape E.L. 1/77 No. Sample numbers..... Collected by GEORGE Sheet 3
 Area / Prospect GRANVILLE EAST Date.....
 Map / Photo reference..... Analysed by ANALABS DPO no.....
 A 02143

078

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mn	As			
		o/c sample type ***																			
		s sample type ****																			
17342								178	15	30	45	25	5.85	0.2		X	160	9500N 9870E	↑ Infill Sampling		
17078								8	X	15	5	15	2.95	X	X	0.5	100	9875			
17077								7	X	15	X	10	1650	0.3	X	X	13	9900			
17076																		9925			
17075								10	X	620	10	15	7700	X	X	X	600	9950			
17074																		9975			
17073								6	X	15	X	30	9600	X	X	X	1	10,000			
17072								8	15	55	X	25	9250	0.1	X	5.5	9	10,025			
15676								9	X	55	X	25	2.75	X	X	1.5	27	10,050			
15675								8	X	80	X	15	3.00	X	-	14.0	62	10,075			
15674								9	X	55	X	25	2.75	X	X	1.5	27	10,100			
15673								20	10	X	X	75	2750	X	X	11.0	10	10,125			
																		9600N			
17104								4	X	10	X	20	3200	0.1	X	0.5	5	9600E			
17103																			No sample. Unable to penetrate gravels		
17102								3	X	115	10	25	7750	0.1	X	X	63	9650E			
17100								6	15	40	45	X	2.05	0.1	X	2	49	9675E			
17101								8	X	30	X	25	1.45	0.1	-	1.0	32	9675E			
17099								15	X	30	X	90	1.95	X	X	0.5	13	96700			
17289								35	10	60	5	115	4.35	0.1	-	X	20	9705	Infill sampling		
17290								9	X	20	60	50	9300	0.2	-	X	4	9710			
17291								20	X	25	60	50	1.10	0.1	-	X	2	9710			

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* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE . DGER

Tenement name Rocky Cape E.L. 1/77 No. Sample numbers Collected by Geopexa Sh #
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference Analysed by ANALABS DPO no
 A 02143

079

Sample No.	Type ss* oc f s	ss channel **						Carbon	Metal content ppm or %												Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As				
		o/c sample type ***																				
		s sample type ****																				
17292								30	X	15	X	85	2.95	0.2	-	10	20	9715E				
17293								15	X	25	15	45	2.15	0.2	-	X	9	9720E				
17098								6	X	40	X	75	2.65	0.1	-	X	26	9725				
17294								20	X	20	5	125	3.65	0.3	-	X	8	9730				
17295								10	X	75	X	275	4.70	0.2	-	X	9	9735				
17296								15	X	70	15	670	4.75	0.2	-	X	12	9740				
17297								10	10	80	225	395	2.10	0.2	-	X	13	9745				
17097								6	30	85	X	380	4.00	0.1	-	X	7	9750				
17298								20	X	220	170	210	1.95	0.2	-	X	13	9755				
17299								25	X	35	115	70	1.65	0.2	-	X	14	9760				
17300								15	X	95	80	110	1.80	0.2	-	X	7	9765				
17301								10	X	105	85	115	1.80	0.2	-	X	5	9765				
17302								20	15	15	55	50	2.10	0.4	-	0.5	9	9770				
17096																		9775				
17303								25	10	20	45	115	6.00	0.2	-	X	3	9780				
17304								40	X	25	50	175	4.4	0.3	-	1.0	74	9785				
17305								40	X	60	85	555	6.45	0.1	-	1.0	26	9790				
17306								230	X		70		12.5					9795				
17095																		9800				
17307								30	X	40	230	80	16.5	0.1	-	0.5	6	9805				
17308								15	X	25	100	45	9.6	0.2	-	X	4	9810				
17309								X	X	20	80	45	7.15	0.1	-	X	9	9815				
17310								X	10	10	75	35	2.00	0.1	-	X	7	9820				

589080

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type sugar hole or pit depth m A, B or C horizon

Tenement name ROCKY CAPE EL 1/77 No. Sample numbers Collected by Sheet 5 080
 Area / Prospect SANDVILLE EAST Date
 Map / Photo reference Analysed by DPO no
 A 02143

Sample No.	Type	ss channel **					Carbon	Metal content ppm or %										Grid ref	Geological Observations		
		fl	wi	al	co	ca		pH	Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo			As	
		o/c sample type ***																			
		s sample type ****																			
17311							X	X			85							9600W	9820E		
17094																			9825		
17312							X	X			25								9830		
17313																			9835	No sample	Infill sampling
17314																			9840	No sample	
17315																			9845	No sample	
17093																			9850	No sample	
17316								X	X	20	30	25	4250	0.3	-	3.0	5		9855		
17317							X	X	20	40	25	4250	0.3	-	3.0	5		9860			
17318							X	X	X	20	10	1550	0.2	-	1.5	4		9865			
17319							15	X	X	40	15	2100	0.2	-	2.5	5		9870			
17091							15	X		65	100	55	7850	0.8	-	7.0	51		9875		
17092							20	X		65	105	40	8950	0.9		6.5	66		9875		
17090																			9900	In crack bed, unable to penetrate	
17089							7	X		25	90	90	4.35	X	-	2.5	160		9925		
17088										75		1250	1.45	0.1	-	5.5	90		9950		
17087										45		65	4.10	0.2	-	10.0	80		9975		
15623							10	X		185	70	1450	1.8	0.4	A	1.0	30		10,000		
15622							4	10		35	15	15	3150	0.1	-	10	X		10,025		02
15620							X	10		55	20	15	1.25	0.1	X	80	40		10,050		08
15621							3	10		50	20	10	1.25	X	-	10	47		10,050		00
15618							8	X		5	5	70	1950	X	X	4.5	6		10,100		00
15617							10	15		75	5	20	1.75	0.2	-	X	43		10,125		00

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R./ EXPLORATION . GEOCHEMICAL SAMPLE . DGER

Tenement name Reconade EL 177

No. Sample numbers

Collected by GEPELO

SH

6 081

Area / Prospect GRANVILLE EAST

Date

Map / Photo reference

Analysed by ALABS

DPO no

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fi	wi	al	co	ca	pH		S	N	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As			
		o/c sample type ***																			
		s sample type ****																			
15615								25	10	10	X	20	8950	0.1	X	X	2	9600N			
15614								20	30	S	X	5	1950	0.1	X	X	X	10,200			
15613								30	15	X	X	10	3100	X	X	X	X	10,225			
15612								35	X	S	X	10	2950	X	X	X	X	10,250			
15610/								20	10	S	X	10	3100	0.2	X	X	X	10,275			
15611								15	20	S	S	35	2750	X	X	X	X	10,275			
15609								6	30	X	X	40	3850	0.1	X	X	X	10,300			
15608								40	80	X	10	25	5100	0.2	X	1.5	X	10,325			
15607								45	20	X	S	10	1800	X	X	X	X	10,350			
15606								35	10	X	S	10	3950	X	X	X	X	10,375			
15605								35	10	X	S	15	2000	X	X	X	X	10,400			
15604								X	10	X	S	10	3500	X	X	X	X	10,425			
15603								25	20	S	10	10	3750	X	X	X	1	10,450			
15602								20	20	X	S	10	1750	0.1	X	0.5	X	10,475			
15601								35	20	S	S	25	2550	X	X	X	4	10,500			
15647								7	10	100	195	25	2.15	X	X	X	2.0	9700N 9500E			
15648								X	X	105	80	75	1.20	0.3	X	2.0	290	9525E			
15649								S	X	45	X	30	1.80	0.1	X	X	25	9550			
15650								3	X	50	X	35	1.90	0.1	X	X	20	9575			
15651																					
15652								X	15	30	X	150	1.80	X	X	X	33	9600E			
15653								7	X	113	10	110	1.65	0.1	X	X	26	9600E			
15654								X	X	45	135	40	1.45	0.1	X	12.0	3	9650E			
15655								X	X	45	134	40	1.46	0.1	X	10	4	9675E			

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fi = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

1589082

C.R.N. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

082

Tenement name RC CAFE E.L. 1/77 No. Sample numbers Collected by
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference LINE 9700N Infill soil sampling 5m centres Analysed by DPO no.
 A 02143

Sample No.	Type	ss channel **							Carbon	Metal content ppm or %												Grid ref	Geological Observations
		fl	wi	al	co	ca	pH	S _N		W	Cu	Pb	Zn	Fe %	As	Bi	Mo	As					
		o/c sample type ***																					
		s sample type ****																					
15656									5	X	25	70	60	6.55	0.1		12.0	4	9700N				
17029									6	X	60	45	90	12.0			5.0	9	9700E				
17030/31									7	X	60/65	60/60	145/170	9.5/9.5			35/40	8	9710				
17032																			9715	Sample not obtainable			
17033																			9720	" " "			
15657									20	X	80	70	25	1.9	0.4		11.5	29	9725				
17034									40	X	40	110	40	2.60			17.5	190	9730				
17035									75	X	20	40	105	2.20			6.0	53	9735				
17036									2350	X	45	80	90	2.85			4.0	150	9740				
17037									20	X	25	20	50	1.10			3.0	11	9745				
15658									1000	10	445	5	60	7.30			1.0	80	9750				
17038									25	15	260	90	1650	1.65			0.5	80	9755				
17039																			9760	Sample contaminated			
17040/41									15/15	15/15	35/35	25/40	50/40	1.25/1.18			2.0/3.0	4/6	9765				
17042																			9770	Quartz gravels			
17043									5	X	100	15	40	0.85			0.5	.17	9775				
15659																			9780				
17044									10	X	65	20	35	1.40			0.5	7	9785				
17045									9	10	60	25	35	0.75			0.5	12	9790				
17046									6	X	65	15	35	1.85			X	9	9795				
15660/61									15	65	60	X	155	7.05	X		X	48	9800				
17047									3	X	30	20	45	5.40			X	8	9805				
17048									10	X	25	15	30	2.50			X	1	9810				

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

280083

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE E.L. 1177 No. Sample numbers Collected by Sheet 083
 Area / Prospect GRANVILLE EAST Date.....
 Map / Photo reference Analysed by DPO no.....
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe %	Ag	Bi	Mo	As			
		o/c sample type ***																			
		s sample type ****																			
17049								15	X	20	15	40	3.00			X	2	9815			
17050								10	X	20	20	20	0.68			X	2	9820			
15662								10	15	85	X	25	0.72	X		X	16	9825			
17052								35	X	50	45	30	0.51			0.5	19	9830			
17053								60	X	125	25	50	0.53			1.5	110	9835			
17054								15	X	145	15	145	5.45			0.5	51	9840			
17095																		9845			
15663								10	X	5	X	115	0.93	0.2		1.5	35	9850			
17056								8	10	5	15	15	0.225			2.0	5	9855			
17057								X	10	110	100	60	0.665			1.5	13	9860			
17058								10	X	140	90	115	2.75			15.5	35	9865			
17059								4	X	165	60	430	1.5			4.0	44	9870			
15664								6	15	65	20	50	1.5	1.2		2.0	12	9875			
15665								170	X	70	20	1530	3.15			4.0	69	9900			
15666								15	X	75	95	30	0.915	0.6		11.0	13	9925			
15667								10	X	20	10	30	0.23	0.5		3.5	4	9950			
15672								4	10	90	15	25	2.45	0.2		4.5	14	9975			
15646								10	X	160	40	25	2.15	X		6.0	41	10,000			
15645								15	15	85	X	16	2.25	X		4.5	47	10,025			
15644								10	X	160	40	25	2.15	X		6.0	41	10,050			
15643								X	X	X	X	30	1.50			X	1	10,075			
15642								20	X	X	X	15	0.48	0.2		X	1	10,100			
15640/41								20/30	15/10	X/X	X	20/30	1.25/1.45	0.2/0.2		1.0/X	X/3	10,125			

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

2089084

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

084

Tenement name E.L. 1/11 Rocky Cape No. Sample numbers..... Collected by..... Sheet.....
 Area / Prospect GRANVILLE EAST Date.....
 Map / Photo reference..... Analysed by..... DPO no.....
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As			
		o/c sample type ***																			
		s sample type ****																			
15639								30	X	X	X	10	0.275	0.2		X	X	9700N			
15638								15	20	X	X	10	0.3800	0.3		X	1	10,175			
15637								75	X	X	X	5	0.1800	X		0.5	X	10,250			
15636								25	40	X	X	15	0.3350	0.3		X	X	10,225			
15635								75	X	X	10	X	0.32	0.2		1.0	X	10,250			
15634								60	35	X	X	20	0.21	1.7		X	X	10,275			
15633								6	X	S	X	20	0.94	0.6		X	1	10,300			
15632								60	30	S	X	15	0.595	0.7		1.5	X	10,325			
15630/31								40/30	10/20	S/S	X/X	30/30	1.7/1.8	2.5/1.5		X/X	1/1	10,350			
15629								8	10	X	X	30	1.65	2.8		X	1	10,375			
15628								35	15	X	S	10	0.35	0.1		X	51	10,400			
15627								20	15	X	X	5	0.215	0.1		X	1	10,425			
15626								15	10	S	S	5	0.33	0.1		X	1	10,450			
15625								10	X	S	10	X	0.35	X		X	1	10,475			
15624								15	20	S	X	10	0.23	0.1		X	X	10,500			

589085

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION, GEOCHEMICAL SAMPLE LEDGER

086

Tenement name ROEY CAPE E.L. 1/77 No. Sample numbers..... Collected by GEORGE Sheet no.
 Area / Prospect GRANVILLE EAST Date..
 Map / Photo reference..... Analysed by ANALABS DPO no.....

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wl	al	co	ca	pH		Sn ppm	W ppm	Cu ppm	Pb ppm	Zn ppm	Fe %	Ag ppm	Bi ppm	Mo ppm	As ppm		
		o/c sample type ***																		
		s sample type ****																		
17123								7	X	35	35	65	2550	0.3			X	6	9800N 10000E	
17122/1712								15	10	330	55	120	1.45	2.4			5.0	53	10025E	
17120								20	30	30	X	35	8050	0.6			2.5	3	10050E	
17119								15	10	40	X	20	4100	0.3			5.0	4	10075E	
17118								30	X	40	10	20	1.85	0.3			5.0	4	10100E	
17117								30	X	75	10	175	2.55	0.2			X	19	10125E	
17116								10	X	25	40	15	4850	0.1			55	13	10150E	
17115								10	X	15	X	15	3100	0.4			0.5	2	10175E	
17114								40	20	40	5	35	3700	0.5			2.5	3	10200E	
15677								10	X	X	X	20	3700	0.2			X	2	10075E	
15678								20	25	X	X	5	4900	X			1.0	5	10050E	
15679								8	X	5	X	35	3.30	X			X	27	10075E	
15680/681								10	X	5	X	25	2.75	X			0.5	17	10100E	
15682								15	X	15	X	10	1.65	0.1			X	21	10125E	
15683								30	X	X	X	15	1350	0.1			X	2	10150E	
15684								45	X	15	X	5	1950	0.1			X	2	10175E	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

589087

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name E.L. Rocky Cape

Area / Prospect GRANDVILLE EAST

Map / Photo reference.....
A 02143

No. Sample numbers..... Collected by.....

Sheet.....

Date.....

Analysed by..... DPO no.....

087

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS17143																		9900N		
17144								4	X	40	15	80	3.50	X		1.0	16	9300E		
17145								7	X	40	15	30	2.00	X		1.0	12	9325		
17146								9	X	30	25	45	4.25	0.2		2.5	17	9350		
17147								8	X	50	35	75	4.80	X		3.0	13	9375		
17148								10	10	40	25	25	4.05	0.1		1.5	10	9400		
17149								9	X	25	25	30	5.05	0.1		2.0	17	9425		
17150								9	X	20	20	30	5.00	X		1.5	13	9450		
17151								10	X	25	20	35	6.85	X		1.0	14	9475		
17152								10	X	25	20	30	6.10	X		0.5	16	9475		
17153								10	X	20	15	35	5.25	0.1		1.5	24	9500		
17154								8	10	45	25	45	19.5	X		0.5	22	9525		
17155								8	X	40	15	35	17.0	0.3			8	9550		
17156								10	X	10	15	25	12.5	0.1		1.5	14	9575		
15698								8	X	5	10	10	5750	0.2		3.0	X	9600		
15697								X	X	30	10	10	2800	0.3		1.0	7	9625		
15696								20	X	20	5	15	4500	0.3		2.5	8	9650		
15695								15	X	20	10	30	8500	0.3		2.5	44	9675		
17157								50	X	35	15	60	1.90	0.4		4.0	27	9700		
17158								20	X	X	5	10	3250	0.2		1.0	X	9725		
15694								6	X	5	20	10	18.50	0.2		11.5	2	9750		
15693								90	X	30	10	25	9050	0.3		1.5	28	9775		
								10	20	75	X	140	4600	0.2		X	23	9800		
																		9825	SAMPLE NOT OBTAINABLE	

285088

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

089

Tenement name... E.L. 177 Rocky CAPE No. Sample numbers..... Collected by.....
 Area / Prospect... GRANDVILLE EAST Date.....
 Map / Photo reference..... Analysed by..... DPO no.....
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS15699								4	X	X	5	25	3000	0.2		1.0	9	9625		
15700								6	X	X	X	10	3500	0.1		X	1	9650		
15701								15	X	5	X	10	3950	0.1		X	3	9650		
15702								15	X	40	15	25	3000	0.1		10.5	9	9675		
																		9700	NO SAMPLE OBTAINABLE	
17164								30	X	30	30	100	6700	0.4		2.5	16	9725		
17274								90% x	15	165	45	2250	1.25%	0.1		2.0	19	9725		
17275								60% x	10	5	10	35	1.35%	X		0.5	51	9730		
17276								370% x	10	10	X	15	5650	X		10.5	14	9735		
17277																		9740		
17278								400% x	10	20	X	30	2.60%	X		5.0	77	9745		
17163								7	15	10	10	15	1.45%	0.1		8.0	160	9750		
17279								2.0% x	30	45	10	45	1.20%	0.8		2.0	28	9755		
17280								1.4% x	20	95	75	290	1.35%	0.1		X	1200	9760		
17281								600% x	30	20	10	60	1.60%	X		1.5	25	9765		
17283								170% x	40	15	15	75	1.65%	0.1		2.0	35	9765		
17284								50% x	10	10	X	60	9400	0.1		0.5	17	9770		
17162								20	X	10	15	20	6050	0.3		3.0	12	9775		
17285								35	X	170	X	1050	9600	0.2		1.6	80	9780	02	
17286								70% x	10	5	10	25	2700	0.1		1.5	13	9785	08	
17287								35	10	5	10	25	5500	X		0.5	18	9790	06	
17288								130% x	X	15	X	20	8550	0.1		1.0	170	9795	06	
17160								25	10	5	X	10	3800	0.2		2.5	12	9800	0	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name E.L. 177 ROCKY CAPE

No. Sample numbers.....

Collected by.....

Sheet.....

Area / Prospect GRANVILLE EAST

Date.....

Map / Photo reference.....

Analysed by.....

DPO no.....

A 02143

090

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	B ₁	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TB 17161								25	X	5	X	15	5200	0.2	0.1	2.0	12	101000N		
17159								9	X	5	5	10	6150	0.1		2.5	1	9800E		
15709								20	X	25	X	15	7600	0.3		6.5	X	9850		
15708								10	X	15	X	20	9050	0.2		X	X	9875		
15707								8	X	50	X	40	4.65%	0.2		X	4	9900		
15706								X	X	15	X	35	2.65%	0.2		X	3	9925		
15705								X	X	5	5	10	3750	0.2		X	1	9950		
15704								6	10	5	X	25	1.9%	0.2		1.0	1	9975		
15703								6	X	10	X	20	9800	0.3		0.5	1	10000		
																		10100N		
17185								8	X	40	35	10	8.10%	0.1		2.0	19	9300E		
17184								8	10	30	25	10	8.6%	0.2		1.0	12	9325		
17183								7	X	45	35	20	5.25%	X		1.0	19	9350		
17182								9	15	60	40	10	3.05%	X		2.0	19	9375		
17181								15	10	50	35	25	4.45%	X		4.0	28	9400		
17180								20	X	75	55	30	4.30%	0.1		3.5	26	9400		
17186								15	X	30	15	20	3.25%	0.1		2.0	18	9425		
17187								25	10	10	10	5	2.95%	0.3		2.5	15	9450		
17188								10	15	5	5	X	3500	0.2		2.0	2	9475		
17189								15	X	20	5	X	405%	0.1		2.5	23	9500	02	
17190								10	10	5	X	X	1.95%	0.1		1.5	12	9525	00	
17191								10	10	5	X	X	1.9%	0.2		1.0	12	9525	01	
17192								7	10	15	10	10	8250	0.2		2.5	6	9550	01	

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type sgh = spher hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION, GEOCHEMICAL SAMPLE LOGGER

Tenement name E.L. 17 Rocky Cape

No. Sample numbers.....

Collected by.....

Sheet.....

Area / Prospect GRANVILLE EAST

Date.....

Map / Photo reference.....

Analysed by.....

DPO no.....

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS																		10100N		
17194								15	15	50	150	20	1.55%	0.3		3.5	78	9600E		
																		9625		
15726								30	X	15	5	60	2.85%	0.2		11.5	130	9650		
15725								15	10	35	105	270	1.50%	0.1		1.0	7	9675		
15724								140	X	170	145	60	2.20%	0.1		X	8	9700		
15723								75	X	65	20	50	1.95%	0.1		4.0	120	9725		
15722								70	X	5	10	30	6.850	X		10.0	110	9750		
15721								9	X	30	X	5	3100	0.3		4.5	100	9750		
15720								5	X	45	X	10	2100	X		X	31	9775		
15719								10	X	15	X	10	2100	X		1.0	4	9800		
15718								X	X	255	X	20	6400	X		X	91	9825		
15717								10	X	10	X	10	7350	X		X	2	9850		
15716								5	X	X	X	5	1350	X		X	X	9875		
15715								4	X	X	X	25	2250	X		1.0	X	9900		
15714								15	20	40	X	20	2.85%	X		1.0	10	9925		
15713								20	20	20	X	15	7700	0.1		1.0	X	9950		
15712								15	15	5	X	15	8800	X		1.5	2	9975		
15711								10	10	15	X	10	5850	0.2		X	X	10,000		
15710								20	X	30	X	15	6150	0.3		0.5	X	10,000		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

591
260682

C R A. EXPLORATION . GEOCHEMICAL SAMPLE LOG

032

Tenement name E. A. Rocky Cape No. Sample numbers Collected by Sheet
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference Analysed by DPO no.
 A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As			
		o/c sample type ***																			
		s sample type ****																			
17205								9	X	5	10	X	4.25	0.1		1.0	25	9300E			
17204								15	X	10	10	X	3.05	0.2		1.0	23	9325			
17203								20	X	20	20	10	3.45	0.1		1.0	21	9350			
17202								15	10	35	20	10	6.65	0.1		2.0	54	9375			
17200/201								10/10	10/X	10/10	15/15	X/X	4.5/4.35	0.1/X		1.5	19	9500			
17199								10	10	15	20	X	5.5	0.1		1.5	17	9425			
17198								15	10	50	50	20	2.8	X		4.0	48	9450			
17197								15	X	10	20	X	0.885			2.0	11	9475			
17196								15	X	10	20	X	0.575	0.1		2.0	11	9500			
																		9525			
15727								35	20	30	X	325	1.9	0.3		1.0	20	9550			
15728								15	X	45	5	35	0.525	0.1		X	110	9575			
15729								100	20	25	10	70	1.85	0.2		1.0	55	9600			
15730 31								70/10	X/X	15/15	15/5	20/20	0.56/0.5	0.1/X		X/X	15/10	9625			
15732								35	10	15	X	30	0.395	X		X	5	9650			
15733								25	X	60	5	25	1.75	X		3.5	57	9675			
15734								20	X	20	10	50	1.80	X		3.0	23	9700			
15735								80	X	100	10	295	2.25	X		1.5	66	9725			
15736								150	X	35	40	25	0.385	X		X	24	9750			
15737								60	X	20	15	100	9.15	X		26.0	35	9775			
15738								10	X	30	5	160	1.65	X		4.	100	9800			
15739								4	X	375	X	15	0.665	X		X	44	9825			
15740 41								5/X	X/10	30/25	X	120/25	4.4/4.5	X/X		X/X	23/24	9850			

9800
9800
9800

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name E.L. ROEKY CAPE
 Area / Prospect GRANVILLE EAST
 Map / Photo reference

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE Ledger

No. Sample numbers..... Collected by.....
 Sheet
 Date.....
 DPO no.....

094

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Zn	Pb	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TB 17206								15	15	X	5	X	5850	0.2		X	4	9300N		
17207								20	X	20	15	X	2.10%	0.2		1.0	28	9325		
15768								7	X	60	68	10	1.55%	X		4.5	24	9350		
15767								15	X	20	45	10	3200	X		X	4	9375		
15766								25	X	60	40	X	7650	X		0.5	6	9400		
15765								3	X	X	15	5	365%	X		X	12	9425		
15764								20	X	20	20	15	9100	X		X	8	9450		
15763								X	X	30	160	10	1.75%	X		5.5	22	9475		
15762								15	X	95	120	95	235%	0.1		9.5	59	9500		
15761								25	X	5	85	10	2.00%	0.1		3.0	18	9525		
15760								20	10	25	60	X	2.15%	X		6.0	21	9525		
15759								20	X	X	25	X	4850	X		X	1	9550		
15758								10	X	X	25	X	6200	X		1.0	13	9575		
15757								9	X	X	30	X	1.65%	X		0.5	14	9600		
15756								7	20	10	20	X	4850	X		X	9	9625		
15755								9	X	35	235	X	1.85%	X		4.0	37	9650		
15754								10	X	25	40	X	1.65%	X		5.5	82	9675		
15753								9	X	20	140	X	1.85%	X		1.0	47	9700		
15752								10	X	15	120	X	2.90%	X		2.5	45	9725		
15751								60	X	40	145	20	8.15%	X		23.0	120	9750	ST	
15750								50	X	35	130	15	6.15%	X		27.5	86	9750	ST	
15749								85	10	35	135	5	7200	0.1		18.0	59	9775	ST	
15748								9	X	X	40	X	5700	0.2		1.0	56	9800	ST	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name E.L. 77 ROCKY CAPE

No. Sample numbers.....

Collected by.....

Sheet 095

Area / Prospect GRANVILLE EAST

Date.....

Map / Photo reference.....

Analysed by.....

DPO no.....

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	C.	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
																		10300N		
TS15747								10	X	185	10	40	8650	0.1		X	58	9825E		
15746								15	10	15	X	15	4050	X		0.5	6	9850		
15745								5	X	45	X	35	3.55%	X		X	11	9875		
15744								6	X	15	X	25	4.20%	X		X	20	9900		
																		10400N		
17219								10	X	35	5	25	7.20%	0.2		0.5	4	9300E		
17218								10	X	15	X	X	5.45%	X		1.5	10	9325		
17217								10	X	20	X	X	4.20%	X		1.5	17	9350		
17216								15	X	15	X	X	8.25%	0.1		1.0	13	9375		
17215								15	X	10	15	X	3.05%	0.1		5.0	12	9400		
17214								8	X	10	15	X	3.10%	0.2		1.0	12	9425		
17213								20	X	50	30	X	6.10%	0.1		1.0	11	9450		
17212								10	X	15	20	X	3.95%	0.1		1.0	21	9475		
17211								7	X	15	15	X	4.75%	0.2		X	9	9500		
17210								9	X	10	15	X	4.85%	0.3		1.0	10	9500		
																		9525		
																		9550		
15769								X	X	X	X	15	3000	X		2.0	2	9575		
15770								15	10	5	X	5	2000	0.2		X	X	9600		
15771								20	X	X	X	20	2250	X		1.0	1	9625		
15772								20	X	5	X	35	4150	X		2.0	4	9650		
15773								15	X	5	X	20	3600	0.1		1.0	1	9650		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

2000000

C R A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

097

Tenement name POCOPAN EL 1/77

No. Sample numbers

Collected by

Sheet

Area / Prospect GRANVILLE EAST

Date

Map / Photo reference

Analysed by

DPO no

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations			
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As						
		o/c sample type ***																						
		s sample type ****																						
KR 15783																							10400N	
15784																							9875	
																							9900	
																							9925	
																							9950	
																							9975	
																							10,000	
EXTRA SAMPLES																								
KR 17272																							9755E	
17273																							9695E	
17271																							9790	
17270																							9795	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type s = sugar hole or pit depth m A, B or C horizon

58005

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL. 7 Rocky CAPE

No. Sample numbers

Collected by

Sheet

Area / Prospect GRANVILLE EAST

Date

Map / Photo reference

Analysed by

DPO no

A 02143

098

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS15774																		10400N		
17223								8	X	X	X	25	3200	0.1		X	1	9675E		
15775								60xx	X	10	10	50	2.15	X		X	2	9690		
15776								3	X	X	X	25	4800	0.1		0.5	15	9700		
15777								9	X	5	X	15	3350	0.2		X	1	9725		
17222								10	X	5	X	100	2.80%	0.2		2.0	23	9750		
15778								9	X	15	5	30	2.45%	X		1.0	6	9760		
17221								8	X	10	X	190	1.60%	X		2.5	18	9775		
17220								6	10	10	X	25	2.35%	X		0.5	6	9785		
15779								20	X	10	5	15	5.55%	X		X	7	9785		
15780								25	X	5	X	115	1.80%	0.1		1.0	41	9800		
15781								55	X	65	10	175	17.5%	X		0.5	32	9825		
15782								65	X	70	5	180	18.5%	X		X	30	9825		
15783								10	X	75	X	20	1.55%	X		3.0	52	9850		
15784								5	X	25	X	15	1550	X		X	1	9875		
								10	X	5	X	15	4550	X		X	8	9900		
																		10500N		
17220								20	X	10	5	15	5.55%	X		X	7	9300E		
17221								6	10	10	X	25	2.35%	X		0.5	6	9325		
17222								9	X	15	5	30	2.45%	X		1.0	6	9325		
17223								60xx	X	10	10	50	2.15%	X		X	2	9350		
17224								25	X	30	10	30	7.40%	X		0.5	3	9375		
17225								9	15	30	5	35	6.15%	X		0.5	4	9400		
17226								10	15	70	15	50	150	X		X	3	9425		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

66008

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name F.L. Rocky Cape

No. Sample numbers

Collected by

Sheet

Area / Prospect GRANVILLE EAST

Date

Map / Photo reference

Analysed by

DPO no.

A 02143

099

Sample No.	Type ss * oc f s	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS																		10500N		
17228								15	X	115	10	105	28.5%	X		X	2	9450E		
17229								9	X	55	5	35	13.5%	X		X	3	9475		
17230								10	10	45	X	35	14.5%	X		X	4	9500		
17231								15*	X*	80	X	45	9.5%	X		X	3	9525		
17232								15	10	65	10	40	9.45%	0.1		X	4	9525		
17232								5	X	80	5	45	14.0%	0.1		X	4	9550		
17233								9	X	10	X	25	4.10%	0.1		0.5	3	9575		
17234								25	X	10	X	45	3.35%	0.1		X	6	9600		
17235								20	X	5	5	20	8.25%	0.1		1.0	3	9625		
15785								30	X	X	X	20	6.25%	X		2.5	6	9700		
15786								9	X	10	X	20	7.70%	X		1.5	5	9725		
17238								8	X	X	5	15	4.10%	0.5		1.0	3	9750		
17239								6	X	X	X	10	3.85%	0.1		X	2	9775		
17240								7	X	5	X	15	3.95%	0.1		X	2	9800		
17241								9	X	20	5	30	4.65%	0.2		0.5	2	9800		
17242								9	X	10	5	15	3.95%	0.1		0.5	2	9825		
17243								9	X	15	10	10	3.25%	0.1		0.5	2	9850		
17244								9	X	5	5	15	6.30%	0.1		2.0	1	9875		
17245								3	10	5	X	10	3.65%	0.1		1.5	2	9900		
17246								7	X	X	5	10	2.95%	0.2		1.0	1	9925		
17247								7	10	X	10	10	2.05%	0.1		0.5	1	9950		
17248								5	X	10	5	15	5.45%	0.3		2.0	2	9975		
17249								7	X	5	5	10	3.80%	0.1		2.5	2	10.000		

589100

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

100

Tenement name E. 177 Rocky CAPE No. Sample numbers..... Collected by.....
 Area / Prospect GRANVILLE EAST Date.....
 Map / Photo reference..... Analysed by.....
 A 02143 DPO no.....

