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GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LIMITED

EXPLORATION LICENCE 27/76

ELLIOTT BAY, TASMANIA

ANNUAL REPORT

1982-83 FIELD SEASON

W. Herrmann
November, 1983

OPEN FILE

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1. INTRODUCTION

1.1. SCOPE

This report presents results of mineral exploration under E.L. 27/76 during the period September 1982 to October 1983.

The field work on which these results are based was carried out during the period 3-1-83 to 21-4-83.

1.2. TENURE

E.L. 27/76 of 329sq km situated in the Elliott Bay area of South Western Tasmania was granted to Geopeko on 17-1-83. Field work by Geopeko commenced in March of that year.

Under the new conditions governing exploration licences (introduced on 1-7-82) E.L. 27/76 must be reduced to no greater than 125sq km by 17-1-85 and will expire on 17-1-88.

1.3. JOINT VENTURE

Prior to December 1982, exploration under E.L. 27/76 was wholly funded and conducted by Geopeko.

On 1-12-82 the company entered a joint venture agreement with Aquitane Australia Minerals Pty Ltd whereby the latter could earn a 25% equity in the project by contributing $650,000 to exploration between 1-12-82 and 30-6-84.

Aquitane withdrew from the joint venture on 31-7-83 without earning any share.

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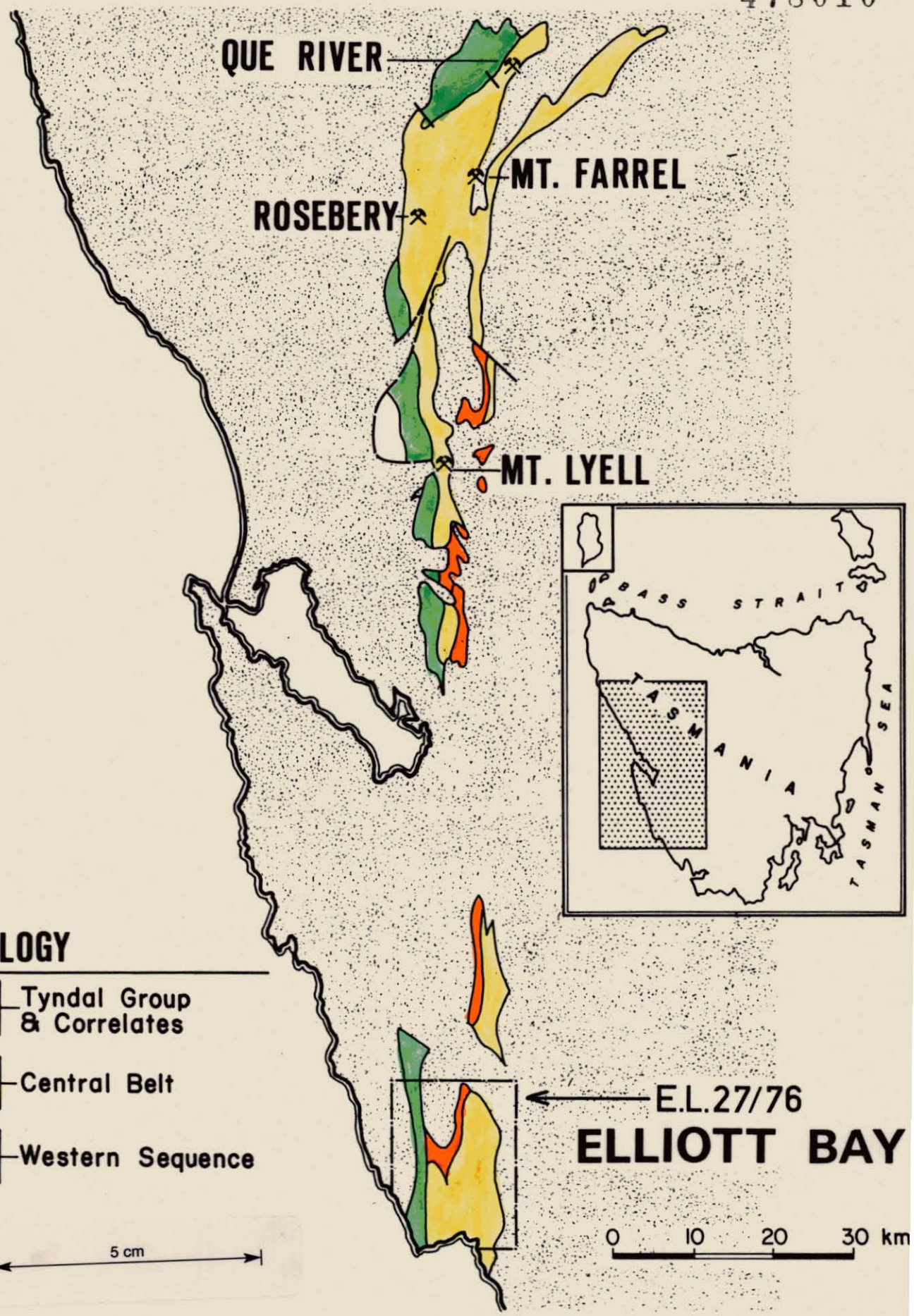

LOCATION DIAGRAM

Figure 1

1.4 EXPLORATION TARGET

Exploration has been primarily directed toward discovery of a massive sulphide deposit of the Rosebery type, containing a minimum 10 million tonnes with a grade of around 20% combined lead and zinc with significant silver and gold.

Secondary potential exists for discovery of a disseminated-fumarolic gold resource in the range 5-10 million tonnes carrying 5-15 g/t Au.

1.5 EXPLORATION HISTORY

The initial three summer exploration programmes by Geopeko were concentrated on stream sediment geochemical survey and Airborne EM anomaly follow up in the southern part of the E.L. Some investigation of previously known abandoned mineral prospects was carried out.

In the fourth season, stream geochemical coverage and regional mapping was extended to cover all of the favourable acid volcanic exposure. This led to the recognition of alteration zones in the Wart Hill and Voyager 9 areas and an extensive gold drainage anomaly as well as subdivision of the volcanic rocks into correlates of the Central Lava Belt, Western sequence and Tyndal Group as has been described for the Mt Read Belt further north (Corbett 1981).

Subsequent prospect development, concentrating largely on bedrock geochem, resulted in discovery of two high grade Pb-Zn-Ag sulphide lenses at Wart Hill.

Although diamond drill testing in the following season produced essentially negative results the 'pedigree' of the area had been established and provided incentive for continued detailed exploration of the most favourable, upper part of the 'Central Lava Belt'.

The details of Geopeko work in E.L. 27/76 upto September 1982 are given in previous annual reports, listed in Section 6: REFERENCES.

1.6 1982-83 SUMMER EXPLORATION PROGRAMME

The programme, reported herein, was designed to locate and define drilling targets in the 'Wart Hill Pyroclastics' which appear to constitute the upper part of the (primary) acid volcanic sequence in the Elliott Bay area; analogous to the upper part of the 'Central Lava Belt' further north.

The programme included:

(i) Approximately 100 line km of Induced Polarization Survey. (50m dipole, 200m line spacing.)

(ii) Completion of C-Horizon geochemical sampling over the area covered by the IP Survey. Total of approximately 2690 samples.

(iii) Approximately 55 line km of ground magnetic traverse over the southern part of the gridded area.

(iv) Detailed geological mapping/remapping of the Voyager 9, 24, 30, 33 and 34 ares. (Figure 2)

(v) Extension of heavy concentrate drainage sampling around the Stoney Creek Microgranite.

(vi) Infill IP survey, close spaced C-Horizon sampling and backhoe trenching over some geophysical/geochemical anomalies defined by the previous surveys.

(vii) Resampling/follow up of zinc drainage anomalies in lower part of Copper Creek.

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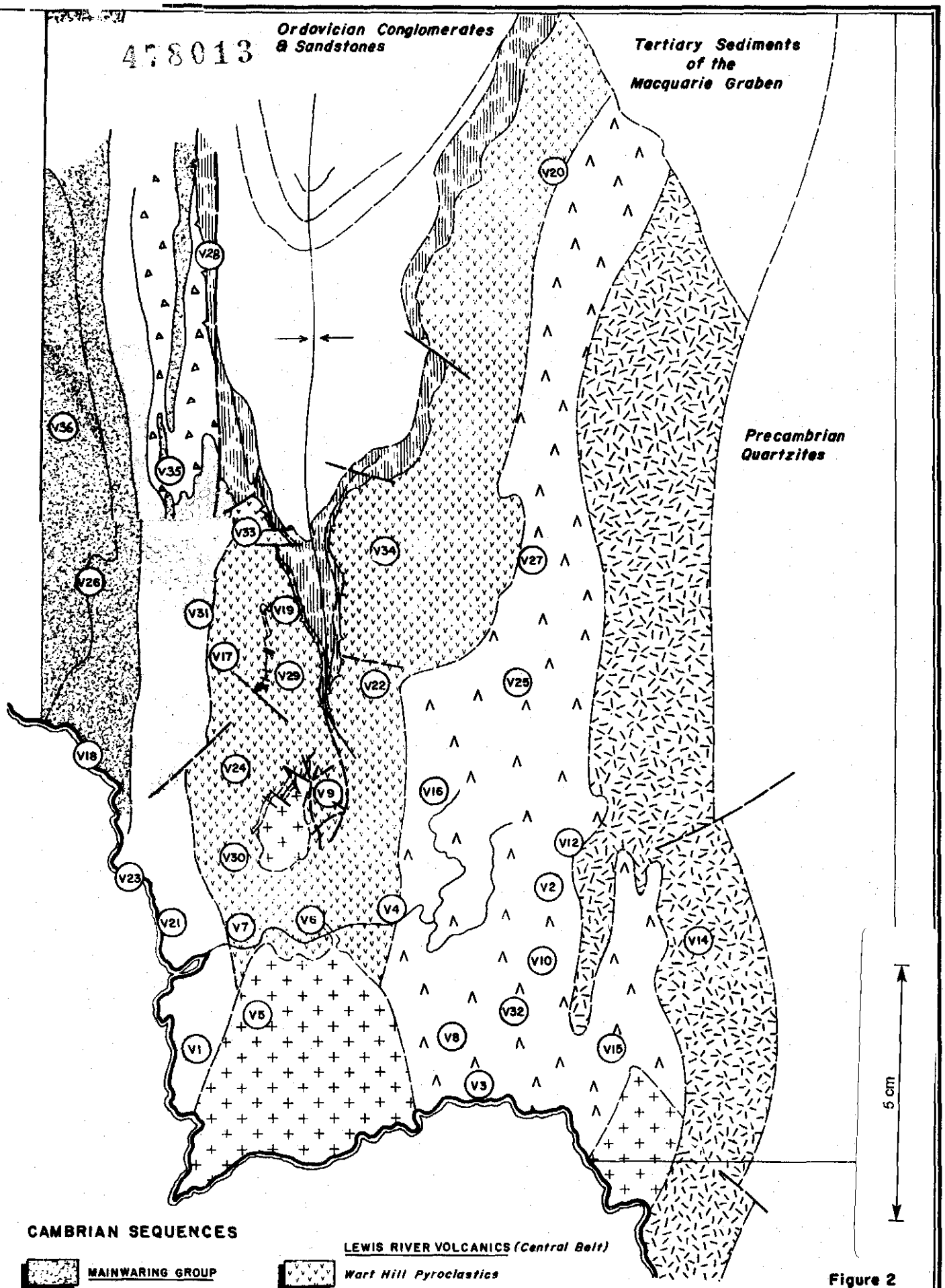

CAMBRIAN SEQUENCES

MAINWARING GROUP

MT. READ CORRELATES

Western Sequence

Tyndal Group Correlates

LEWIS RIVER VOLCANICS *(Central Belt)*

Wart Hill Pyroclastics

Hudson River Pyroclastics

Elliott Point Porphyry

Granite

Undifferentiated Acid Volcanics

Figure 2

E.L.27/76
ELLIOTT BAY, TASMANIA
GEOLOGY & PROSPECT LOCATIONS

0 1 2 3 4
KILOMETRES

GEOPEKO-DEVONPORT BASE

(viii)Investigation into the lead isotopic character of mineralization and geochemical anomalies of the Elliott Bay area.

The field work was carried out by a team of upto three geologists, one geophysicist, two geophysical observers and upto eight field assistants operating from the Wart Hill Base Camp.

Acknowledgement for geological mapping and interpretation is due to:

P.A. Wilson	-	Voyager 9 and south eastern areas of IP grid.
R.J. Perring	-	Voyager 24, Voyager 30. Au/Sn drainage sampling.
J.M. Pemberton	-	Voyager 33, Voyager 34.

Induced Polarization survey was supervised and interpreted by J.D. Sumpton.

TABLE 1 EXPENDITURE ON E.L. 27/76 1982-83 SEASON

	$
Professional Salaries:	
Geology	58773
Geophysics	14805
Drafting	5360
Other	18063
Wages:	
Field Assistants	55591
Drafting	13940
Vehicles	14607
Travel & Accomodation	8820
Freight	7148
Supplies	17455
Sustenance	15617
Tenement	5827
Payroll	542
Geological Consultants	2219
Mineralogy	270
Survey and Gridding	11927
Geochemistry	25856
Soil Drilling	657
Diamond Drilling	1138
General Contractors (Helicopters etc)	91971
Hired Equipment	1696
Communciations	818
Maintenance	1983
Other Expenses	2817
Indirect Costs	59665
Management Charges	88255
TOTAL	$525,820

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2. SUMMARY

Exploration in E.L. 27/76 during the 1982-83 summer field season was aimed at definition of drill targets within the 'Wart Hill Pyroclastics', which are considered to have accumulated in a geological environment favourable to the formation of massive sulphide deposits of the 'Rosebery type'.

The principal exploration method was systematic Induced Polarization survey (50m dipole on 200m line spacing) over some 25sq km of the favourable lithologies.

Systematic C-Horizon geochemical sampling, ground magnetic survey and detailed geological mapping (1:2500 scale) was completed over the same area.

Limited follow up evaluation, involving infill IP (100m line spacing), close spaced C-Horizon geochemical sampling and backhoe trenching, was carried out over some of the anomalies detected by the regional IP survey and previously known geochemical features.

Assessment of the combined data has resulted in recognition of three IP/geochemical anomalies which warrant diamond drill testing.

An additional eight zones of IP or geochemical interest require further infill work to allow full evaluation and drill target definition.

Recommendations are given for testing of the indicated targets, regional prospecting over possible extensions of the favourable lithologies and further detailed investigation of the environment of high grade massive Pb-Zn-Ag sulphide mineralization at Voyager 19.

3. RECOMMENDATIONS

3.1. DIAMOND DRILLING

Voyager 33: Drilling of one inclined diamond drill hole to test style, grade and thickness of mineralization below 14100N/8900E.
A hole of ~ 100m length collared at 8850E and inclined at 45° to East would pass approximately 50m below mineralization exposed in the surface costean.
If successful, a second hole of ~170m length inclined at 45° to the East from 8800E should be considered to provide a test of continuity of grade at approximately 100m below surface.
An initially cautious approach to drilling is recommended, especially as the target mineralization on 14100N occurs at the northern end of the defined soil geochemical anomaly. Close spaced geochemical infill at 50m spaced lines should be considered in order to lessen the chance of drilling 'off the end' of the anomaly.

Voyager 29 West, 11400N/9400E Chargeability Anomaly

Strong chargeability response (with some dubious negative values) essentially without geochemical or resistivity support; sulphide mineralization at surface but chargeability feature appears to be deep.

Requires:
(i) Verification of IP data.
(ii) IP infill on 11300N and 11500N.
(iii) Diamond drilling if verified.
One hole of ~ 250m length, collared at around 9250E should provide an adequate test.
Precise targetting will depend on IP verification.

V-28
Upper Mainwaring River
Au Drainage Geochem.

V-33 14200N
I.P./Pb-Ag Geochem.

V-33 14100N
I.P./Pb-Ag Geochem.
8m @ 1·1% Pb 96 gm/t Ag
in Costean.

V-35
Au Drainage Geochem.

V-36
Cu-Zn-Fe Drainage
Geochem.

V-29W 11400N
Deep source I.P.
+ 4m gl-py minz. up to
0·96% Pb, 24 gm/t Ag.

V-29 10400N
Pb-Zn Geochem/Gravity.

V-24 9600N
I.P./Res. assoc. with Au
bearing silic. agglomerate.

V-30 8000-8200N
I.P./Res., Au Geochem.
Pb-Zn-Ag vein minz. in Pit.

Boundary E.L. 27/76

Area of undifferentiated Acid Volcanics.
Proposed future systematic exploration.

V-19 12200N
I.P. in pyritic
chloritic tuff.

V-19
Ore grade bedded
massive sulphide lenses
at surface.

V-34
Pb-Zn-Ag Geochem.

380 000 E A.M.G.

Area covered by I.P
Dipole - Dipole Geophysics and C-Horizon
Geochemical Surveys.

V-9 9200N
I.P./Res./Mag.

V-9 8400N
Res/Pb-Zn
Geochem.

V-9 7000N
Pb-Zn Geochem
undefined Res.