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	w	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
TS 17269								10	X	5	X	20	340%	X		1.0	6	9575E		
17268								10	10	15	10	20	5.15%	X		1.0	8	9600		
17267								9	X	5	10	20	7750	X		1.5	5	9625		
17266								15	X	10	15	25	4.50%	X		1.0	7	9650		
17265								7	20	10	15	25	5.75%	X		2.5	9	9675		
17264								15	10	5	10	30	4.90%	X		1.5	14	9700		
17263								10	X	5	5	15	3.45%	X		1.0	13	9725		
17262								15	10	10	X	55	1.35%	X		0.5	7	9750		
17261								25	X	10	5	25	5700	X		X	2	9775		
17260								15	X	10	5	25	5250	X		0.5	3	9775		
17259								15	10	5	X	30	8200	0.1		1.0	7	9800		
17258								10	X	X	X	20	4450	X		X	6	9825		
17257								8	10	X	X	20	4350	X		X	2	9850		
17256								9	X	5	5	20	3450	0.1		1.0	2	9875		
17255								8	X	10	X	25	4800	X		1.0	4	9900		
17254								6	X	10	10	20	4350	0.1		X	2	9925		
17250								9	X	15	X	20	4500	0.1		X	5	10,000		
17251								8	X	15	X	20	5400	X		1.5	6	10,000		

589101

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

101

Tenement name E 177 Rocky Cape
 Area / Prospect GRVILLE EAST
 Map / Photo reference

No. Sample numbers..... Collected by.....
 Analysed by.....

Sheet no.
 Date.....
 DPO no.....

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %						Grid ref	Geological Observations					
		ss *	fl	wi	al	co	ca		pH	Sn	W	Cu	Pb	Zn			Fe	Ag	Bi	Mo	As
		oc	o/c sample type ***																		
		f	s sample type ****																		
TS 17026									40	10	10	X	15	8250		28	20	3	10700N		
17027									20	X	5	X	45	290%			1.0	9	9875		
17028									50	10	5	10	45	8700			0.5	X	8825		
																			10800N		
17001									15	10	5	25	85	3700			0.5	1	9450E		
17002									25	15	X	5	20	4750			0.5	1	9475		
17003									10	10	5	X	15	1.30%			0.5	2	9500		
17004									10	X	X	5	20	1.15%			X	1	9525		
17005									15	10	10	5	20	4.85%			X	4	9550		
17006									10	X	5	X	20	4.50%			1.5	4	9575		
17007									15	10	10	5	20	3.50%			1.5	10	9600		
17008									10	X	55	X	35	16.0%			X	4	9625		
17009									10	10	20	5	35	10.0%			0.5	4	9650		
17010									10	X	10	X	10	2.45%			1.5	3	9675		
17011									15	X	20	X	35	2.05%			1.5	6	9675		
17012									15	X	10	X	15	7.80%			1.0	X	9700		
17013									9	10	10	X	30	2.75%			X	2	9725		
17014									10	X	10	X	30	8800			X	X	9750		
17015									15	10	X	X	10	5200			X	X	9775		
17016									35	X	10	X	10	8800			4.0	X	9800		
17017									15	10	5	X	10	4700			1.0	X	9825		
17018									25	10	15	X	50	1.25%			1.0	8	9850		

589102

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

102

Tenement name EL 177 Rocky Cape

No. Sample numbers..... Collected by.....

Sheet.....

Area / Prospect GRANVILLE EAST

Date.....

Map / Photo reference.....

Analysed by..... DPO no.....

A 02143

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	Geological Observations
		ss*	fl	wi	al	co	ca		pH	Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		oc	o/c sample type ***																		
		f	s sample type ****																		
17019									10	X	15	10	45	9000			1.0	2	9875E		
17020									15	10	15	10	20	5100			0.5	2	9900		
17021									15	X	10	X	15	3900			0.5	2	9900		
17022									15	X	10	X	20	4250			1.0	4	9925		
17023									35	X	20	10	55	3700			1.0	46	9950		
17024									10	X	10	X	10	4800			2.0	2	9975		
17025									10	10	5	X	10	5650			1.0	3	10000		

589103

* Sample type ss = stream sediment oc = outcrop f = float s = soil
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 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

4.2

Ledger Sheets from Gourlays Creek

(Granville West) Soil Sampling Programme.

C.R.A. (PLORATION, GEOCHEMICAL SAMPLE REGISTER

Tenement name: E 1/27 ROCKY CRIBE No. 819030 - 819047 Sample numbers: 819030 - 819047 Collected by: P. HEATHERSAY Sheet no. 2
 Area / Prospect: GRANVILLE WEST Date: 22-4-80
 Map / Photo reference: BASE - LINE 1000N Analysed by: 11/2/80 DPO no. 589106

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations		
		ss*	oc	f	s	o/c sample type ***				S _r -08 PPM	W -08 PPM	Cu Zn PPM	Pb Ag PPM	Zn Mo PPM	Fe Mn %	As Au PPM			Li PPM	
		fl	wl	al	co	ca	pH													
		Depth m sample type ****							Horiz											
819030	S																	1000N	2175E	Grey mud. Banded clay.
031	S																	1000N	2200E	
032	S																	1000N	2225E	Pale brown sandy soil.
033	S																	"	2240E	Red brown soil. Quartzite fragments
034	S																	"	2275E	Red brown soil with quartzite rock frag.
035	S																	"	2300E	Reddy brown soil with soft sandstone f.
036	S																	"	2325E	Red brown with sandstone rock frag
037	S																	"	2350E	Pale brown with quartzite fragments
038	S																	"	2375E	Grey brown sandy soil. Sandstone
039	S																	"	2400E	
040	S																	"	2425E	Dry sandy. Angular rock fragments
041	S																	"	2450E	Quartzite fragments. Quartzos. Hornfels
042	S																	"	2475E	Sandy. Angular quartzite fragments
043	S																	"	2500E	Yellow brown. Slightly clayey. Basalt.
044	S																	"	2525E	Brown crumbly sandy. Basalt
045	S																	"	2550E	Brown, basaltic soil.
046	S																	"	2575E	Brown soil Basaltic
819047	S																	"	2600E	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. (PLORATION GEOCHEMICAL SAMPLE) DGER

Tenement name... 1/22 ROCKY CREEK
 Area / Prospect... BRONVILLE WEST
 Map / Photo reference.....

No. Sample numbers... 819048 - 068

Collector by... P. HEITHERSAY

Sheet no. 3 106
 Date... 22-4-86
 DPO no.....

LINE 1600E

Analysed by... AMDEL

589107

Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wl	al	co	ca	pH		Fe	Ni	Cu	Pb	Zn	Fe	Ag	Au	Ni	GRID REF		
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
		DEPTH W's sample type ****							ppm	ppm	ppm	ppm	ppm	ppm	ppm					
819048	S		W						6	<10	4	15	12	3400	<1			1600E	900N	Grey sand.
049	S								5	<10	2	10	10	710	<1			1600E	925N	"
050	S								5	<10	2	15	8	1100	<1			"	950N	"
051	S																	"	975N	
	S	1																"	1000N	White sand
051	S	2							8	10	2	15	10	930	<1			"	1025N	Brown grey sand. Schist fragments
052	S								10	<10	2	10	8	350		1		"	1050N	B horizon only. Dark mud.
053	S								14	<10	2	15	16					"	1075N	Grey sand.
054	S								10	10	2	15	10	790	<1			"	1100N	"
055	S								12	<10	4	15	16	1400	<1			"	1125N	Grey sandy soil
056	S								14	<10	2	20	24	1100	<1			"	1150N	Dark brown soil.
057	S	1.7							6	<10	2	10	28	1200		1 0-10		"	1175N	Dark brown sandy soil
058	S	1.5							8	<10	2	5	28	1200				"	1200N	Dark brown. Minor rock grains
059	S	1.5							10	<10	2	10	10	870	<1			"	1225N	Dark brown. Minor quartz grains
060	S								10	10	10	15	28	1000				"	1250N	"
061	S								12	<10	2	15	14	980	<1			"	1275N	Grey brown sandy soil
062	S								10	10	2	20	16	810	<1			"	1300N	Brown clay rich soil
063	S								14	10	6	15	14	3000	<1			"	1325N	"
064	S								10	10	4	15	28	6200	<1			"	1350N	Grey phyllite in rock chips
065	S								6	15	12	10	20	2500	<1			"	1375N	"
066	S								22	10	4	15	18	2200	<1			"	1400N	Quartzite in float
067	S								16	10	2	10	14	4500		0-20		"	1425N	"
819068	S								16	10	25	15	14	57%	<1			"	1450N	Dark grey sand.

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

+ SAMPLE MISSING

C.R.A. (PLORATION GEOCHEMICAL SAMPLE) 'JGER

Tenement name 1/77 ROCKY CREEK No. 81900 Sample numbers 077 Collected by P. HEATHERSAY
 Area / Prospect CRIVILLE WEST
 Map / Photo reference LINE 1000E Analysed by AMDEL

Sheet no. 4103
 Date 23-11-90
 DPO no. _____

589108

Geological Observations

Sample No.	Type	ss channel **							Carbon	Metal content ppm or %										Grid ref	Geological Observations
		ss*	fl	wl	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Al	GRID REF			
		oc	o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		f	s sample type ****							ppm	ppm	ppm	ppm	ppm	ppm	ppm					
319009	S	0.3	IV						20	<10	4	15	12	3400	<1		1000E 1475N	Grey white basaltic soil.			
070	S	0.4	"						10	<10	2	10	10	710	1		" 1500N	Brown grey sandy soil			
071	S	0.4							12	15	2	15	3	1400	1		" 1525N	White beach sand. Rounded pebble			
072	S	0.3							30	<10	2	15	10	920	<1		" 1550N	White beach sand.			
073	S	0.2							25	<10	2	10	3	390	<1		" 1575N	Grey brown soil. Phyllite fragments			
074	S	0.3							26	<10	2	15	16	310	<1		" 1600N	Basalt			
075	S	0.4							12	<10	2	15	10	790	1		" 1625N	Basalt			
076	S	0.3							14	<10	4	15	16	1400	<1		" 1650N	Basalt			
	S	0.3															" 1675N	Grey mud.			
819077	S	0.3							8	<10	2	20	24	1600	<1	<0.03	" 1700N	Grey mud.			

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** s = stream sediment depth m A B or C horizon

+ SAMPLE MISSING

Tenement name EL 1/27 ROCKY COPE No. Sample numbers 819073 - 899 Collected by HEITHERSA Sheet no. 5108
 Area / Prospect DOWNVILLE WEST Date 22-4-80
 Map / Photo reference LINE 1800E Analysed by AMDEL DPO no.

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Ag	Au	ppm	ppm		
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		PETROL W's sample type ****							MOZIZ	ppm	ppm	ppm	ppm	ppm	ppm					
819073	S	0.5	W					8	10	8	10	14	2.20	1			1800E	250N	Brown sandy soil	
079	S	0.75	"					8	<10	4	20	20	6.40	<1			"	275N	"	
080	S	0.75	"					16	<10	4	15	20	3.30	<1			"	300N	Black laminated micaceous siltstone?	
081	S	0.75	"					14	10	2	20	18	4.200	<1			"	325N	Hornfels. Actinolite, magnetite.	
082	S	0.5	"					6	10	<2	20	10	2.000	<1			"	350N	"	
083	S	0.6	"					14	<10	4	20	20	1.900	<1			"	375N	Brown sandy soil	
084	S	0.75	"					12	<10	2	15	10	2.400	<1			"	400N	"	
085	S	0.5						18	20	2	15	16	3.600	<1			"	425N	Brown sandy soil. Minor quartz grains	
086	S	0.8						8	<10	4	25	22	1.20%	<1			"	450N	Grey brown soil. Phyllite fragments	
087	S	1						12	<10	2	20	12	3.000	<1	0.05		"	475N	Sandy grey brown soil	
088	S	1.5						8	<10	8	20	18	3.00%	<1			"	500N	Yellow clay rich soil	
089	S	1						12	<10	18	20	20	4.30	1			"	525N	Brown yellow soil.	
090	S	0.6						20	<10	6	2.5	14	3.500	1			"	550N	Brown sandy soil	
																	"	575N		
091	S	0.6						8	<10	<2	15	10	300	<1			"	600N	Black laminated siltstone	
092	S	1						<4	<10	<2	15	12	1100	<1			"	625N	Brown sandy soil.	
093	S	1.5						12	<10	<2	5	14	1100	<1			"	650N	Grey brown sandy soil.	
094	S	1.8						10	<10	2	15	16	690	<1			"	675N	"	
095	S	1.5						6	<10	<2	10	10	570	<1			"	700N	"	
096	S	1.5						4	15	<2	15	12	700	<1			"	725N	"	
097	S	1.5						5	<10	2	15	14	710	<1	<0.05		"	750N	"	
098	S	1.7						8	<10	<2	10	12	580	1			"	775N	White sand	
819099	S	1.7						8	<10	2	15	12	730	<1			"	800N	"	

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

+ SAMPLE MISSING

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name: EL 1/77 ROCKY CAPE No. 589110 Sample numbers: 589110 - 120 Collected by: P. HEATHERSAY Sheet no. 6 109
 Area / Prospect: GRANVILLE WEST Date: 22-4-80
 Map / Photo reference: LINE 1300 E Analysed by: AMDEL DPO no. _____

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	cs	pH		S _D	W	Cu	Pb	Zn	Fe	Ag	Au	CRIT	REF		
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		MORIZ							ppm	ppm	ppm	ppm	ppm	ppm	ppm					
589110	S	0.3	W					24	<10	2	15	12	730	<1		1300E	S.75N	Grey sand		
101		0.4						6	10	2	15	14	720	1		"	850N	"		
102		0.5						12	10	16	15	22	5200	1		"	875N	"		
103		0.75						6	10	2	10	12	700	1		"	900N	"		
104		0.5						5	<10	10	10	14	1700	<1		"	925N	"		
105		0.4						4	10	2	10	14	1000	<1		"	950N	Grey sand		
106		0.3						6	10	2	15	16	1400	<1		"	975N	Brown sandy soil. Black micaceous grain		
																"	1000N	Brown soil. Bedrock at base		
107		0.75						12	<10	14	15	36	6300	<1	0.05	"	1025N	Brown silt and sand. Angular pebbles of		
108		1						10	<10	6	15	25	1400	<1		"	1050N	Grey white sand.		
109		0.5						12	10	2	20	18	1000	<1		"	1075N	Grey white beach sand		
110		1						4	<10	4	15	18	1100	<1		"	1100N	White beach sand.		
111		0.5						16	10	24	10	18	2400	<1		"	1125N	Grey brown clayey soil		
112		0.3						8	10	2	15	14	1200	1		"	1150N	Grey sand. Angular quartz grains		
113		-						10	<10	<2	10	12	1600	1		"	1175N	Outcrop. Grey and white laminated siltstone		
114		-						8	<10	2	10	32	2100	1		"	1200N	Grey and white siltstone		
115		0.2						10	<10	4	20	18	4500	<1		"	1225N	Fine laminated siltstone		
116		0.4						16	<10	2	<5	12	1300	<1		"	1250N	Grey sand		
117		-						14	10	2	5	20	1100	<1	<0.05	"	1275N	Massive grey quartzite outcrop		
118		0.2						10	<10	4	5	20	700	<1		"	1300N	Dark brown clayey soil.		
119		0.1						10	<10	4	5	24	3000	<1		"	1325N	Dark brown. Rock fragments X		
119		0.05						10	<10	60	5	120	2.4%	<1		"	1350N	Sandy brown soil. Rock frag. X		
589120		1						4	<10	55	10	130	11.4%	<1		"	1375N	Yellow orange clayey sand.		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial cs = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

+ SAMPLE MISSING

Tenement name: 1/77 ROCKY CREEK C.R.A. (PLORATION) GE CHEMICAL SAMPLE / DGER P HEATHERSAY
 Area / Prospect: ROBINVILLE WEST No. 91015 Sample numbers: 133 Collected by: P HEATHERSAY Sheet: 7/10
 Map / Photo reference: LINE 1800E Analysed by: AMDEL Date: 22-4-98 DPO no.:

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	589111 Geological Observations
		fl	wl	al	co	ca	pH		S	W	Cu	Pb	Zn	Fe	Ag	A _u	Grid REF			
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		s sample type ****							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
S19121	S	0.15	W					10	15	55	10	130	11.9	<1		1800E	1400N	Brown clayey soil. Compacted clay		
122	"	1	"					24	15	50	5	110	12.3	<1		"	1425N	Red clayey soil		
123	"	0.5	"					6	<10	55	10	100	13.5	<1		"	1450N	Yellow clayey soil Basalt cobbles		
124	"	0.05	"					6	<10	22	15	65	7.10	<1		"	1475N	Light brown soil. Rock fragments		
125	"	0.3	"					10	<10	28	15	28	7200	<1		"	1500N	Dark brown soil. Green quartzite		
126	"	0.3	"					24	<10	60	5	26	320%	<1		"	1525N	Grey black clay rich soil. Basalt		
127	"	0.1	"					8	<10	48	5	38	1.10	1	20.05	"	1550N	Basalt		
128	"	0.1	"					8	<10	85	10	85	3.00	<1		"	1575N	Weathered basalt		
129	"	0.1	"					12	10	90	15	180	13.00	1		"	1600N	" "		
130	"	"	"					24	<10	70	5	120	13.7%	1		"	1625N	" "		
131	"	"	"					6	<10	60	10	150	13.1%	1		"	1650N	" "		
132	"	"	"					8	<10	55	5	120	17.0%	1		"	1675N	Red brown soil.		
S19133	"	"	"					10	<10	46	10	130	14.3%	1		"	1700N	Dark brown soil.		

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name: EL 1/77 ROCKY CAPE C.R.A. (PLORATION) GEOCHEMICAL SAMPLE REGISTER No. 819134 Sample numbers: 819154 Collected by: P. HEITHERSAY Sheet no. 8 11
 Area / Prospect: GRANVILLE WEST Map / Photo reference: LINE 2000 E Analysed by: AMDEL Date: 22-4-80 DPO no.

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	589112 Geological Observations
		ss*	fl	wl	al	co	ca		pH	Sn	W	Cu	Pb	Zn	Fe	Ag	Au	Grid REF		
		oc	o/c sample type ***						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		s	s sample type ****						ppm	ppm	ppm	ppm	%	ppm	ppm					
819134	S	0.2	"						42	<10	10	<5	42	8600	<1		2000E	900N	Swamp gravel	
819135		0.4							30	<10	16	5	44	1.90%	<1		"	925N	Brown Mud	
819136		0.0							18	<10	26	15	60	3.70	<1		"	950N	Dark brown soil. Quartz grains	
819137		0.5							8	15	4	5	16	1.90%	<1	0.05	"	975N	"	
		-															"	1000N	Fine grained tourmaline rich granite	
819138		0.5							8	10	14	10	26	9000	<1		"	1025N	Brown soil. Rock fragments	
819139		0.1							6	10	22	10	32	1.50%	<1		"	1050N	Grey brown soil. Bedrock	
819140		0.1							40	<10	10	10	26	1.10%	<1		"	1075N	Grey brown soil. Bedrock	
819141		0.1							12	<10	10	10	26	1.45%	<1		"	1100N	Grey brown soil. Very fine quartzite	
		0.1															"	1125N	White sandy soil.	
819142		0.2							14	15	12	10	24	9700	<1		"	1150N	"	
819143		0.2							28	10	12	10	32	2.70%	<1		"	1175N	Grey brown dry soil. C horizon red reaches	
819144		0.15							12	10	16	10	32	1.70	<1		"	1200N	Dry grey brown soil	
819145		0.2							18	<10	16	15	30	1.60	<1		"	1225N	"	
819146		0.3							4	<10	22	15	34	6.00	<1		"	1250N	Red brown soil.	
819147		0.75							4	<10	46	15	55	11.4	<1	0.10	"	1275N	Red clayey soil	
819148		0.75							8	10	44	5	55	10.5	<1		"	1300N	Red orange clay rich soil	
819149		0.3							4	<10	55	15	70	11.3	<1		"	1325N	Banded light grey phyllite	
819150		0.4							44	10	55	10	70	12.5	1		"	1350N	Red clay rich soil	
819151		0.2							44	10	55	20	120	10.4	1		"	1375N	Brown red soil. Minor rock chips	
819152		0.1							44	10	46	15	150	9.300	<1		"	1400N	Brown clayey soil. Bedrock	
819153		0.1							10	<10	48	10	120	10.70	<1		"	1425N	Red yellow soil. Basalt	
819154		0.1							6	<10	42	15	150	9.50	<1		"	1450N	Basalt	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE REGISTER

Tenement name EL 1/77 Rocky Cape No. 589113 Sample numbers 819155 - 819161 Collected by P. HEATHERSAY Sheet no. 9
 Area / Prospect GRANDVILLE WEST Date 23/4/80
 Map / Photo reference LINE 2000E Analysed by AMDEL DPO no. 112

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wl	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Co	Au	Au			
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		s sample type ****							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
819155	s	0.05						10	<10	42	15	110	7.30	<1		2000E 1475N	Dark brown soil. Basalt cobbles			
819156	s							8	<10	60	5	170	12.40	1		1500N	Yellow orange clay rich. Weathered base			
819157	s	0.2						8	<10	60	15	240	7.90	<1	0.05	1525N	Basalt			
819158	s	0.2						<4	<10	55	15	230	10.7	<1		1550N	Basalt			
	s	0.2														1575N	Basalt			
819159	s	0.5						4	<10	55	10	90	13.8	<1		1600N	Red clay			
819160	s	0.75						<4	<10	65	5	100	13.5	<1		1625N	Red compacted clay			
819161	s	0.75						8	<10	44	10	65	11.6	<1		1650N	" " "			

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed, sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2 + SAMPLE MISSING
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** c

C.R.A. EXPLORATION, GEOCHEMICAL SAMPLE REGISTER

113

Tenement name..... LT. 1/11 Rocky Creek CARB No. Sample numbers..... 819162, 819163, 819164, 819165, 819166, 819167, 819168, 819169, 819170, 819171, 819172, 819173, 819174, 819175, 819176, 819177, 819178, 819179, 819180, 819181, 819182 Collected by..... P. HEATHERSAY Sheet..... 19
 Area / Prospect..... GRANVILLE WEST Date..... 23/4/80
 Map / Photo reference..... LINE 2200E Analysed by..... AMDEL DPO no.....

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations	
		ss*	fl	wl	al	co	ca		pH	SS	W	Co	Pb	Zn	Fe	Cu			Ag
		oc	o/c sample type ***						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm			
		f	s sample type ****						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm			
819162	s							10	<10	40	10	148	7.50	1		2200E	500N	Red clay rich soil	
819163	s							24	<10	55	5	70	13.4	<1		"	525N	Brick red clay	
819164	s							4	<10	48	10	55	10.4	<1		"	550N	Red compacted clay	
	s															"	575N	Red brown soil	
819165	s							24	10	55	5	60	13.0	<1		"	600N	Orangy red soil. Basalt?	
819166	s	0.5						8	<10	35	10	36	9.00	<1		"	625N	Compacted clay	
819167	s	0.5						8	<10	22	<5	24	3.80	<1	0.05	"	650N	Brown clayey soil. Quartz grains	
819168	s	0.5						24	<10	10	5	22	1.10	<1		"	675N	Creek gravel	
819169	s	0.5						10	<10	6	5	18	3.00 ppm	1		"	700N	Silty shale. Weathered.	
819170	s	0.5						16	<10	4	5	14	7.0%	<1		"	725N	Yellow clay rich soil.	
819171	s	0.5						8	<10	12	20	26	5.60	<1		"	750N	Bright yellow clay rich	
819172	s	0.6						12	<10	10	5	18	1.80	<1		"	775N	"	
819173	s	0.5						14	10	2	10	16	2.10	<1		"	800N	Orangy brown weathered micaceous	
819174	s	0.1						18	15	4	10	10	3.00	<1		"	825N	Grey brown sandy soil. Quartz grains	
819175	s	0.75						20	10	8	10	16	3.50	<1		"	850N	Grey brown sandy soil. Minor quartz	
819176	s	0.5						18	15	6	5	20	2.1%	<1		"	875N	Yellowy orange. Weathered phyllite	
819177	s	0.3						20	10	2	10	10	2.00	<1	0.15	"	900N	White-brown sandy soil.	
819178	s	0.5						36	<10	4	10	16	1.35%	<1		"	925N	Brown soil.	
819179	s	0.5						18	<10	8	10	18	1.80%	1		"	950N	Orangy brown soil.	
819180	s	0.5						12	10	60	10	34	1.00	<1		"	975N	" " "	
	s	0.2														"	1000N	Yellow brown compacted clay	
819181	s	0.2						16	10	38	15	22	3.35%	<1		"	1025N	"	
819182	s	0.3						6	10	65	10	24	2.50	<1		"	1050N	"	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

589114
 Geological Observations

C.R.A. (PLORATION, GEOCHEMICAL SAMPLE REGISTER

Tenement name EL 117 Rocky Cape

No. 117 Sample numbers 819183-819205

Collected by P. HEATHERSAY

Sheet no. 114

Area / Prospect LAGANVILLE HARBOUR

Date 23/4/80

Map / Photo reference LINE 2200E

Analysed by AMDEL

DPO no. 589115

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wl	bl	co	ca	pH		Sn	Pb	Cu	Ag	Zn	Fe	Mn	As	Se			
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		Soil sample type ****							Depth	ppm	ppm	ppm	ppm	ppm	ppm	ppm				
819183	S	0.3						6	<10	20	10	22	2.3%	1			2200E	1075N	Yellow brown clayey soil	
819184	S	0.1						8	15	16	<5	24	1.7%	1			"	1100N	Quartzite fragments	
819185	S	0.2						10	<10	6	5	18	1.6%	1			"	1125N	Brown soil.	
819186	S	0.2						10	10	30	20	24	3.9%	<1			"	1150N	" " Quartz and Quartzite	
819187	S	0.2						44	<10	26	10	65	3.5%	<1	0.20		"	1175N	"	
819188	S	0.05						3	<10	65	10	46	2.5%	<1			"	1200N	Fine grained quartzites in outcrop	
819189	S	0.3						22	<10	16	10	38	2.3%	<1			"	1225N	Brown grey soil. Quartzite	
819190	S	0.2						14	<10	10	10	24	2.3%	<1			"	1250N	Light brown soil. Clay clasts	
819191	S	0.75						10	<10	30	5	26	4.9%	<1			"	1275N	Orangey clayey soil. Bleached siltstone	
819192	S	0.1						3	15	16	10	22	1.8%	<1			"	1300N	Orangey yellow sandy soil.	
819193	S	0.1						14	<10	22	15	26	3.7%	<1			"	1325N	Yellow clay clasts	
819194	S	0.1						14	<10	14	10	20	2.9%	<1			"	1350N	" " "	
819195	S	0.2						8	<10	70	15	34	7.3%	<1			"	1375N	Yellow orange clay rich soil.	
819196	S	0.1						44	<10	14	10	26	3.3%	<1			"	1400N	Grey brown soil. Minor quartz	
819197	S	0.2						6	<10	26	5	34	6.1%	<1	0.10		"	1425N	Finely laminated siltstone	
819198	S	0.2						10	<10	14	10	24	6.0%	<1			"	1450N	Micaceous siltstone - pelite	
819199	S	0.1						10	<10	24	5	22	7.3%	<1			"	1475N	Quartzite	
819200	S	0.3						12	<10	90	10	65	13.7%	<1			"	1500N	Clay	
819201	S	0.75						10	25	80	5	80	13.4%	<1			"	1525N	Clay rich soil.	
819202	S	0.6						4	<10	75	10	60	16.2%				"	1550N	Yellow orange soil	
819203	S	0.5						24	10	70	5	60	13.5%	1			"	1575N	Yellow orange clayey soil	
819204	S	0.3						4	<10	80	5	90	12.2%	1			"	1600N	Orangey clay	
819205	S	0.3						10	<10	20	10	70	14.0%	<1			"	1625N	" "	

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wl = width m bl = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type euger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE REGISTER

Tenement name... ELIJAH ROCKY CREEK

No. Sample numbers... 819207

Collected by... P. HEITHERSAY

Sheet no. 13

Area / Prospect... GRANVILLE WEST

Date... 22/4/80

Map / Photo reference.....

LINE 2400E

Analysed by... AMDEL

DPO no.....

589116

Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %									Grid ref	Geological Observations	
		ss*	fl	wi	al	co	ca		pH	As	W	Cu	Pb	Zn	Fe	Ag	Au			
		oc	o/c sample type ***						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		f	s sample type ****						ppm	ppm	ppm	ppm	ppm	ppm	ppm					
819207	S	0.1							4	<10	38	10	55	7.30	<1	<0.03	2400	E	400N	Basalt
819208	S	0.1							6	<10	30	15	95	1.00	<1		"		425N	Basalt
819209	S	0.1							10	<10	46	10	80	12.16	<1		"		450N	Red brown Basaltic
819210	S	0.2							8	10	44	15	130	11.60	<1		"		475N	Red brown clayey
819211	S	0.3							12	<10	38	15	44	2.60	<1		"		500N	Brown clayey Basaltic
819212	S	0.5							6	15	22	10	55	7.40	<1		"		525N	Pale brown and sandy
819213	S	0.3							12	10	36	5	65	4.40	1		"		550N	Pale green clayey
819214	S	0.2							14	<10	30	10	32	6.10	<1		"		575N	Weathered bedrock. White-orange brown
819215	S	0.3							8	10	200	10	130	2.90	<1		"		600N	Orange brown clayey soil. Pyritic quartzite
819216	S	0.6							4	<10	60	20	75	10.9	1		"		625N	Red brown. Clay soil
819217	S	0.5							6	15	30	15	60	12.7	<1	<0.03	"		650N	Brown crumbly with rock and quartz frag.
819218	S	0.6							18	<10	65	15	70	7.70	<1		"		675N	Swamp. white clayey sand.
819219	S	0.4							8	<10	20	15	26	3.00	<1		"		700N	Swamp. Mottled grey green clay
819220	S	0.5							12	<10	110	20	120	3.00	<1		"		725N	Grey brown clayey. Quartzite
819221	S	0.8							16	<10	14	10	28	4.70	<1		"		750N	Red brown slightly clayey
819222	S	0.9							14	<10	24	15	55	11.9	<1		"		775N	Orange brown, sandy. Bedrock base.
819223	S	0.6							8	<10	26	15	70	10.6	<1		"		800N	Brown, soft rock fragments
819224	S	0.2							8	<10	22	15	28	2.30	1		"		825N	Pale brown sandy. Angular quartzite fr.
819225	S	0.5							4	10	26	15	30	8.10	<1		"		850N	Pale brown sandy base. Basalt
819226	S	0.4							6	<10	20	15	65	2.80	1		"		875N	Pale brown sandy base. Basalt
819227	S	0.6							2	15	36	15	70	12.8	1	0.05	"		900N	Red brown crumbly
819228	S	0.4							8	<10	48	20	38	10.6	<1		"		925N	Red brown crumbly
819229	S	0.1							8	10	14	10	26	1.3%	<1		"		950N	Grey brown soil. Quartzite

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. 'PLORATION , GEOCHEMICAL SAMPLE LOGGER

Tenement name..... ELIOTT ROCKY CREEK No. Sample numbers..... 819230 - 819250 Collected by..... F. HEATHERSAY Sheet no. 116
 Area / Prospect..... SHANNVILLE WEST Date..... 23/11/80
 Map / Photo reference..... Analysed by..... AMDEL DPO no.....