LEGEND:

OWEN GRP
└ cse siliceous clastics

TYNDAL GRP
└ Epiclastics, A. volcs, shales

MAINWARING GRP
└ undifferentiated gwk-shales/basic. volcs

WESTERN SEQUENCE
└ phyllites blk. shales/acid epiclastics

Acid pyroclastics, minor sediments

WART HILL PYROCLASTICS

Acid pyroclastics/interb. seds/
major acid lavas

Porphyritic Granite

undifferentiated acid volcanics

5 cm

1000 750 500 250 0 1000 2000 3000 m

Geol: W. Harrmann Date: Aug 83 Drawn: R. Tag

GEOPEKO

E.L. 27/76 Elliott Bay, Tas.

Geological Plan

Anomaly Location Diagram

Fig. 3

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Voyager 29: Geochemical anomaly at 10400N/10050E

Previously defined (Wilson et al, 1982) C-Horizon soil geochemical anomaly (coincident Pb, Zn, Fe) with subtle gravity anomaly over zone of chloritic quartz-feldspar crystal tuffs.

One hole of ~ 200m collared at 9925E on 10400N, inclined at -45 to East is recommended to test for style and grade of mineralization.

Voyager 19: The 1981-82 drilling program to test beneath the outcropping massive sulphide lenses as well as the subtle gravity anomaly on Wart Hill and weak IP anomaly south of Wart Hill produced essentially negative results.
In view, however, of the uncertain detailed geological structure of the area, it is considered that depth extensions to the surface mineralization have not been entirely precluded.
It is recommended that a detailed structural reappraisal of the prospect should be undertaken.
This could involve:

(i) - relogging of core
(ii) - extension of backhoe trenching with emphasis on mapping out the enveloping surface of the massive sulphide lenses in three dimensions.
(iii)- systematic backhoe pitting on grid arrangement in attempt to relate core lithologies to surface geology.

If the results of the above are able to indicate additional subsurface targets then these should be tested with an economical and cautious approach. A 'deep look' EM system should be considered to aid target definition.

All future drill core should be <u>oriented</u>.

3.2 IP-GEOCHEMICAL INFILL

The following eight anomalous zones require further dipole IP survey and geochemical sampling to evaluate their prospectivity and to define drilling targets.

Voyager 33 - 14200N/9200E

Broad chargeability anomaly with moderate Pb, Ag geochemical support.

Follow up should consist of:

(i) 25m dipole IP for better resolution and targetting.

(ii) Continuous trenching across zone of anomaly.

Voyager 9 - 9200N/11100E

A broad, complex chargeability anomaly with resistivity low and coincident magnetic anomaly. (Small magnetic anomaly to north of main Voyager 9 magnetic feature). Situated on major N-S linear/fault (?) with intersecting cross fractures and chloritic alteration.

Recommendations for follow up include:

(i) Infill IP on 100m line spacings.

(ii) 25m dipole IP for improved resolution.

(iii) Infill magnetic survey

(iv) Close spaced (5m) bedrock geochemical sampling.

(v) Selective backhoe trenching.

Voyager 30 Area

Several complex overlapping chargeability anomalies associated with broad resistivity lows occur on lines 7800N, 8000N and 8200N between 8800E and 9200E.

Requires:

(i) Infill IP on 100m line spacings.

(ii) Some 25m dipole IP to improve resolution of complex anomalies.

(iii) Further pitting and trenching to improve geological understanding.

Voyager 24 - 9600N/9400E

Shallow chargeability anomaly with coincident resistivity low. Overlies lower part of silicified agglomeratic unit which carries anomalous (upto 400ppb) gold in Voyager 24 DDH 1. Erratic bedrock Pb-Zn geochemical anomalies.

Recommendations:

(i) 100m infill IP survey

(ii) 25m dipole IP over anomaly to improve resolution.

(iii) Modelling of IP data - (depth extent appears limited).

Voyager 19 - 12200N/9700E and 12400N/9600E

Requires: (i) Extension of IP survey westwards on line 12400N.

(ii) Infill IP on 100m line spacings.

(iii) Close spaced bedrock geochemical sampling.

(iv) Extension of trenching on 12400N.

Voyager 34 - 13600N to 14000N/ 11800E

A significant C-Horizon Pb-Zn geochemical anomaly coincident with zone of (pyritic) chloritic quartz feldspar crystal tuffs. No associated IP anomalies. Has similarities to the Voyager 29 geochemical anomaly.

Follow up should include:

(i) Close spaced geochemical sampling.

(ii) Selective backhoe trenching of geochemical peaks to determine type of mineralization.

(iii) Further evaluation might depend upon results and assessment of prospectivity of Voyager 29 Drilling.

Voyager 9 - 8400N/11200E

Lead-zinc geochemical anomaly at eastern edge of old Voyager 9 grid. Situated adjacent to 'kink' in major N-S linear/ fault structure, localized chloritic alteration. Strong coincident resistivity low with good depth extent.

Deserves:
(i) Infill IP-Resistivity on 100m lines spacing.
(ii) Close spaced geochemical sampling.
(iii) Trenching over geochemical peaks/Resistivity lows to determine source type.

Voyager 9 South-East - 7000N/11900E

Coincident Pb-Zn geochemical anomaly at extreme South East corner of gridded area. Suggestion of Res-IP anomaly developing at end of line. Geology not well known.

Requires:
(i) Extension of IP.
(ii) Extension of bedrock geochemical sampling.
(iii) Trenching if warranted.

3.3. GOLD - TIN EXPLORATION

Panned concentrate drainage sampling should be extended outward from Voyager 30 and Stoney Creek Microgranite areas to fully define the extent of the drainage anomalies.

C-Horizon geochemical sampling at 25m intervals has not satisfactorily outlined zones of gold mineralization at Voyager 30. However, at Voyager 24, the technique appears to successfully outline a stratabound gold anomaly suggesting that it's use (perhaps on a closer sampling pattern) should be extended to north and (particularly) south-west to assist in definition of gold distribution and drill targetting.

Consideration should be given to a program involving shallow percussion drilling on a systematic pattern over the favourable rock unit to obtain fairly large samples of primary rock to allow an assessment of extent, continuity and grade of the gold mineralization.

3.4 EXTENSION OF REGIONAL PROSPECTING

Geological and drainage sediment sampling reconnaissance by R & N Poltock in 1981 indicated the prescence of acid volcanics in the Upper Mainwaring River area. These are considered to represent extensions of the 'Wart Hill Pyroclastics' and probably are confined to a 1.5km wide strip adjacent to the Western edge of the Ordovician clastic rocks of Mt Osmund syncline, extending north of Voyager 33 as far as the Wanderer River.

This zone is believed, to have good potential for the 'Rosebery type' massive sulphide mineralization as it appears equivalent to the uppermost section of the 'Central Lava Belt', of the Mt Read Volcanics, which is host to the principal Pb-Zn-Ag deposits of Western Tasmania.

The presence of several (-80 fraction) gold drainage anomalies also suggests potential for extensions of the Voyager 24-30 stratabound (?) gold association.

The following programme is recommended for an initial evaluation of the potential:

(i) Grid line cutting at 400m line spacing (which would require approximately 5km of base line in open country with additional 27km of cross lines in forested country.

(ii) Geological mapping of grid lines and stream beds.

(iii) Systematic C-Horizon sampling along grid lines.

(iv) Magnetometer survey along grid lines (to define and identify source of narrow elongate aeromagnetic feature).

(v) Detailed panned concentrate drainage sampling to follow up gold anomalies.

4. REGIONAL SURVEYS

Previous exploration and the discovery of high grade sulphide lenses near Wart Hill had indicated that the greatest potential for the target (Rosebery type) mineralization existed within the 'Wart Hill Pyroclastics'. These consist of a complex assemblage of rhyolitic lavas and associated pyroclastic deposits with several minor pyritic shale and siliceous sandstone/conglomerate interbeds. Structural indications are that the group dips and faces steeply to the west and appears to be semi conformably overlain by (acid volcanic) epiclastics, siltstones and shales of the 'Western Sequence'. The 'Wart Hill Pyroclastics' thus appear to represent the uppermost, youngest (?) section of the acid volcanic sequence exposed at Elliott Bay and thus may be analagous to the western part of the 'Central Lava Belt' of the Mt Read Volcanics north of Queenstown.

It is considered noteworthy that all the significant, known Pb-Zn-Ag deposits of the Mt Read Belt (Rosebery, Que River, Hercules) occur within a couple of kilometres of the Central Lava Belt-Western Sequence contact.

The 1982-83 exploration programme was aimed at definition of drilling targets within the favourable stratigraphy represented by the 'Wart Hill Pyroclastics'.

It was considered that this could best be achieved systematic electrical geophysical coverage.

Dipole-Dipole Induced Polarization-Resistivity was chosen for the job, mainly on the basis that a large Pb-Zn sulphide body could reliably be expected to be chargeable but not necessarily conductive (Webster & Skey, 1979).

Previous experience at Elliott Bay has shown that the effects of strong surface leaching and minimal secondary geochemical dispersion severely limit the value of wide spaced soil geochemical sampling as a reconnaissance exploration tool. However, it was considered that complete geochemical coverage at 25m sample intervals along lines surveyed by IP, would assist in rating of near surface anomalies.

Obviously, an understanding of geological situation is fundamental to assessment of geophysical/geochemical anomalies and to this end the southern areas around Voyagers 9, 24 and 30 and the northern areas of Voyager 33 and 34 were mapped in detail at 1:2500 scale.

4.1. INDUCED POLARIZATION/RESISTIVITY SURVEY

The survey, covered approximately 25sq km of the favourable 'Wart Hill Pyroclastic' group and adjacent 'Western Sequence' (Figure 3) This involved approximately 100 line kilometres at 50m dipole spacing on east-west lines spaced 200m apart. The survey was directed by Mr. J. Sumpton, who has kindly provided the following notes on the operation.

4.1.1. IP Survey Procedure

The bulk of the survey was conducted using two Scintrex IPR-11 six channel receivers. Data was routinely collected for ten time intervals between 30msec and 1770msec after current shut off. Repeat readings were taken from time to time over a much shorter time window in order to obtain a more complete rendering of the transient decay curve for analysis. The value of the chargeability plotted is the area under the decay curve (in milliseconds) between 510 msec and 1050msec after current shut off. The transmitter used with this equipment was a Huntec 2.5kW unit, transmitter timing was two secondson, two seconds off.

In more inaccessible areas a Scintrex 1PR-8 was used with much lighter transmitters. Both Elliot 1.5kW and Phoenix 1PT-1 units were used. The transmitter timing was also two seconds on, two second off. The mean value of the secondary voltage was recorded for three time slices of the transient decay curve, these had mean delay times of 390 msec, 910 msec (the value plotted) and 1430 msec. Precautions were taken to ensure that the transmitted signal from one unit did not interfere with signal detected by the other receiver.

Using data from traverse lines surveyed with both receivers an empirical relationship was determined whereby the plotted value in mV/V as measured by the 1PR-8 was found to be approximately three times the plotted value in milliseconds measured by the 1PR-11.

Data from the 1PR-8 was manually recorded and then entered into an HP-85 desk top computer, which calculated apparent resistivity and stored the information on magnetic tape. Original pseudosections of apparent chargeability and resistivity were plotted by an A3 plotter driven by the HP-85. Data from the 1PR-11 receivers was dumped at intervals directly into the HP-85 from the receiver's data memory. This data was stored on on magnetic tape for editing or output in a variety of forms as required.

All equipment functioned satisfactorily in the prevailing conditions. Minimal weatherin g and low current electode contact resistance ensured that the signal to noise ratio was high. The 1PR-11/Huntec combination proved particularly efficient in collecting large amounts of high quality data in a short time. The 1PR-11's did however suffer moisture related problems during the high rainfall period at the end of the season. This not only affected the receiver electronics, but connections along the potential electode array (the 1PR-11 gathers information simultaneously from six receiving dipoles at each station) suffered from the ingress of water leading to spurious secondary voltages. Once this problem was recognised it could be adaquately monitored.

4.1.2. Data Presentation and Assessment

Induced Polarization Chargeability, Resistivity and Metal Factor data were plotted in pseudo section form at 1:2500 scale.

Photo reductions of the chargeability and resistivity psuedosections to 1:5000 scale was arranged to allow presentation in convenient form to accompany this report.

Further reduction to 1:10,000 enabled compilation of chargeability and resistivity psuedo plan which are useful (when coloured) for direct comparison with geological and geochemical plans of the same scale.

A glance at the 1:10,000 compilations will show the strong chargeability-resistivity responses over pyritic black shales of the Tyndal Group and the Western Sequence.

There is an arcuate chargeability-weak resistivity anomaly roughly coincident with the magnetic feature east of the Stony Creek Micro-granite and an unexplained high chargeability-high resistivity zone in the core of the microgranite body.

Likewise unexplained, is the higher 'background' chargeability-conductivity in the southern part of the surveyed area relative to the northern part.

Following an elimination of all obviously 'geological' anomalies, (such as black shales) an initial appraisal of the chargeability and resistivity data led to recognition of approximately sixty anomalous responses. To achieve some sort of priority order for follow up and testing a system of 'Anomaly Data Sheets' was devised. These are collectively included as Appendix 1. They graphically portray, at 1:5000 scale, segments of the relevant chareability and resistivity pseudosections together with details of geology, other geophysical and geochemical responses.

The individual IP anomalies were given a classification score, out of a possible 10 points, on the basis of intensity, form and apparent depth.

Though not purely empirical, the scoring was partly based on results of drilling of previous IP anomalies at Elliott Bay.

For examples: the fairly well defined chargeability-resistivity anomaly on 10200N at Voyager 2 would rate about 7 points. (Mudge, 1978; Strickland and Herrmann, 1980) The weaker and apparently shallow chargeability response on V19, 12000N/10350E would rate only 4 points (Wilson et. al, 1982)

Additional points, out of possible 10, were allotted for favourable geological, geochemical or other geophysical characteristics. Thus each anomaly was ascribed a numerical score out of 20 and a priority rating established. A similar procedure was adopted for anomalies defined by geochemical surveys but with points allocated on the following scales:

Geochemical /10 points
Geology /5 points
Geophysical /5 points

In the subsequent assessment of all geophysical and geochemical responses, it is considered that anomalies with aggregate score of 13 or greater, are worthy of drill testing. There are three anomalies in this category.

A further eight anomalies, with scores in the range 11 to 12, require further infill geophysical, geochemical and geological investigation to enhance drill target definition.

Anomalies with scores of 10 points or less are currently considered to be of low priority without justification for further work.

For details on the individual anomalies, the reader is referred to the Anomaly Data Sheets presented as Appendix 1 and to the discussions in Section 5: PROSPECT EVALUATION.

4.2 GROUND MAGNETIC SURVEY

The gridded area south of 10,000N was covered by ground magnetic survey.

Instrument used was Geometrics G816 with readings taken at 12.5m intervals along lines spaced 200m apart. That is, the same lines as were covered by IP survey.

The contoured information is portrayed on 1:2500 scale plans and also, in less detail, at 1:10,000 scale (Plan No 3) which also indicates the extent of ground magnetic coverage over the gridded area.

The contours shown are drawn from the 200m line spacing information only and do not take into account the earlier magnetic survey of the Voyager 9 grid (Wilson et. al, 1982). Consequently there is considerable elongation of the anomalies due to the 12.5x200m sampling grid.

The principal feature is a series of large elongate 'highs' occupying an arcuate trend east of the Stony Creek Microgranite and showing a close coincidence with zones of chloritic alteration adjacent to interpreted major faults.

Two dimensional inversion modelling of part of the main (Voyager 9) anomaly (Wilson et. al, 1982) suggested that the anomaly could be due to 'a near surface body (about 50m to top) with a fairly small susceptibility contrast, with a deep about 550m) body beneath it with a much higher susceptibility contrast. This model is not inconsistent with the possible existence of pods and large bodies of veiny-disseminated to massive magnetite and chlorite alteration/mineralization occupying fault controlled structures. Such mineralization may be genetically related to either the intrusion of the Microgranite stock or to the deeper parts of a footwall conduit zone instrumental in massive sulphide mineralization.

4.3 C-HORIZON GEOCHEMISTRY

C-Horizon or bedrock samples were collected at 25m intervals along 200m spaced lines over all those parts of the IP survey area which had not previously been geochemically sampled.

These are, principally, the southern part of the grid (between 7000N to 9800N and approximately 8200E to 12000E) and the north eastern extensions of the Voyager 34 area.

Samples were obtained by drilling to the 'limit of penetration' with a Bombardier mounted Jacro drill using 75mm diameter auger rods. Sample depths ranged from 0.2 to 3.5m with average around 1.0 metres.

The -80mesh fractions were analysed for Cu, Pb, Zn, Fe and Ag by Atomic Absorbtion Spectrophotometry. (Method G001 of Australian Laboratory Services). Samples from the vicinity of the gold-tin drainage anomaly were also analysed for Au, As and/or Sn, W, by A.A.S. and X.R.F. techniques respectively. (A.L.S. methods: Au PM 205; As G004; Sn + W X.R.F.1-A). Tabulated analytical results are presented in Appendix II.

Sample locations and analytical results are plotted on separate series of 1:2500 scale plans included with this report.

Lead and zinc contour plans are presented at 1:2500 scale for the Voyager 34 (north eastern) area.

No attempt has been made to present the contoured data at 1:2500 scale for the large southern area.

However, lead and zinc contour plans have been produced at 1:10,000 scale to cover the entire area of the regional IP survey. These plans are based on all previous (Voyager Prospects) geochemical data as well as the 1982-83 sampling and indicate the extent and density of C-Horizon sampling over the Wart Hill Pyroclastics.