LINE 2400E

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		ss*	fl	wi	al	co	ca		pH	As	W	Cu	Pb	Zn	Fe	Ag	Q.			
		oc	o/c sample type ***						P	B	Zn	Ag	Mo	Mn	As	Q.				
		f	s sample type ****						ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
819230	s							24	10	36	15	26	2.9	<1		2400E	975N	Orange brown soil. Weathered Rock Frag.		
	s	0.5														"	1000N	" "		
819231	s	0.4						50	10	20	15	28	5.10	<1		"	1025N	Sandy topsoil. Base may be basaltic		
819232	s	0.6						4	<10	16	10	32	6.90	<1		"	1050N	"		
819233	s	0.4						14	10	32	10	44	10.2	<1		"	1075N	Red brown clayey soil. Basaltic		
819234	s	0.4						10	<10	38	10	50	10.9	<1		"	1100N	Brown basaltic		
819235	s	0.5						24	<10	34	10	34	6.20	<1		"	1125N	Topsoil sandy. Base basaltic		
819236	s	0.6						24	<10	26	5	34	6.00	<1		"	1150N	"		
819237	s	0.5						6	10	26	15	32	8.20	1	0.05	"	1175N	"		
819238	s	0.4						4	<10	22	20	28	4.20	<1		"	1200N	"		
819239	s	0.6						12	15	100	15	38	8.40	<1		"	1225N	Orange brown sandy. Quartz and quartzite		
	s															"	1250N	Rock sample. Dark hornfels some quartz		
819240	s	0.4						12	<10	48	10	36	5.10	<1		"	1275N	Brown crumbly soil. Quartz quartzite		
819241	s	0.6						30	<10	55	10	28	6.50	<1		"	1300N	"		
819242	s	0.5						48	<10	65	25	26	6.10	<1		"	1325N	Orange brown sandy		
819243	s	0.6						18	<10	200	20	44	9.10	<1		"	1350N	Top sandy. Base orange brown clay		
819244	s	0.4						16	<10	14	10	26	3.30	<1		"	1375N	Sandy, pale brown		
819245	s	0.7						No	result							"	1400N	Minor grey schist rock fragments		
819246	s	0.2						14	<10	22	10	60	1.50	<1		"	1425N	Grey brown sand. Angular rock frag.		
819247	s	0.6						14	10	24	10	65	1.50	1	0.05	"	1450N	Swamp. gravel. Grey green schist		
819248	s	0.3						10	10	10	5	28	2.00	1		"	1475N	Slightly sandy. Angular quartz frag.		
819249	s	0.4						2	15	32	10	36	6.30	<1		"	1500N	Yellow brown clayey. Quartz frag.		
819250	s							24	10	85	15	95	14.1	1		"	1525N	Yellow brown clayey. Basaltic		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

† SAMPLE MISSING

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. FLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name... 117 Rocky CAFE No. Sample numbers 819251 & 819255 Collected by... P. H. TILKESAY Sheet no. ... 15
 Area / Prospect... GRANDVILLE WEST Date... 23/4/30
 Map / Photo reference..... Analysed by... RAMDOL DPO no.....

LINE 2400E

589118

Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	Fe	Co	Au		
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
		s sample type ****							ppm	ppm	ppm	ppm	ppm	ppm	ppm			
819251	s	0-3						8	<10	50	5	60	113	<1		2400E	1550N	Yellow brown clayey
819252	s	0-2						24	<10	70	<5	70	11.2	1		"	1575N	"
819253	s	0-3						24	10	75	5	120	14.5	1		"	1600N	" Basalt
819254	s	0-3						5	<10	85	10	160	13.0	<1		"	1625N	" "
819255	s	0-4						24	<10	30	5	110	14.8	<1		"	1650N	" "

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. PLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name... EL 1177 Rocky Cape No. Sample numbers... 819256... 819277... Collected by... P. HELTHERSY Sheet no. 43
 Area / Prospect... GRANVILLE WEST Date... 23/4/80
 Map / Photo reference... LINE 260E Analysed by... AMDEL DPO no...

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref.	589119 Geological Observations
		fl	wl	al	co	ca	pH		Sr	W	Cu	Pb	Zn	Fe	Ag	Au				
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	%	ppm	ppm				
		s sample type **** Depth (cm)																		
819256	S								8	210	55	5	95	11.4	<1		2600 E	600N	Soil close to basalt	
819257	S								8	15	48	5	70	11.7	1	0.05	"	625N	"	
819258	S								18	210	50	10	130	13.0	<1		"	650N	"	
819259	S								6	210	50	10	110	13.4	1		"	675N	"	
819260	S								8	210	50	10	110	10.9	<1		"	700N	Soil close to basalt	
819261	S								4	210	70	15	120	9.60	1		"	725N	Basaltic soil	
819262	S								24	210	70	5	100	11.1	<1		"	750N	Basaltic soil close to outcrop	
819263	S								24	210	65	5	75	12.1	<1		"	775N	Red brown clayey	
819264	S								6	210	55	5	70	11.0	<1		"	800N	Clayey red brown soil.	
819265	S								10	15	46	5	55	11.9	<1		"	825N	Red brown crumbly	
819266	S	0.2							18	<10	22	10	34	5.30	<1		"	850N	In creek. Quartzite, pyrite. Outcrop	
819267	S	0.3							24	10	14	10	24	3.50	<1	0.15	"	875N	Pale brown sandy loam. fine quartzite	
819268	S	0.2							12	210	32	10	60	9.20	<1		"	900N	Brown clay Basalt	
819269	S	0.4							24	210	32	15	112	8.70	<1		"	925N	Brown clay "	
819270	S	0.3							4	210	38	10	112	11.4	<1		"	950N	Clay, brown.	
819271	S	0.4							24	15	22	10	50	5.50	<1		"	975N	Kahki brown, crumbly, Basalt?	
819272	S	0.6							24	210	40	15	34	11.1	1		"	1000N	Orange brown clay loam	
819273	S	0.6							6	210	50	10	50	13.0	1		"	1025N	"	
819274	S	0.7							10	210	60	5	90	13.0	<1		"	1075N	Brown, crumbly. Weathered basalt	
819275	S	0.6							24	10	50	10	60	11.5	<1		"	1100N	Brown, weathered basalt fragments	
819276	S	0.6							24	10	40	15	55	9.60	<1		"	1125N	"	
819277	S	0.6							6	210	55	10	60	13.4	<1	0.10	"	1150N	Orange brown crumbly. Weathered basalt	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wl = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type s = sugar hole or pit depth m A, B or C horizon

C.R.A. LOCATION . GEOCHEMICAL SAMPLE LOCATION

Tenement name... ELI 1177 ROCKY COPE No. Sample numbers 819275-819297 Collected by... P. HEATHERSAY Sheet... 17
 Area / Prospect... GRANDVIEW WEST Date... 23/4/80
 Map / Photo reference... LINE 2600E Analysed by... AMDEL DPO no.

119

589120

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %								Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		Si	W	Co	Fe	Zn	Pb	Ag	Hg		
		o/c sample type ***							ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
		s sample type ****							ppm	ppm	ppm	%	ppm	ppm	ppm			
819275	S	0.6						24	<10	46	15	60	10.3	<1		2600E	1175N	Orange brown crumbly weathered basalt
819279	S	0.6						16	<10	36	10	40	8.00	<1		"	1200N	"
819280	S	0.5						24	<10	50	5	48	12.1	<1		"	1225N	"
819281	S	0.5						24	<10	60	5	70	13.2	<1		"	1250N	Orange brown crumbly, basalt fragment
819282	S	0.6						12	10	32	15	42	10.3	<1		"	1275N	Red brown crumbly pale sandstone
819283	S	0.5						38	<10	22	10	100	2.40	<1		"	1300N	Fine quartz gravels grey-green schist base
819284	S	0.5						6	<10	65	10	60	13.2	<1		"	1325N	Red brown sand crumbly
819285	S	0.4						8	<10	50	10	46	12.0	<1		"	1350N	Possible basalt fragments
819286	C	0.5						24	<10	65	15	60	13.2	<1		"	1375N	"
819287	S	0.4						24	<10	65	10	75	12.3	1	0.05	"	1400N	Clayey yellow brown
819288	S	0.5						8	<10	55	10	55	12.3	<1		"	1425N	Brown crumbly
819289	S	0.5						10	<10	42	10	48	10.9	<1		"	1450N	"
819290	S	0.5						14	20	20	10	45	10.9	<1		"	1475N	"
819291	S	0.4						8	<10	36	10	42	7.30	<1		"	1500N	"
819292	S	0.5						8	10	44	15	42	11.6	<1		"	1525N	"
819293	S	0.5						10	<10	48	10	38	10.1	1		"	1550N	"
819294	S	0.7						36	<10	12	5	44	3.20	1		"	1575N	Grey fine gravel
819295	S	1.0						32	15	65	15	380	3.40	1		"	1600N	Swamp gravels and grey schists
819296	S	0.6						4	<10	38	15	50	7.90	1		"	1625N	Yellow brown soil to basalt
819297	S	0.5						10	<10	14	10	14	7.00	<1	0.05	"	1650N	"

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** s sample type ****

120

589121

4.3

Coastal Geochemistry

Tenement name Rocky Ridge E.L. 177 No. Sample numbers Collected by GEORGE S
 Area / Prospect GRAND LANE EAST Date
 Map / Photo reference **COSTEAN SAMPLES** Analysed by ANALABS DPO no

121

589122

Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %						Grid ref					
		fl	wi	al	co	ca	pH		Sn	N	Cu	Pb	Zn	Fe			Ag	Bi	Mo	As
		o/c sample type ***																		
		s sample type ****																		
KR. 9251								11	4	50	X	15	1.80	X	4	5.5	20	G ₂ -1m	COSTEAN LINE 9900N	
9252								17	X	75	70	15	4.25	X	X	10.5	170	2m		
9253								6	X	70	X	10	2.30	X	X	6.5	55	3m		
9254								12	X	75	10	15	2.05	X	2	14.0	19	4m		
9255								26	X	80	15	35	2.35	0.5	X	8.0	39	5m		
9256								X	X	100	30	20	2.30	X	X	5.5	60	6m		
9257								10	X	90	20	15	2.20	X	X	2.5	73	7m		
9258								49	X	80	25	30	3.05	X	X	19	86	8m		
9259								252	13	80	25	30	3.05	X	X	20.5	250	9m		
9260								60	X	160	15	50	4.90	X	X	8.5	73	10m		
9261								270	X	145	30	50	6.40	X	2.0	90	330	11m		
9262								262	X	190	55	120	7.40	X	X	10.0	750	12m		
9263								442	X	155	45	170	5.65	X	6	5.0	680	13m		
9264								467	19	80	25	70	2.10	X	X	X	59	14m		
9265								4.8%	88	200	30	70	25.6	X	42	X	5400	15m		
9266								4.71%	69	375	40	90	22.2	X	50	X	3000	16m		
9267								1.91%	87	260	30	195	16.0	X	74	X	4400	17m		
9268								8130ppm	24	265	15	45	9.75	X	48	X	6600	18m		
9269								2.89%	62	210	30	80	4.50	X	16	X	2600	19m		
9270								7000ppm	39	165	20	100	4.90	X	26	X	2600	20m		
9271								6550	43	160	10	60	2.60	X	30	X	3900	21m		
9272								3820	12	125	10	50	3.35	X	22	X	5300	21m		
9273								11.2%	263	345	15	270	2.50	X	62	X	9	22m		

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION , GEOCHEMICAL SAMPLE LEDGER

122

Tenement name ROCKY HILL E.L. 1/77 No. Sample numbers Collected by GEORGE Sh
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference COSTEAN SAMPLES Analysed by AMALAS DPO no
 A 02143

589123
 Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref	
		fl	wi	al	co	ca	pH		Sr	Ni	Cu	Pb	Zn	Fe	Ag	Bi	Mn	As			
		o/c sample type ***																			
		s sample type ****																			
CR 9251								11	4	50	X	15	1.80	X	4	5.5	20	Q _u -1m	COSTEAN LINE 9990N		
9252								17	X	75	70	15	4.25	X	X	10.5	170	2m			
9253								6	X	70	X	10	2.30	X	X	6.5	55	3m			
9254								12	X	75	10	15	2.05	X	2	14.0	19	4m			
9255								26	X	80	15	35	2.35	0.5	X	8.0	39	5m			
9256								X	X	100	30	20	2.30	X	X	5.5	60	6m			
9257								10	X	90	20	15	2.20	X	X	2.5	73	7m			
9258								49	X	80	25	30	3.05	X	X	19	86	8m			
9259								252	13	80	25	30	3.05	X	X	20.5	250	9m			
9260								60	X	160	15	50	4.90	X	X	8.5	73	10m			
9261								270	X	145	30	50	6.40	X	2.0	90	330	11m			
9262								262	X	190	55	120	7.40	X	X	10.0	750	12m			
9263								442	X	155	45	170	5.65	X	6	5.0	680	13m			
9264								467	19	80	25	70	2.10	X	X	X	59	14m			
9265								4.8%	88	200	30	70	25.6	X	42	X	5400	15m			
9266								4.71%	69	375	40	90	22.2	X	50	X	3000	16m			
9267								1.91%	87	260	30	195	16.0	X	74	X	4400	17m			
9268								8130ppm	24	265	15	45	9.75	X	48	X	6600	18m			
9269								2.89%	62	210	30	80	4.50	X	16	X	2600	19m			
9270								7000ppm	39	165	20	100	4.90	X	26	X	2600	20m			
9271								6550	43	160	10	60	2.60	X	30	X	3800	21m			
9272								3820	12	125	10	50	3.35	X	22	X	5300	21m			
9273								11.2%	263	345	15	270	2.30	X	62	X	9	22m			

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

123

Tenement name Rocky Cape E.L. 117 No. Sample numbers..... Collected by.....

Sheet.....

Area / Prospect GRANVILLE EAST..... Date.....

Map / Photo reference..... Analysed by ANALABS..... DPO no.....

A 02143

589124

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
		fl	wi	al	co	ca	pH		S _N	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As		
		o/c sample type ***																		
		s sample type ****																		
9297								9	X	15	5	35	3500	X	X	0.0	24	11		
9298								11	X	35	10	85	1.75	X	4	1.0	5	12		
9299								10	X	40	15	85	3.40	0.5	X	2.5	17	13		
9200								5	X	45	5	95	1.45	X	X	2.5	55	14		
9201								8	X	30	5	90	850	0.5	X	1.5	61	15		
9202								14	X	15	5	80	8450	0.5	X	1.5	52	16		
9203								25	X	20	X	150	9.50	X	X	1.5	15	17		
9204								14	X	35	5	145	1.10	X	X	1.0	23	18		
9205								6	X	20	X	125	1.60	X	X	X	10	19		
9206								24	X	60	X	175	1.25	X	X	1.0	19	20		
9207								15	X	20	X	240	2.20	X	X	20	58	21		
9208								34	X	60	10	250	1.50	X	X	0.5	46	22		
9209								43	X	10	X	165	7500	X	X	X	8	23		
9210								26	X	15	X	175	8600	X	2	X	37	24		
9211								6	X	15	X	135	1.20	X	X	X	57	25		
9212								11	X	10	X	85	6550	X	X	0.5	14	26		
9213								X	X	10	X	40	6050	X	X	X	19	27		
5627								80	X	20	15	35	1.55	X	X	1.5	7	0-1m	COSTEAN LINE 9600N	
5628								211	X	25	5	40	1.25	X	X	2.0	15	2		
5629								112	X	25	15	45	1.40	X	X	2.5	4	3		
5630								25	X	35	30	100	3.25	X	X	0.5	22	4		
5631								9	X	20	10	55	1.70	X	X	1.5	15	5		
5632								8	X	5	X	35	9300	X	X	0.5	2	6		

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

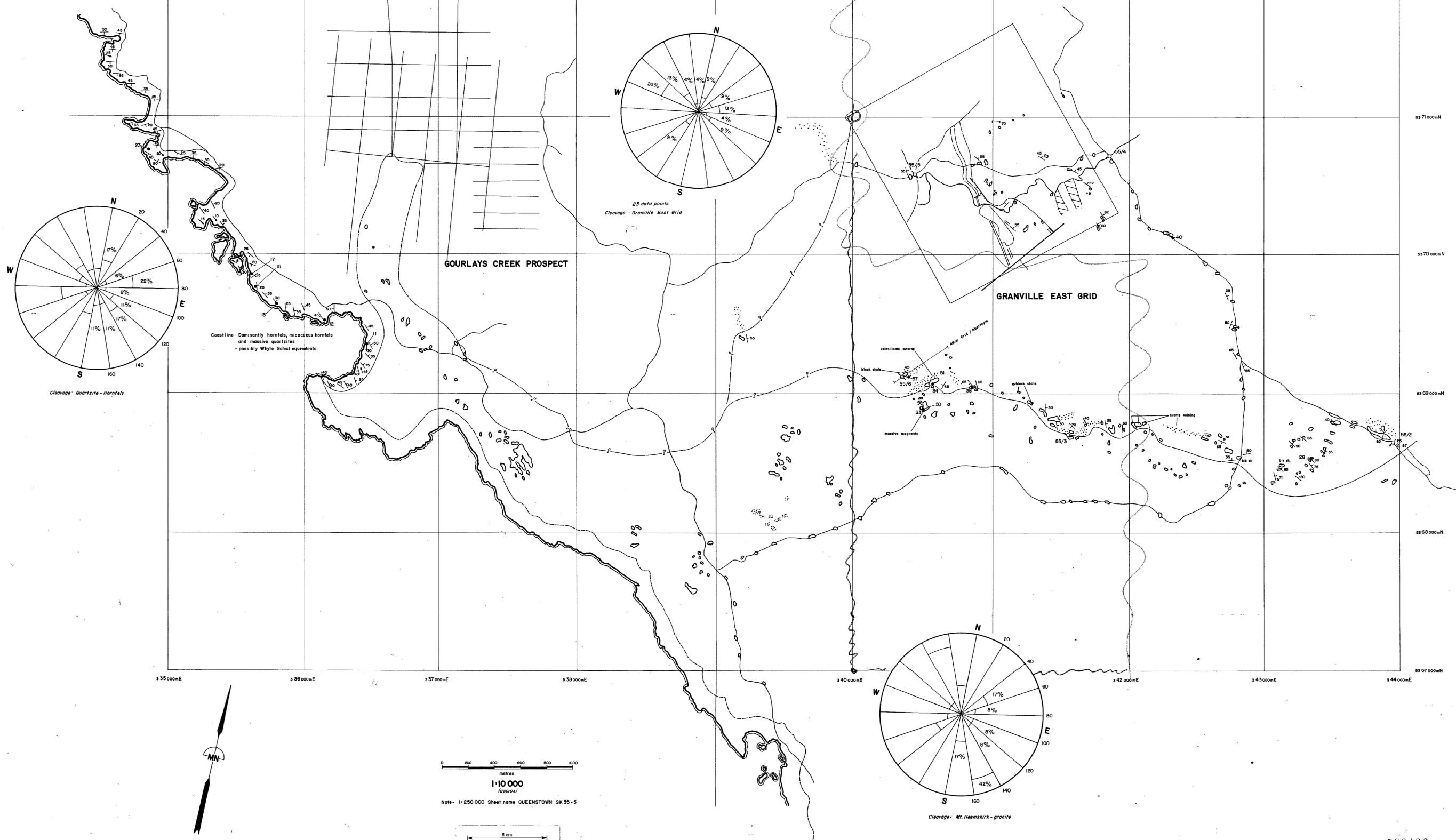
C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCK CADE E.L. 1/77 No. Sample numbers Collected by Sheet
 Area / Prospect GRANVILLE EAST Date
 Map / Photo reference Analysed by DPO no
 A 02143

589125
 Geological Observations

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %											Grid ref								
		fl	wi	al	co	ca	pH		Sn	W	Cu	Pb	Zn	%	Ag	Bi	Mo	As										
		o/c sample type ***																										
		s sample type ****																										
5633																		23	X	20	10	90	1.70	X	X	X	2	7
5634																		6	X	25	X	30	7450	X	X	1.5	1	8
5635																		6	X	25	X	25	6400	0.5	X	1.0	X	9
5636																		X	X	35	X	10	6500	X	X	5.5	X	10
5637																		11	X	20	X	15	4500	0.5	X	2.0	3	11
5638																		13	X	5	10	25	5800	0.5	X	2.0	X	12
5639																		16	X	20	X	25	5800	0.5	X	1.0	X	13
5640																		15	X	5	X	20	4300	0.5	X	1.0	X	14
5641																		13	X	10	10	25	4700	0.5	2	X	X	15
5642																		7	X	5	5	25	4300	X	X	0.5	X	16
5643																		36	X	5	X	25	4350	X	X	3.5	X	17
5644																		79	X	5	5	20	4500	X	X	2.5	X	18
5645																		72	X	5	X	55	7600	X	X	1.0	X	19
5646																		24	X	5	5	30	4500	X	X	0.5	X	20
5647																		118	X	5	X	25	3600	X	X	2.0	X	21
5648																		45	X	30	5	45	7600	X	X	2.0	X	22
5649																		8	X	25	5	30	4450	X	X	1.5	X	23

* Sample type ss = stream sediment oc = outcrop f = float s = soil
 ** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
 *** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
 **** Soil sample type auger hole or pit depth m A, B or C horizon



135 000E 136 000E 137 000E 138 000E 139 000E 140 000E 141 000E 142 000E 143 000E 144 000E

5372 000N
5371 000N
5370 000N
5369 000N
5368 000N
5367 000N

- LEGEND**
- Road
 - River
 - 33 Rock sample number & location
 - 55/3 Stream sediment sample & location
 - Geological Boundary
 - Dip & strike of strata
 - Pentcline, pos. approx.
 - Syncline, position approx.
 - Facing
 - Faults
 - Thrust fault
 - Prominent Photo Linear
 - ↖ ↗ ↘ ↙ Cleavage strike and dip
 - Lincation trend and plunge
 - Outcrop
 - Float

INFERRED STRATIGRAPHY

Tertiary	Basalt	Devonian	Heemskirk Granite
Tertiary	Grits and Gravels		
Precambrian	Upper Oonah Quartzite		
	Lower Oonah Quartzite		

589126

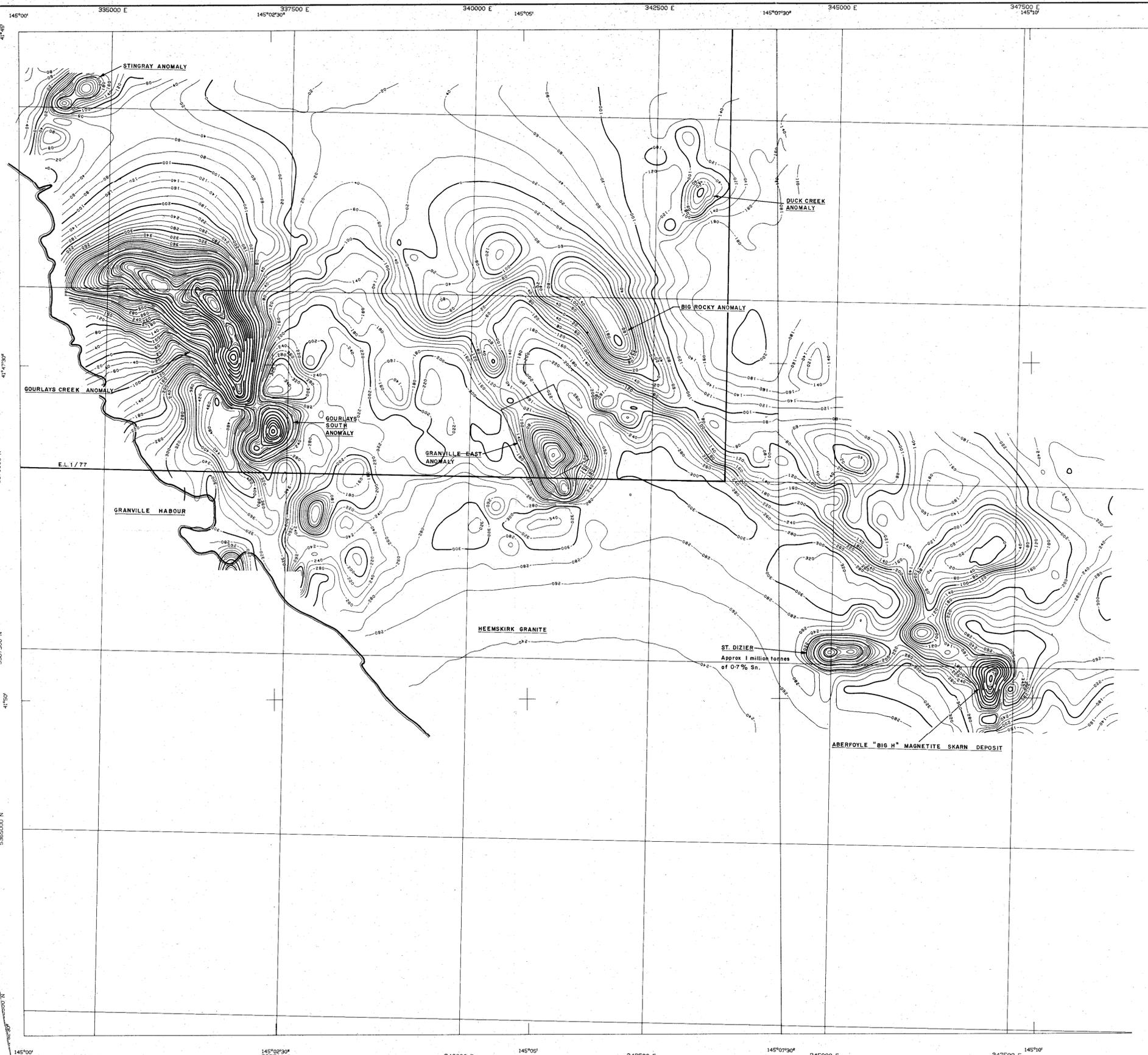
GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD — DEVONPORT

FILE No **TSI/77-GE-1** PLAN No **I**

SCALE: 1:10 000
DATE: 29/4/82
GEOLOGIST: M.E. P.H.
DRAWN: R. Toop
CHECKED: *[Signature]*

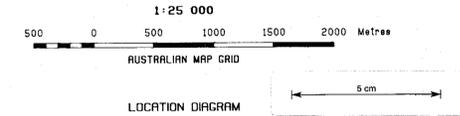
**E.L.1/77 ROCKY CAPE, TASMANIA
GRANVILLE HARBOUR
Heemskirk Granite Contact**

001



**QUEENSTOWN SK55-5
PIEMAN
7914-III-NW**

GEOPEKO



7914 -I-SE	7914 -IV-SW	7914 -IV-SE
7914 -II-NE	7914 -III-NW	7914 -III-NE
7914 -II-SE	7914 -III-SW	7914 -III-SE

589127
**GRANVILLE HARBOUR
AIRBORNE GEOPHYSICAL SURVEY**
TOTAL MAGNETIC INTENSITY 33-1961

SURVEY SYSTEM
AIRCRAFT CESSNA 185E
MAGNETOMETER GEMETRICS G803
Bird installation
ACQUISITION SYSTEM CEDEX

FLIGHT SPECIFICATION
TRAVERSE LINE INTERVAL 250 metres
TRAVERSE LINE DIRECTION 90 degrees
TIE LINE INTERVAL 2500 metres
TIE LINE DIRECTION 0 degrees
TERRAIN CLEARANCE 135 metres
SPEED 50 metres/sec
ACQUISITION INTERVAL 0.8 second
NAVIGATION Aerial photography

DATA PROCESSING
REGIONAL FIELD IGRF Model 1975 removed
GRID CELL SIZE 75 metres
CONTOUR INTERVAL 20 nT

DRAWN M.yds.	REVISION	DATE
2-7-82		
GEOPHYSICS		
APPROVED		
DRAWING No. 6418 S/C	REVISION No. ITS1/77-GE-2A	

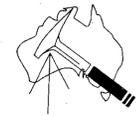
Survey by
GEOEX LTD
September 1981
Project management by
GEOPEKO GEOPHYSICAL GROUP

QUEENSTOWN SK55-5

PIEMAN

7914-III-NW

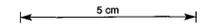
GEOPEKO



1:25 000

500 0 500 1000 1500 2000 Metres

AUSTRALIAN MAP GRID



LOCATION DIAGRAM

7814 -I-SE	7914 -IV-SW	7914 -IV-SE
7814 -II-NE	7914 -III-NW	7914 -III-NE
7814 -II-SE	7914 -III-SW	7914 -III-SE

589128

GRANVILLE HARBOUR
AIRBORNE GEOPHYSICAL SURVEY

FLIGHT PATH 83-1961

SURVEY SYSTEM

AIRCRAFT CESSNA 185E
 MAGNETOMETER GEOMETRICS G803
 Bird installation
 ACQUISITION SYSTEM GEDEX

FLIGHT SPECIFICATION

TRAVERSE LINE INTERVAL 250 metres
 TRAVERSE LINE DIRECTION 90 degrees
 TIE LINE INTERVAL 2500 metres
 TIE LINE DIRECTION 0 degrees
 TERRAIN CLEARANCE 135 metres
 SPEED 50 metres/sec
 ACQUISITION INTERVAL 0.8 second
 NAVIGATION Aerial photography

DATA PROCESSING

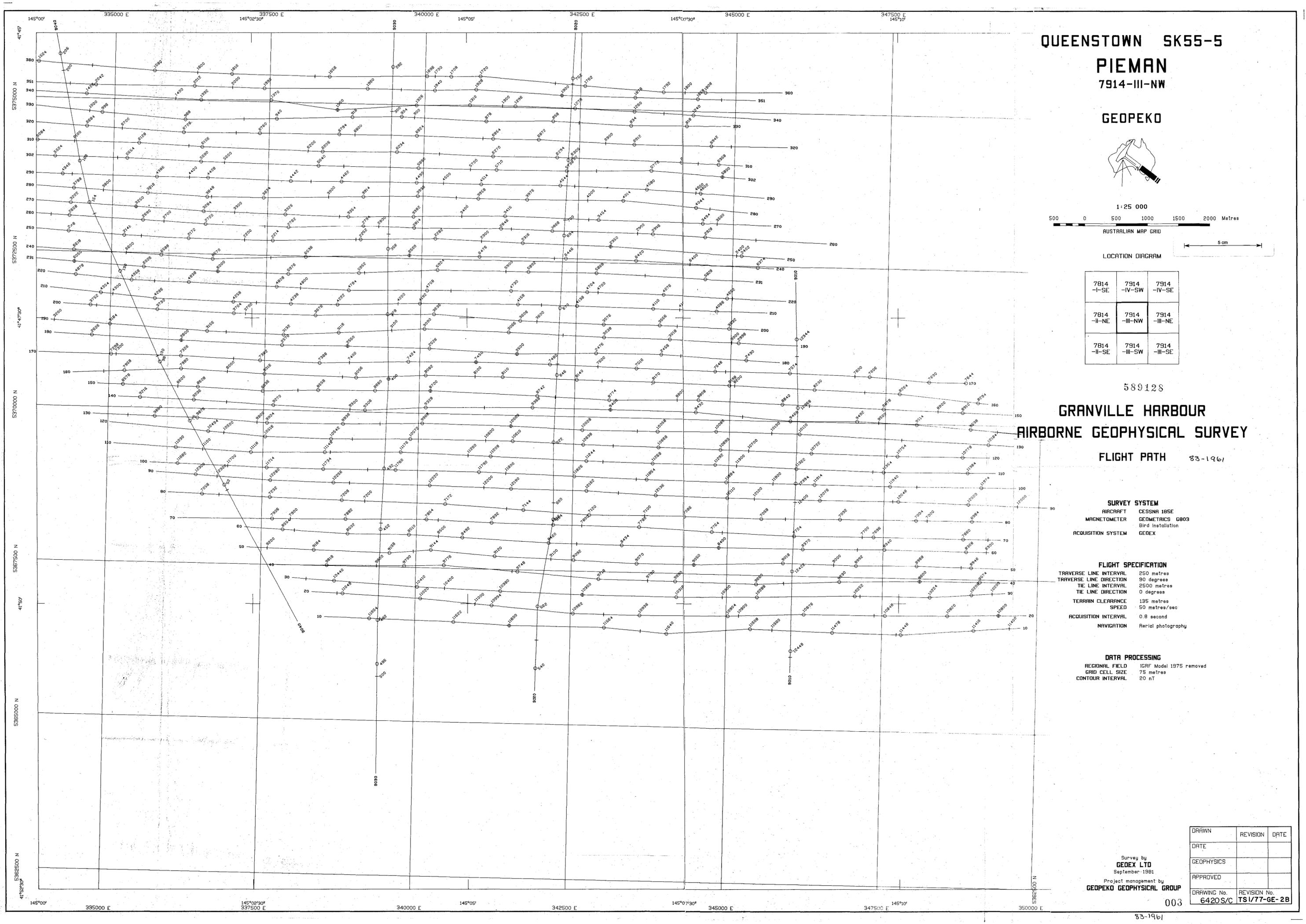
REGIONAL FIELD IGRF Model 1975 removed
 GRID CELL SIZE 75 metres
 CONTOUR INTERVAL 20 nT

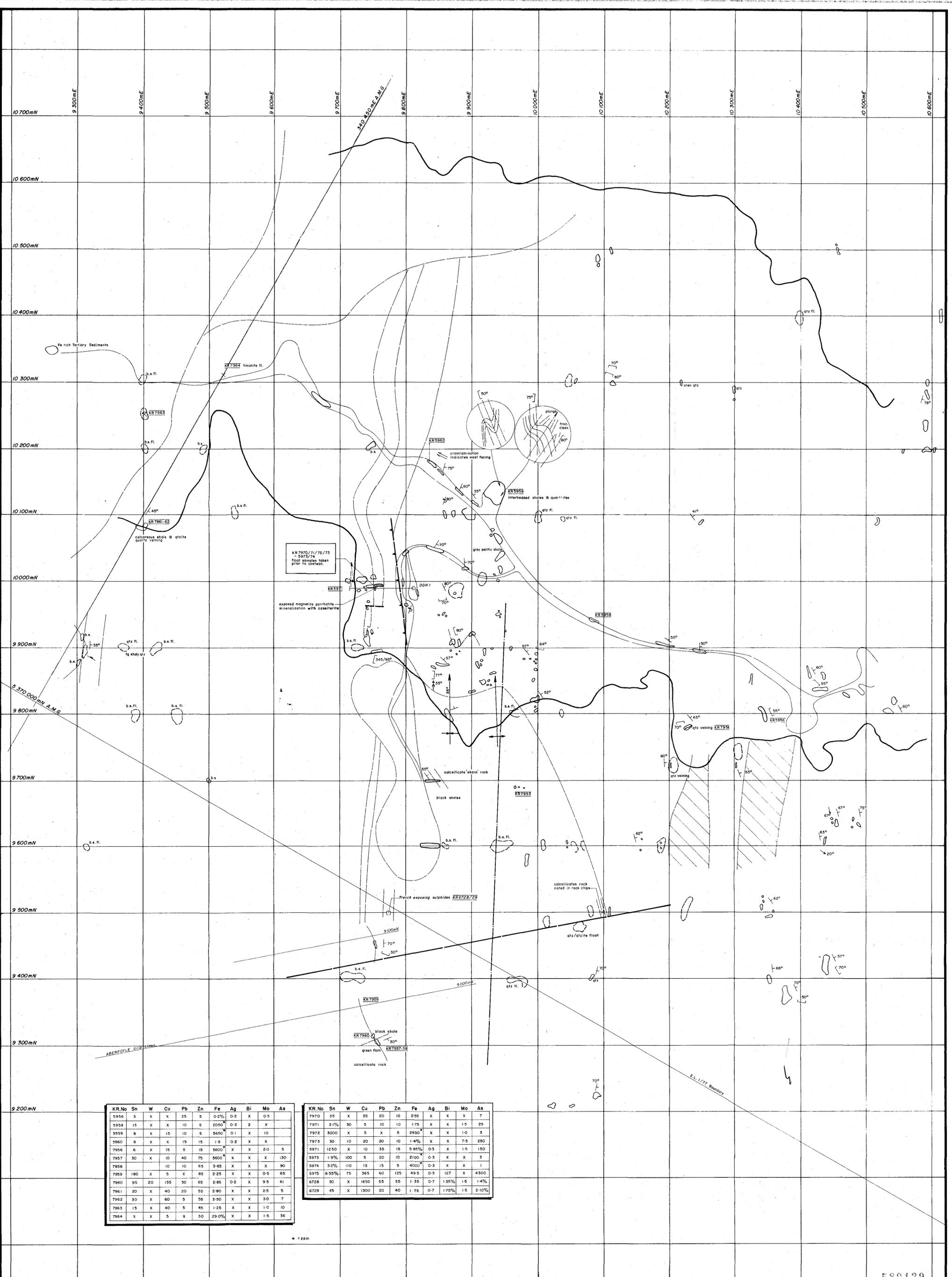
DRAWN	REVISION	DATE
DATE		
GEOPHYSICS		
APPROVED		
DRAWING No.	REVISION No.	
6420/S/C	TS1/77-GE-2B	

Survey by
GEDEX LTD
 September 1981
 Project management by
GEOPEKO GEOPHYSICAL GROUP

003

83-1961





KR.No	Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As
5956	3	X	X	25	5	0.2%	0.2	X	0.5	
5958	15	X	X	10	5	2050	0.2	2	X	
5959	8	X	15	10	5	5650	0.1	X	10	
5960	8	X	X	15	15	1.9	0.2	X	X	
7956	6	X	15	5	15	5600	X	X	2.0	5
7957	30	X	10	40	75	5600	X	X	X	150
7958			10	10	65	3.65	X	X	X	90
7959	180	X	5	X	85	2.25	X	X	0.5	85
7960	95	20	135	50	65	2.85	0.2	X	9.5	61
7961	20	X	40	20	55	2.80	X	X	2.5	5
7962	30	X	60	5	55	3.50	X	X	3.0	7
7963	15	X	40	5	45	1.25	X	X	1.0	10
7964	X	X	5	X	30	29.0%	X	X	1.5	36

KR.No	Sn	W	Cu	Pb	Zn	Fe	Ag	Bi	Mo	As
7970	35	X	35	20	10	255	X	X	X	7
7971	2.1%	30	5	10	10	1.75	X	X	1.5	29
7972	3000	X	5	X	5	2930	X	X	1.0	3
7973	30	10	20	20	10	1.4%	X	X	7.5	250
5971	1250	X	10	35	15	5.85%	0.3	X	1.5	150
5973	1.9%	100	5	20	10	2100	0.3	X	X	3
5974	3.2%	110	15	15	5	4000	0.3	X	X	1
5975	6.35%	75	365	60	125	49.5	0.3	127	X	4300
6728	30	X	1650	55	55	1.35	0.7	1.35%	1.5	1.4%
6729	45	X	1300	20	40	1.76	0.7	1.75%	1.5	2.10%

589129

LEGEND

- Geological boundary
- Minor syncline with plunge
- Cleavage: strike & dip
- Tracks
- Zone of tourmaline replacement
- Faults: inferred
- Lineation: trend & plunge
- Creeks
- Strike & dip of strata
- Faults: inferred
- Jointing
- Anticline, position approx.
- Thrust fault
- Outcrop
- Syncline, position approx.
- Prominent photo-linear
- Float

STRATIGRAPHY

- TERTIARY: Unconsolidated pebbles & boulders of quartzite, black shale; Very Fe rich grit; Black shales containing pyrite & pyrrhotite
- PRECAMBRIAN: Calcisilicate rock consisting of varying amounts of tremolite, diopside, serpentine, moscovite; Mineralized skarn: varying amounts of coesalite pyrrhotite, magnetite, arsenopyrite; Crumpled micaceous quartzites, interbedded shales

SCALE 1:2500

83-196/A DIVISION OF GEOPEKO

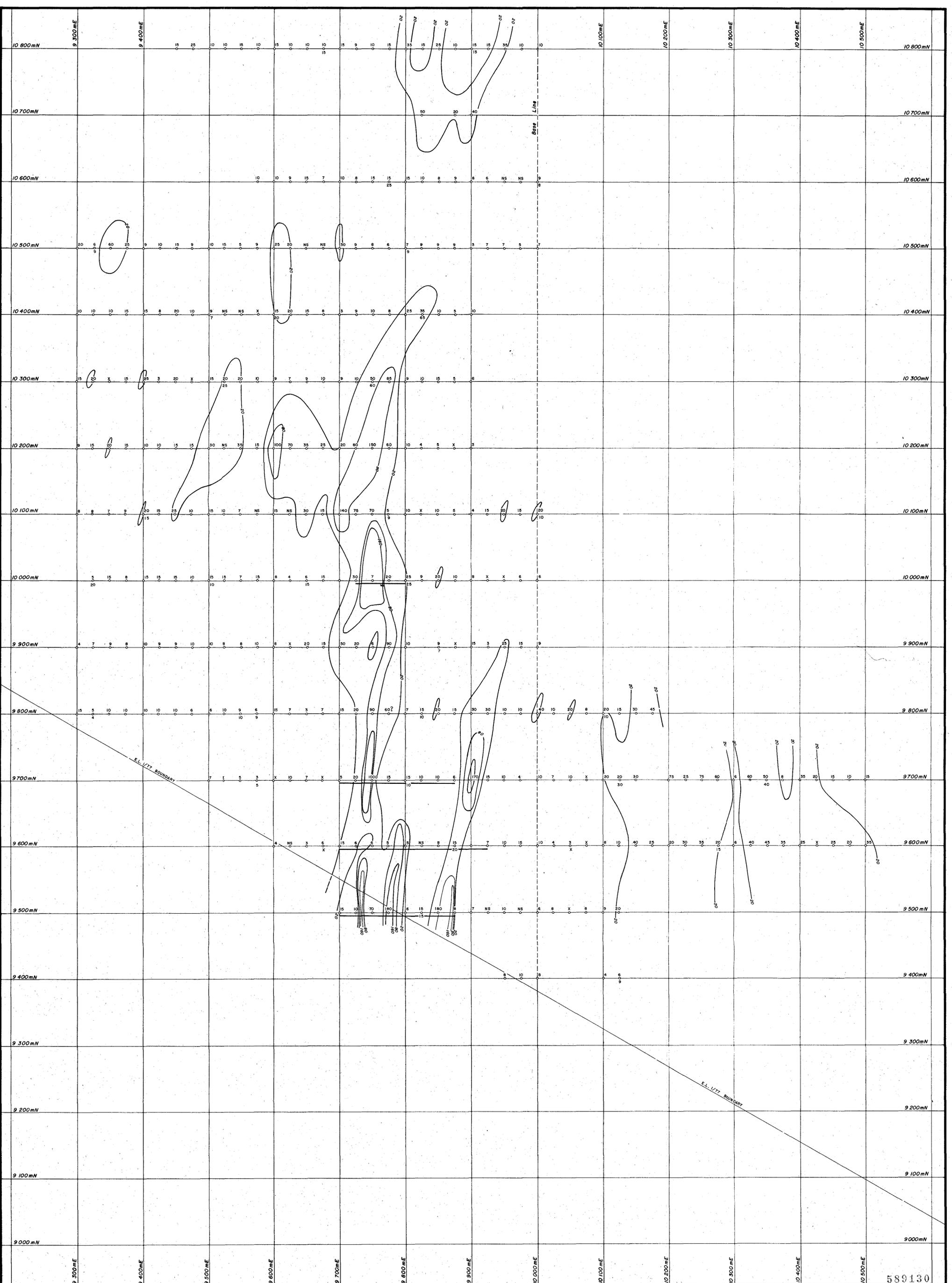
No.TS 1/77-GE-3 PLAN No. 3

E.L. 1/77 ROCKY CAPE, TASMANIA

GRANVILLE EAST

Geology 004

DATE 1/6/82
GEOLOGIST P. HETHERINGTON
DRAWN R. TOG
CHECKED



LEGEND:

- Auger hole
- Sn value, ppm
- Sample location
- X Duplicate sample

CONTOUR INTERVAL ppm

19-6	20-79
19-10	80-159
19-16	160 <

Pencil No. _____

5 cm

33-1961

SCALE 2:500

DATE 4/3/82

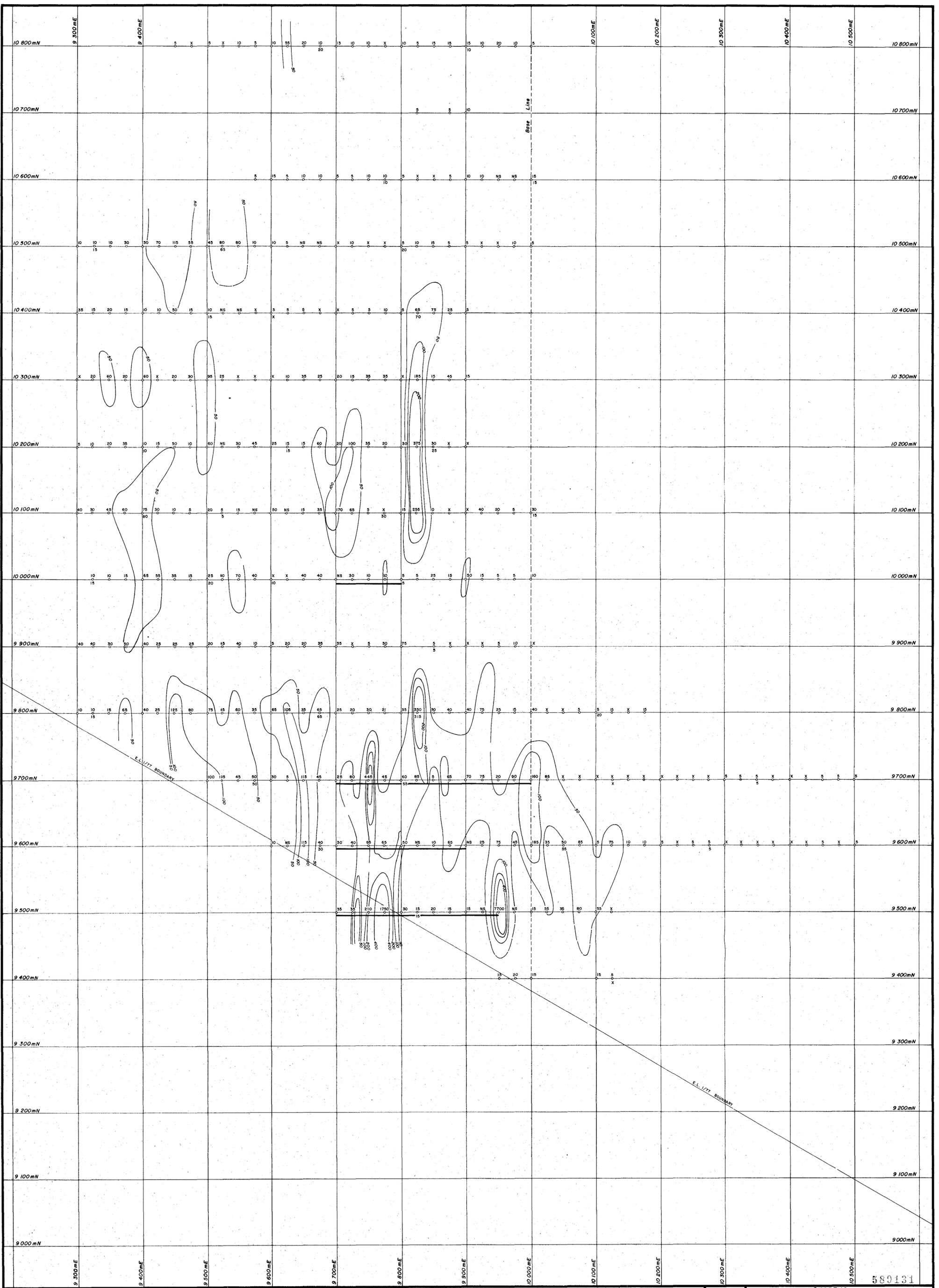
GEOPEKO
A DIVISION OF PEKO WALLSEND OPERATIONS LTD.

No. TS 1/77-GE-4 PLAN No. 4

E.L. 1/77 ROCKY CAPE, TASMANIA
GRANVILLE EAST
Sn Geochemistry 005

CHECKED [Signature]

589130



580131

LEGEND:

- o Auger hole
- 10 Cu value, ppm
- 15 Sample location
- 15 Duplicate sample
- NS No sample

CONTOUR INTERVAL ppm

19-6	50-99	19-28	400C
19-10	100-199		
19-16	200-399		

93-1961 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

DATE 12/3/82

GEOLOGICAL PLAN No. 5

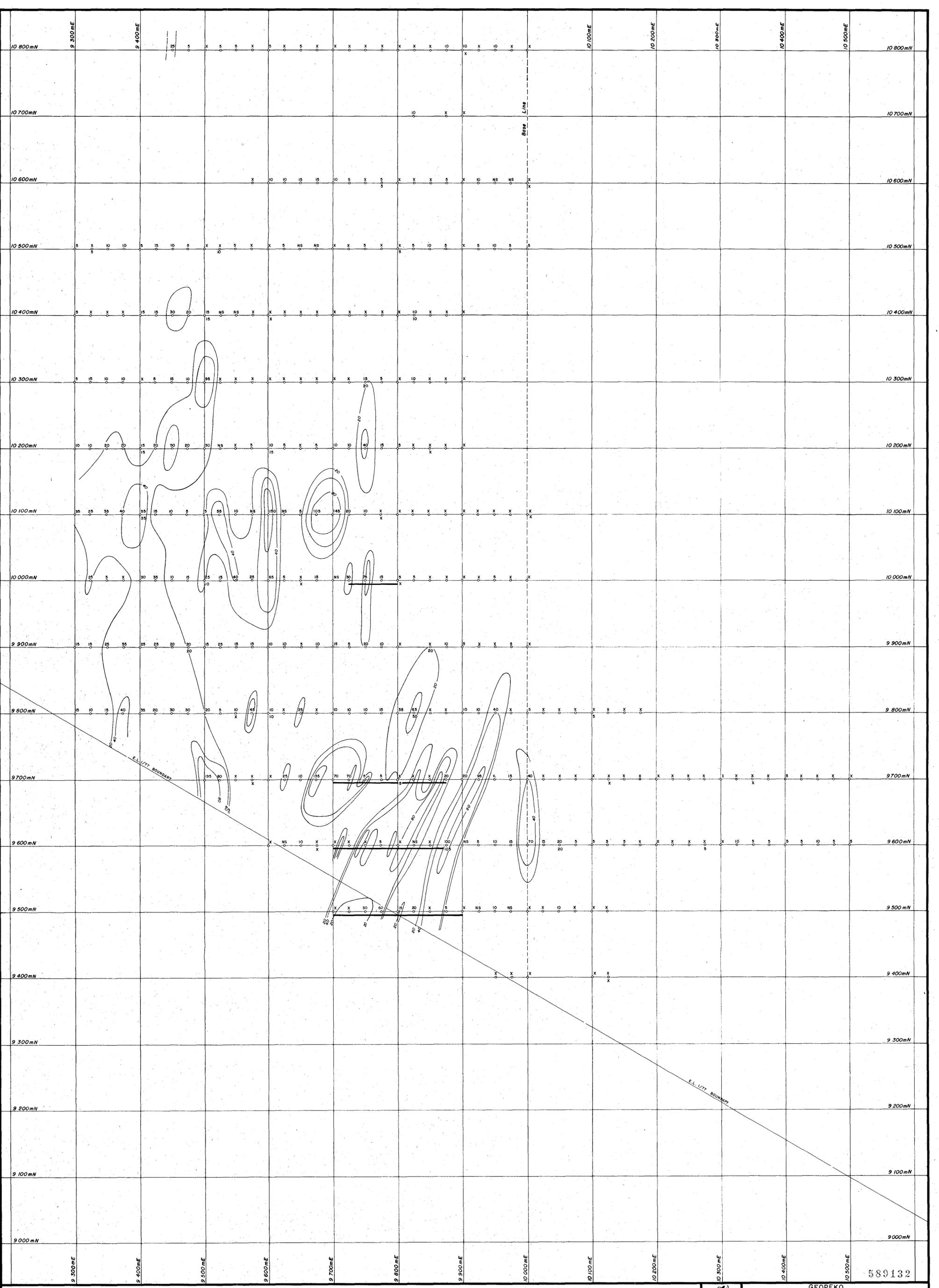
E.L. 1/77 ROCKY CAPE, TASMANIA

GRANVILLE EAST

Cu Geochemistry

006

CHECKED

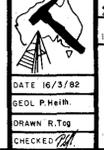


LEGEND:

- Auger hole
- X Sample location
- Duplicate sample
- NS No sample

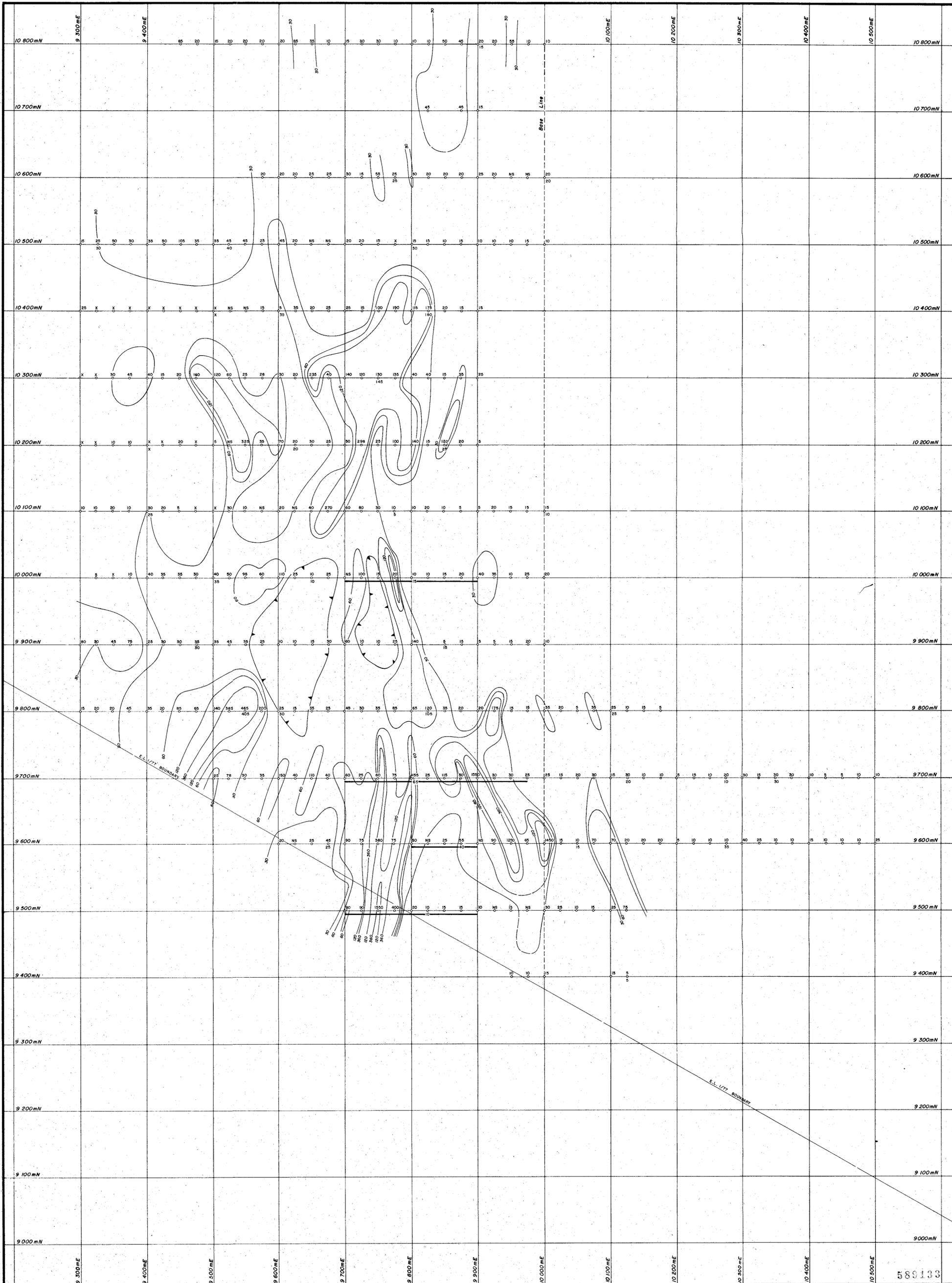
CONTOUR INTERVAL ppm

Parcel No.	Interval	Value Range
19-6	20-39	20-39
19-10	40-79	40-79
19-16	80+	80+



GEOPEKO
 A DIVISION OF PEABODY ENERGY AUSTRALIA PTY LTD
 No. TS 1/77-GE-6 PLAN No. 6
 E.L. 1/77 ROCKY CAPE, TASMANIA
 GRANVILLE EAST
 Pb Geochemistry 007

589132



LEGEND:

- Auger hole
- Zn value, ppm
- Sample location
- Duplicate sample
- NS No sample

CONTOUR	INTERVAL	ppm
19-6	30-59	19-28
19-10	60-119	
19-16	120-359	360 <

GEOPEKO
A DIVISION OF PEAK-WALLSEND OPERATIONS LTD.

53-196/ No.TS 1/77-GE-7 PLAN No. 7

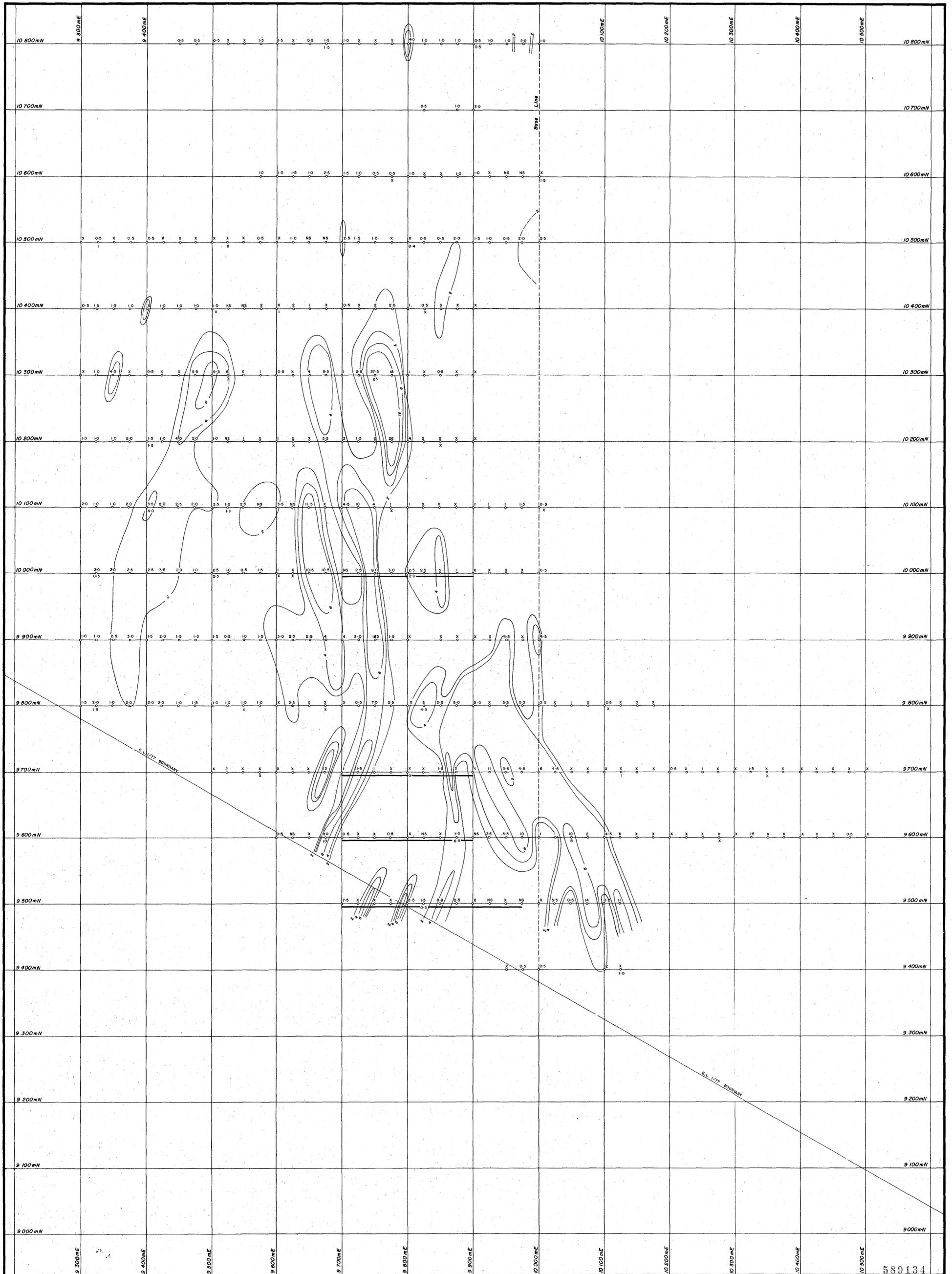
E.L. 1/77 ROCKY CAPE, TASMANIA
GRANVILLE EAST
Zn Geochemistry

008

DATE 22/3/82
GEOLOGICAL PHASE
DRAWN R.T.G.
CHECKED

5 cm

CT 80133



LEGEND:

- Auger hole
- X Sample location
- 15 Duplicate sample
- NS No sample

CONTOUR INTERVAL ppm

19-6	2-3-99	19-28	16 <
19-10	4-7-99		
19-16	8-15-99		

Mo value, ppm

5 cm

33-96

DATE 17/5/82

GEOPEKO
A DIVISION OF PEER-WALLEREND OPERATIONS LTD.