Experience at Elliott Bay, particularly at Voyager 19, has shown that the upper soil horizons and even the upper part of the C-Horizon are strongly leached of base metals. There is evidently no development of a secondary geochemical dispersion (halo) around even near surface mineralization. It also is apparent that the Voyager 19 high grade massive sulphide mineralization is very discrete and is not associated with extensive lateral or footwall geochemical dispersion patterns.

Under these conditions, it must be recognized that soil geochemistry surveys may not be effective in detecting buried mineralization, especially on a 200x25m sampling grid.

5. PROSPECT EVALUATION

This section outlines the results of follow up investigations over anomalous responses indicated by the regional IP survey and by prospect development work of the previous seasons.

5.1 FOLLOW UP OF IP ANOMALIES

The planned 1982-83 programme called for completion of the regional IP survey by late February to allow for plotting, assessment and follow up of significant anomalies during March. Follow up was to include:

- infill IP at 100m line spacing
- SIROTEM Survey
- close spaced Jacro geochem sampling
- backhoe trenching or pitting with geological mapping of exposure and rock chip/channel sampling of trenches

Due to late commencement of the field season and poor weather the regional IP survey was not completed until late in March. Initial assessment of the data indicated:

11 A priority anomalies
19 B priority anomalies
28 C priority anomalies
(in decreasing order of significance)

Plans were formulated and work commenced on further investigation of some of these anomalies and the results are detailed below.

5.1.1. Infill Induced Polarization Surveys

The following infill IP was completed:

Line 14300N/8700-9750E
Line 14200N/8700-9850E (resurveyed)
Line 14100N/8400-9750E (resurveyed)
Line 12700N/9750-10500E
Line 12600N/9300-10500E (resurveyed)
Line 12500N/9450-10200E

Contoured psuedo sections of apparent chargeability and resistivity are presented at 1:5000 scale in the accompanying plan folios.

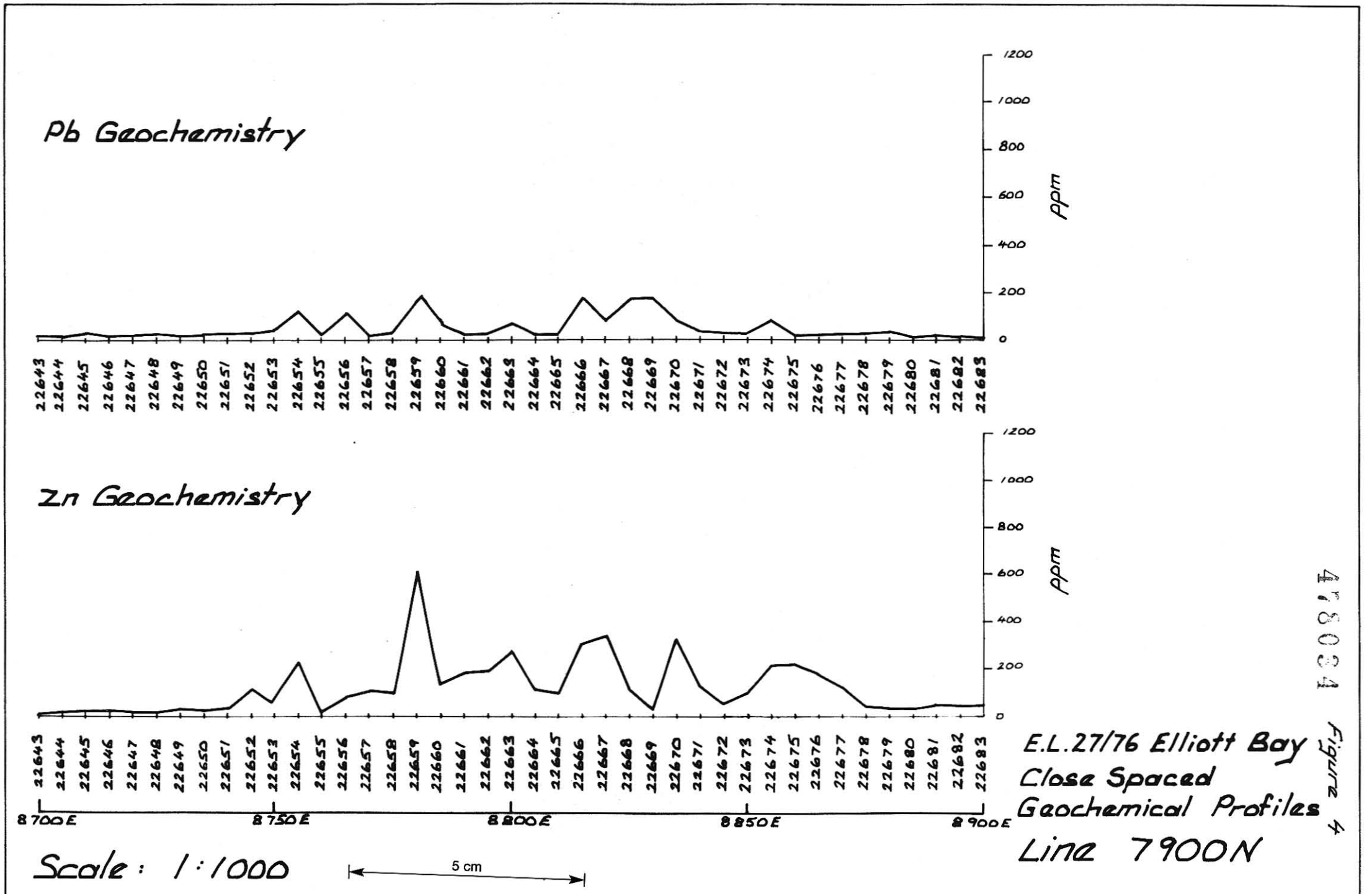
As the infill IP lines are in the Voyager 19 and Voyager 33 areas, the results will be discussed under those headings (below) to avoid duplication.

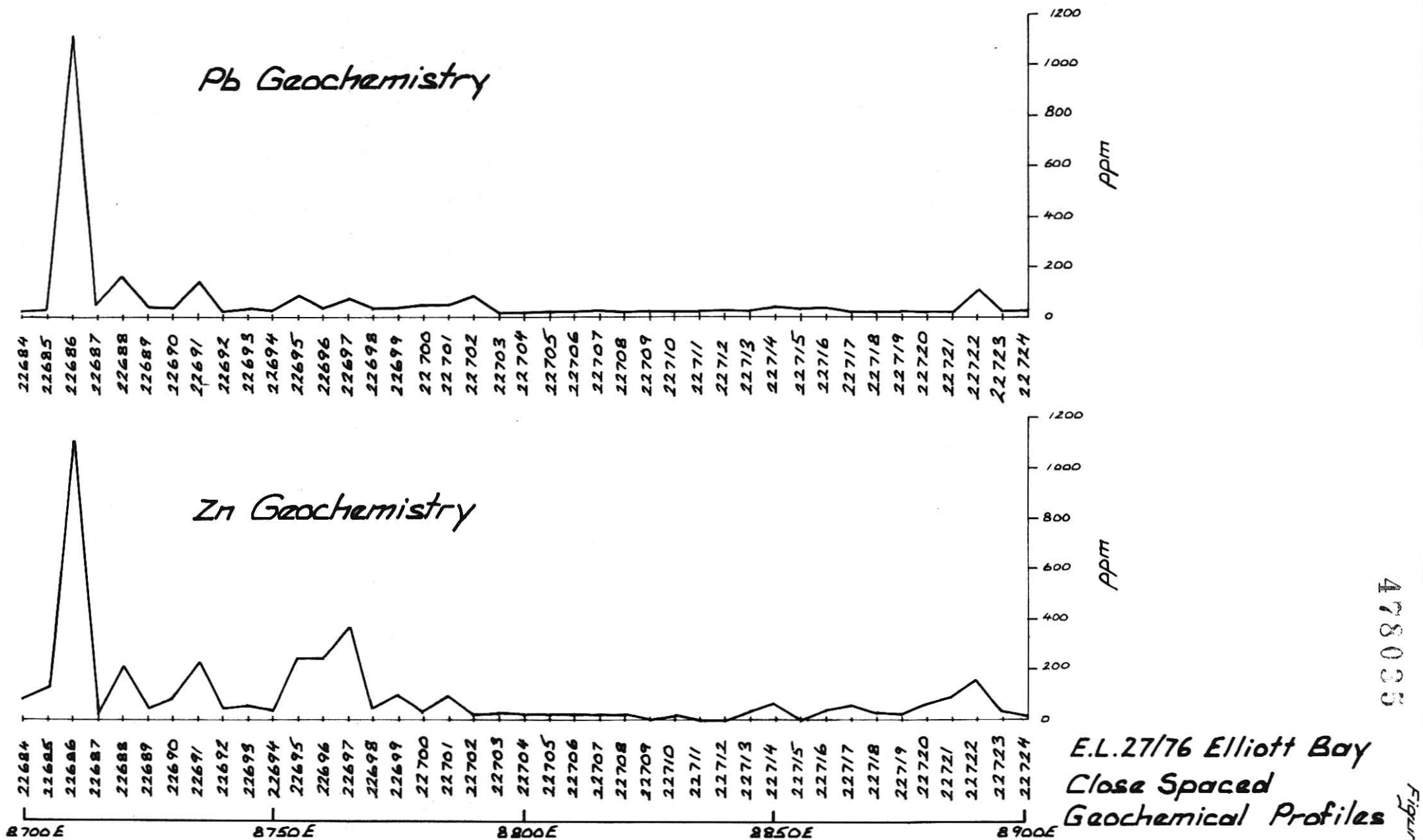
5.1.2.Close Spaced C-Horizon Geochemical Sampling

Samples were collected at 5m intervals over the following zones:

Line 7900N, 8700-8900E
Line 8100N, 8700-8900E
Line 9200N, 9550-9750E
Line 9600N, 9250-9500E

Results are tabulated in Appendix II and presented in profile form in Figures 4,5,6,7.


Pb Geochemistry
Zn Geochemistry
ppm
1200
1000
800
600
400
200
0
22643 22644 22645 22646 22647 22648 22649 22650 22651 22652 22653 22654 22655 22656 22657 22658 22659 22660 22661 22662 22663 22664 22665 22666 22667 22668 22669 22670 22671 22672 22673 22674 22675 22676 22677 22678 22679 22680 22681 22682 22683
8700E
8750E
8800E
8850E
8900E
Scale: 1:1000
5 cm
E.L.27/76 Elliott Bay
Close Spaced
Geochemical Profiles
Line 7900N
Figure 4
478034



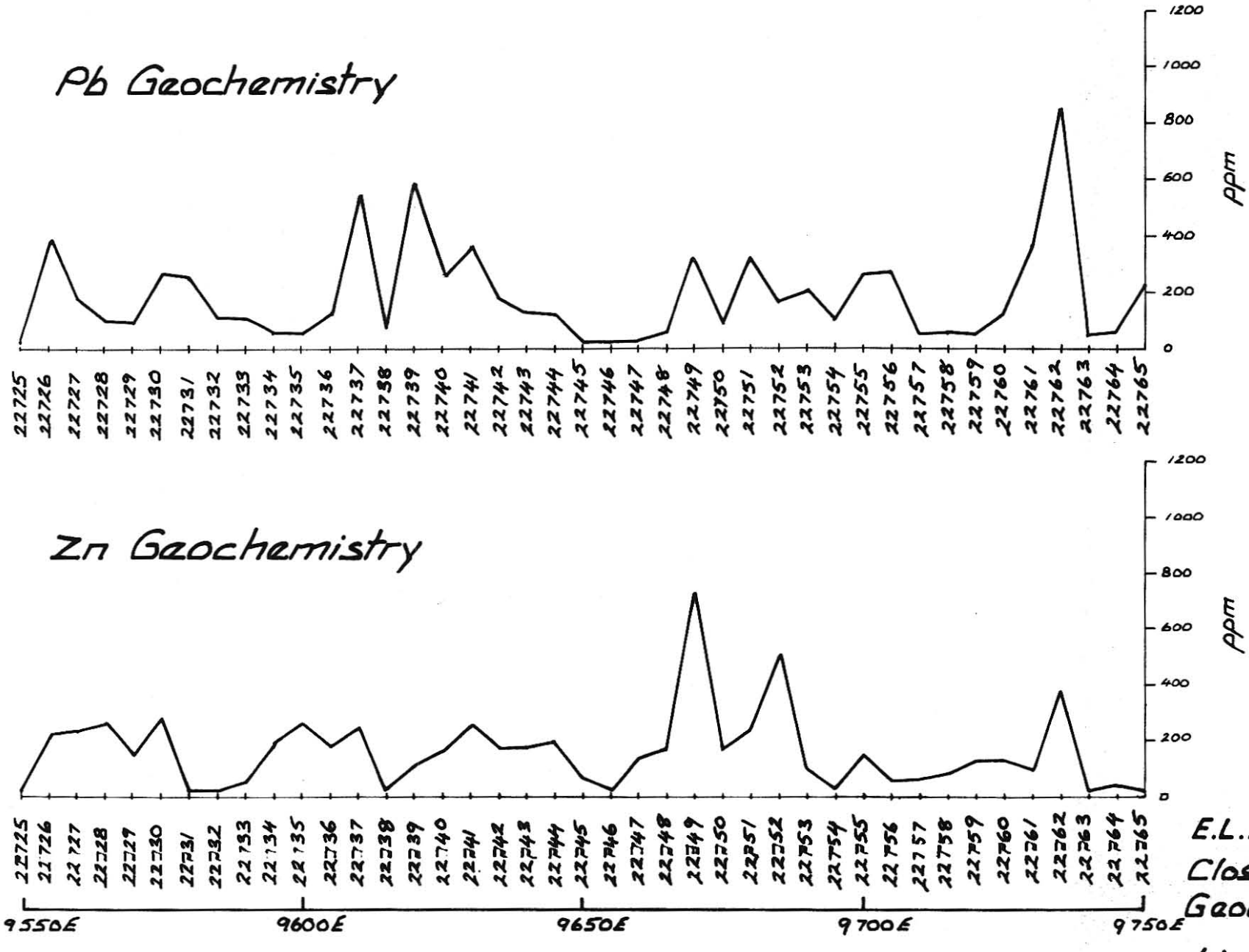
E.L. 27/76 Elliott Bay
Close Spaced
Geochemical Profiles

Line 8100N

Scale: 1:1000

47803

Figure 5



E.L.27/76 Elliott Bay
Close Spaced
Geochemical Profiles

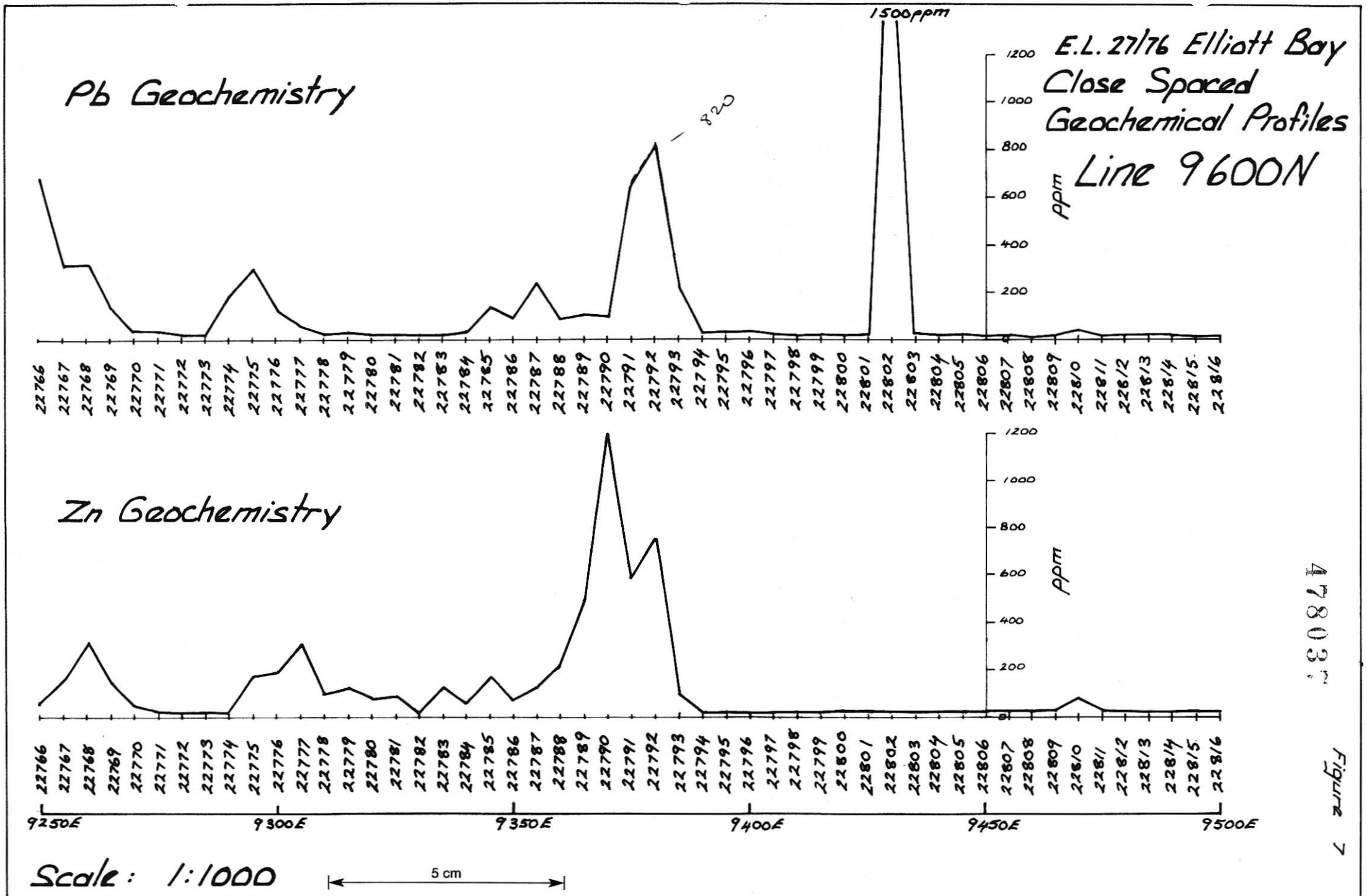
Line 9200N

Scale: 1:1000

5 cm

Figure 6

93081



478038

Figure 7

Samples were collected at 10m intervals over the following segments of the Voyager 19 grid:

Line 12400N, 9200-9600E
Line 12550, 9700-9900E
Line 12650N, 9750-9950E
Line 12750N, 9800-10000E
Line 12850N, 9850-10050E
Line 12850N, 10200-10300E
Line 12950N, 9900-10250E
Line 13100N, 9900-10000E

The Voyager 19 infill was designed to test the concept that a weak NNE striking IP trend, through about 12600N/9850E, represented the stratigraphic equivalent of the known massive sulphide lenses. The lead and zinc C-Horizon data (see Plans 44,45) do not bear this out.

5.1.3. Trenching/Pitting

Short trenches or pits were excavated, by hand or by Bombardier mounted 300mm hydraulic backhoe, over 16 zones of anomalous IP chargeability.
These were as follows:

Figure 8	14200N;	Nine 2m long pits at 12.5m intervals between 9175E and 9275E.
Figure 9	13600N:	Nine 2m long pits at 12.5m intervals between 9050E and 9151E.
Figure 10	12800N:	Six 2m long pits at 10m intervals between 9925E and 9975E.
Figure 11	12600N:	Six 2m long pits at 10m intervals between 9850E and 9900E.
Figure 12	12400N:	Two 5m long trenches at 9625-9631E and 9650-9655E.
Figure 13	12200N:	24m Costean 9676-9700E.

Figure 14	11600N:	Five 2m long pits at 25m intervals between 9700E and 9800E.
Figure 15	11600N:	Five 2m long pits at 25m intervals between 9400E and 9500E.
Figure 16	11400N:	One short trench from 9421-9429E.
Figure 17	11400N:	Eight 2m long pits at 10m intervals between 10070E and 10140E.
Figure 18	9800N:	Five 2m pits at 25m intervals between 10325E and 10425E.
Figure 19	9600N:	Five 2m pits at 25m intervals between 10250E and 10350E.
Figure 20	8000N:	Six 2m pits at 20m intervals between 9100E and 9200E.
Figure 21	8000N:	Three 2m long pits at 25m intervals between 10000E and 10050E.
Figure 22	7800N:	Three deep pits at 9075E, 9100E and 9125E.
	7600N:	Pits at 8350 and 8375E, unable to reach bedrock.

Geological observations and rock chip/channel samples were taken from exposed bedrock in all excavations (except those on 7600N).

Rock chip/channel samples representative of one metre intervals, were analysed for Cu, Pb, Zn, Fe, Ag (AAS); As, Ba, Sn, W (XRF) and Au (Carbon Rod/AAS).

The results are tabulated in Appendix IV and graphically summarized in Figures 8-22.

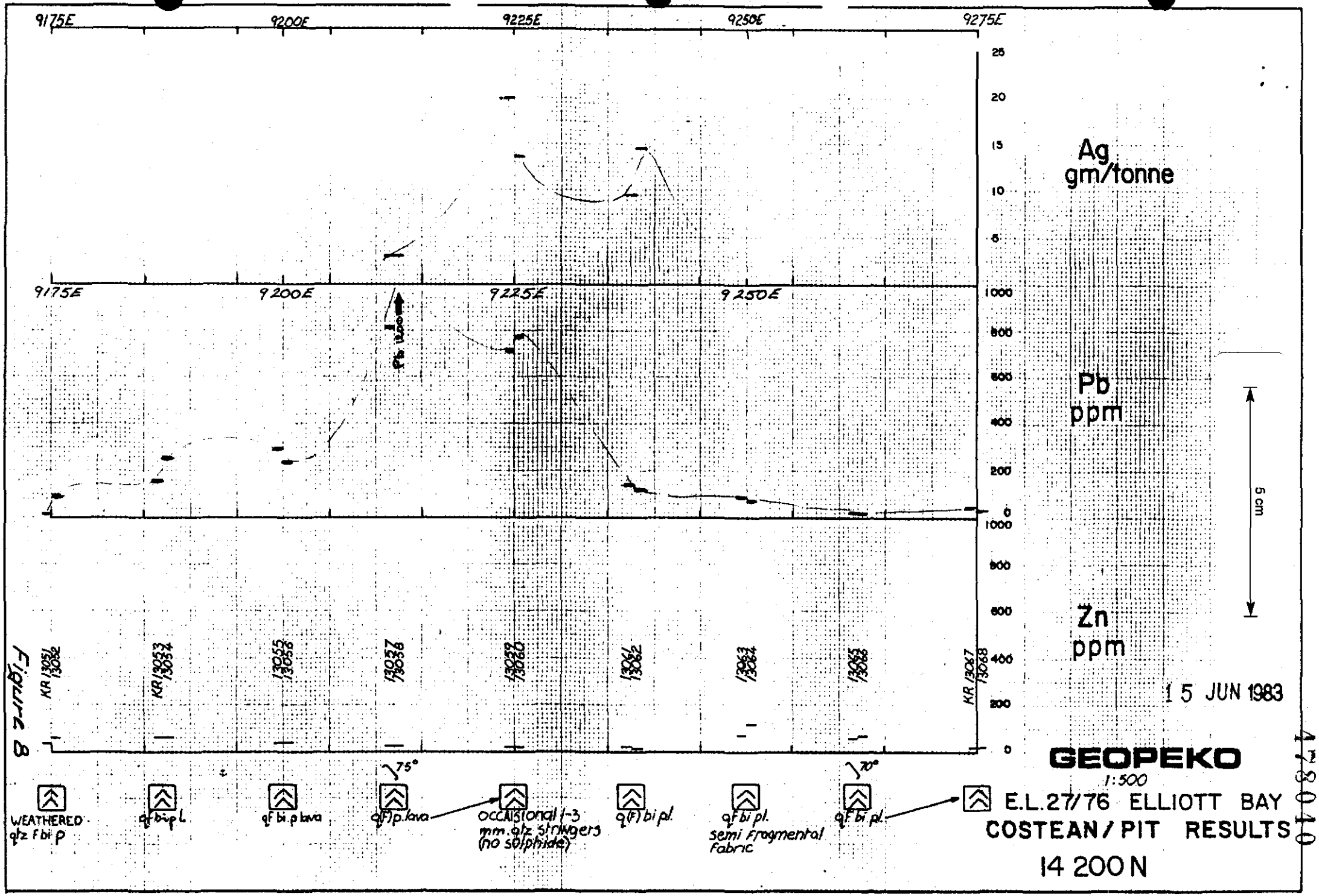
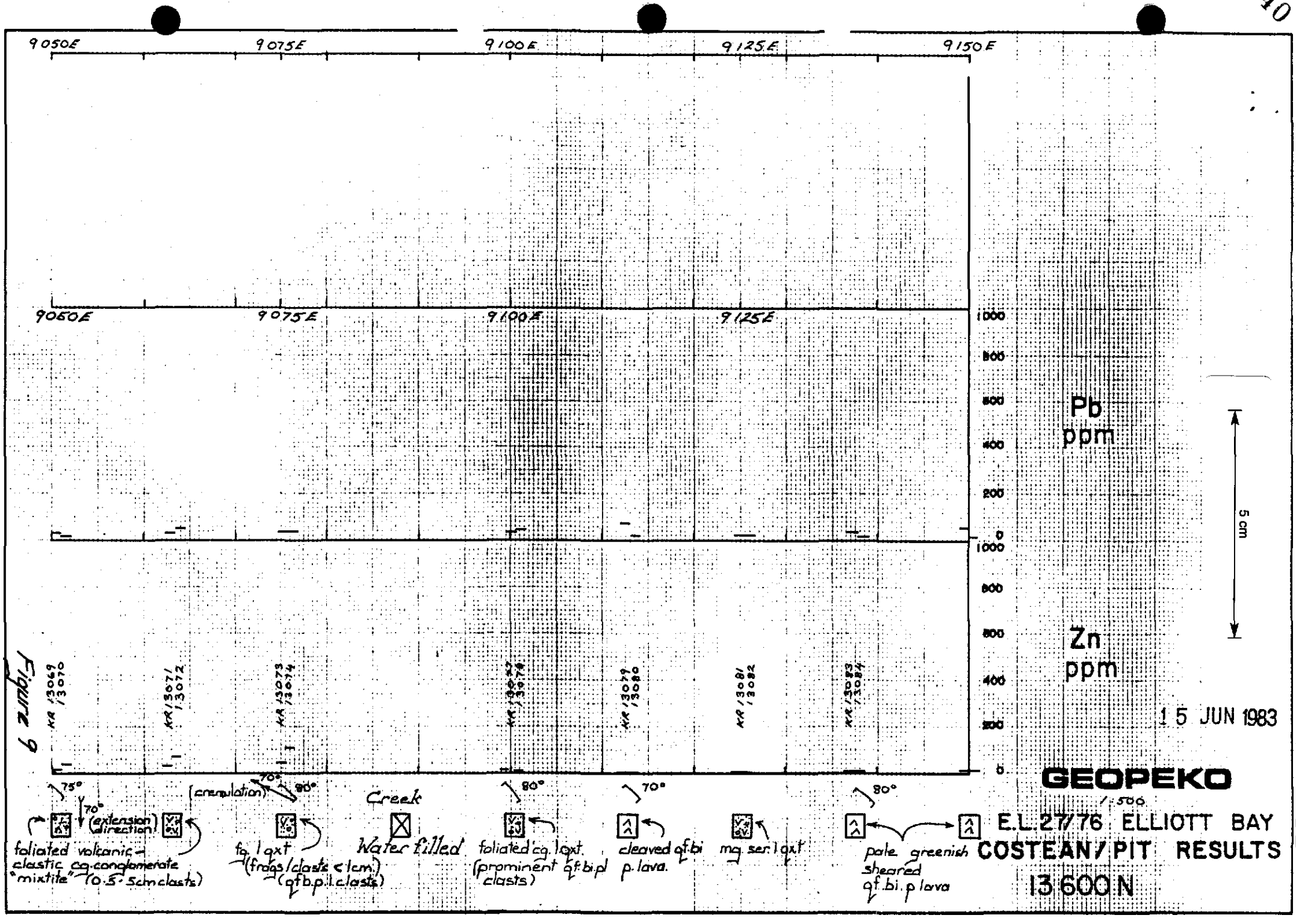

9175E
9200E
9225E
9250E
9275E
Ag gm/tonne
Pb ppm
Zn ppm
5 cm
KR 13051 13052
KR 13053 13054
13055 13056
13057 13058
13059 13060
13061 13062
13063 13064
13065 13066
KR 13067 13068
75°
70°
WEATHERED qtz F bi P
qF bi p l.
qF bi. p lava
q(F) p. lava
occasional 1-3 mm. qtz stringers (no sulphide)
q(F) bi pl.
qF bi pl. semi Fragmental Fabric
qF bi pl.
15 JUN 1983
GEOPEKO
1:500
E.L. 27/76 ELLIOTT BAY
COSTEAN / PIT RESULTS
14 200 N

Figure 8


9050E
9075E
9100E
9125E
9150E
9060E
9075E
9100E
9125E
Pb ppm
Zn ppm
1000
800
600
400
200
0
5 cm
KR/13069 13070
KR/13071 13072
KR/13073 13074
KR/13077 13078
KR/13079 13080
KR/13081 13082
KR/13083 13084
Figure 9
15 JUN 1983
GEOPEKO
1:500
E.L. 27/76 ELLIOTT BAY
COSTEAN/PIT RESULTS
13 600 N
75°
70°
(extension direction)
foliated volcanic-clastic cg-conglomerate "mixtite" (0.5-5cm clasts)
(crenulation)
70°
80°
fg. lapt (frags/clasts < 1cm.) (qf.b.p.l clasts)
Creek
Water filled
80°
foliated cg. lapt. (prominent qf.bi.pl clasts)
70°
cleaved qf.bi p. lava.
mg. ser. lapt
80°
pale greenish sheared qf.bi. p lava
4/0041

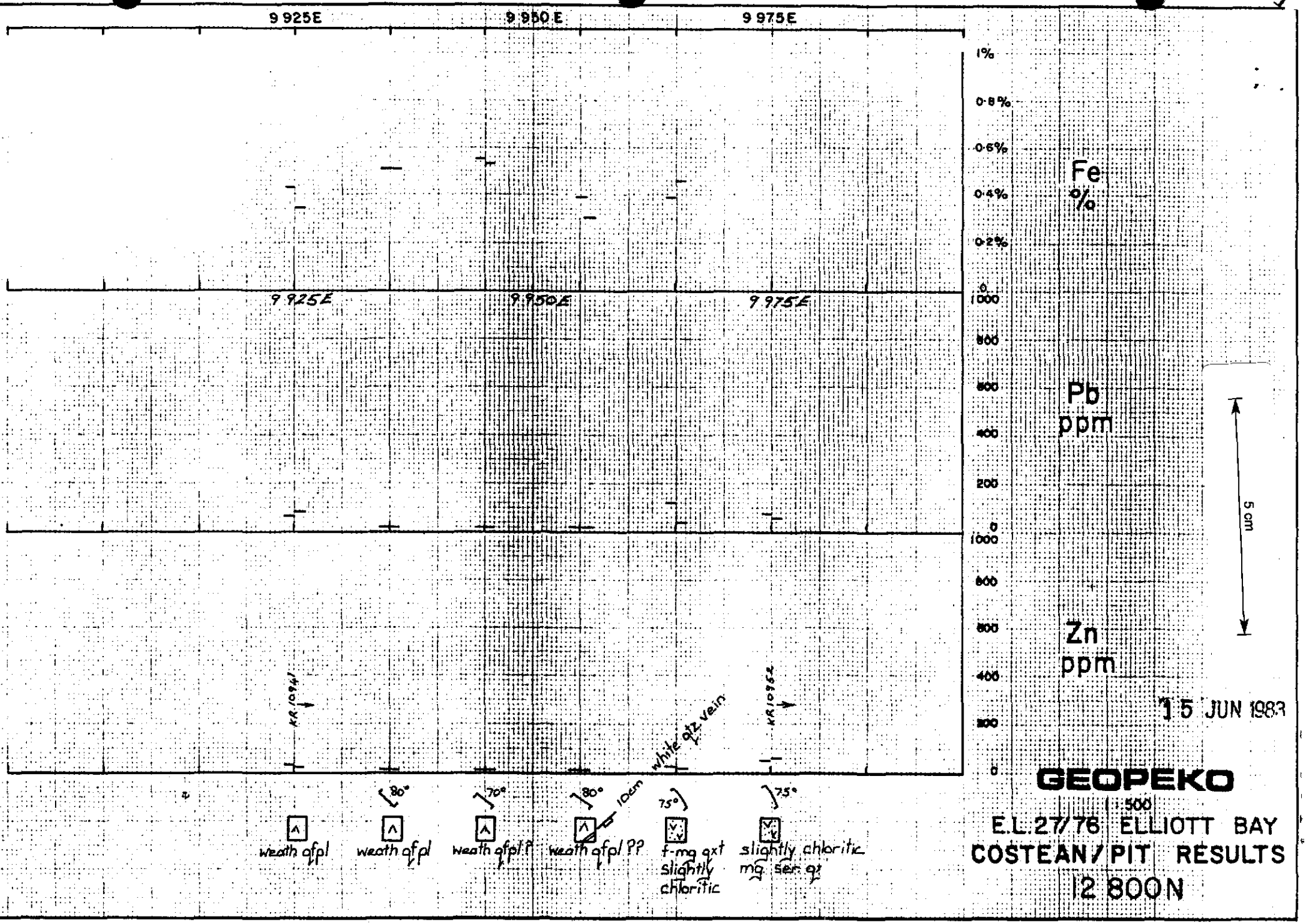
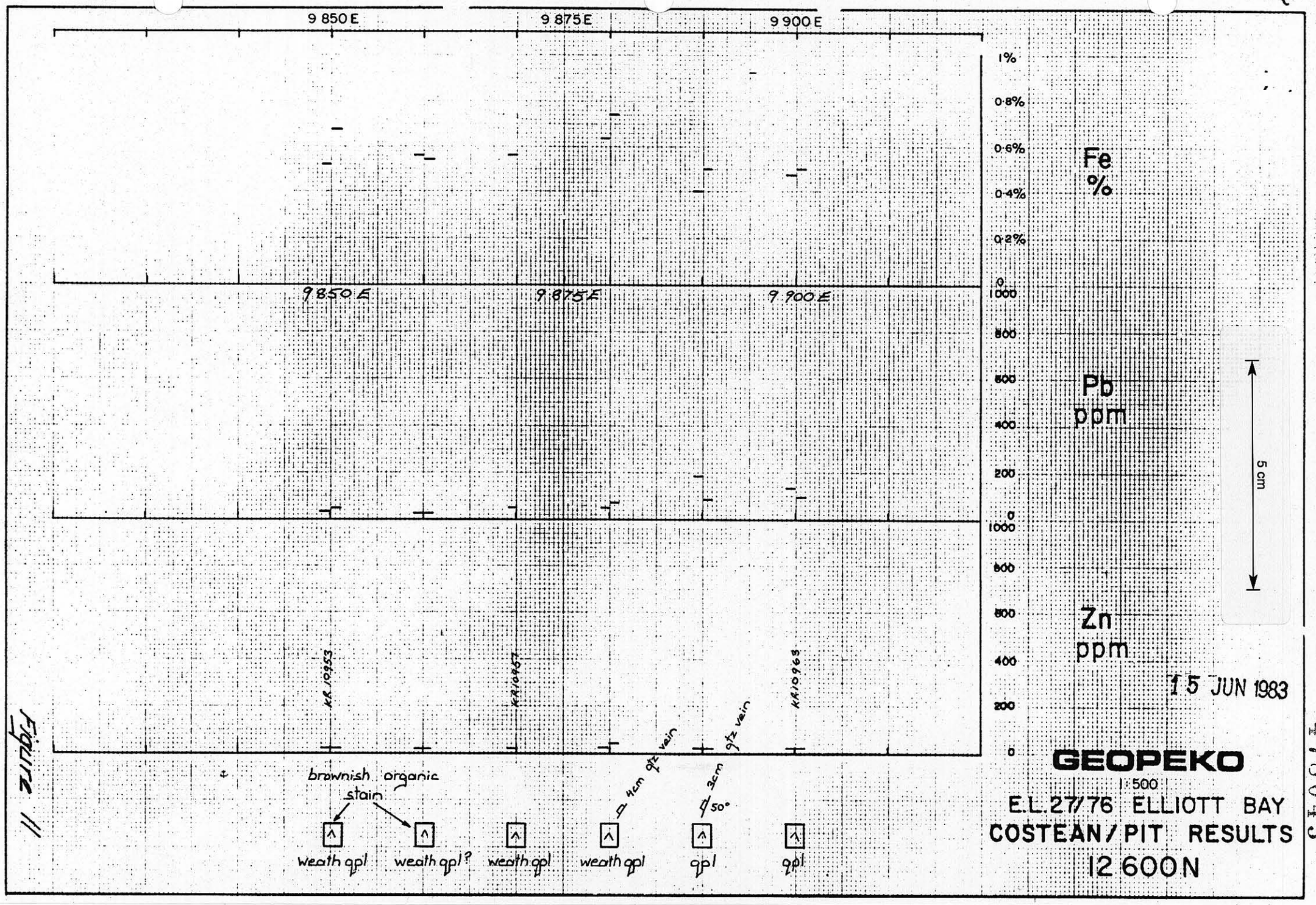