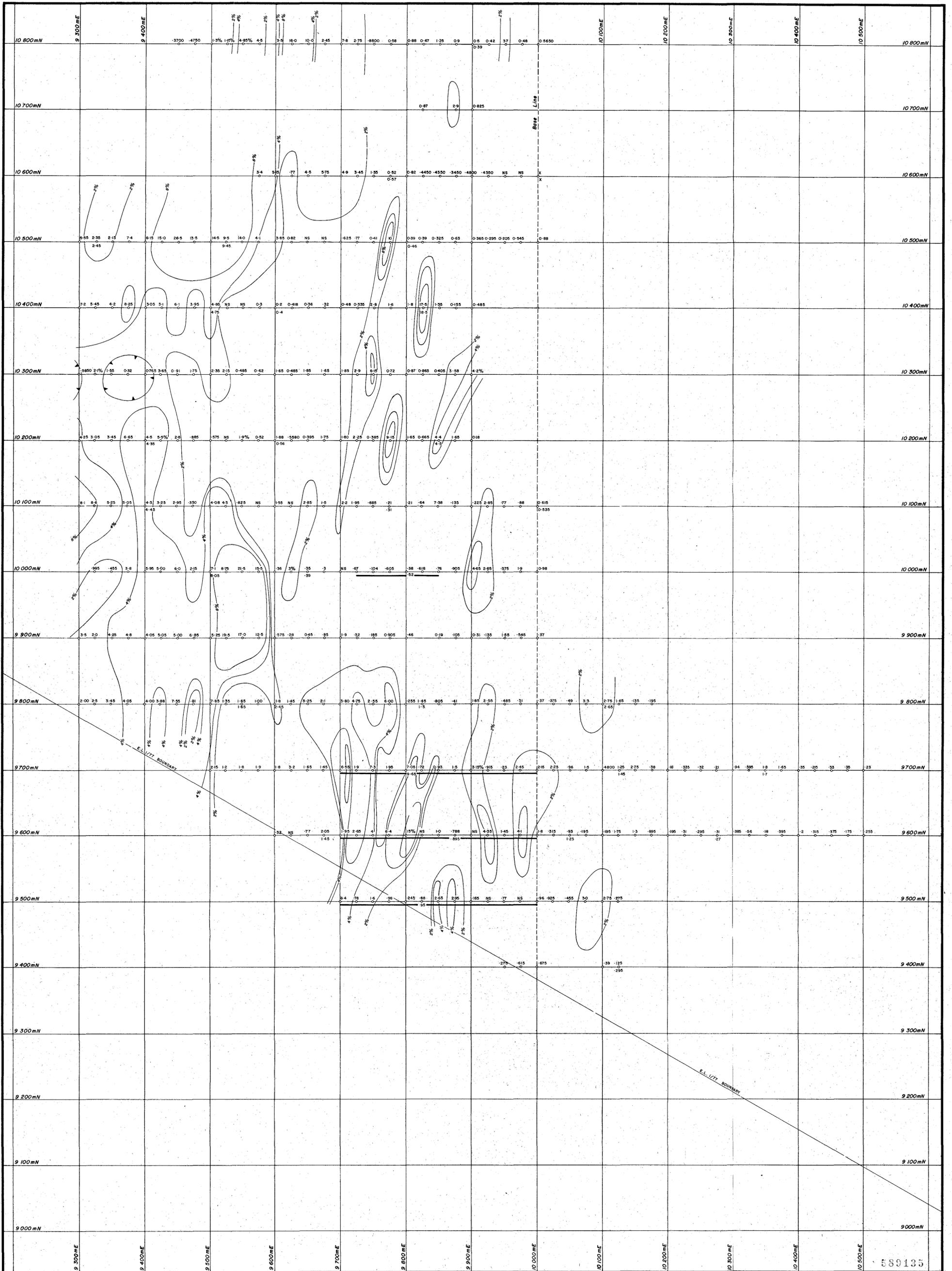
SCALE 1:2500

No.TS 1/77-GE-8 PLAN No. 8

E.L. 1/77 ROCKY CAPE, TASMANIA
GRANVILLE EAST
Mo Geochemistry

009

389134



LEGEND:

- Auger hole
- Fe value, %
- Sample location
- Duplicate sample
- NS No sample

CONTOUR INTERVAL

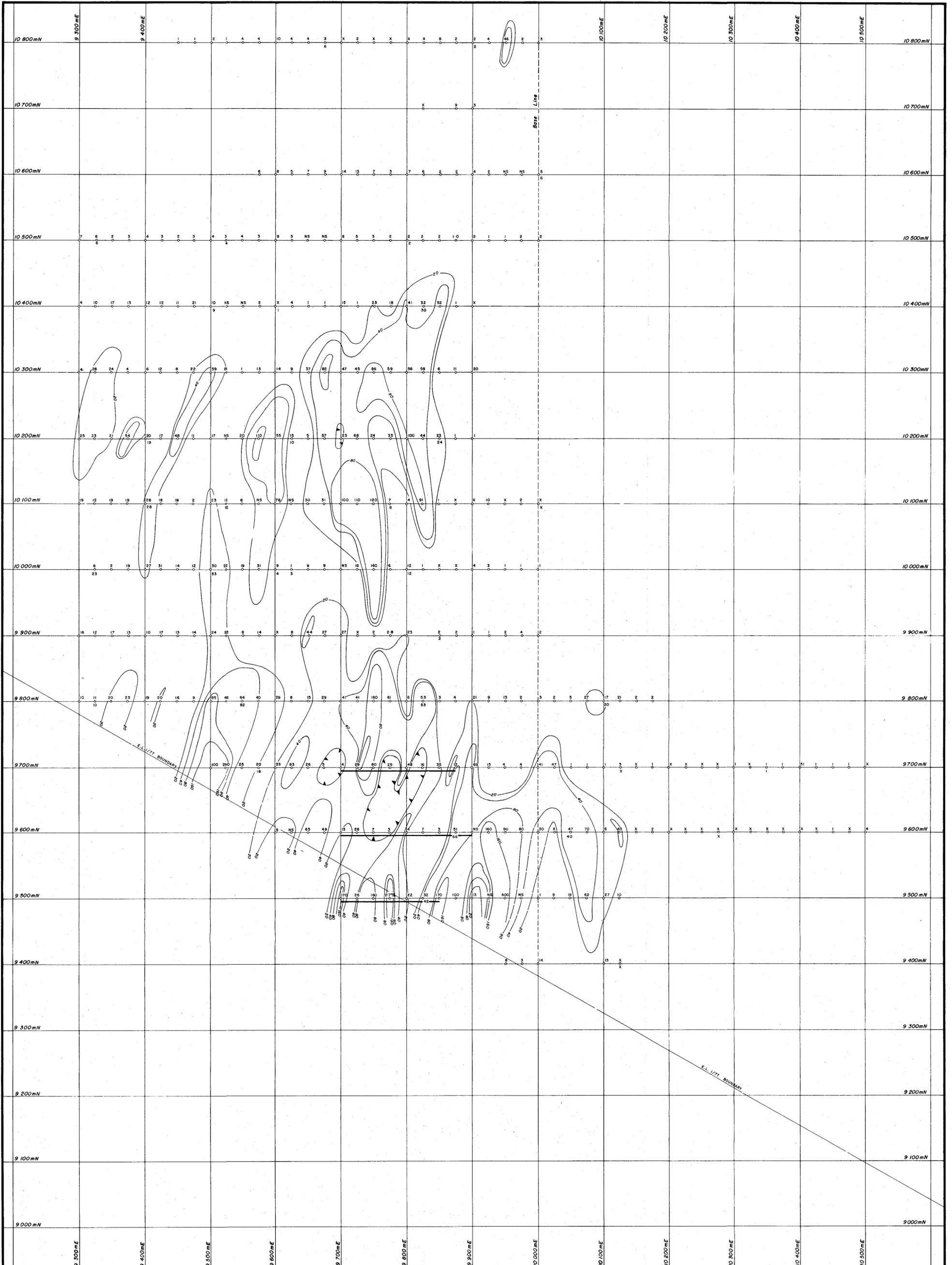
Pencil No.	19-6	2-3.99%
	19-10	4-7.99%
	19-16	8% >

DATE 17/5/82
 GEOL. P. Hill
 DRAWN R. Tog
 CHECKED [initials]

5 cm

889135

GEOPEKO
 A DIVISION OF ROCKWALL/SEND OPERATIONS LTD.
 No. TS 1/77-GE-9 PLAN No. 9
 E.L. 1/77 ROCKY CAPE, TASMANIA
 Fe Geochemistry 010



LEGEND:

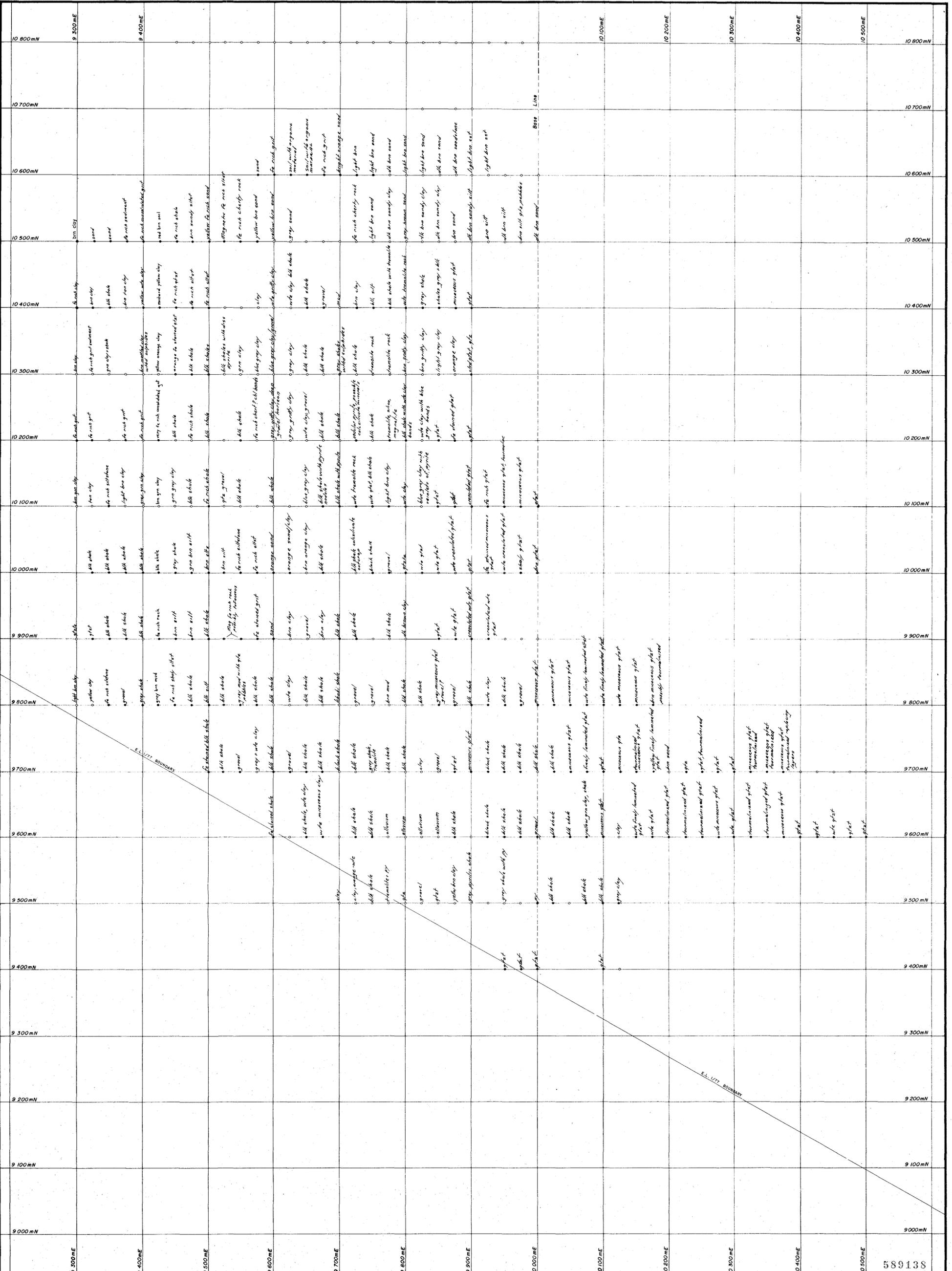
- Auger hole
- As value, ppm
- Sample location
- Duplicate sample
- NS No sample

CONTOUR INTERVAL ppm

19-6	20-39	19-28	160
19-10	40-79		
19-16	80-159		

589136

53-1961 A DIVISION OF GEOPEKO
 No.TS 1/77-GE-10 PLAN No. 10
E.L. 1/77 ROCKY CAPE, TASMANIA
GRANVILLE EAST 011
 As Geochemistry
 DATE: 4/3/82
 GEOL. P. HATH.
 DRAWN: R. TOG
 CHECKED: [Signature]



LEGEND:

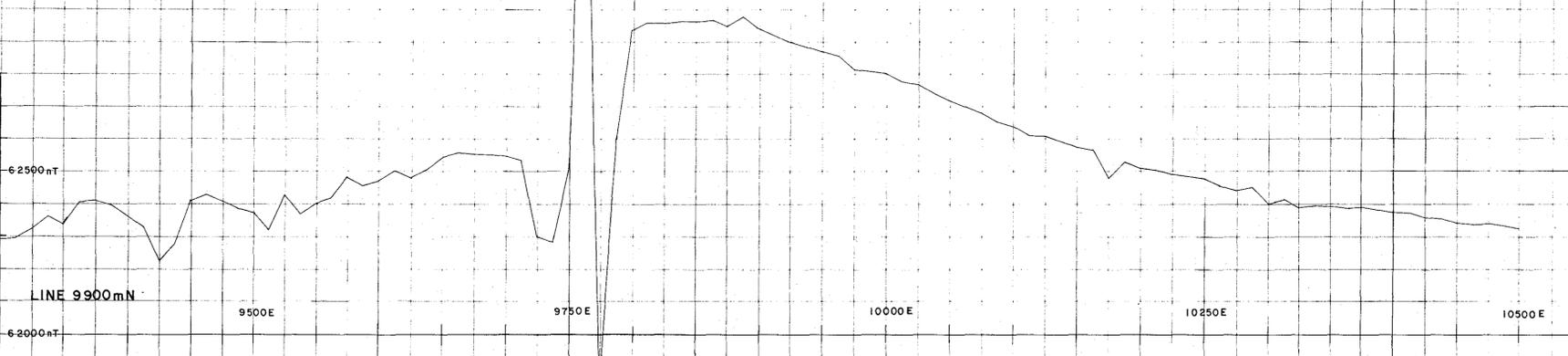
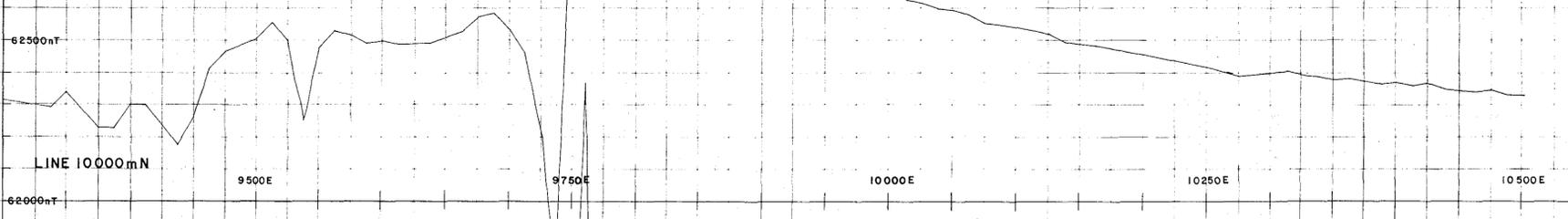
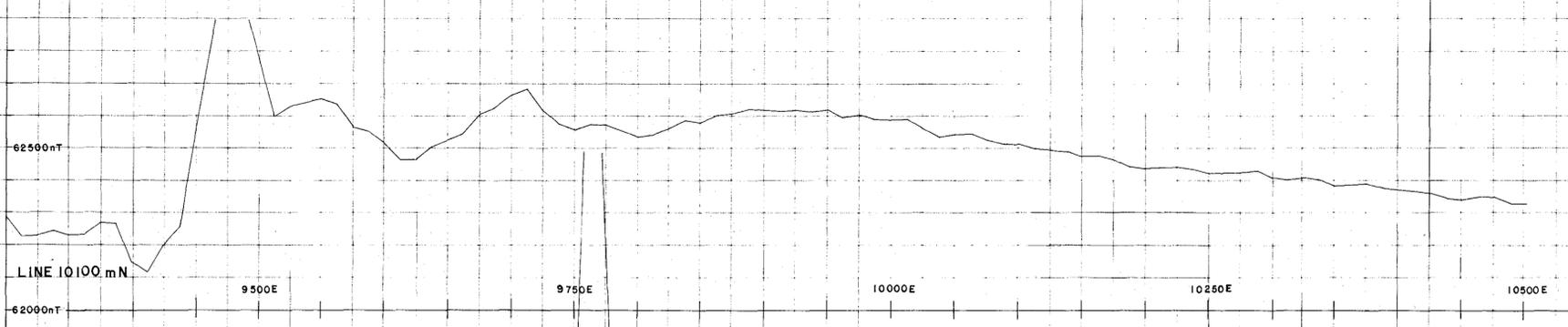
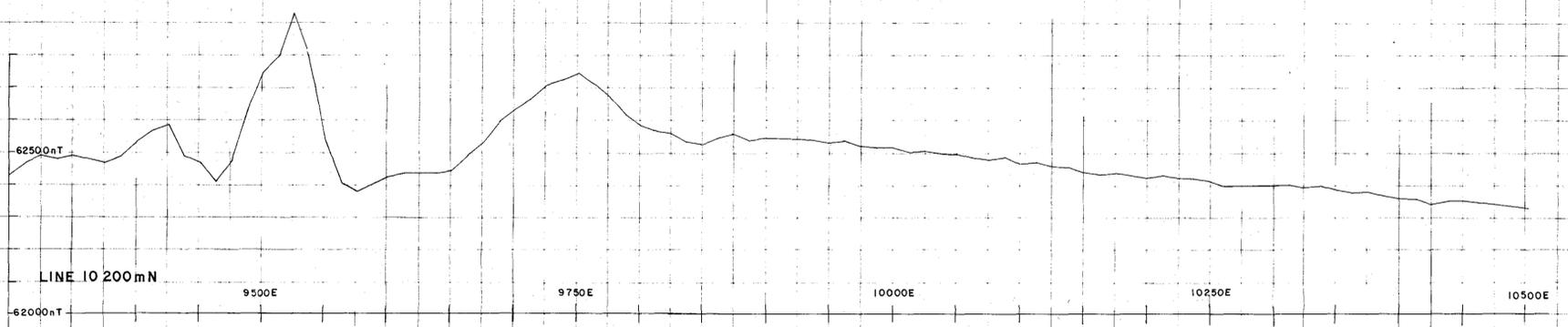
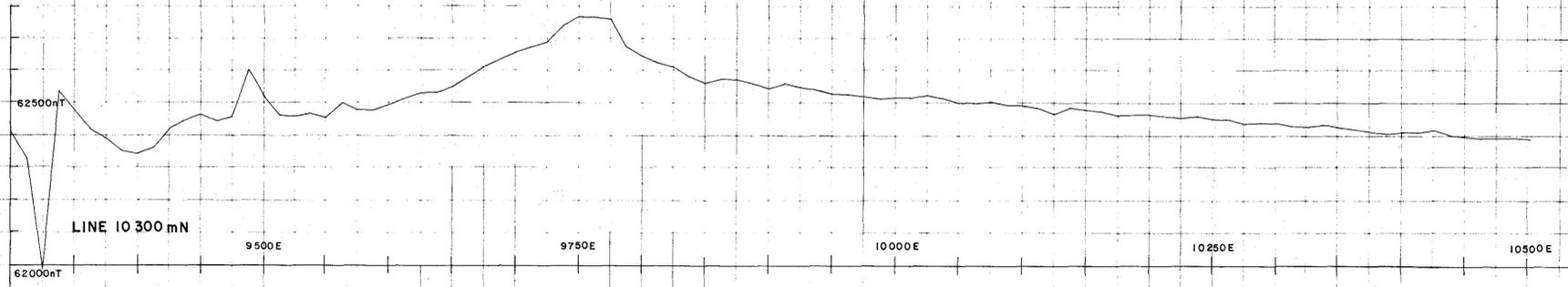
- Auger hole
- Rock chip mounted on data cards
- Description from sampler

589138

DATE 3rd 1972
GEOLOGIST
DRAWN R. Top (C-1)
CHECKED

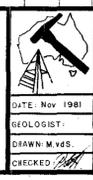
5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
No. TS 1/77-GE-12 PLAN No. 12
E.L. 1/77 ROCKY CAPE, TASMANIA
GRANVILLE EAST
SOIL AUGER ROCK CHIP DATA
013

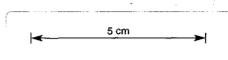


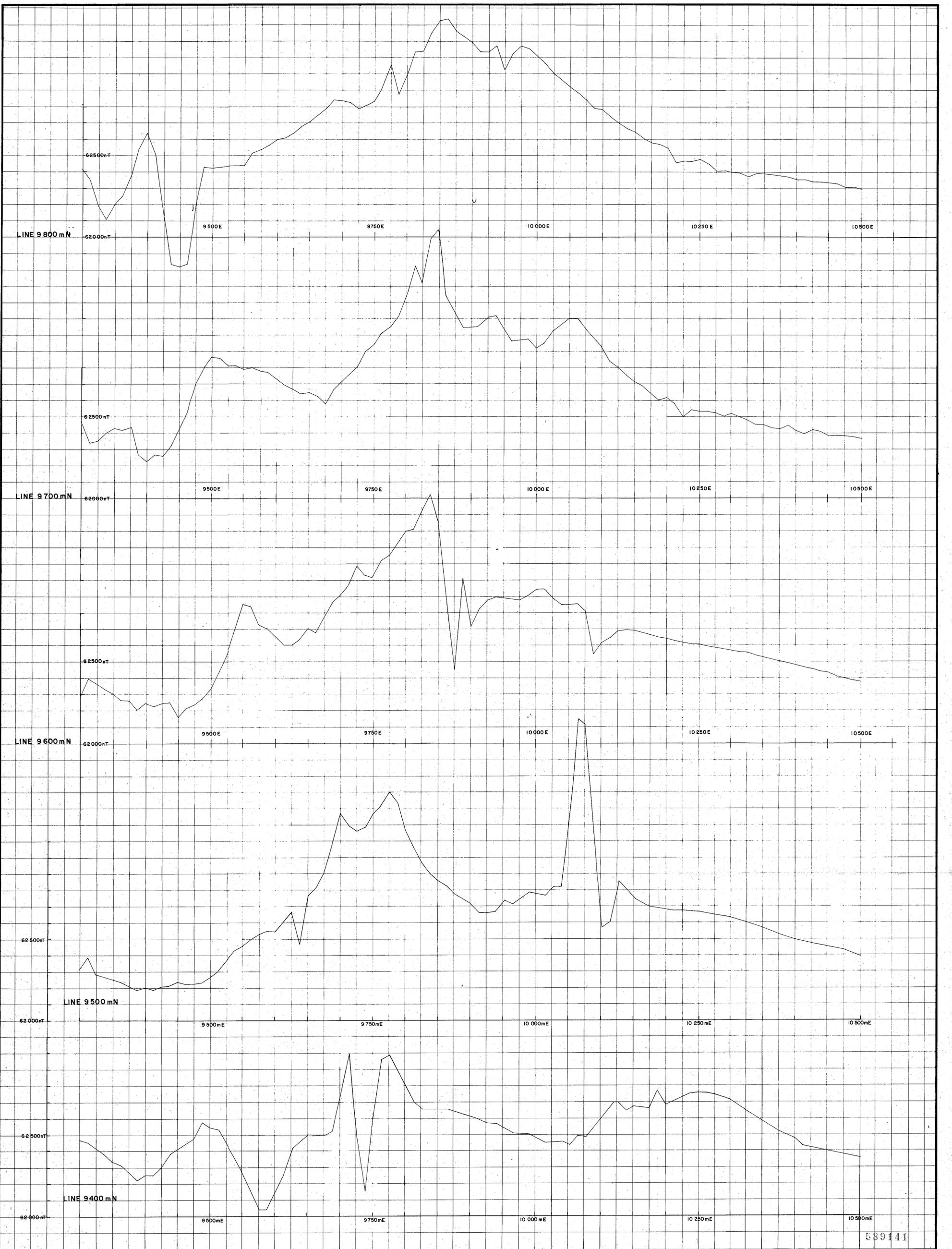
589140

NOTE
 Inst - Geometrics 6816
 Obs - N. Longford
 Datum - 63000nT
 Horz. Scale 1:2500
 Vert. " 1cm = 100nT



53-1961
 SCALE 1:2500
 No. TSI/77-GE-14 PLAN 14A
 E.L./77 ROCKY CAPE, TASMANIA.
 GRANVILLE EAST 015
 PROFILES OF TOTAL MAGNETIC INTENSITY



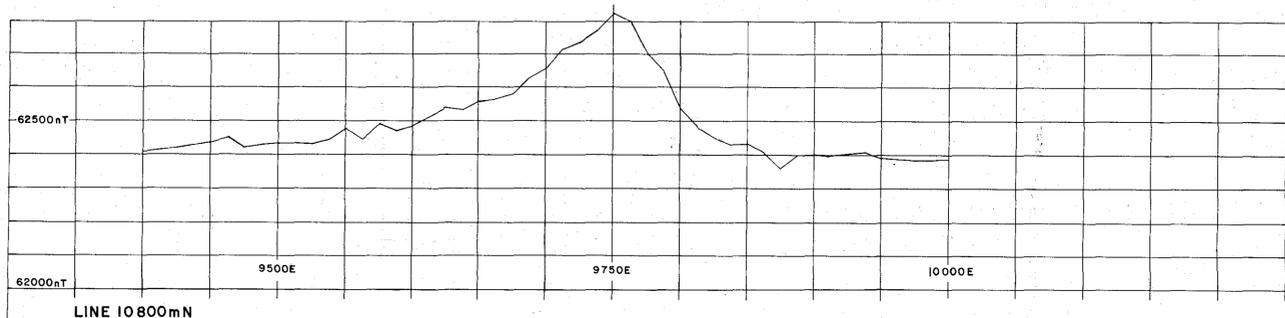


58944

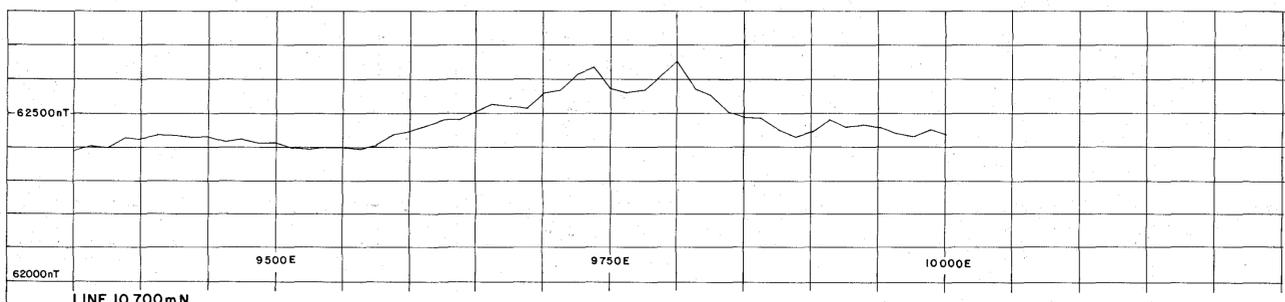
NOTE
 INST:- Geometrics G816
 Obs:- N. Langford
 Datum:- 63000 nT
 Horiz. Scale 1:2500
 Vert. " 1cm = 100 nT



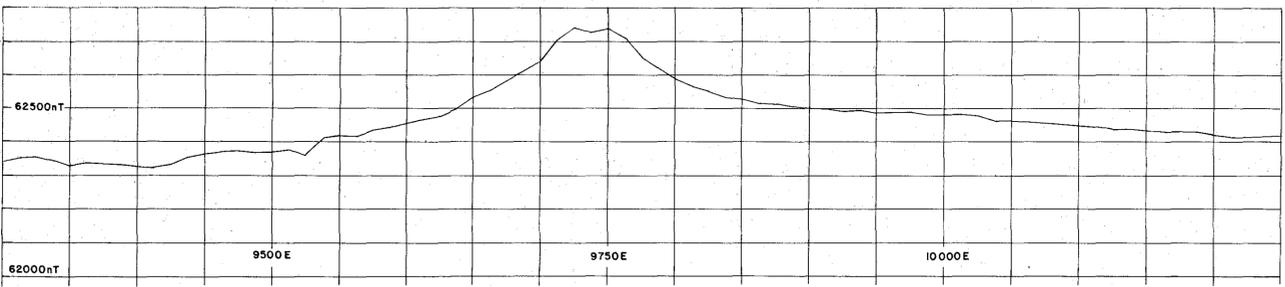
331061
 SCALE 1:2500
 GEOPEKO A DIVISION OF PERU-WALLSEND OPERATIONS LTD.
 No. TSI/77-GE-14 B PLAN 14 B
 DATE: Nov 1981
 GEOLOGIST:
 DRAWN: N. ves.
 CHECKED: [Signature]
 E.L./77 ROCKY CAPE, TASMANIA.
 GRANVILLE EAST 016
 PROFILES OF TOTAL MAGNETIC INTENSITY



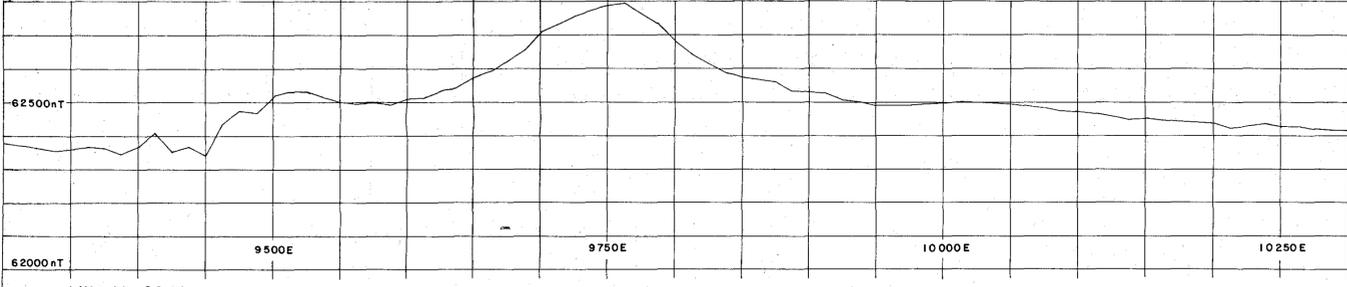
LINE 10800mN



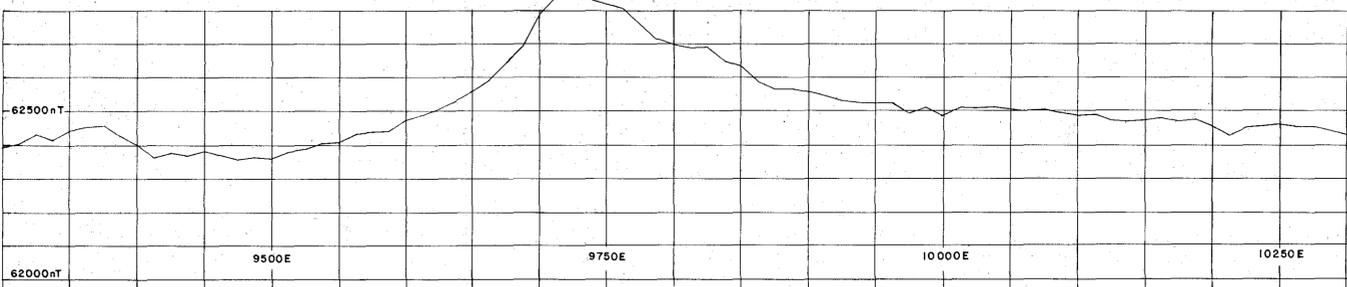
LINE 10700mN



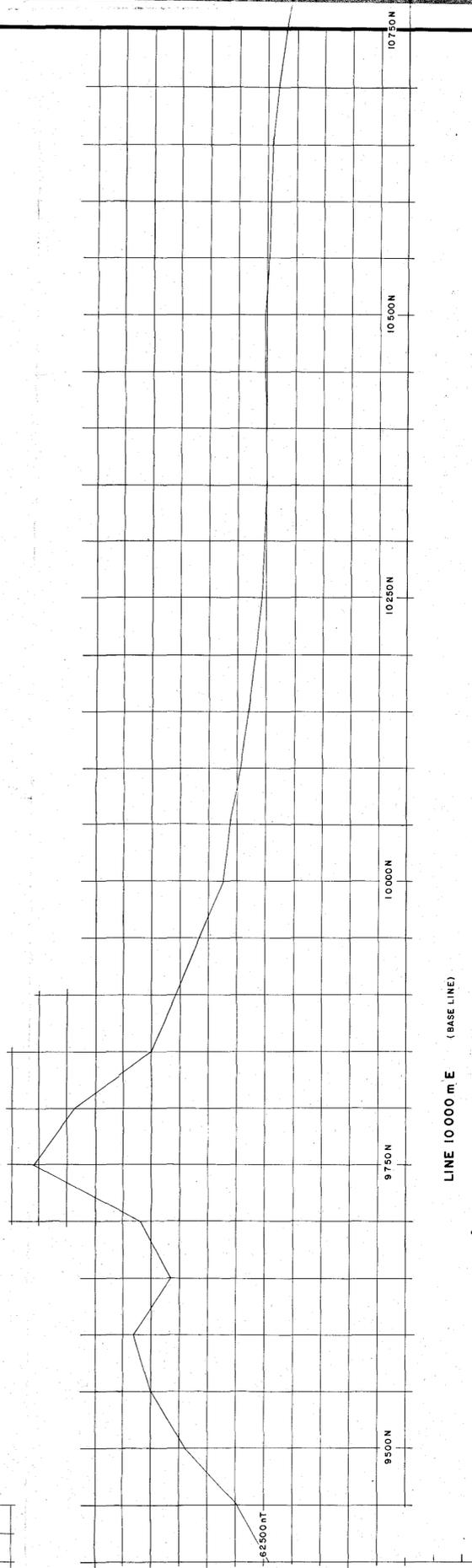
LINE 10600mN



LINE 10500mN



LINE 10400mN



LINE 10000 m. E (BASE LINE)

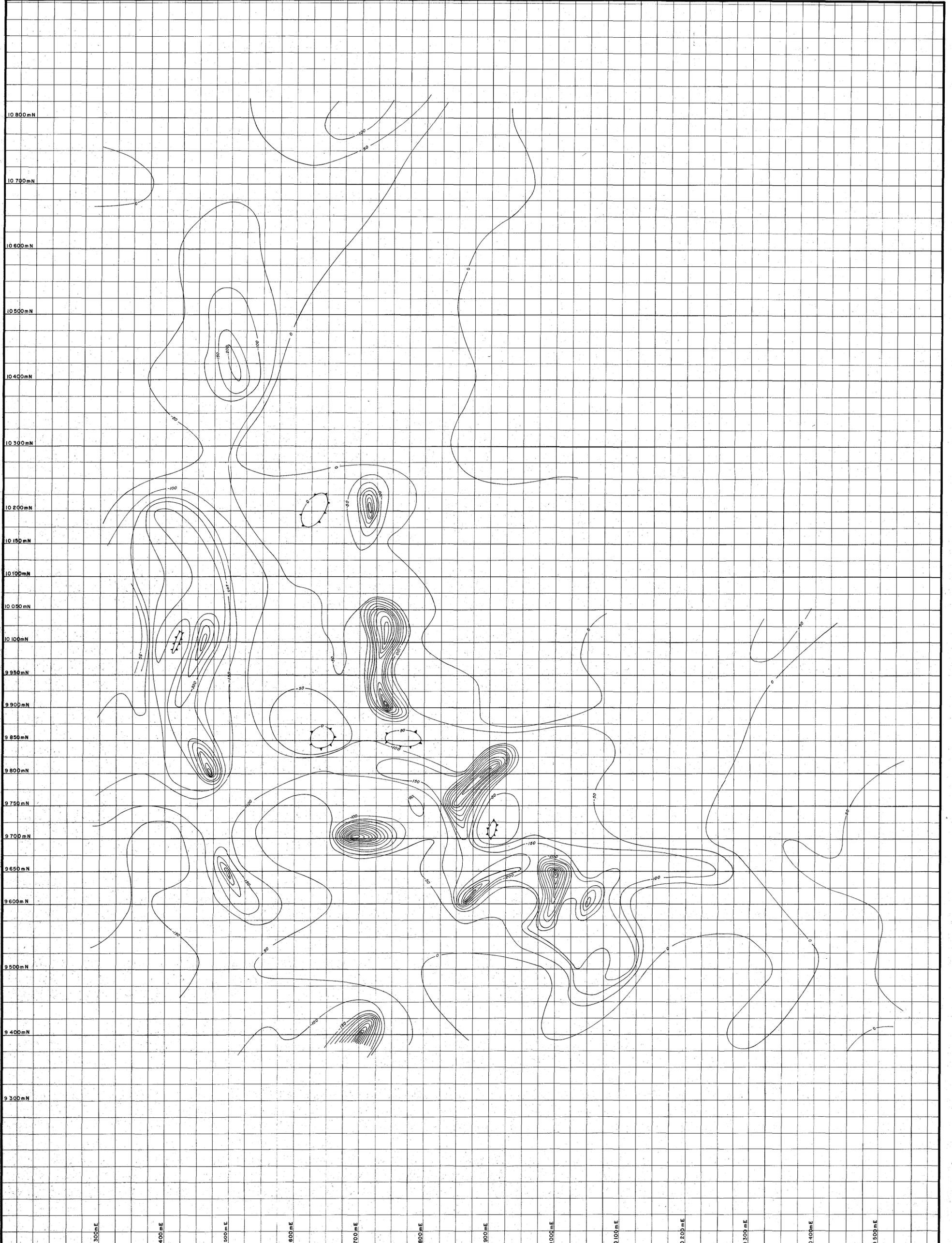
NOTE
 INST:- Geometrics G816
 Obs:- N. Longford
 Datum:- 63000nT
 Horz. Scale 1:2500
 Vert. " 1cm = 100nT