9 925E
9 950E
9 975E
1%
0·8%
0·6%
0·4%
0·2%
0
Fe
%
9 925E
9 950E
9 975E
1000
800
600
400
200
0
Pb
ppm
5 cm
1000
800
600
400
200
0
Zn
ppm
KR 1094
KR 1096
white qtz vein
80°
70°
80°
10cm
75°
75°
weath afpl
weath afpl
weath afpl ?
weath afpl ??
f-mg qxt slightly chloritic
slightly chloritic mg. ser. qz
500
15 JUN 1983
GEOPEKO
E.L. 27/76 ELLIOTT BAY
COSTEAN / PIT RESULTS
12 800N

Figure 10


9 850 E
9 875E
9 900 E
1%
0·8%
0·6%
Fe
%
0·4%
0·2%
0
1000
800
600
Pb
ppm
400
200
0
1000
800
600
Zn
ppm
400
200
0
5 cm
9850 E
9 875E
9 900 E
KR 10953
KR10957
KR10965
brownish organic stain
4cm qtz vein
3cm qtz vein
50°
weath qpl
weath qpl?
weath qpl
weath qpl
qpl
qpl
Figure 11
15 JUN 1983
GEOPEKO
1:500
E.L.27/76 ELLIOTT BAY
COSTEAN/PIT RESULTS
12 600N

9 625E
9 630E
9 650E
9 655E

9625E
9655E

1000
800
600
400
200
0
1000
800
600
400
200
0

Pb
ppm

Zn
ppm

KR 10969
KR 10971
KR 10964
KR 10968

weath. clayey chloritic qf xtuff
75°
partly silicified fragmental grey qtz-feldspar crystal tuff
up to 5% dissem. pyrite in dissem. trains // to cleavage
chloritic mg. qf. x.tuff
5 cm

GEOPEKO
1:500
E.L.27/76 ELLIOTT BAY
COSTEAN/PIT RESULTS
12 400N

15 JUN 1982
15 JUN 1982

Figure 12

4780441

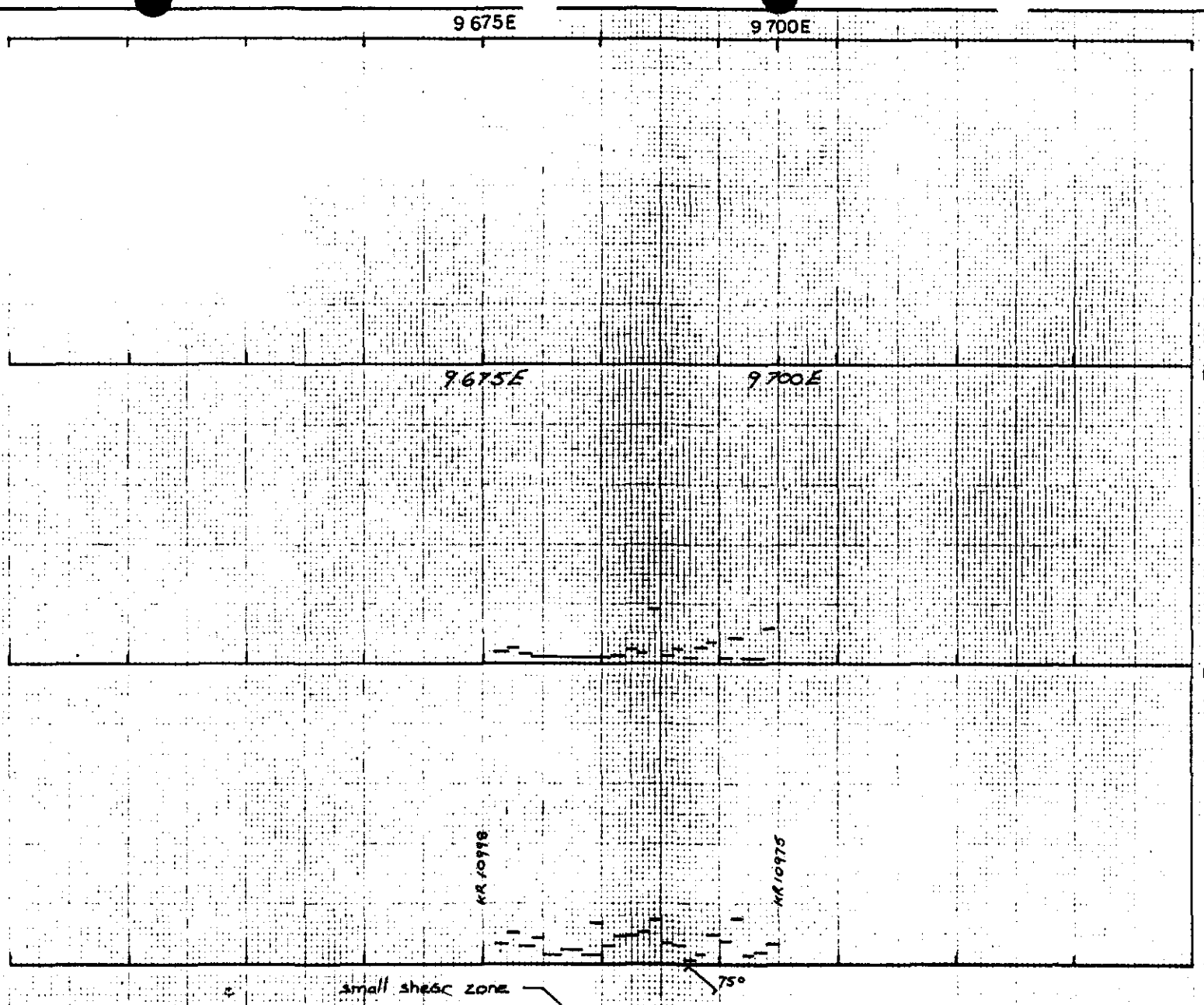


Figure 13

breccidated chloritic qtz.(feldspar) crystal (lithic) tuff.
disseminated pyrite 1-2% up 10% locally;
associated with dark chlorite in breccia fill zones.

15 JUN 1983

GEOPEKO

1:500

E.L.2776 ELLIOTT BAY
COSTEAN/PIT RESULTS
12 200N

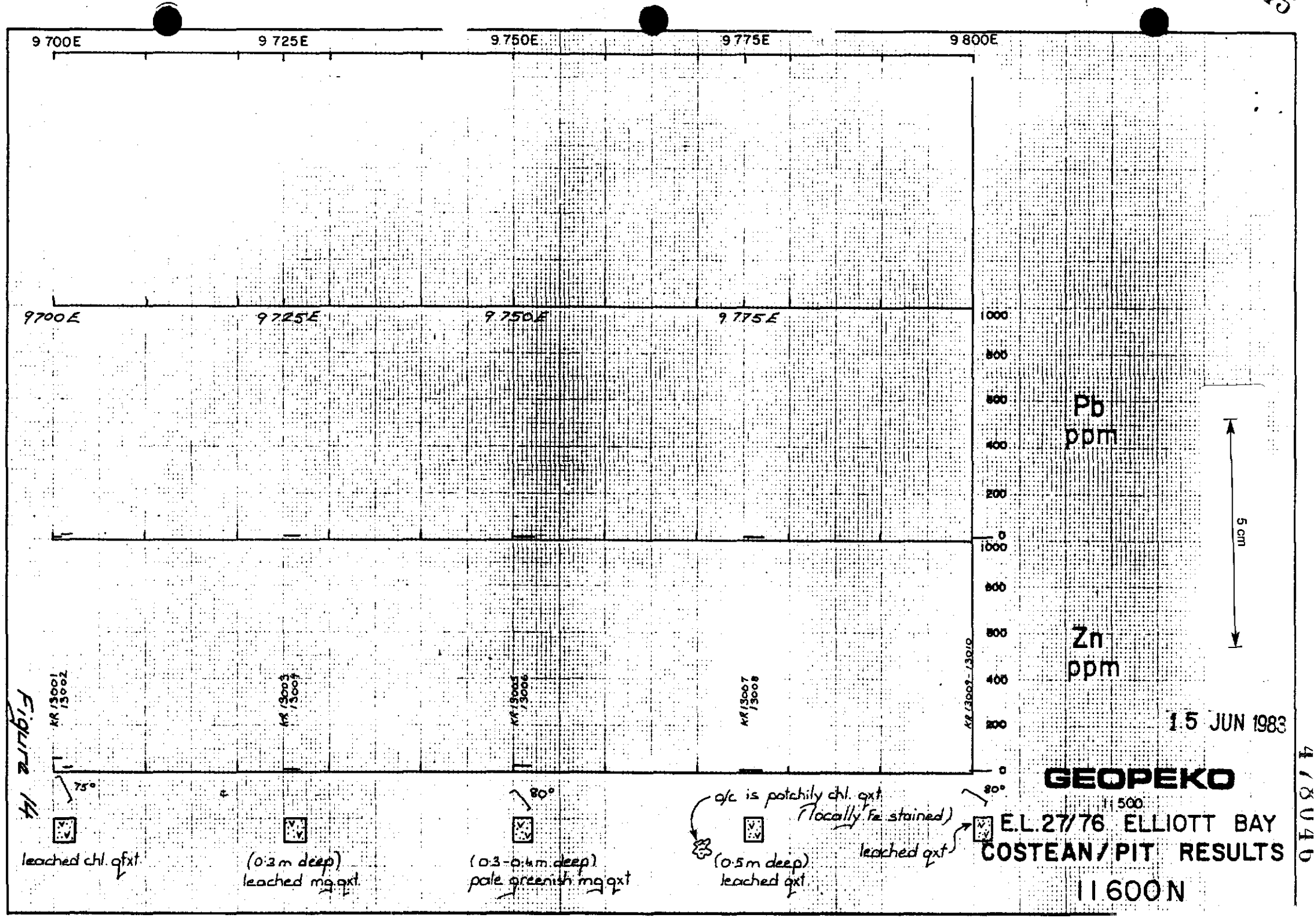
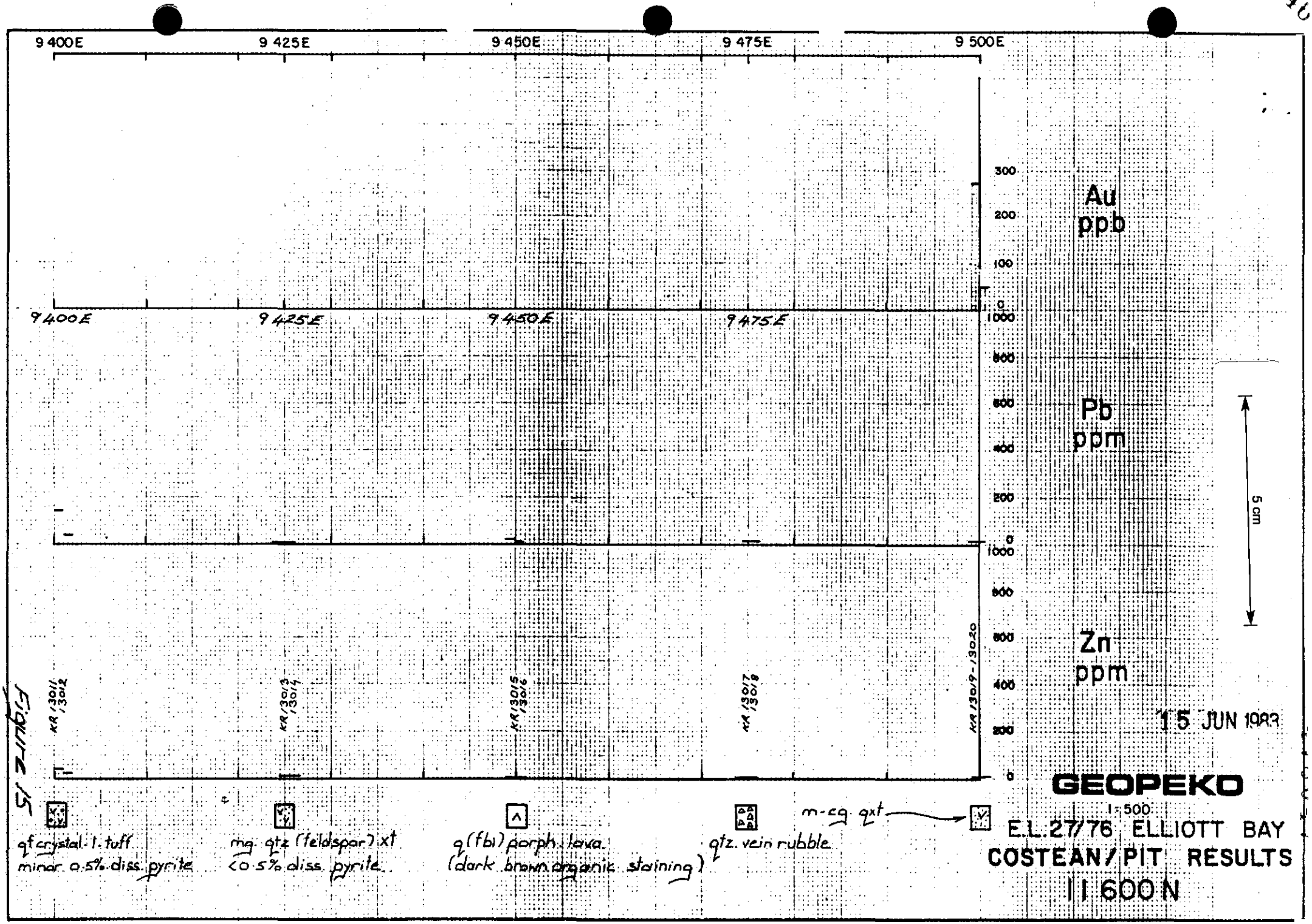
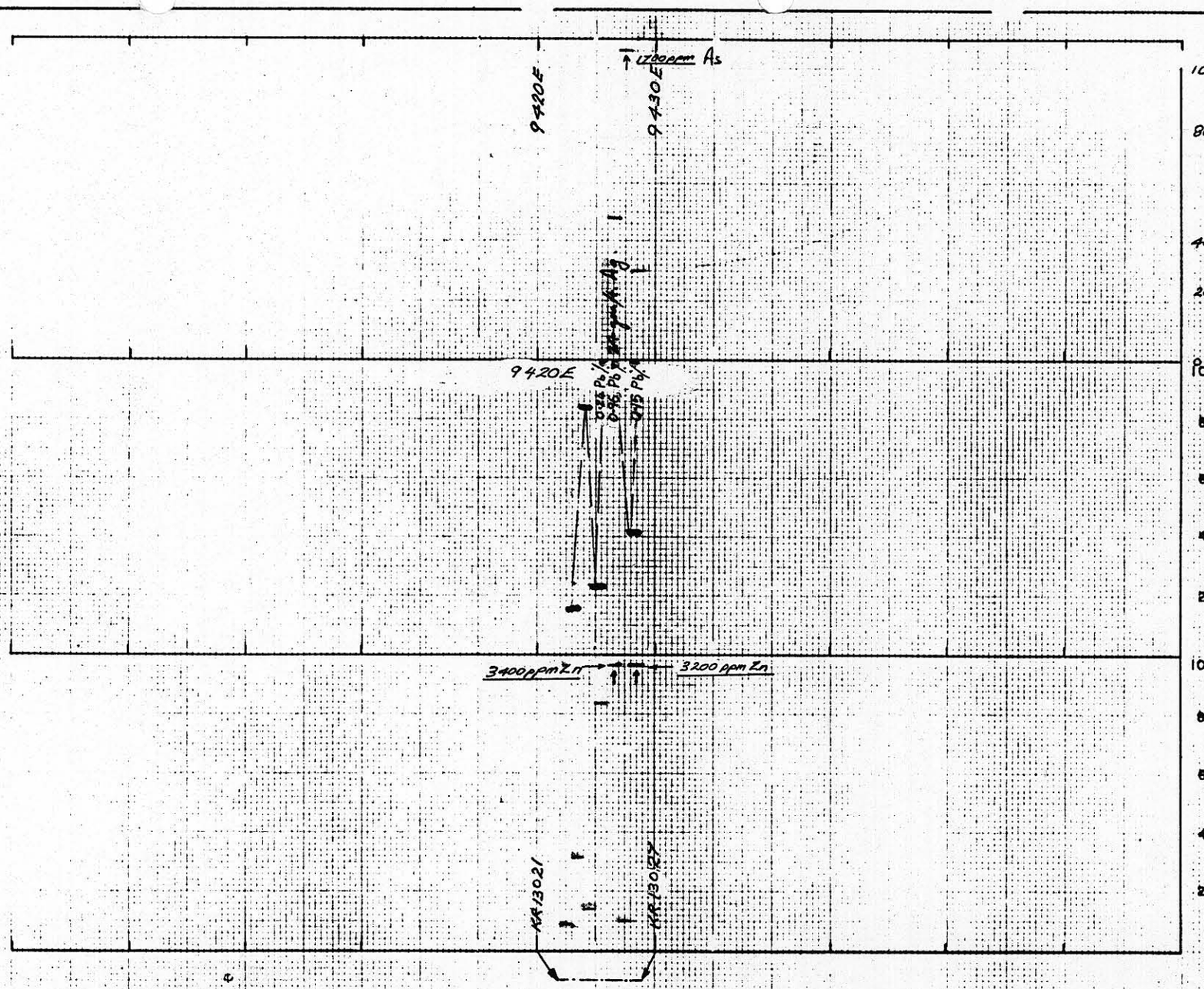

9 700E
9 725E
9 750E
9 775E
9 800E
9700E
9725E
9750E
9775E
1000
800
600
400
200
0
Pb
ppm
5 cm
Zn
ppm
KR 13001
13002
KR 13003
13004
KR 13005
13006
KR 13007
13008
KR 13009-13010
75°
80°
80°
leached chl. qfxt
(0.3m deep)
leached mg qxt
(0.3-0.4m deep)
pale greenish mg qxt
a/c is patchily chl. qxt
(locally Fe stained)
(0.5m deep)
leached qxt
leached qxt
15 JUN 1983
GEOPEKO
1:500
E.L.27/76 ELLIOTT BAY
COSTEAN/PIT RESULTS
11600N

Figure 14


9 400E
9 425E
9 450E
9 475E
9 500E
Au ppb
300
200
100
0
Pb ppm
1000
800
600
400
200
0
Zn ppm
1000
800
600
400
200
0
5 cm
KR/3011/3012
KR/3013/3014
KR/3015/3016
KR/3017/3018
KR/3019-/3020
qf crystal-l. tuff
minor 0.5% diss. pyrite
mg. qtz (feldspar) xt
<0.5% diss. pyrite
q(fbl) porph. lava.
(dark brown organic staining)
qtz. vein rubble
m-cg. qxt
15 JUN 1993
GEOPEKO
1:500
E.L. 27/76 ELLIOTT BAY
COSTEAN/PIT RESULTS
11 600 N



15 JUN 1983

GEOPEKO

SCALE 1:500

E.L. 2776 ELLIOTT BAY

COSTEAN / PIT RESULTS

11400 N

Figure 16

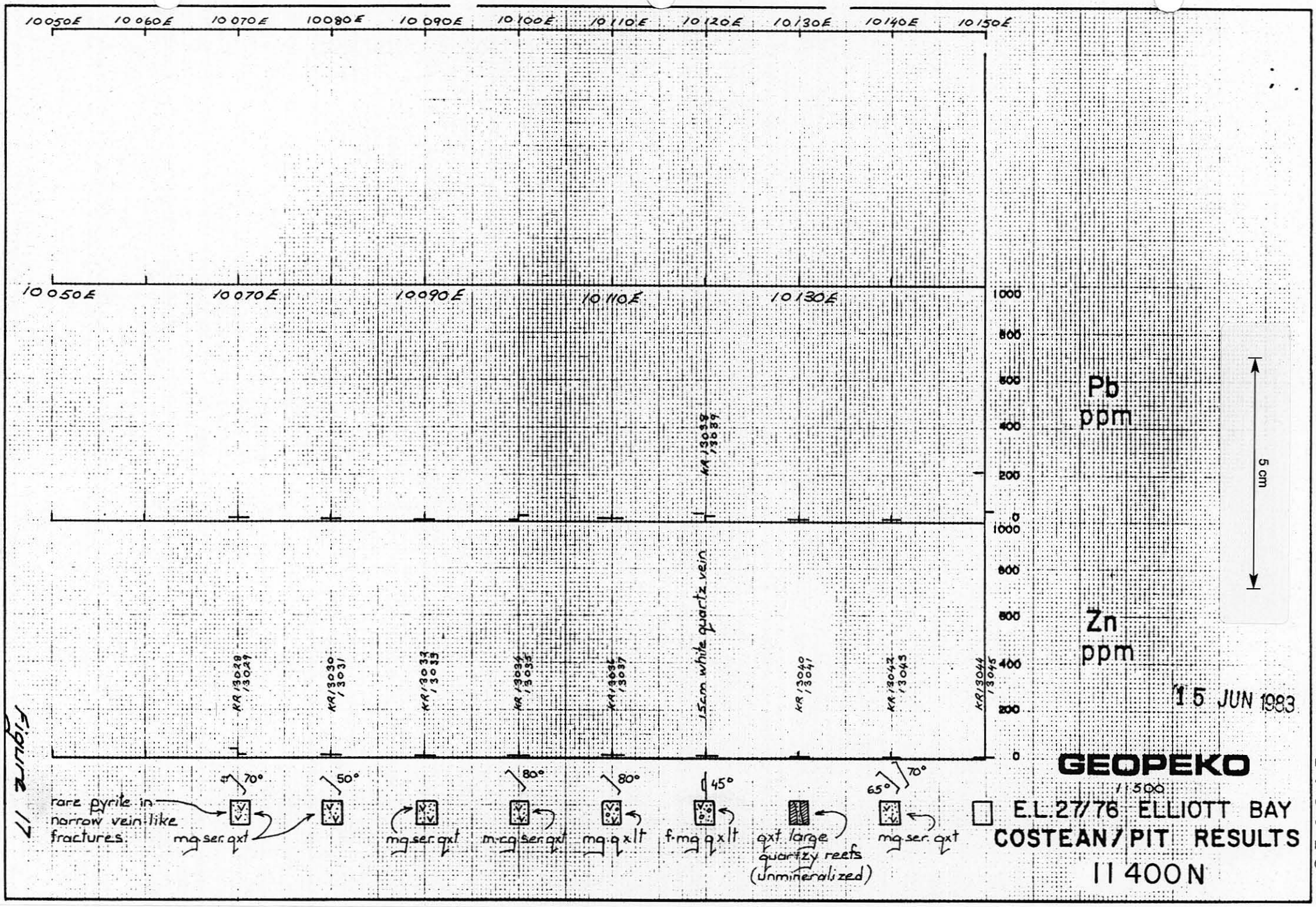
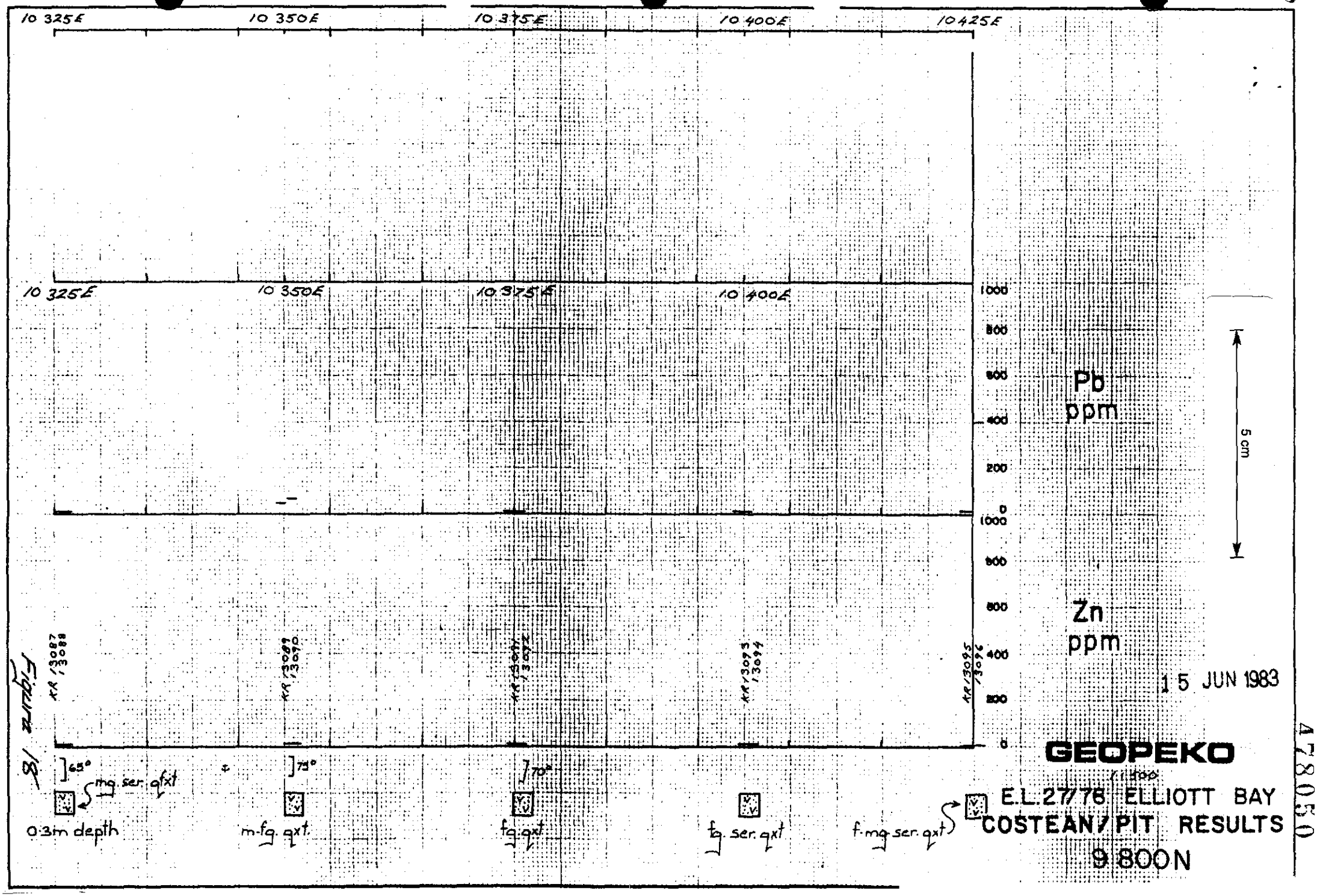
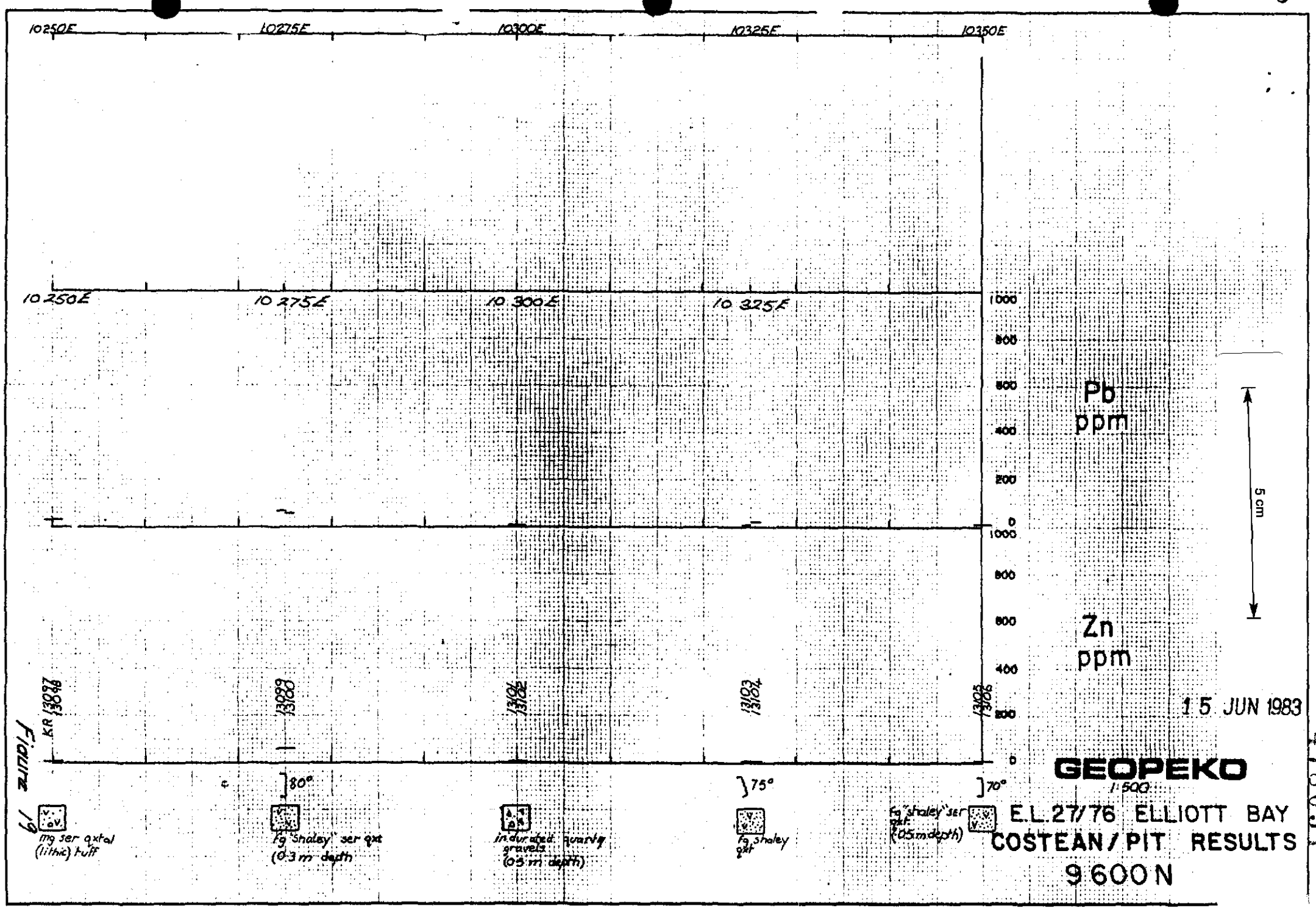

10050E
10060E
10070E
10080E
10090E
10100E
10110E
10120E
10130E
10140E
10150E
10050E
10070E
10090E
10110E
10130E
1000
800
600
400
200
0
Pb
ppm
5 cm
Zn
ppm
KR 13039 / 13089
KR 13028 / 13029
KR 13030 / 13031
KR 13032 / 13033
KR 13034 / 13035
KR 13036 / 13037
15cm white quartz vein
KR 13040 / 13041
KR 13042 / 13043
KR 13044 / 13045
rare pyrite in narrow vein like fractures.
mg ser. qxt
70°
50°
mg ser. qxt
80°
m-cg ser. qxt
80°
mg qxlt
45°
f-mg qxlt
qxt large quartzy reefs (unmineralized)
65°
70°
mg ser. qxt
GEOPEKO
1:500
E.L. 27/76 ELLIOTT BAY
COSTEAN / PIT RESULTS
11400N
15 JUN 1983