589142

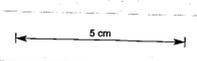
GEOPEKO
 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
 No.TS I/77-GE-14C PLAN 14 C
 E.L.I/77 ROCKY CAPE, TASMANIA.
 GRANVILLE EAST 017
 PROFILES OF TOTAL MAGNETIC INTENSITY

DATE: Nov 1981
 GEOLOGIST:
 DRAWN: vds
 CHECKED:



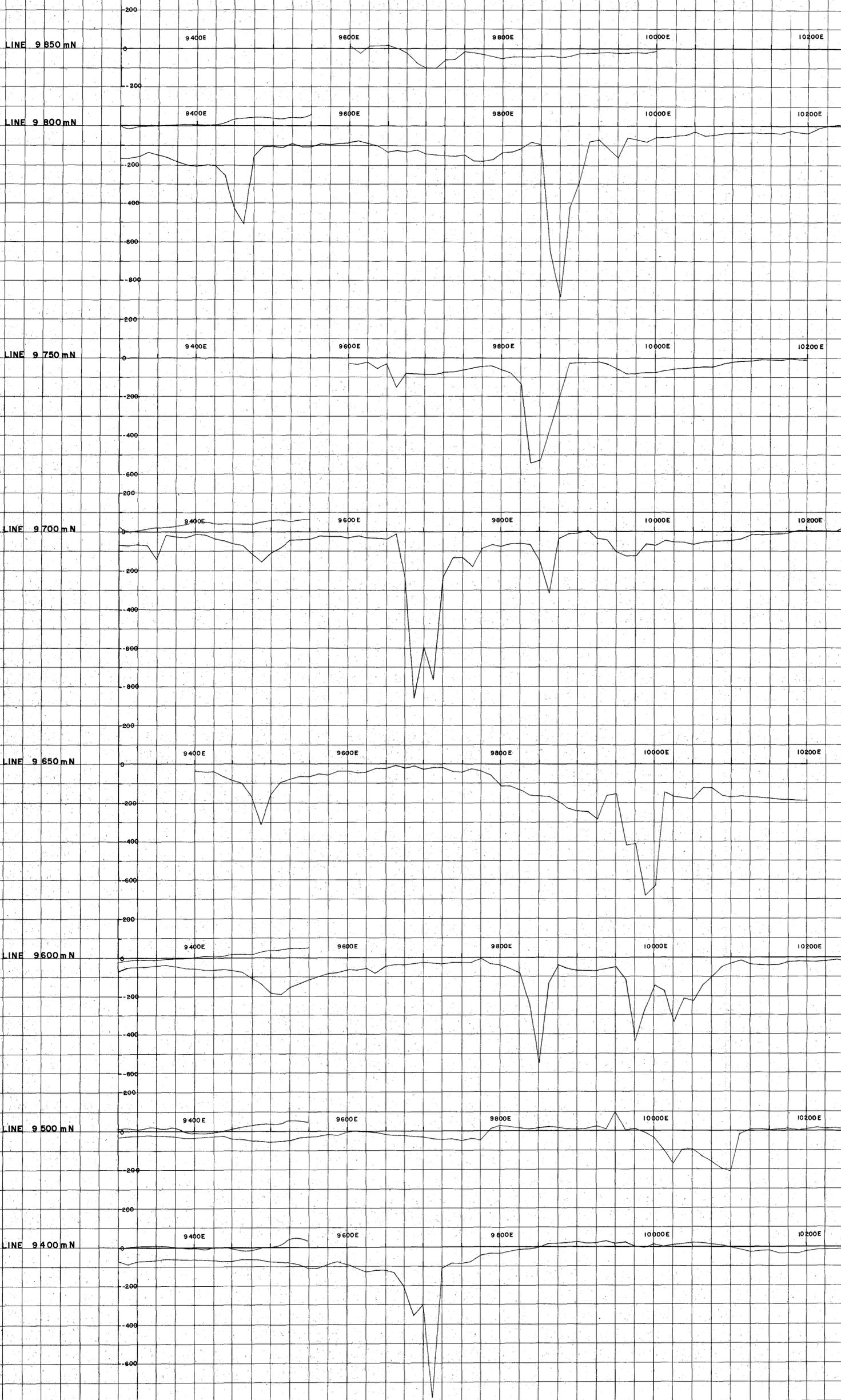
9 300 mE 9 400 mE 9 500 mE 9 600 mE 9 700 mE 9 800 mE 9 900 mE 10 000 mE 10 100 mE 10 200 mE 10 300 mE 10 400 mE 10 500 mE

Contour Int. 1cm=100mV
 Base Peg (0mV) 10 000 N, 10 000 E.

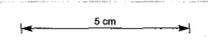


589143
 DATE 29-6-82
 GEOLOGIST
 DRAWN: M.vds
 CHECKED

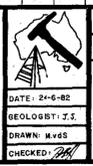
GEOPEKO
 A DIVISION OF PEKO-WALLEND OPERATIONS LTD.
 No. TS 1/77-GE-15 PLAN 15
 E.L.1/77 ROCKY CAPE TASMANIA 018
 GRANVILLE EAST
 CONTOURS OF SELF-POTENTIAL



VERT. SCALE: 1cm = 100mV
 DATUM: 0mV
 BASE PEG: 10000mN, 10000mE
 DATE: JUNE 1981

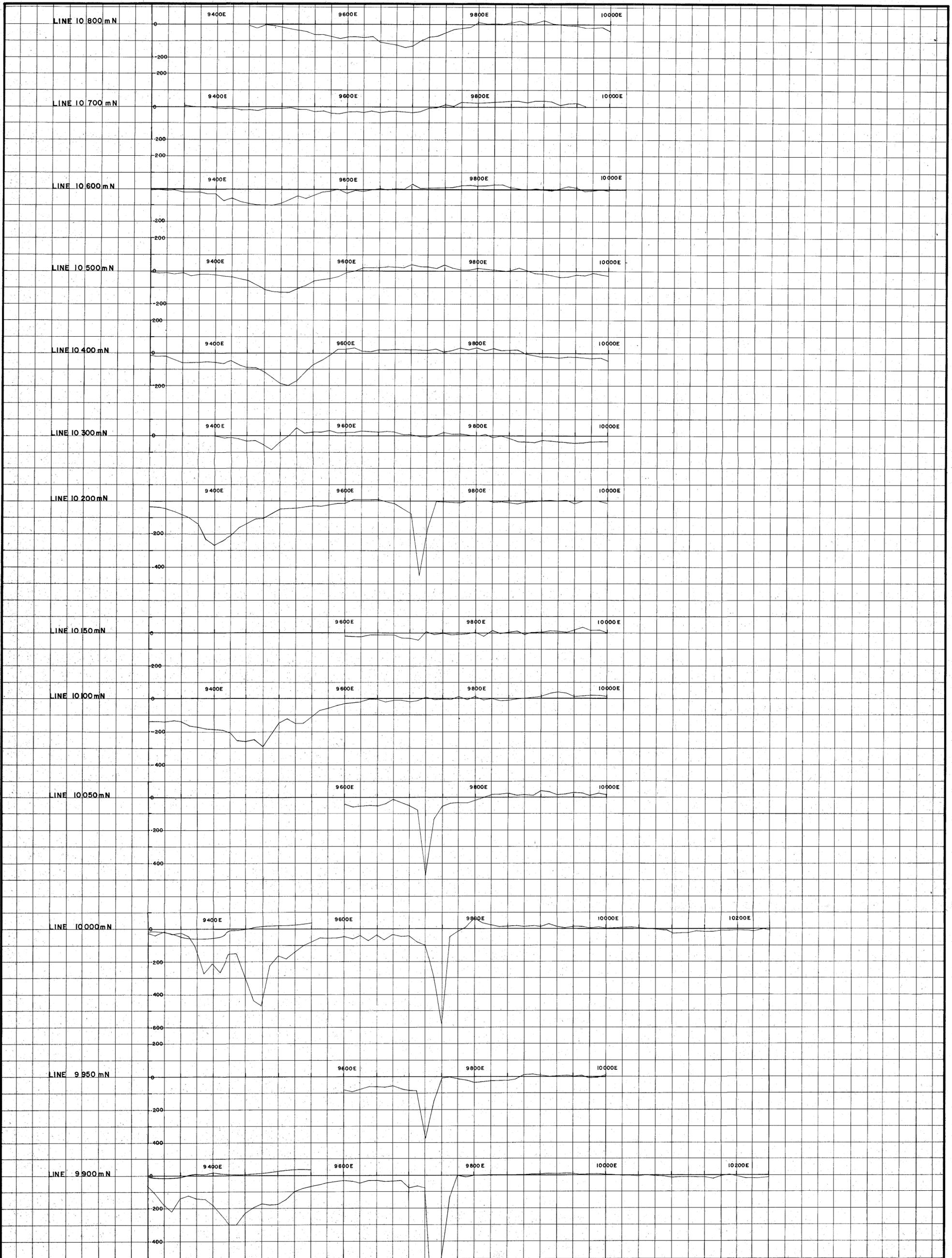


58914

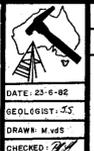
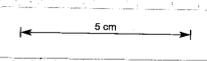


GEOPEKO
 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
 No. TS 1/77-GE-16A PLAN 16A
 E.L. 1/77 ROCKY CAPE TASMANIA
 GRANVILLE EAST 019
 SELF-POTENTIAL PROFILES

DATE: 2-6-82
 GEOLOGIST: J.S.
 DRAWN: M.v.S.
 CHECKED: J.S.

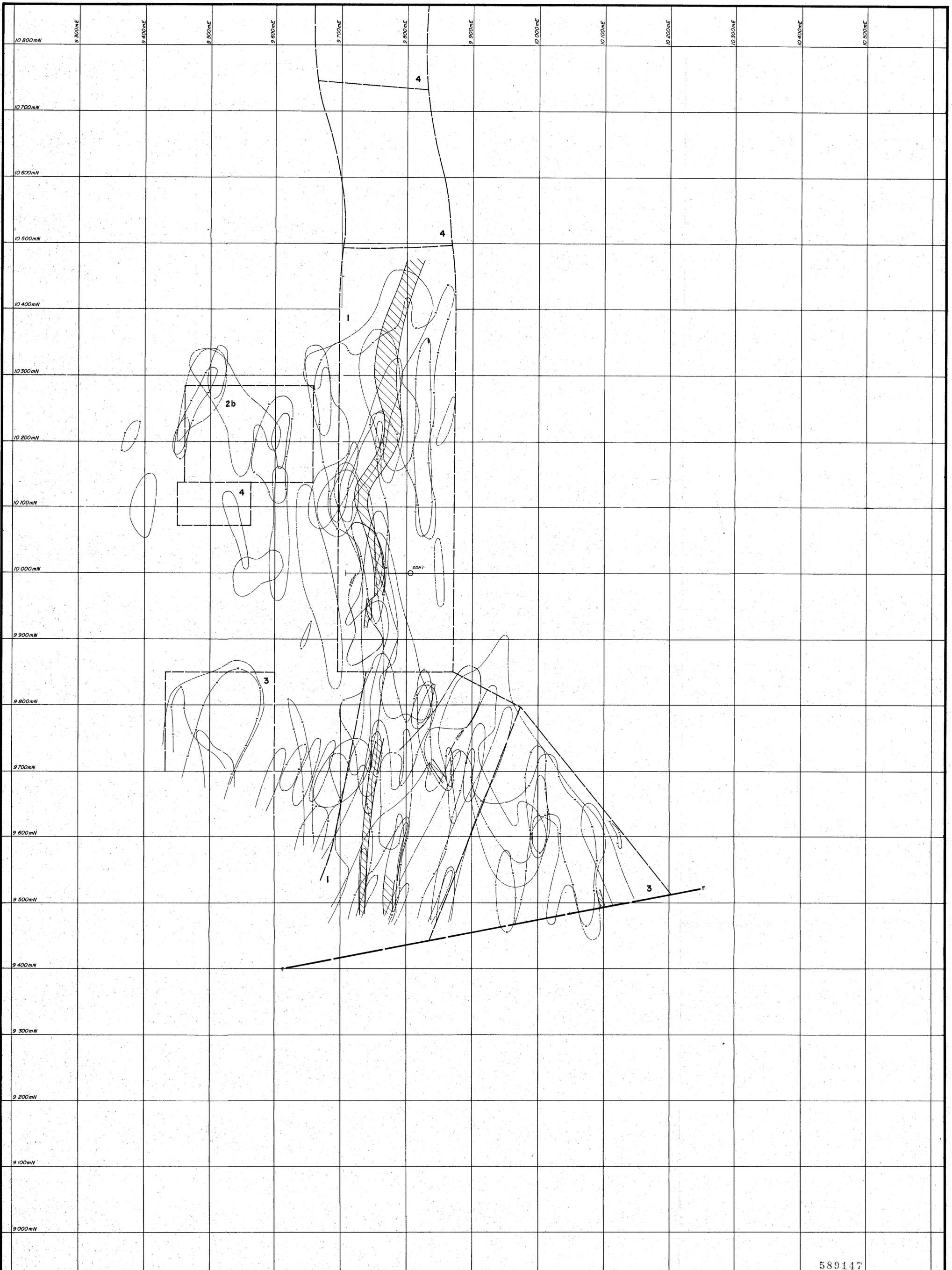


VERT. SCALE: 1cm = 100mV
 DATUM: 0mV
 BASE PEG: 10000mN, 10000mE
 DATE: JUNE 1981



GEOPEKO
 A DIVISION OF PEAC-WALLACE OPERATIONS LTD.
 No. TS 1/77-GE-16B PLAN 16 B
 E.L. 1/77 ROCKY CAPE TASMANIA
 GRANVILLE EAST
 SELF-POTENTIAL PROFILES

020



589147

ANOMALY EVALUATION
 Priority 1 Anomaly Coincident Sn,Cu,As geochemistry
 Coincident Magnetic S.P. anomaly
 Calcilicite rocks mapped with strike continuity
 Priority 2 Anomaly Coincident Sn,As,Cu with coincident Magnetic S.P. response
 Priority 3 Anomaly Coincident Cu,As with some Sn assoc./coincident with Magnetic B/or S.P. anomaly
 Priority 4 Anomaly Magnetic B/or S.P. anomalies with some geochemical character

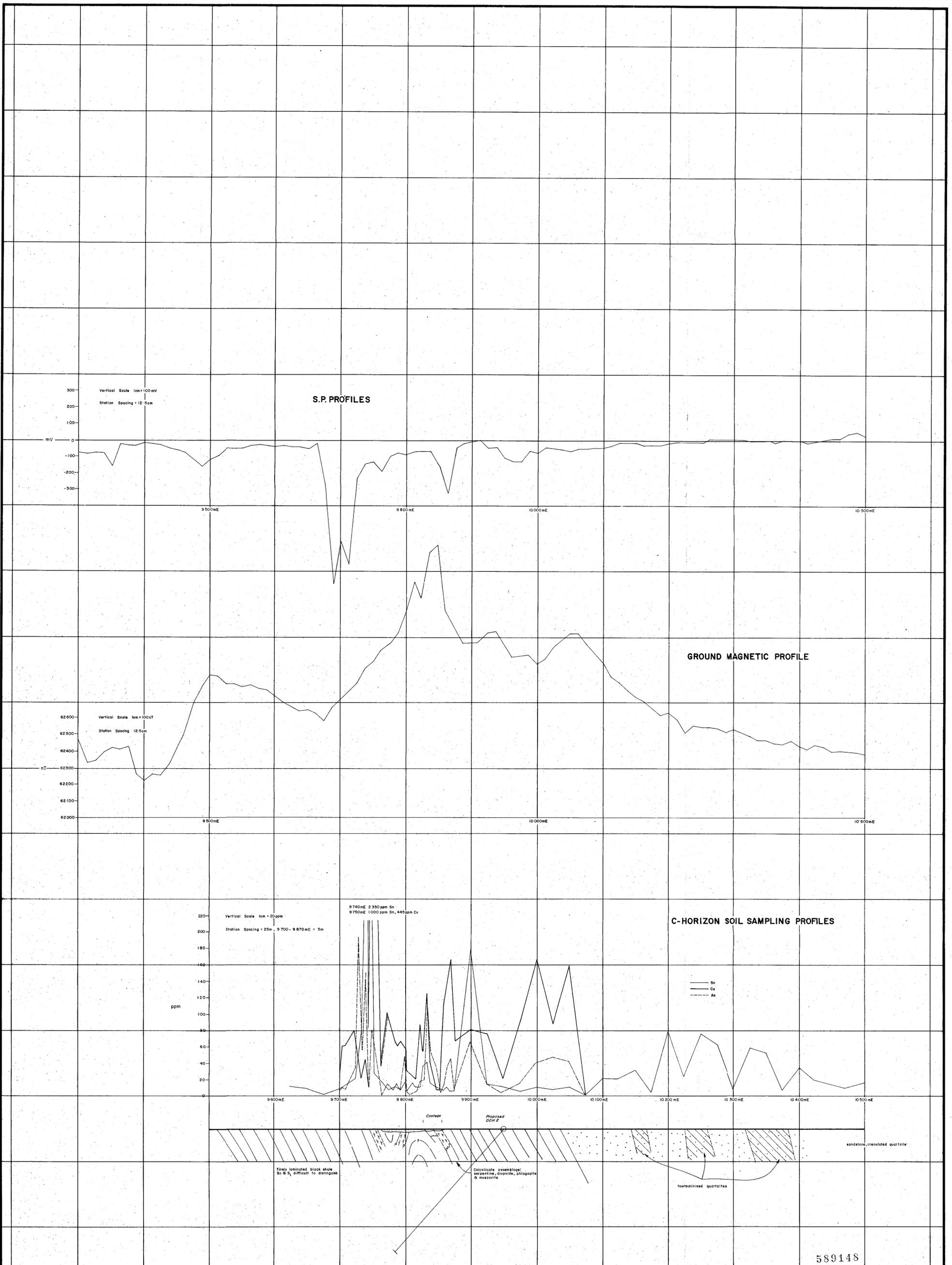
GEOCHEMISTRY
 Sn > 80 ppm
 Pb > 40 ppm
 Zn > 80 ppm
 Mo > 1 ppm
 Cu > 100 ppm
 As > 40 ppm

GEOLOGY
 Calcilicite/Skarn Unit
 Fault

DATE 15/6/82
 GEOL. P.H.
 DRAWN R.Tog
 CHECKED *[Signature]*

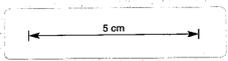
83-1961 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
 SCALE 1:2500 No.TS1/77-GE-18 PLAN No. 18
E.L. 1/77 GRANVILLE EAST, TAS 022
ANOMALY EVALUATION MAP
Summary of Important Geological
Geochemical & Geophysical Features





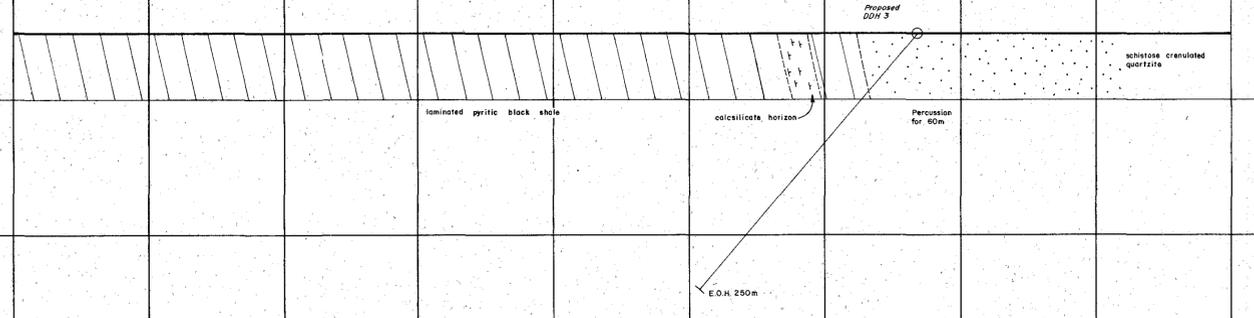
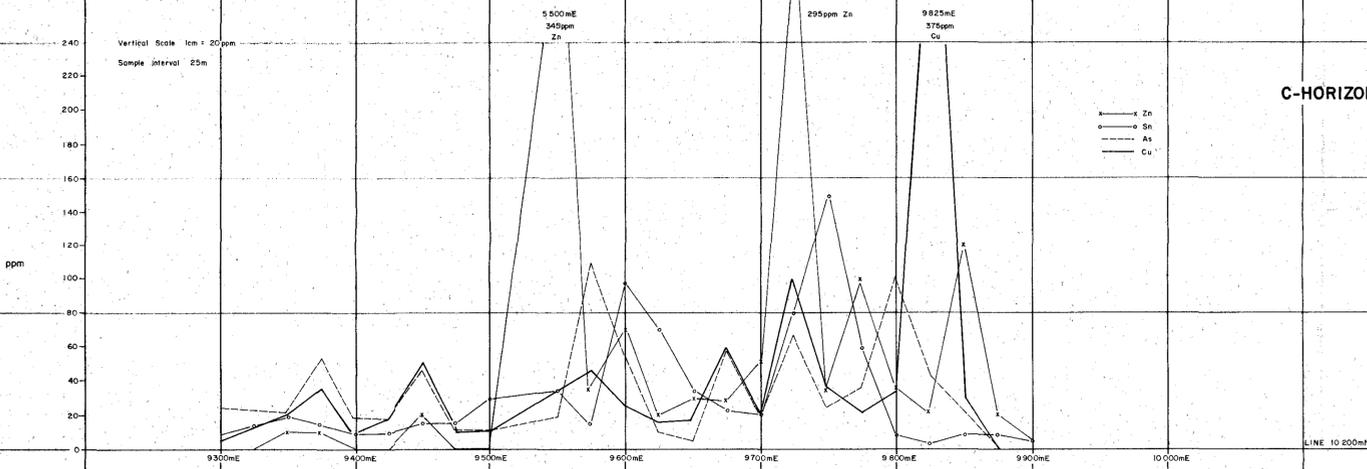
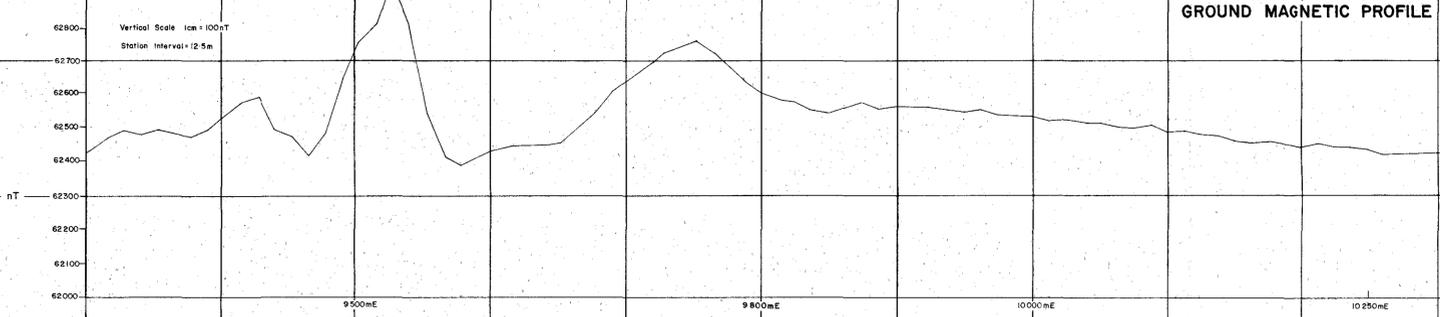
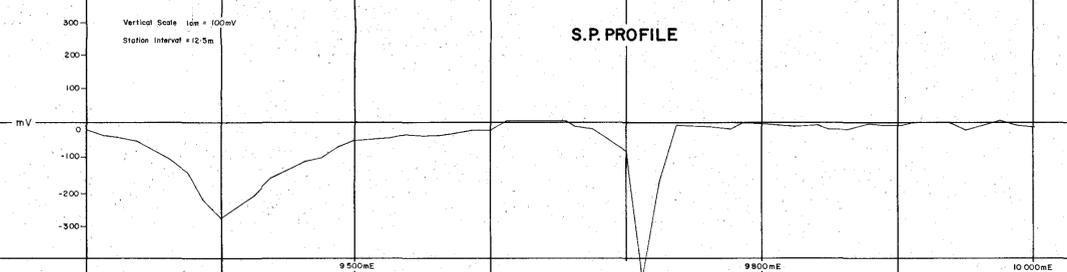
589148

COORDINATES 9700mE, 9950mE
AZIMUTH 231°
DECLINATION 50°
DEPTH 250m



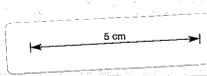
GEOPEKO
A DIVISION OF PEAD-WALLSEND OPERATIONS LTD.
No.TS 1/77-GE-19 PLAN No. 19
E.L. 1/77 GRANVILLE EAST, TAS. 023
LINE 9 700mN, PROPOSED DDH2
Geology, Geochemistry & Geophysics

DATE 15/6/82
GEOLOGICAL P.H.
DRAWN R.Tog
CHECKED [initials]



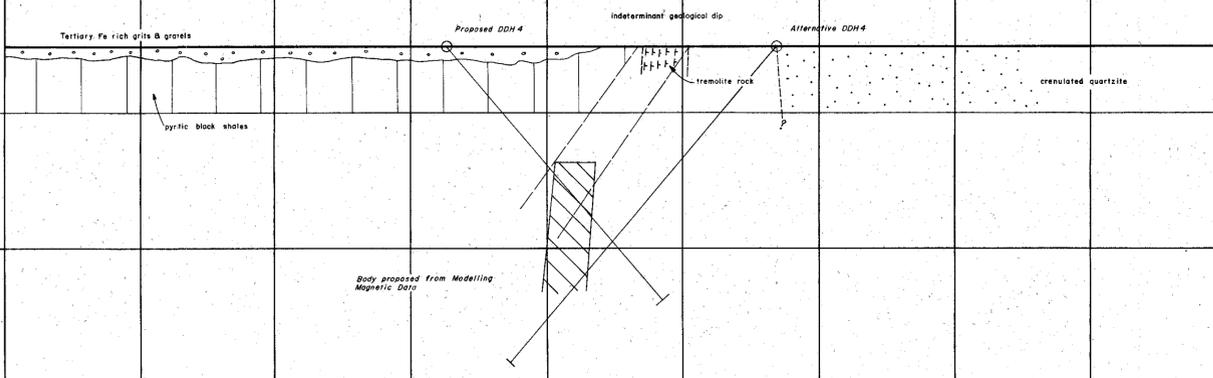
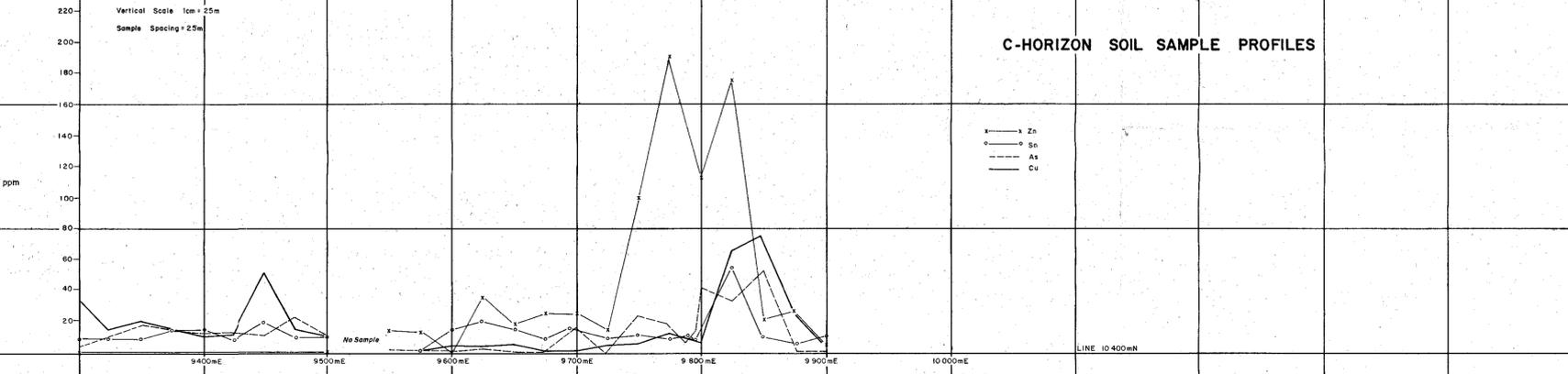
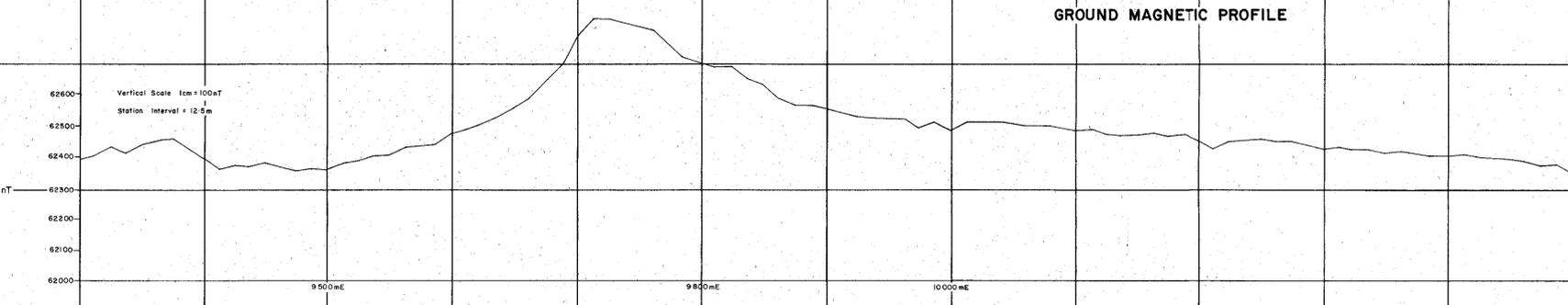
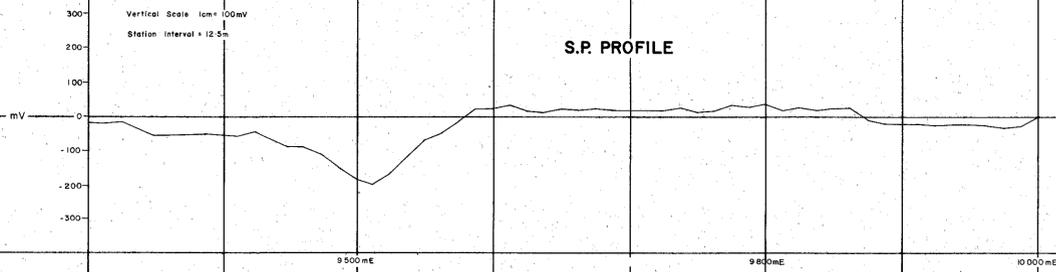
589149

COORDINATES 9875mE, 10200mN
 AZIMUTH 231°M
 DECLINATION -50°
 FINAL DEPTH 250m
 Note: 0-60m is amenable to percussion drilling