Figure 17


10 325E
10 350E
10 375E
10 400E
10425E
Pb
ppm
Zn
ppm
1000
800
600
400
200
0
5 cm
KR/13087
13088
KR/13089
13090
KR/13091
13092
KR/13093
13094
KR/13095
13096
65°
mg. ser. qfxt
0.3m depth
75°
m-fg. qxt
70°
fg. qxt
fg. ser. qxt
f-mg ser. qxt
15 JUN 1983
GEOPEKO
E.L.2776 ELLIOTT BAY
COSTEAN / PIT RESULTS
9 800N


10250E
10275E
10300E
10325E
10350E
10 250E
10 275E
10 300E
10 325E
1000
800
600
400
200
0
Pb
ppm
5 cm
Zn
ppm
15 JUN 1983
GEOPEKO
1:500
E.L.27/76 ELLIOTT BAY
COSTEAN / PIT RESULTS
9600N
KR 13087
13088
13104
13102
13103
13104
13105
FIGURE 19
80°
75°
70°
mg ser qxtal (lithic) tuff
fg 'shaley' ser qxt (0.3 m depth
indurated quartz gravels (0.5 m depth)
fg shaley qxt
fg 'shaley' ser qxt (0.5 m depth)

47805

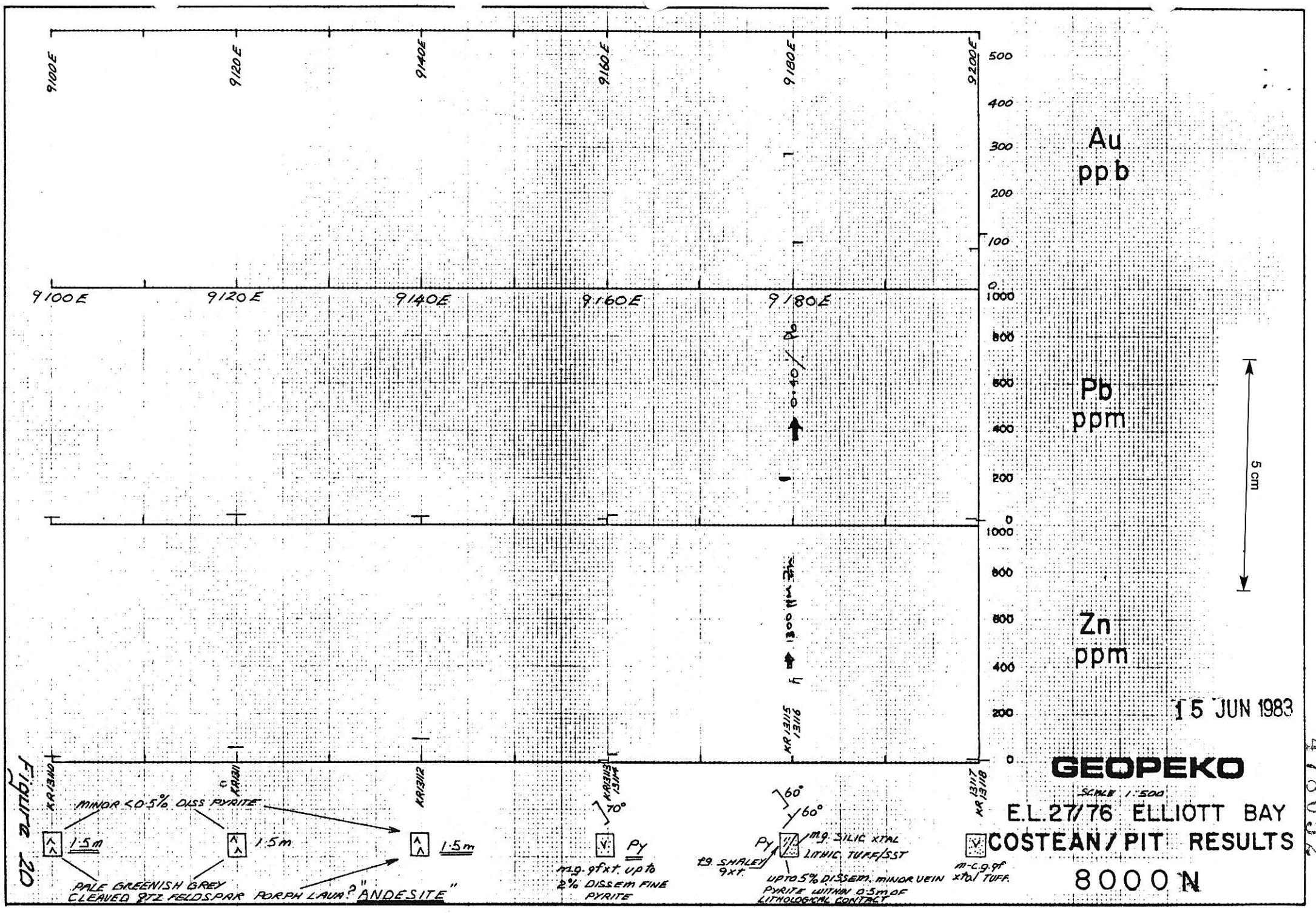


Figure 20

15 JUN 1983

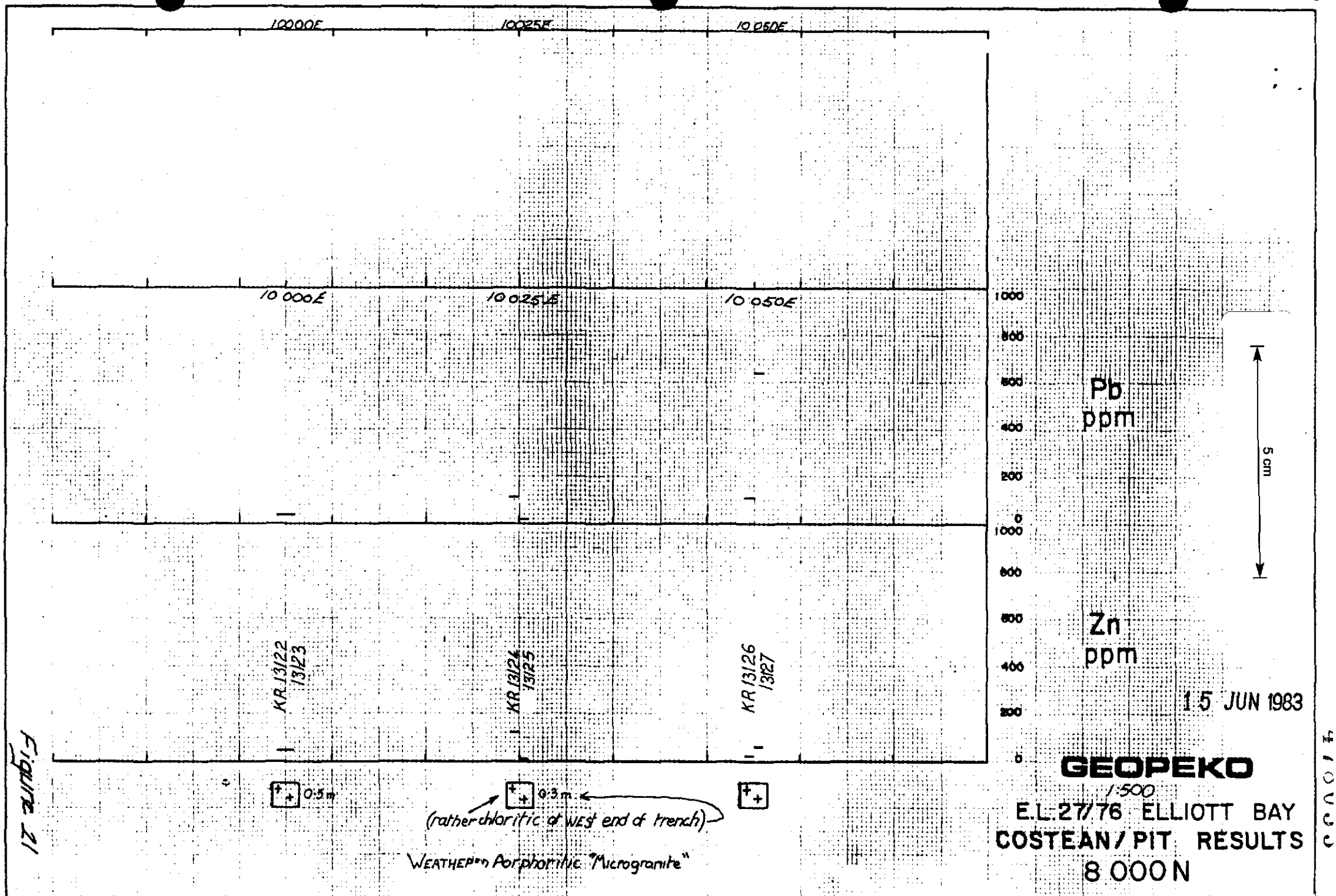
GEOPEKO

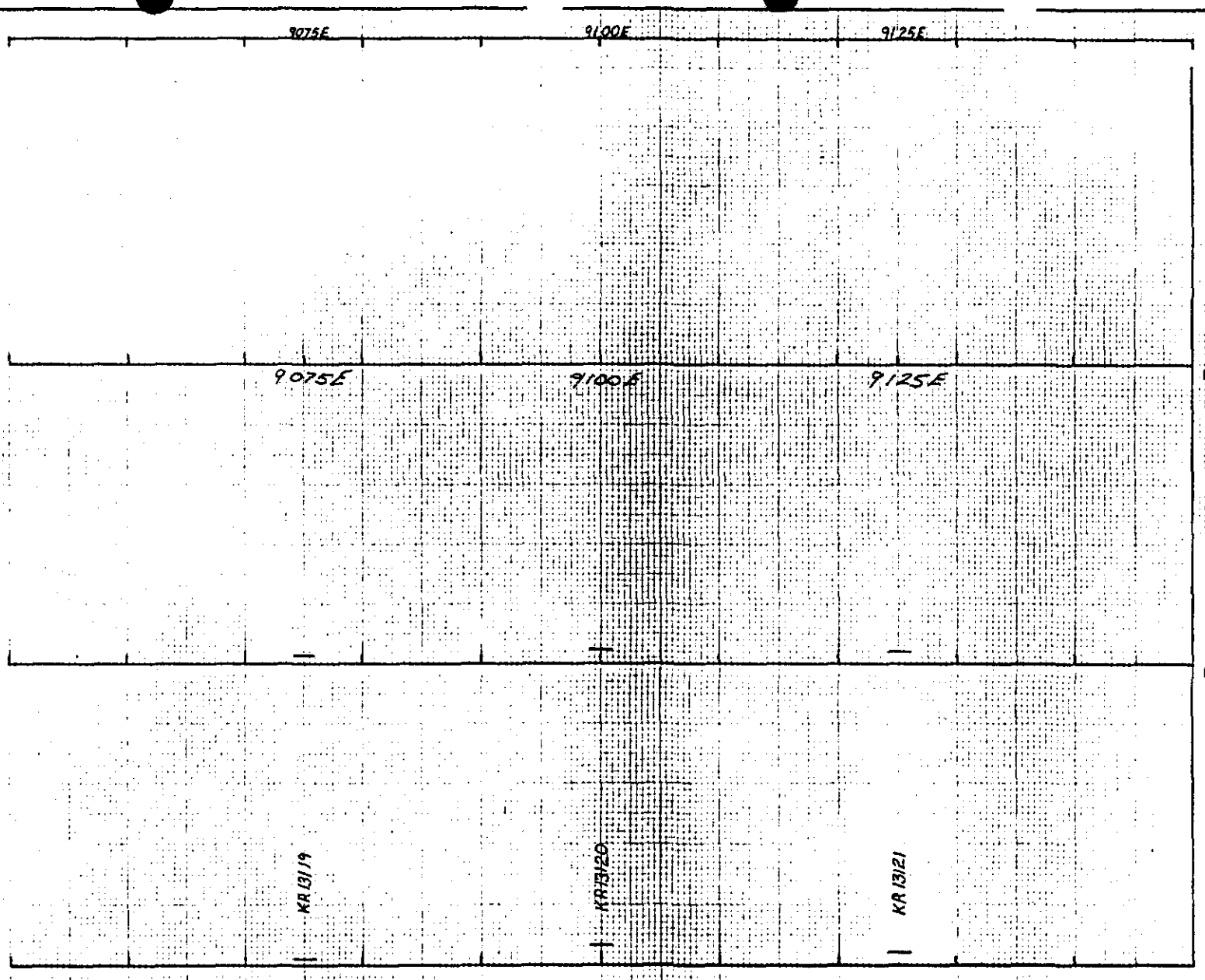
SCALE 1:500

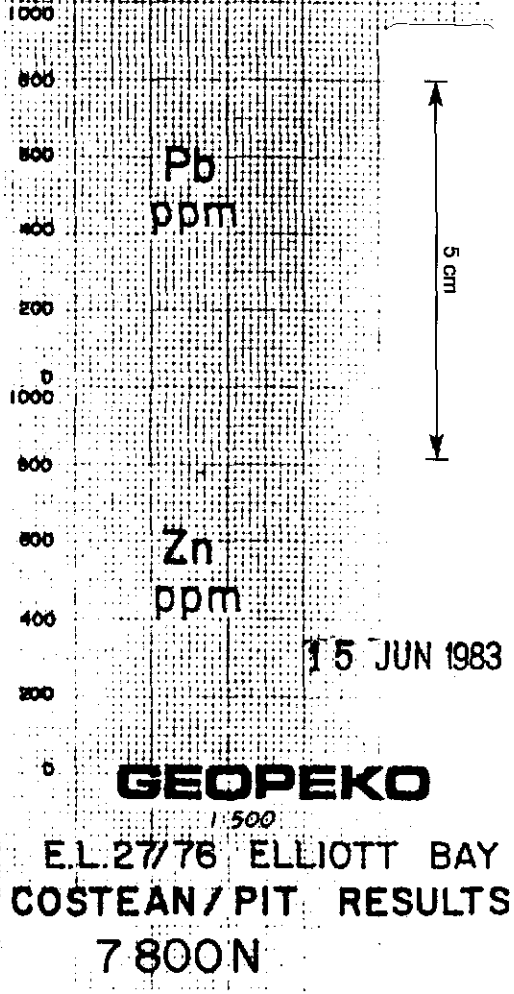
E.L. 27/76 ELLIOTT BAY

COSTEAN / PIT RESULTS

8000 N


10000E
10025E
10050E
10 000E
10 025E
10 050E
1000
800
600
400
200
0
1000
800
600
400
200
0
Pb
ppm
Zn
ppm
5 cm
KR 13122
13123
KR 13124
13125
KR 13126
13127
0·5m
0·3m
(rather chloritic at WEST end of trench)
WEATHERED Porphyritic "Microgranite"
Figure 21
15 JUN 1983
GEOPEKO
1:500
E.L. 27/76 ELLIOTT BAY
COSTEAN / PIT RESULTS
8 000 N





15 JUN 1983

GEOPEKO

1:500

E.L.27/76 ELLIOTT BAY

COSTEAN / PIT RESULTS

7 800N

Figure 22

The trenching provided useful geological and geochemical information which was nevertheless somewhat limited by the effect of strong leaching/weathering in the upper few centimetres of bedrock beyond which the backhoe could not penetrate. It is considered that Jacro-auger sampling, where available, would give a more reliable indication of metal values than the rock chip sampling.

However, significant base metal responses were obtained from trenches on the following lines:

14200N		(V33)
11400N	(9421-9429E)	(V29W)
8000N	(9100-9200E)	(V30)

These areas have been subjects of (or one earmarked for) more detailed investigations and the specific details are discussed under the appropriate headings (5.2, 5.4 and 5.6).

5.2 VOYAGER 33

The Voyager 33 area (Figure 2) was gridded at 200m line spacing with geological mapping and C-Horizon geochemical sampling (MATE portable Auger) during the 1981-82 season. (Wilson et. al. 1982). This work outlined two significant Pb-Zn-Ag geochemical anomalies, one in a similar stratigraphic location to the Voyager 19 massive sulphide lenses and the other within rocks of the 'Western Sequence'.

Follow up during the 1982-83 season involved:

1. infill gridding on 100m line spacing.
2. infill geochemical sampling with close spaced sampling over the anomalous zones.
   (STIHL portable power auger)
3. updating of geological mapping. (largely based on rock chips from auger cuttings.)
4. Dipole IP coverage (as part of regional survey).
5. a 40m long trench was excavated (by hand) across the peak of the geochemical anomaly on line 14100N.
6. a series of pits were excavated (by hand) over IP anomalies on lines 14200N and 13600N.

5.2.1. Geology

The updated geological plan is presented as Plan No: 11. There is essentially no change in the geological interpretation.

5.2.2. Infill C-Horizon Geochemical Sampling

Was completed at 25m intervals on 100m spaced infill lines. Updated soil sample location plans and contoured Pb, Zn, Ag results are presented as plans numbered: 32,33,34 and 37,38,39.

The principal feature is a narrow, NNW elongate Pb, Zn, Ag anomaly of some 300m strike length (between 13800N and 14100N) coincident with the contact between argillaceous shales and tuffaceous sandstones within the 'Western Sequence'.

Close spaced auger sampling (5m and 2m intervals) over the anomaly on lines 14000N and 14100N indicated peak values of 4.1%Pb, 1.25%Zn and 180gm/t Ag with upto 290ppb Au and 0.3%As.

Geochem profiles are shown on Plan No 56. Lead to zinc ratios are high (>1) tending to indicate a vein style association.