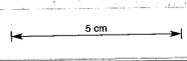
GEOPEKO
 A DIVISION OF PERD-WALLSEND OPERATIONS LTD.
 DATE 2/6/82
 GEDL P.H.
 DRAWN R Top
 CHECKED [Signature]

83-1961
 SCALE 1:2500
 No.TS 1/77-GE-20 PLAN No. 20
E.L. 1/77 GRANVILLE EAST, TAS. 024
LINE 10200mN, PROPOSED DDH3
Geology, Geochemistry & Geophysics



589150

CO-ORDINATES	10 400mN, 9 625mE	Alternative DDH 4	CO-ORDINATES	9 400mN, 9 875mE
AZIMUTH	51° M		AZIMUTH	231° M
DECLINATION	50°		DECLINATION	50°
FINAL DEPTH	250m		FINAL DEPTH	300m

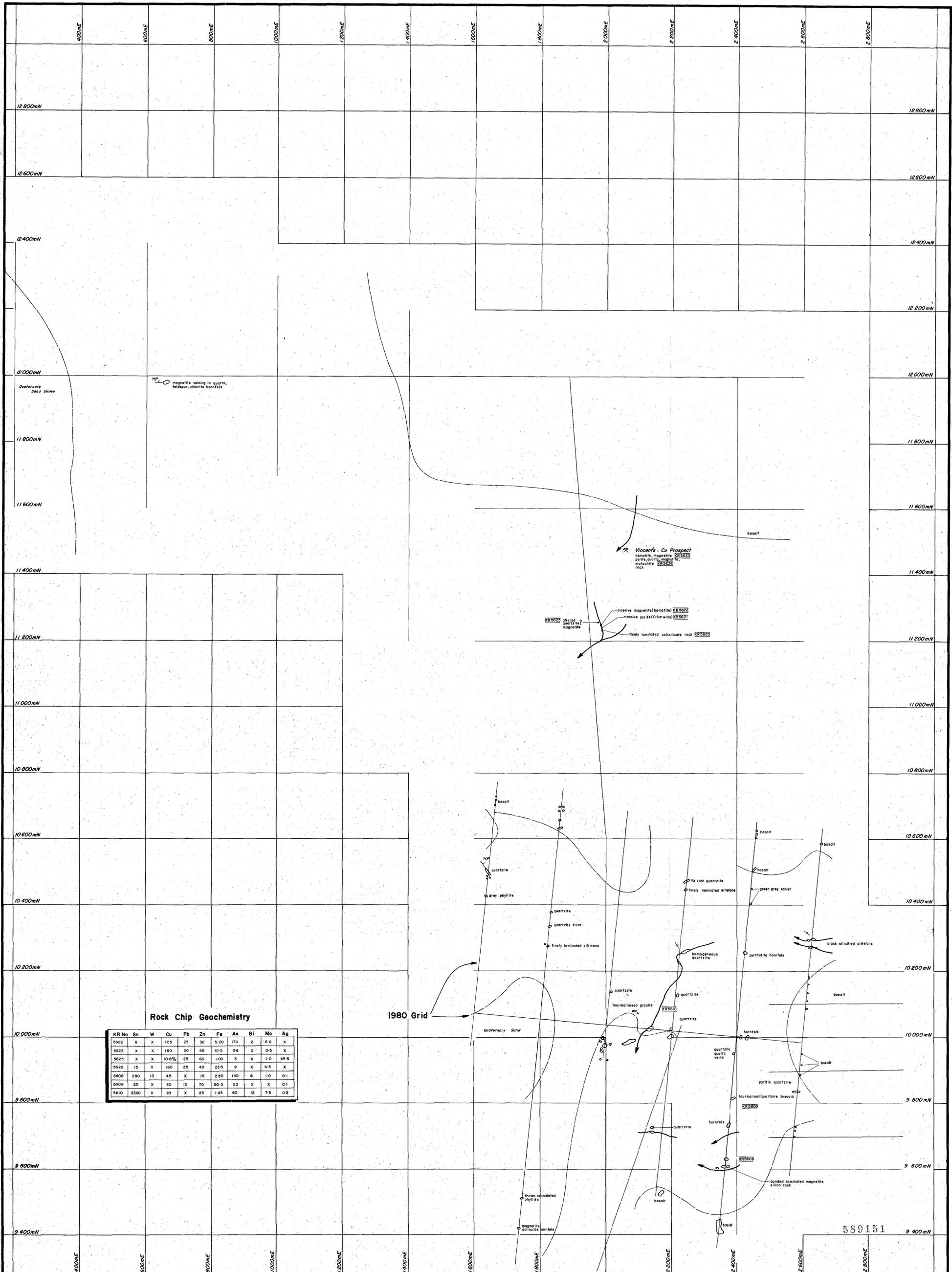


83-1961 GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2,500 No.TS/1/77-6E- 21 PLAN No. 21

E.L. 1/77 GRANVILLE EAST, TAS. 025
LINE 10 400mN, PROPOSED DDH4
Geology, Geochemistry & Geophysics

DATE 13/6/82
SEDL. P.H.
DRAWN R.Tog
CHECKED



Rock Chip Geochemistry

KR.No	Sn	W	Cu	Pb	Zn	Fe	As	Bi	Mo	Ag
5622	6	X	725	25	30	5.20	170	2	6.0	X
5623	X	X	180	30	45	10.5	54	X	0.5	X
5625	X	X	10-8%	25	60	1.00	3	X	1.0	45.3
5626	15	X	180	25	40	23.5	9	X	4.5	X
5608	280	10	45	X	15	2.80	140	6	1.0	0.1
5609	20	X	30	15	70	50.5	23	X	X	0.1
5610	2200	X	20	X	25	1.45	60	12	7.5	0.3

1980 Grid

580151

STRUCTURAL

- Lithological boundary
- - - 70° Dip or Strike of boundary
- Creek

STRATIGRAPHY

QUATERNARY: Sand

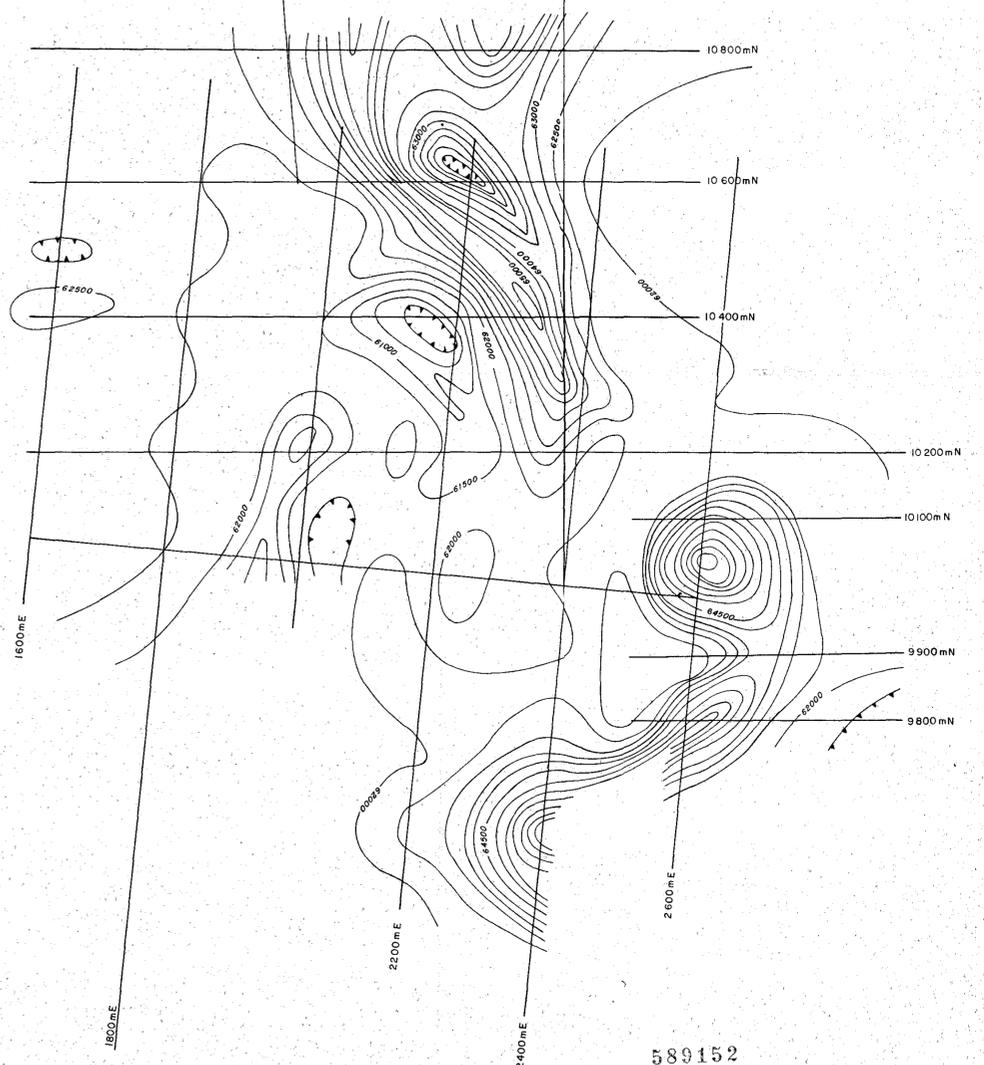
TERTIARY: Basalt with magnetite

PRECAMBRIAN: Quartzites, siltstones & phyllites; Hard siliceous hornfels with disseminated pyrite & pyrrhotite; Massive magnetite - Associated with hematite, malachite, pyrite in the north

DEVONIAN: Granite

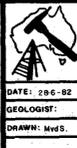
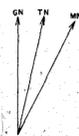
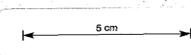
GEOPEKO
 33-1061 DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
 SCALE 1:1,500
 No.TS 1/77 - GC - I PLAN No. 1
 E.L./77 ROCKY CAPE, TASMANIA
 GOURLAYS CREEK
 Geology: Preliminary Map 026

DATE 22/6/82
 GEOL. P.H.
 DRAWN R.Too
 CHECKED [Signature]



589152

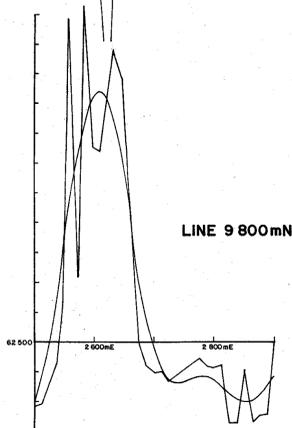
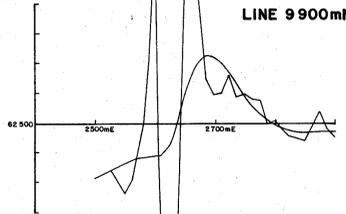
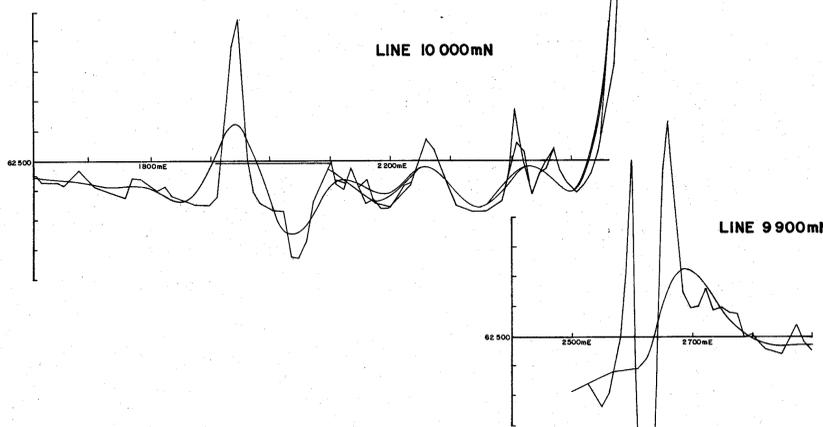
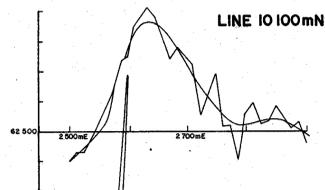
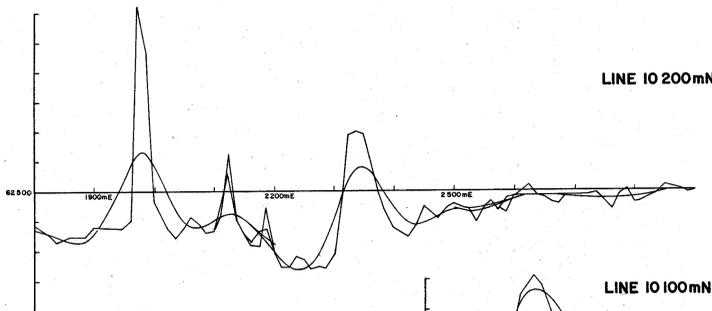
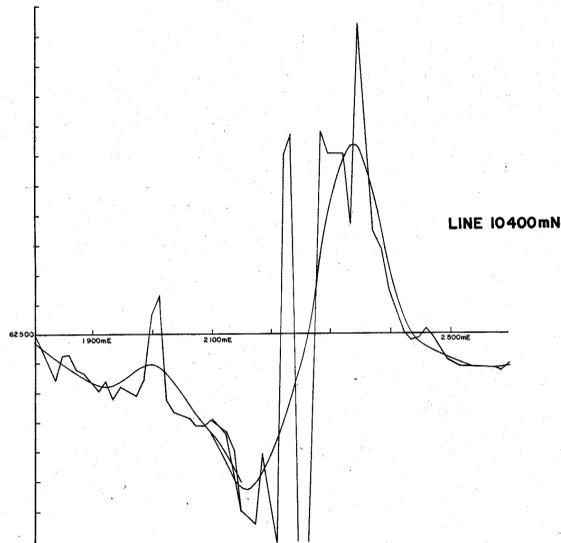
Cont. Int. 500mt.



GEOPEKO
A DIVISION OF PERD-WALLESEND OPERATIONS LTD.

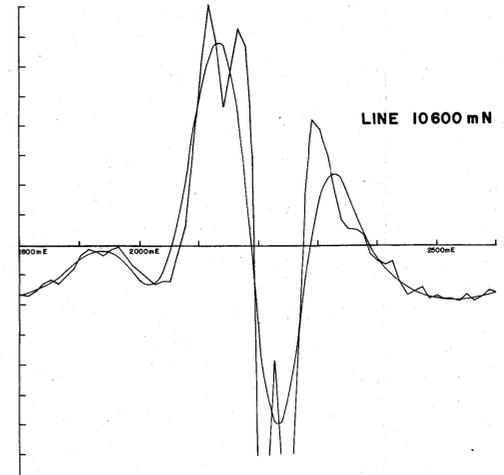
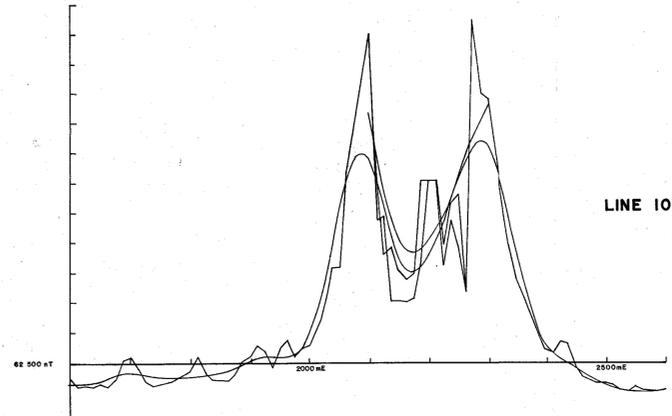
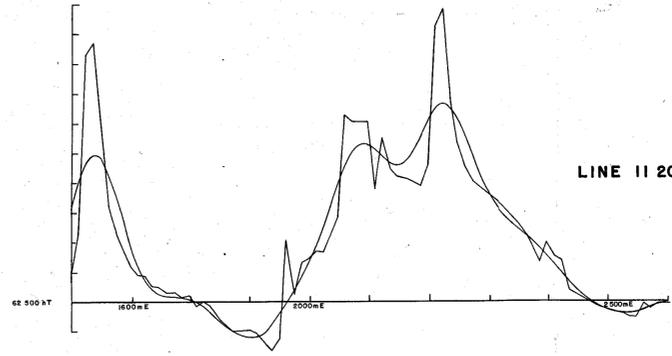
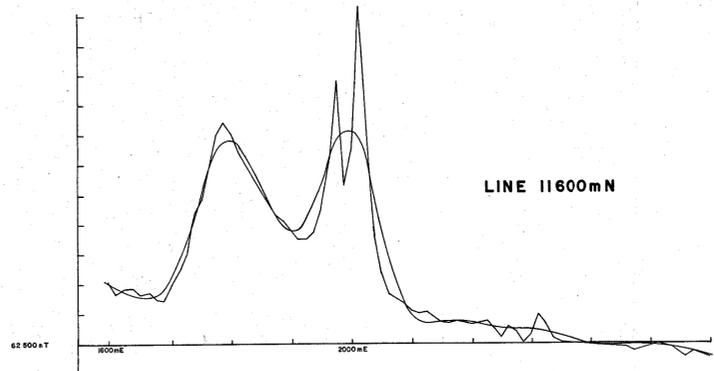
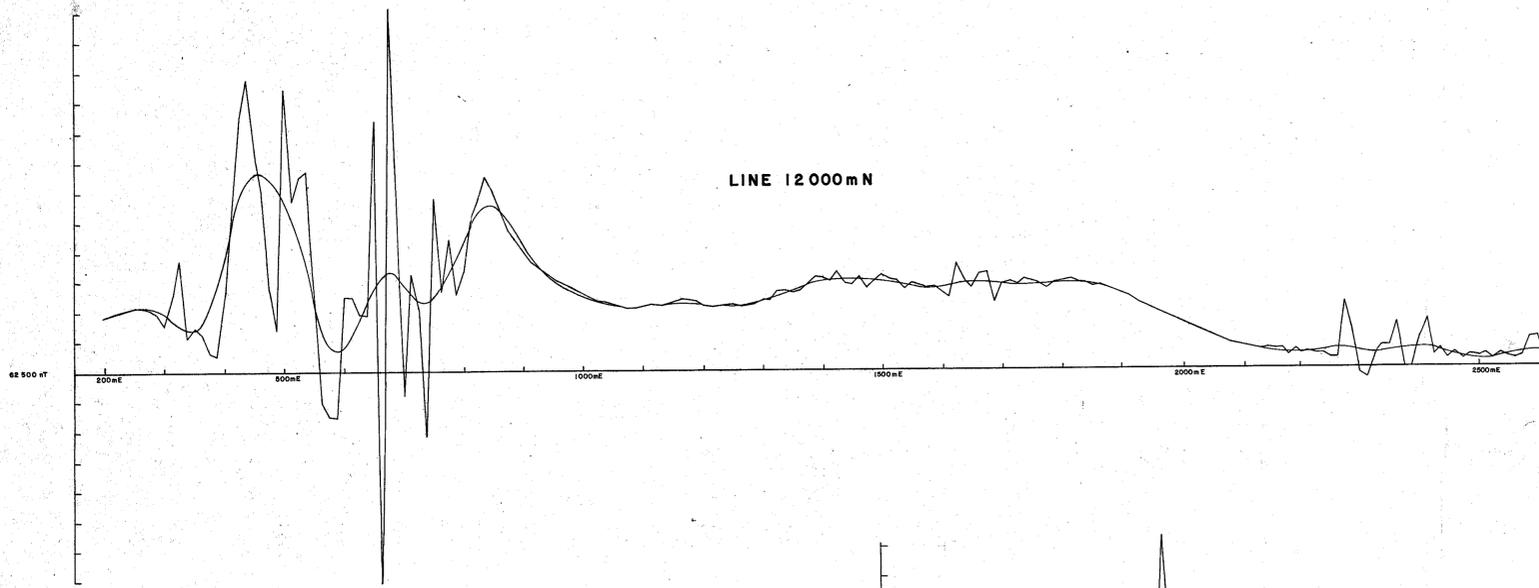
33-1961
SCALE 1:5000 No.TS 1/77-GC-2 REP No. 2

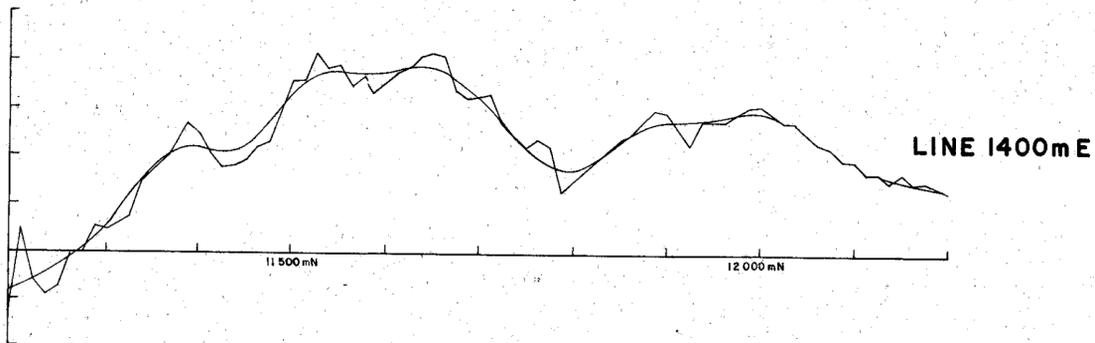
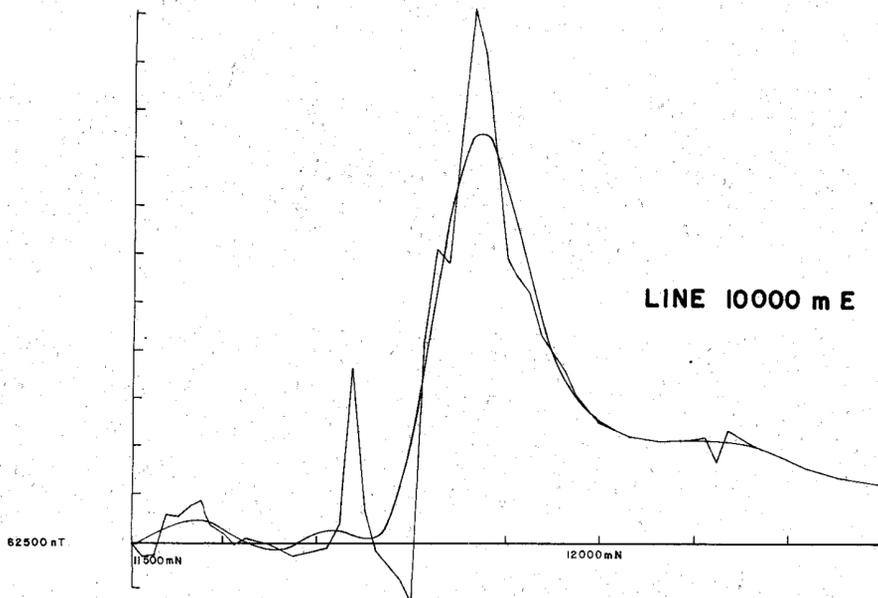
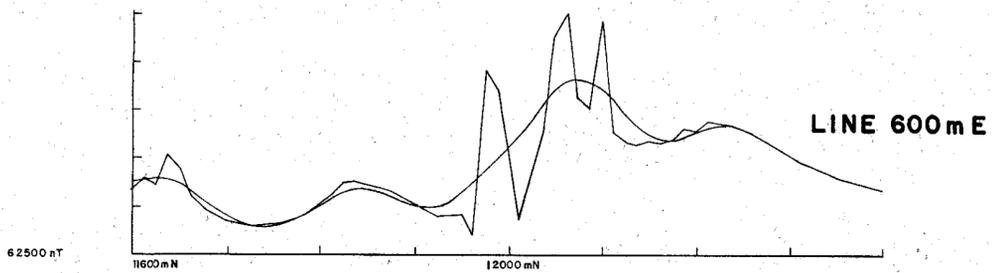
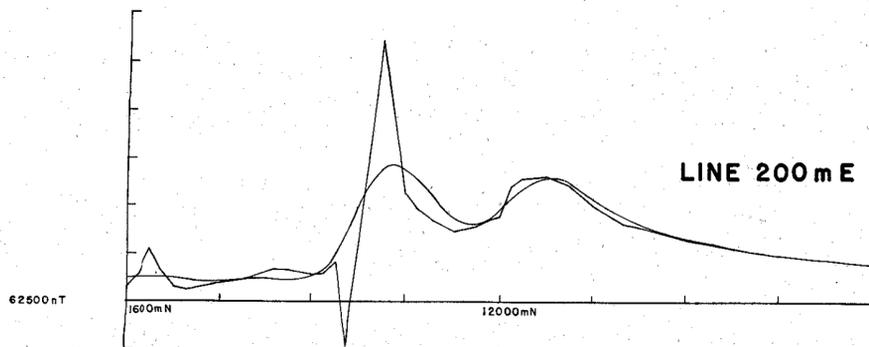
E.L.1/77 ROCKY CAPE TASMANIA
GOURLAYS CREEK 027
CONTOURS OF TOTAL MAGNETIC INTENSITY.



Instrument	Datum	62 500 nT	Hor. Scale	1 : 5000
Observer	Base Peg	G. Bugg	Vert. Scale	1cm = 500 nT
Date Obs.	Date/Drawn	Jan. 1982	Cont. Inf.	18/6/82, R.Tog

AREA	E.L.1/77 ROCKY CAPE, TASMANIA 85-1961
PROSPECT	GOURLAYS CREEK
PLAN SHOWS	Profiles of Total Magnetic Intensity

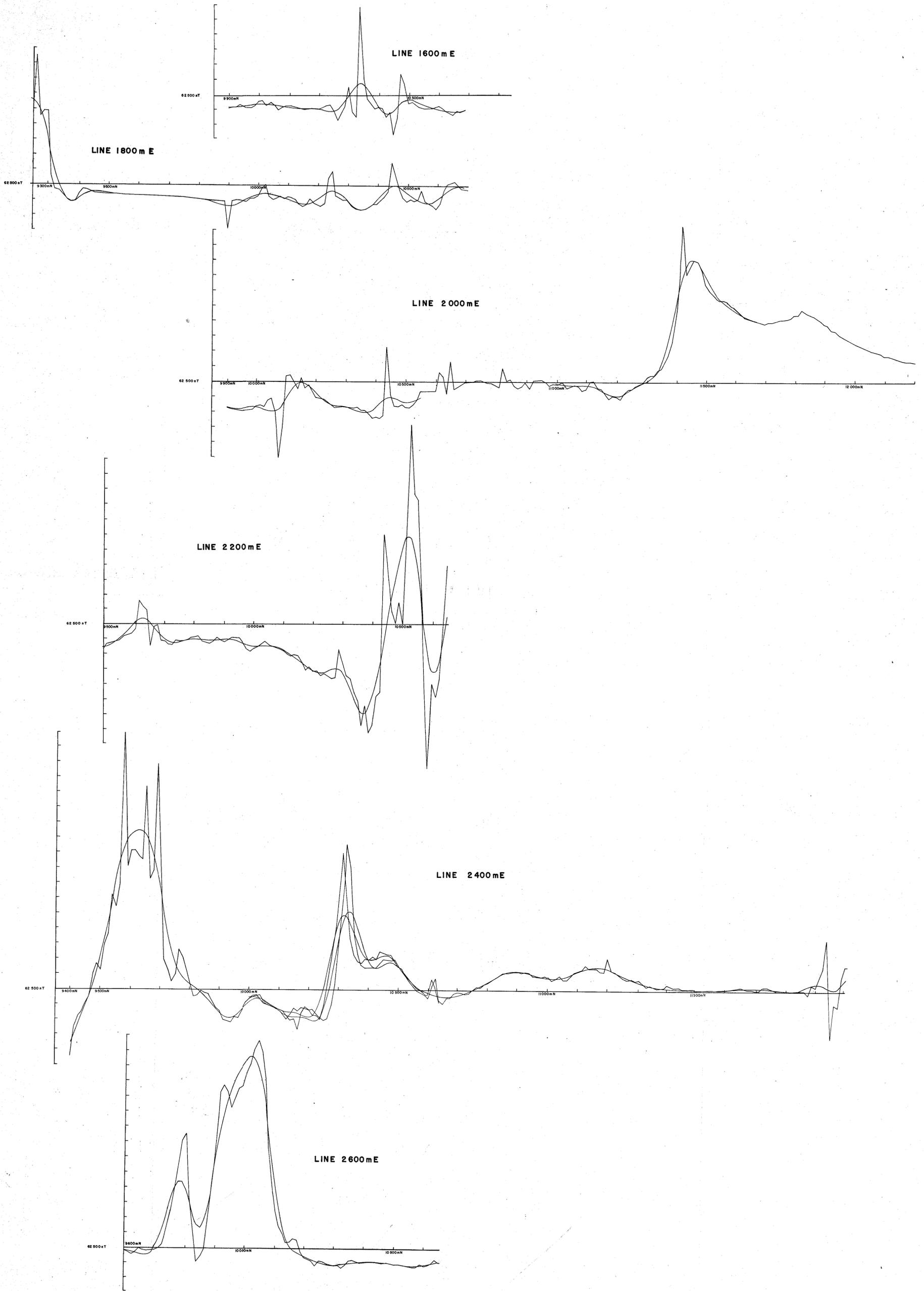




5 cm

589155 3c

GEOPEKO Geophysical Surveys. Plan No. TS 1/77-GC-3c	Instrument	Datum	62 500 nT	Hor. Scale	1:5000	AREA	E.L. 1/77 ROCKY CAPE, TAS
	Observer	JAN 1982 G. BUGG	Base Peg	Vert. Scale	1cm = 500 nT	PROSPECT	GOURLAYS CREEK 83-1961
	Scale Fact.		Date/Drg.	22/6/82 M. vdS.	Cont. Int.	PLAN SHOWS	Profiles of Total Magnetic Intensity 030



5 cm

589156

3d

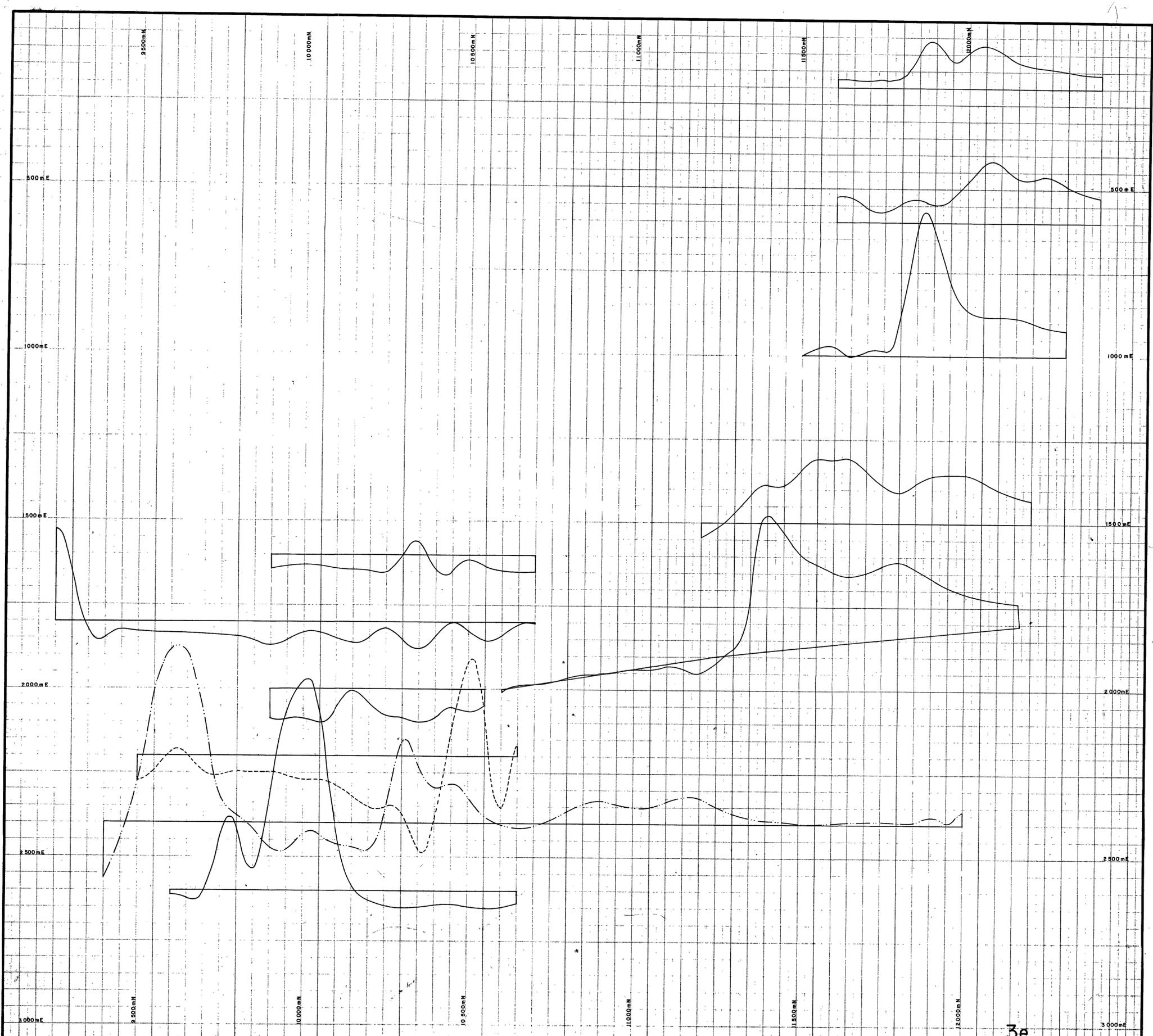
031

GEOPEKO
Geophysical Surveys
Plan No. TS 1/77-6C-3d

Instrument		Datum	62 500 nT	Hor. Scale	1:5000
Observer	G. Bugg	Base Peg		Vert. Scale	1cm = 500 nT
Date Obs.	Jan. 1982.	Date/Drawn	18/6/82, M.v.d.S.	Cont. Int.	

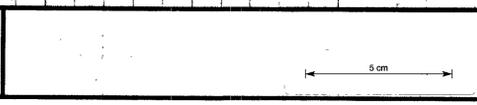
AREA	E.L. 1/77 ROCKY CAPE, TASMANIA
PROSPECT	GOURLAYS CREEK
PLAN SHOWS	Profiles of Total Magnetic Intensity





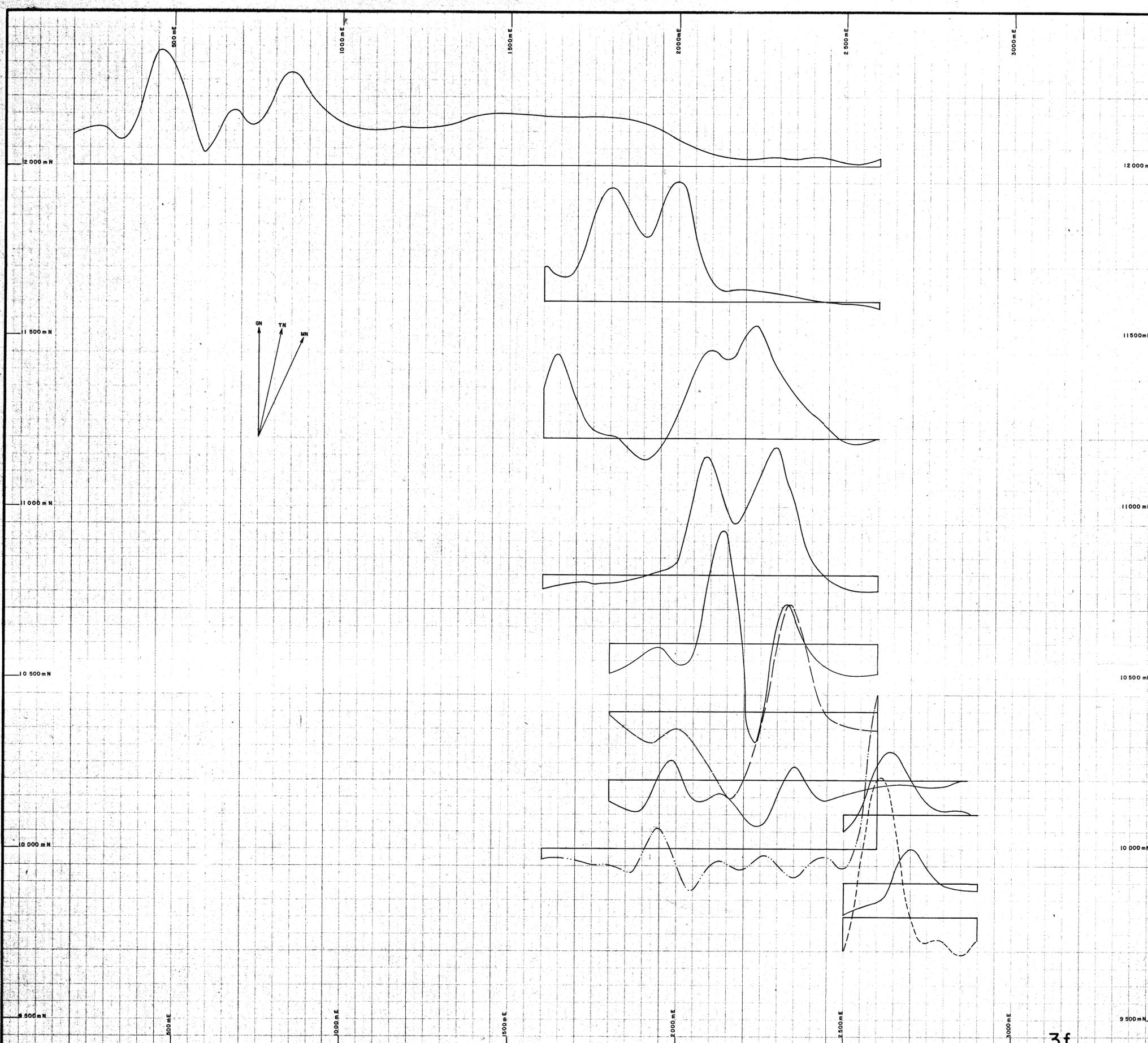
3e

GEOPEKO
Geophysical Surveys
Plan No. TS 1/77-6C-3e



Instruments	Datum	62 500 nT	Hor. Scale	1:5000
Observer	Drawn by	J.P.M.	Vert. Scale	1cm = 500nT
Scale Fact	Date	30-6-82	Cont. Int.	

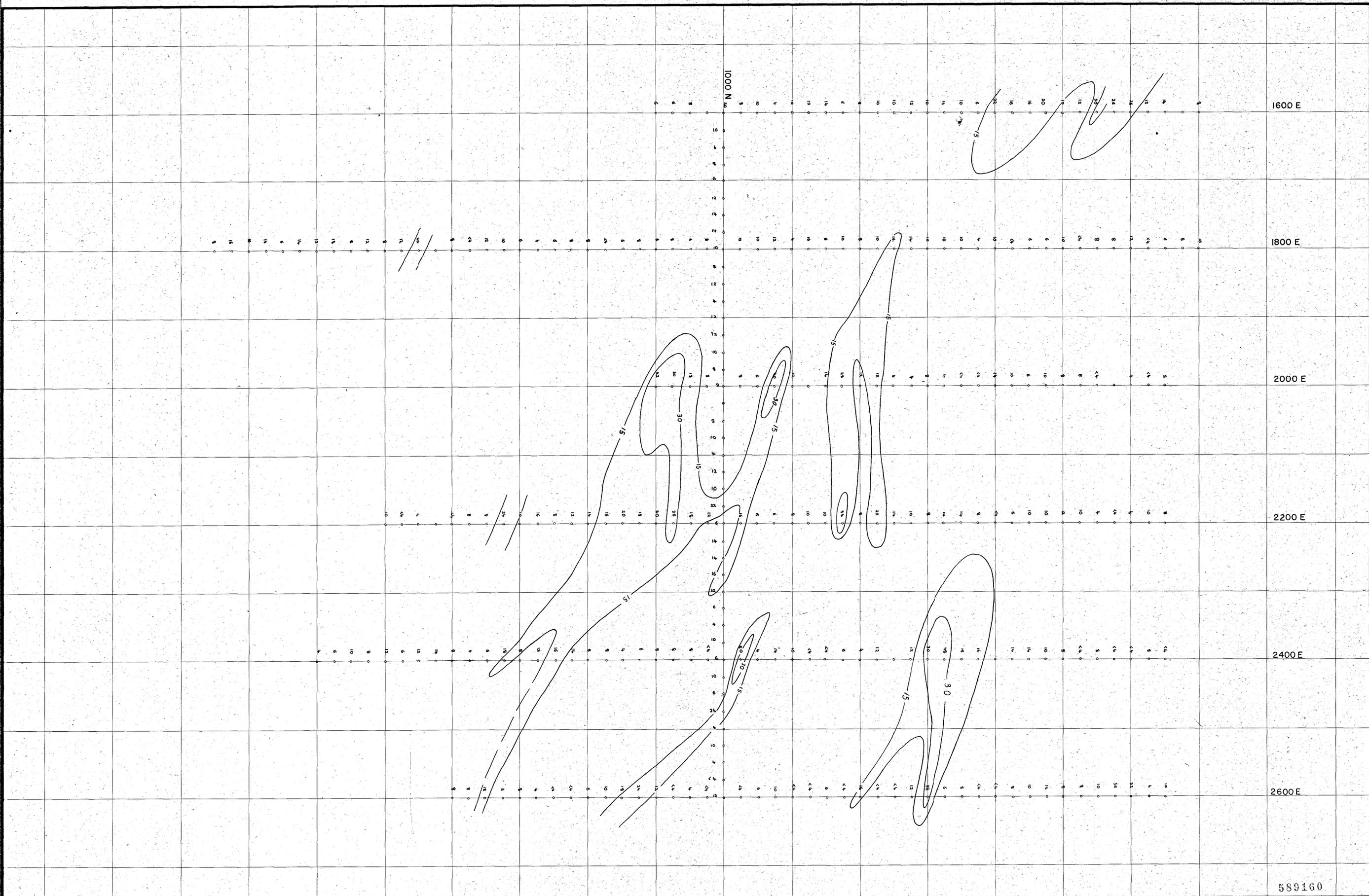
AREA	E.L. 1/77 ROCKY CAPE TASMANIA	83-1961
PROSPECT	GOURLAYS CREEK	589157
PLAN SHOWS	North-South Profiles of Filtered Total Magnetic Intensity	



GEOPEKO
 Geophysical Surveys
 Plan No. TS 1/77-6C-3f

Instruments	Datum	62500 nT	Hor. Scale	1:5000	AREA	E.L.1/77 ROCKYCAPE TASMANIA 35-1961
Observer	Drawn by	J.P.M.	Vert. Scale	1cm = 500nT	PROSPECT	GOURLAYS CREEK
Scale Fact	Date	30/6/82	Cont. Int.		PLAN SHOWS	East West Profiles of Filtered Total Magnetic Intensity

3f



1600 E

1800 E

2000 E

2200 E

2400 E

2600 E

589160

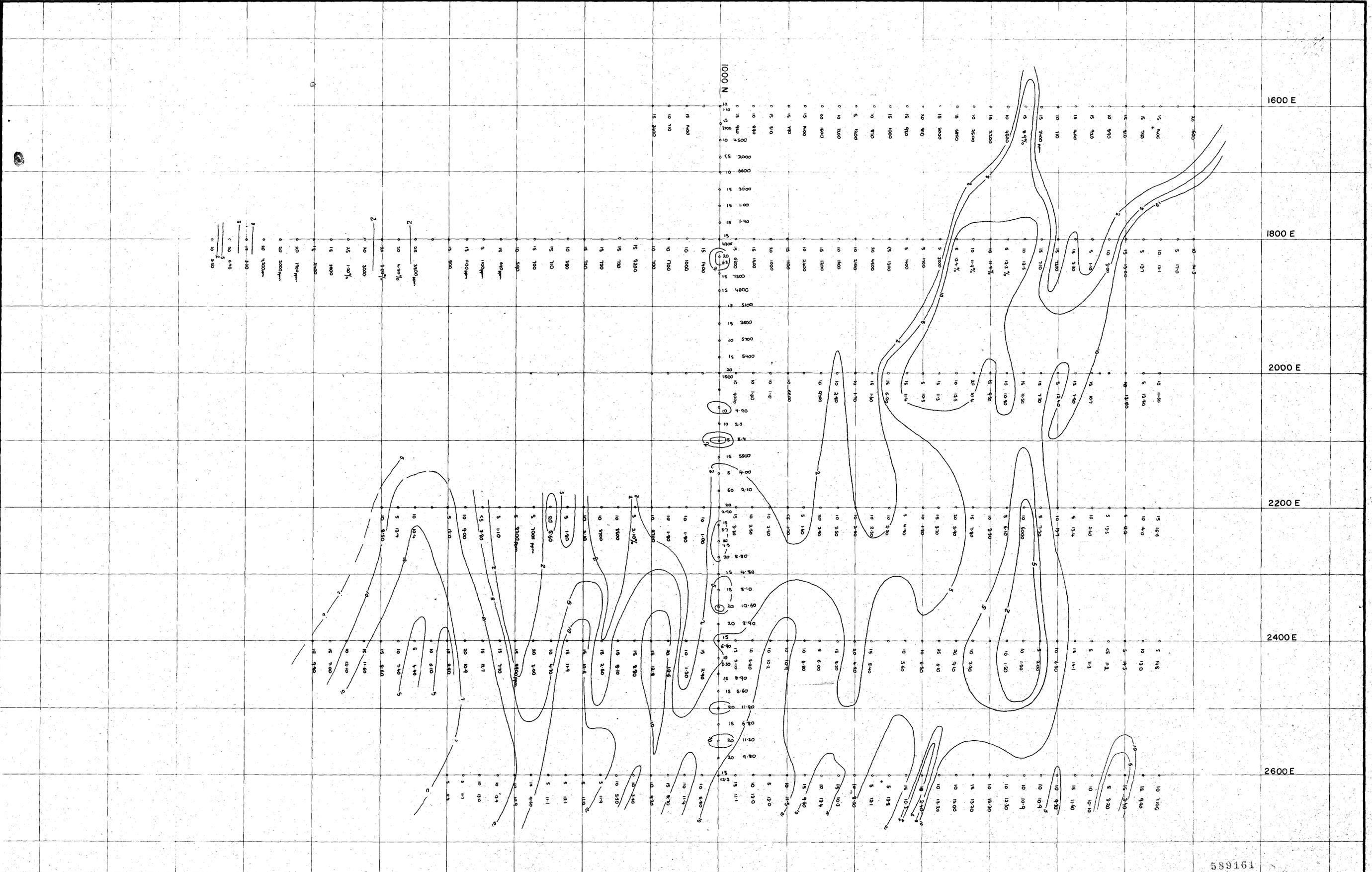
LEGEND

- Pencil No. 19-6 15 - 20 ppm Sn
- 19-15 20 - 30
- 19-28 30 - 50

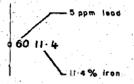



 DATE: JULY '80
 GEOLOGIST: P.H.
 DRAWN: P.H.
 CHECKED:

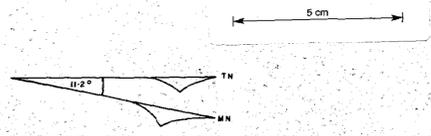
GEOPEKO 83-1961
 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
 No TS 1/77W-5
 GRANVILLE WEST GRID
 Sn "B" Horizon Geochemical Results
 035



LEGEND
 METHOD OF ANALYSIS:
 Fe by AAS (method I)
 Pb by AAS (method II)



Pencil No.	Concentration Range
19 - 6	2% - 5%
19 - 15	5% - 10%
19 - 28	> 10%



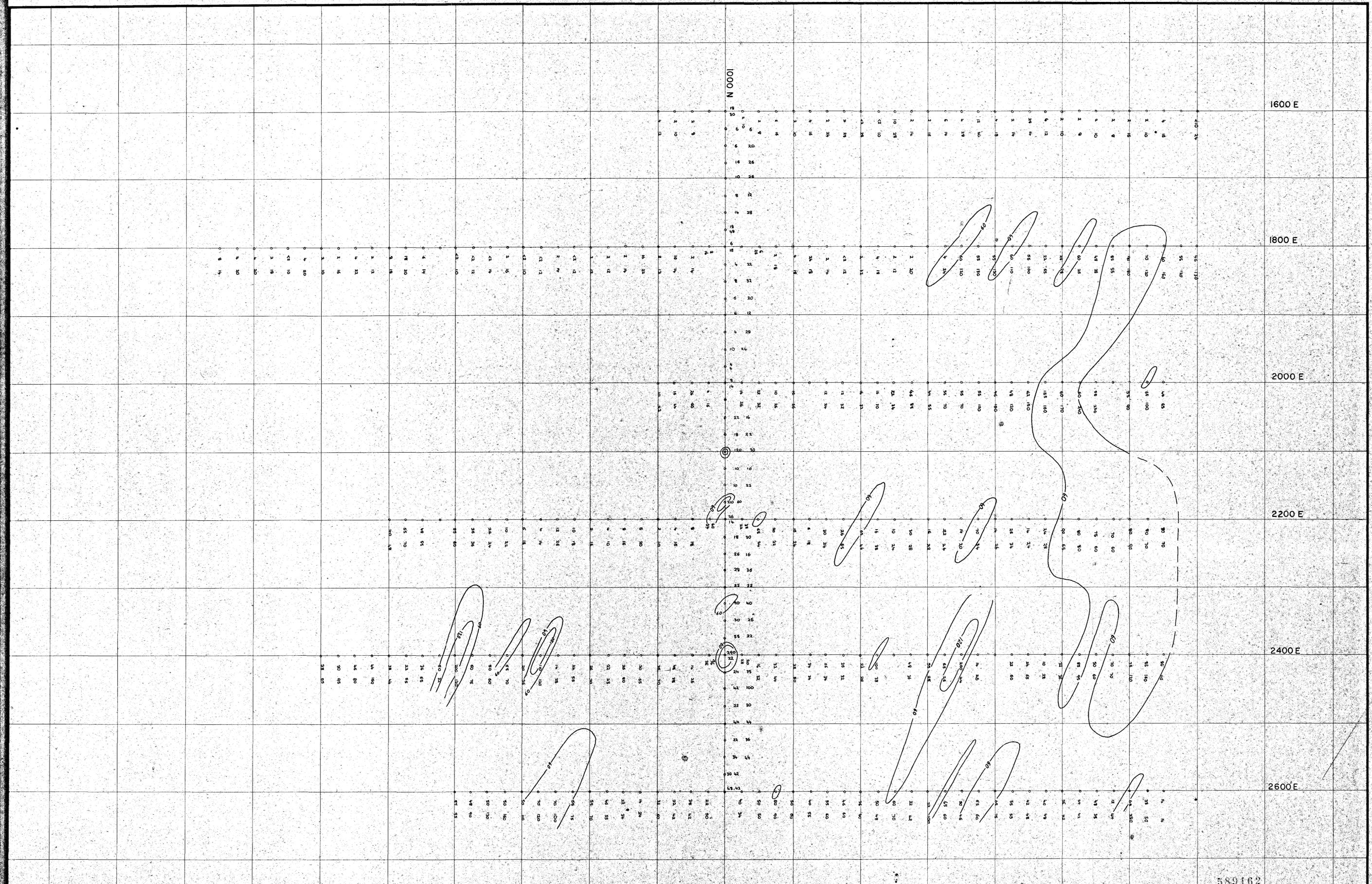
589161

GEOPEKO
 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
 No TS 1/77-GC-6

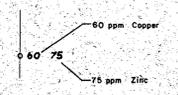
GRANVILLE WEST GRID
 Fe Geochemical Contours

DATE: JULY '80
 GEOLOGIST: P.H.
 DRAWN: J.P.L.
 CHECKED: J.P.L.

036



LEGEND:
 METHOD OF ANALYSIS
 Cu and Zn by AAS (method 1)

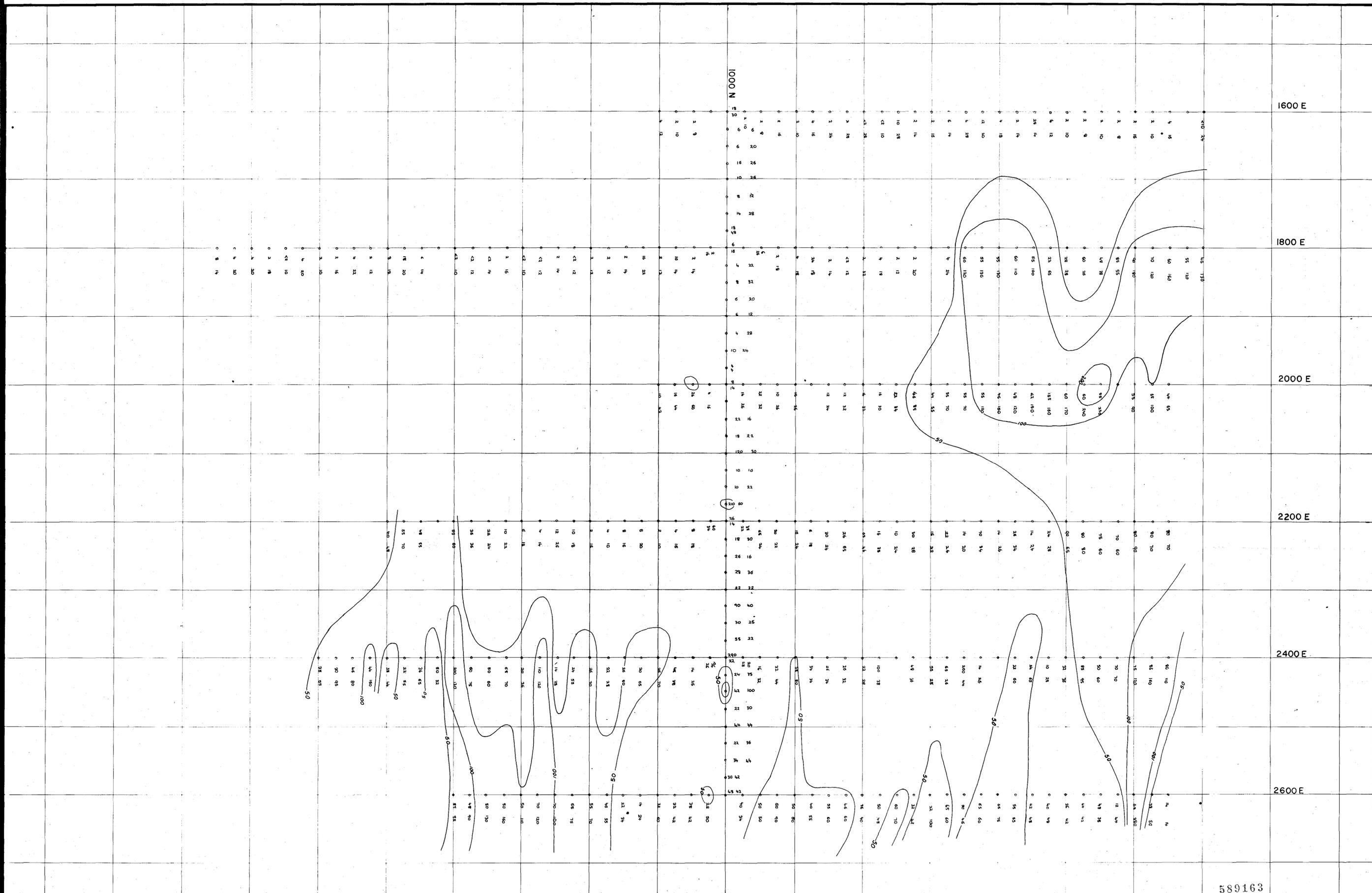


Pencil No. 60 - 120 ppm
 > 120 ppm



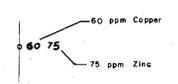
589162

53-1961 GEOPEKO
 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
 SCALE 1:2500 NoTS1/77-GC-7
 GRANVILLE WEST GRID
 Cu Geochemical Contours 037
 DATE: JULY '80
 GEOLOGIST: P.H.
 DRAWN: P.H.
 CHECKED: P.H.
 5 cm

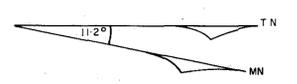


589163

LEGEND:
METHOD OF ANALYSIS
Cu, Zn by AAS (method 1)



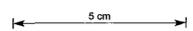
Pencil No. 50-100 ppm
 100-200 ppm
 >200 ppm

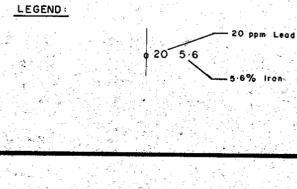
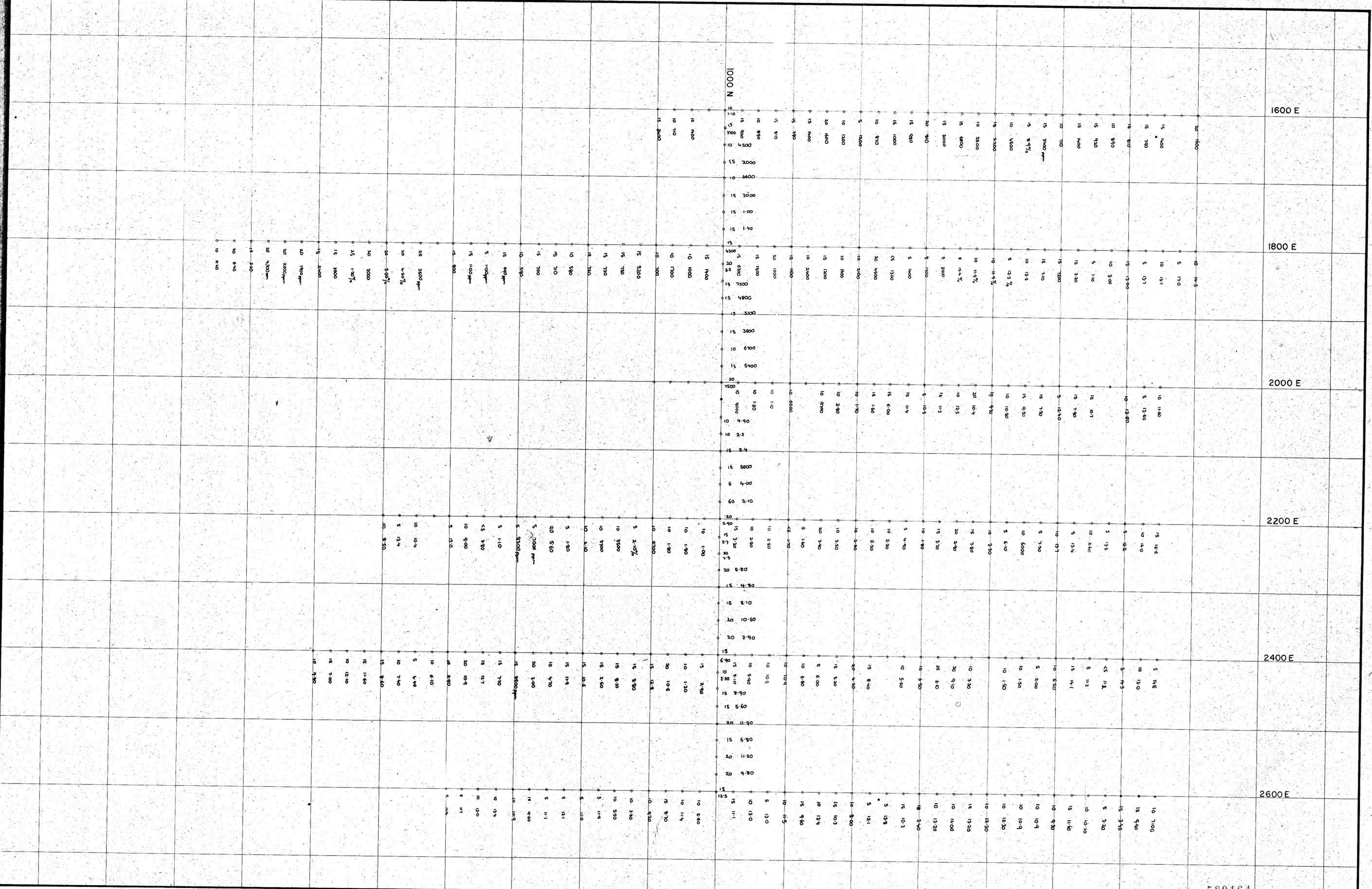


DATE: JULY '80
 GEOLOGIST: P.H.
 DRAWN: P.H. J.M.
 CHECKED:

83-1961 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD
 No TS 1/77-GC-8
 GRANVILLE WEST GRID

Zn Geochemical Contours 038



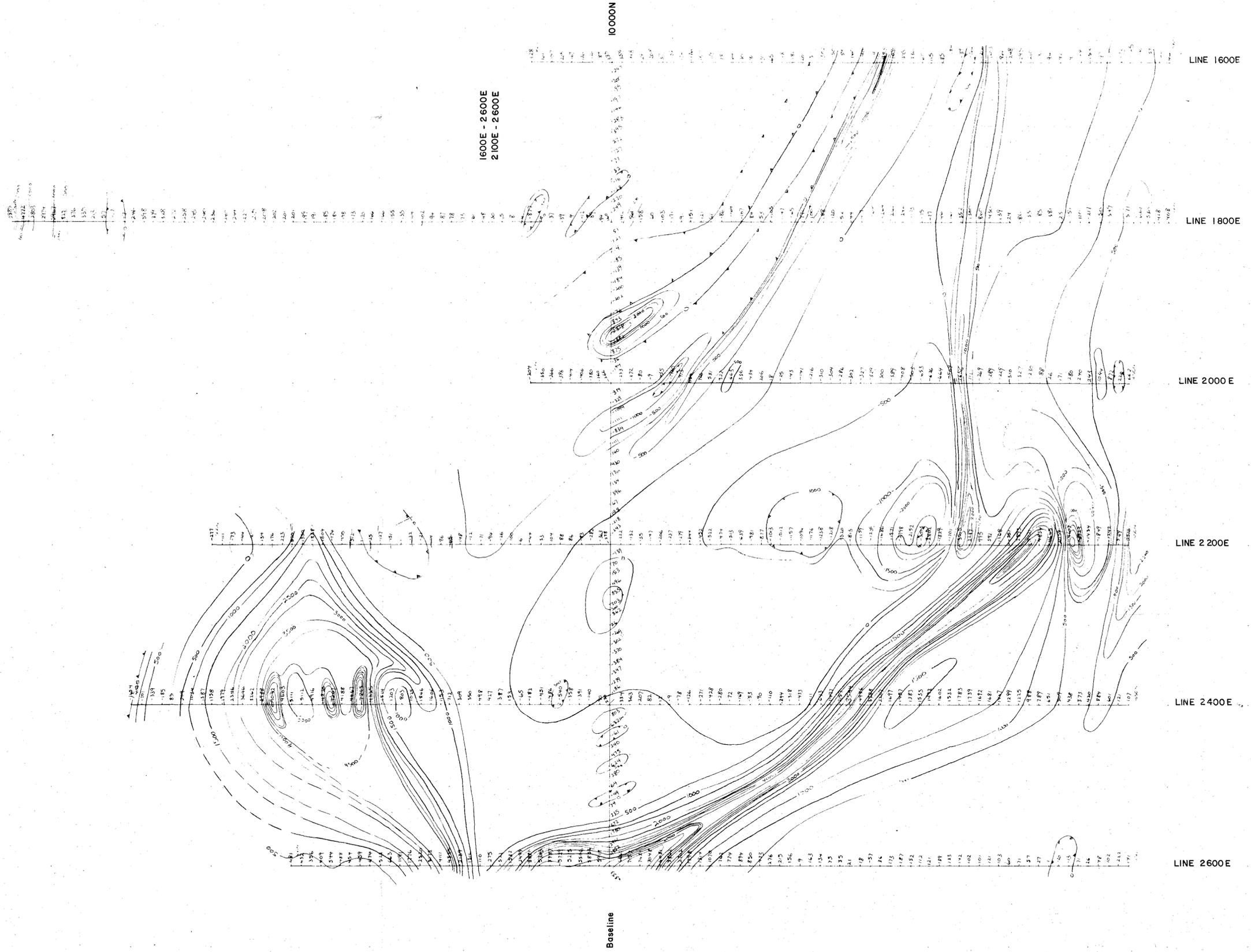


589164

53-1961
GEOPEKO
 A DIVISION OF PEKO-WALLENBOND OPERATION LTD
 No TS1/77-GC-9
GRANVILLE WEST GRID
 Pb - Geochemical Results
 039

DATE: JULY '80
 GEOLOGIST: P.H.
 DRAWN: P.H.
 CHECKED: P.H.

5 cm



589165

	83-1961	TS/77-GC-10
	GROUND MAGNETICS	
	GRANVILLE WEST PROSPECT	
	EL 1/77	
BASE 62 000		040



Plan No. 757