A less coherent and weaker group of Pb-Zn-Ag anomalies roughly coincident with a broad IP anomaly, occurs on lines 14200N-14300N between 9200E and 9600E within a fairly massive quartz (feldspar-biotite) porphyritic rhyolite unit immediately below the 'Tyndal Group' unconformity.

5.2.3. Trenching

14100N: A 40m long trench was excavated to bedrock, (with hand tools) across the peak of the geochemical anomaly on line 14100N between 8870E and 8910E.

One metre continous rock chip/channel samples were obtained from the bottom of the trench and analysed for Cu, Pb, Zn, Fe, Ag, Au, As, Ba, Sn and W. Analytical results (KR 10908 - 10940 representing 1 metre intervals from 8876E to 8910E) are presented in Appendix IV and summarized on Plan No:56.

An 8 metre wide zone (8895E to 8903E) has an average grade of

1.1% Pb
0.32%Zn
96gm/tAg
0.35gm/tAu

with significantly anomalous (upto 1.3%) As.

The mineralization was found to consist of fine veiny and disseminated galena and pyrite with minor sphalerite associated with a zone of siliceous and brecciated rock (of uncertain type but likely to be a silicified acid tuff or tuffaceous sandstone) occurring at the contact between medium grained tuffaceous sandstone (to east) and finely interbedded siltstones and argillaceous black slate/shale (to west). A narrow zone of dark brown stained (oxidized) rock immediately east of the mineralized zone may represent weathered pyritic chlorite rich rock.

Dips in the adjacent sedimentary lithologies are steep to the west. In the narrow confine of the trench (200mm wide by 1.2m deep) it is impossible to determine if the mineralized zone is strictly conformable or fracture controlled. The form of the geochemical anomaly suggests a stratabound association whilst the distribution of sulphides within the mineralized zone implies a structurally controlled fracture/breccia filling style.

14200N: A series of 2m long pits were excavated, by hand, at 12.5m intervals between 9175E and 9275E to investigate the broad IP chargeability/Pb-Ag geochemical anomaly on line 14200N.

The pits, of about 0.5m depth, exposed fairly massive and uniform quartz-feldspar-biotite porphyritic rhyolite with no visible evidence of sulphide mineralization.

One metre rock chip/channel samples, (KR 13051-13068, see Figure 8) returned results of upto 1200ppm Pb and 20gm/t Ag from pits centred on 9212.5E, 9225E, 9237.5E but with background values of Zn.

Excavation of a continuous trench between 9210E-9240E should be considered as a means of elucidating the style of mineralization.

13600N: Nine 2m long pits were excavated, by hand, at 12.5m intervals between 9050E and 9150E to investigate the unusual chargeability feature on line 13600N.

The pits exposed strongly foliated acid epiclastic pebbly lithic 'tuffs' ('mixtites') typical of the basal part of the 'Western Sequence'.

East of about 9110E, pit exposures are of cleaved quartz-feldspar-biotite prophyritic rhyolite with minor lithic crystal tuff. (Figure 9)

Rock chip geochemical values were low.

It is considered that the chargeability 'anomaly' reflects the geological contact of the 'Western Sequence' against the rhyolitic lithologies of the 'Wart Hill Pyroclastics' and that no further investigations are warranted.

5.2.4. Infill IP Survey

As indicated in Section 5.1.1, lines 14300N and 14100N were surveyed with IP to provide infill data along strike from the anomaly on 14200N which was also resurveyed to verify the response.

The anomaly on 14200N is centred on 9200E, a broad and evidently shallow chargeability response with no resistivity support. The infill lines, suggest that the anomaly does not have significant strike extensions.

The IP survey on 14100N was extended further west to give coverage over the known mineralized zone but it is apparent that the close proximity of graphitic shale/slate dominates the IP response and no separate anomaly attributable to the mineralization can be resolved.

5.3. VOYAGER 19

The Voyager 19 prospect embraces the Wart Hill area and is notable for the prescence of two small suboutcropping lenses of high grade Zn-Pb-Ag mineralization which were discovered during the 1980-81 season. A subsequent geophysical and diamond drilling program (Wilson et al 1982) failed to yield significant subsurface intersections and appeared to preclude the existence of a large massive sulphide orebody of the target type at shallow depth. (~ 50m)

Follow up work during the 1982-83 season was to include:

1. Coverage by Dipole IP (as part of the regional survey) and infill as required.

2. Mise à la Mass survey over the high grade sulphide lenses.

3. Small dipole (say 5 or 10m dipole) IP coverage over the mineralized lenses to test their chargeability response.

4. SIROTEM survey over the mineralized lenses area.

Only the first two objectives were achieved.

5.3.1. Voyager 19 IP Responses

The known mineral lenses lie at approximately 13300N/10080E and 13050N/10060E. Pyritic sediments, notably black shales, of the Tyndal Group lie nearby to the east (approximately 50m and 170m respectively) and clearly dominate the IP response. Small lobe like projections of the contours on 13400N, 13200N suggest the prescence of chargeable material adjacent to the Tyndal contact but may simply reflect a 'smearing' effect by the prominent E-W faults which lie close to the survey lines.

12600N: The preliminary appraisal of IP data indicated a very strong (upto 10 x background) chargeability anomaly (without resistivity support) centred at 9875E on line 12600N.

Infill lines on 12500N and 12700N were recommended with trenching and re-survey of 12600N as follow up.

Regrettably, the anomaly was not confirmed by the re-survey nor are there significant anomalies on the infill lines to north and south. Results of backhoe pitting (six 2m long trenches at 10m intervals between 9850E and 9900E) on 12600N were also negative (Figure 11, KR's 10953-10963).

12800N: Pits were also excavated on line 12800N to investigate the weak and skeletal chargeability feature centred at about 9950E. (Six 2m long trenches at 10m intervals between 9925E and 9975E, Rock chip/channel samples KR's 10941-10952, Figure 10). No traces of mineralization or likely chargeable source were observed in the trenches and rock chip sample values were low.

12400N: Two short backhoe trenches (9625-9630E and 9650-9655E) were excavaged on 12400N to investigate the half defined high chargeability-high resistivity anomaly on 12400N.

The eastern pit exposed unexceptional medium grained chloritic quartz-feldspar crystal tuff. The western pit exposed a similar lithology with narrow zones of silicified-fragmental variants containing upto 5% disseminated pyrite, mostly in 'trains' parallel to cleavage. Metal values in rock channel samples (KR's 10964 to 10974) were low.

The planned extension of IP survey to the west was not completed.

12200N: A weak chargeability-high resistivity anomaly (possibly related to above 12400N feature) occurs under 9700E on 12200N.

A 24m backhoe trench (9676E-9700E) exposed a somewhat brecciated chloritic quartz-feldspar crystal (lithic) tuff containing 1-2% disseminated pyrite. Upto 10% pyrite occurs locally associated with dark chlorite in breccia fill zones. This result was somewhat unexpected as the interpreted depth of the chargeable source was greater than 50m. Metal values from rock chip/channel samples along the trench (KR's 10975-10998) were low (< 200ppm in Pb and Zn) (Refer to Figure 13).

5.3.1. Mise à la Mass

The mise-à-la-masse method involves emergizing a conductor by means of a current electrode placed directly within the body (the other current electrode being at a great distance, effectively infinity) and measuring the potential at various points in proximity to the body. Lines of equipotential are drawn, and the distortion of this pattern away from a concentric 'bullseye' pattern may indicate to some extent the shape and attitude of the conductor.

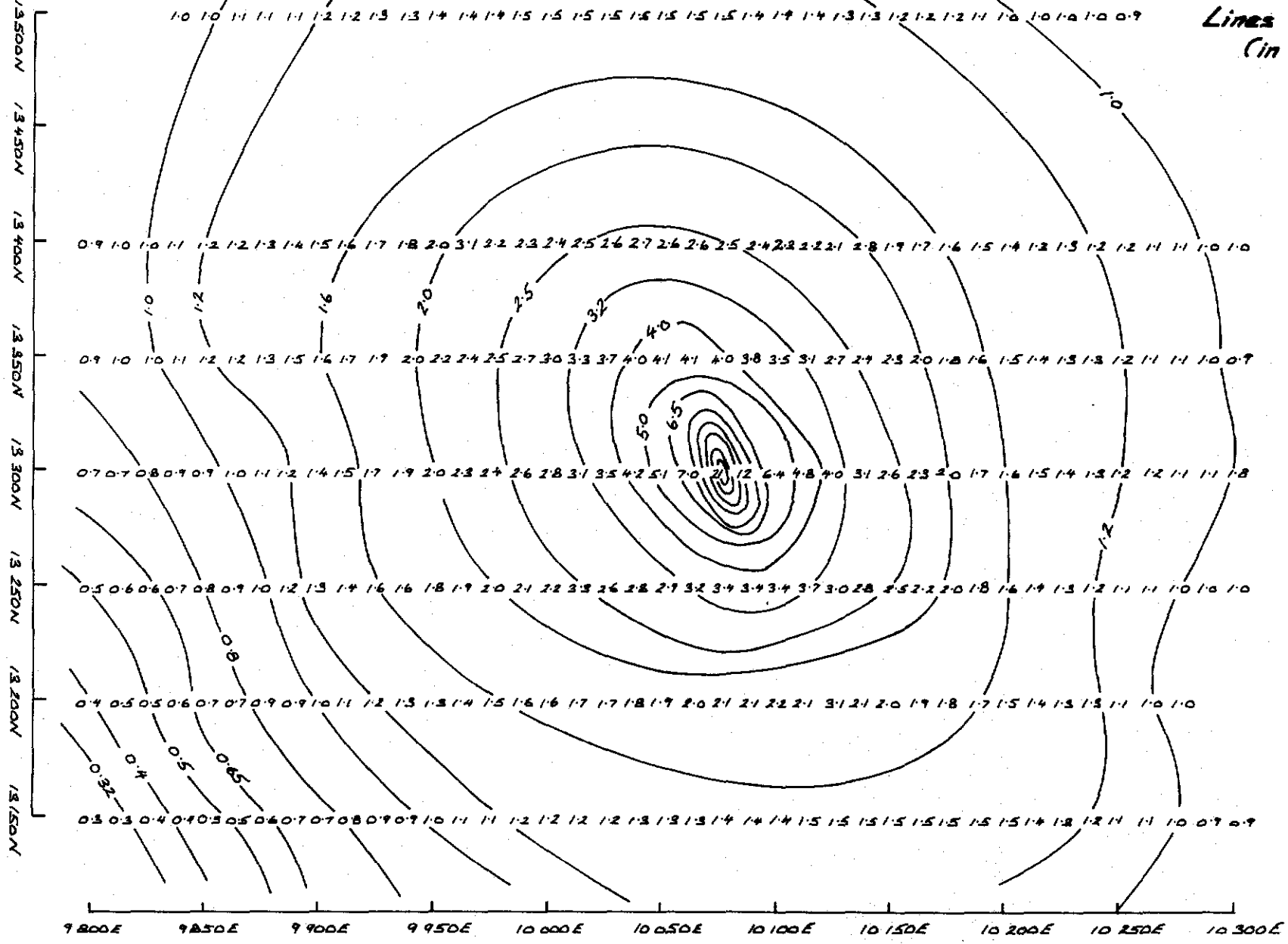
In this case the two massive sulphide lenses at Voyager 19 were emergized by a steel electrode driven directly into their surface expression. The co-ordinates of the electrodes were, for the northern lens 13300N, 10080E, and for the southern 'Buggs Reward' lens, 13044N, 10072E. The Huntec 2.5kW IP transmitter was used to provide the required current, 1.25A for the northern lens, 1.6A for the southern lens. A Scintrex IPR-8 IP receiver was used to measure the potential difference between a remote point and points on traverse lines in vicinity of the lenses. It was felt that the fresh nature of the sulphides at surface would ensure adaquate electrical connection between the material into which the electrodes were driven and the mass of the bodies.

Contour Interval: Logarithmic
Scale: 1:2500
March 1983

C_1 13300N 10080E
C_2 ∞

E.L.27/76 Elliott Bay, Tas.
Vovager 19
Mise-à-la-masse

Lines of equipotential (in volts)



Contour Interval: Logarithmic
Scale: 1:2500
March 1983

C_1 13044N 10072E "Buggys Reward"
C_2 ∞

E.L. 27/76 Elliott Bay, Tas.
Voyager 19
Mise-à-la-masse
Lines of equipotential (in volts)

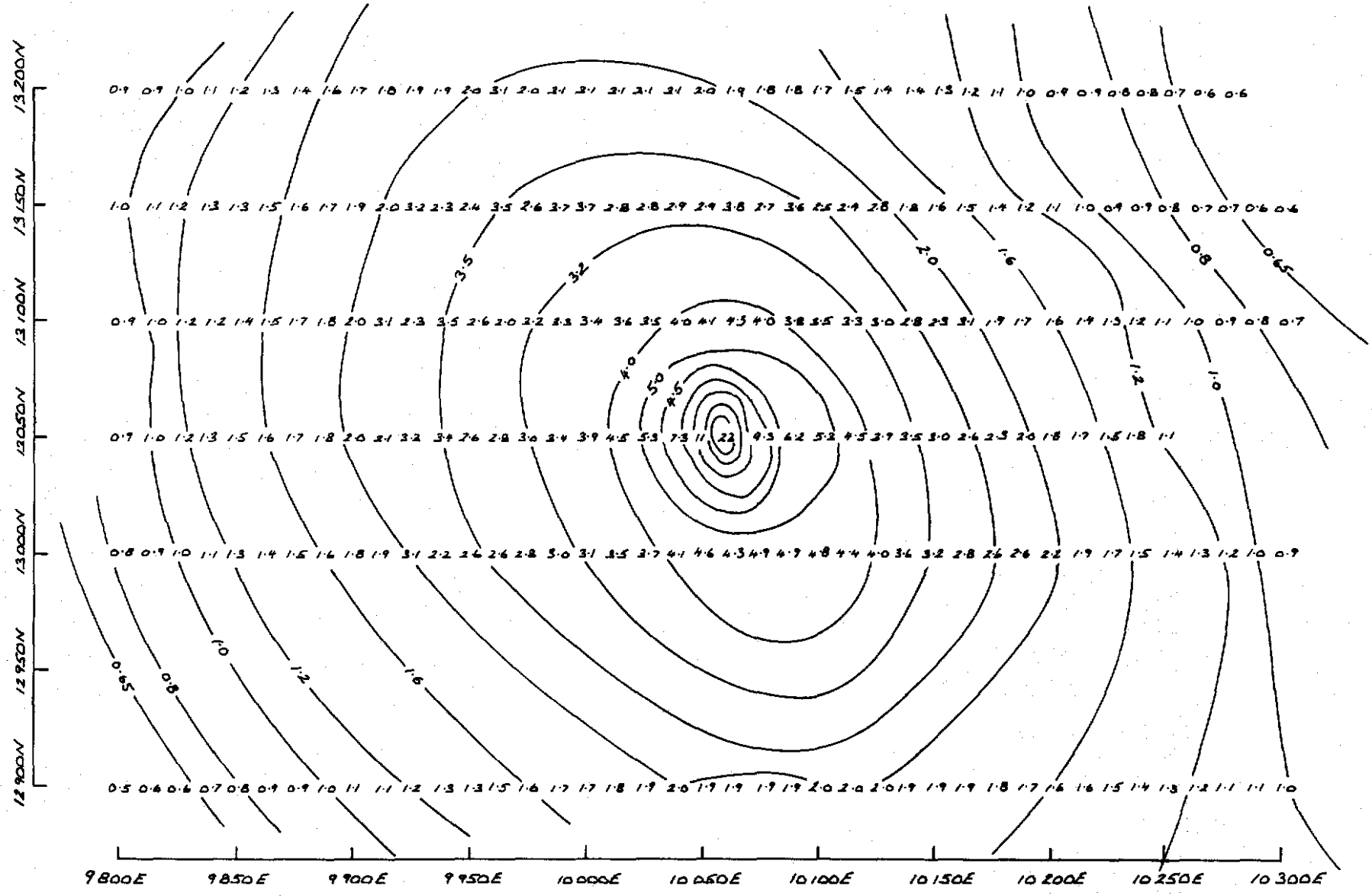


FIG. 28
478064

Plans showing lines of equipotential are presented in Figures 27 and 28. Both show little distortion of the pattern that would be expected from a homogeneous earth. Some elongation of the pattern in a north north westerly direction may reflect the overall geological strike and, at least in the case of the northern lens, some elongation in that direction of the body itself.

5.3.3. Close Spaced C-Horizon Geochemical Infill

Infill geochemical sampling as outlined in Section 5.1.2. was designed to test the concept that a series of weak IP anomalies lying on a NNE trend passing through 12600N/9850E might reflect the stratigraphic equivalent of the Voyager 19 Pb-Zn-Ag mineralized lenses in the western limb of a hypothetical antiformal structure.

The geochemical results (Plans 44, 45) do not bear this possibility out, nor is there significant support in the infill IP data.

5.4 VOYAGER 29 WEST

The principal feature of interest is a fairly strong and discrete chargeability anomaly centred under 9400E on line 11400N. The chargeable source is interpreted to be fairly deep (~ 100m), without resistivity support and essentially no surface (C-Horizon) geochemical anomaly.

It occurs adjacent to the western margin of a large body of quartz porphyritic rhyolite within fine grained acid crystal tuffs and possibly at similar stratigraphic position to a narrow pyritic grey shale horizon which outcrops in the creek 200m to the south. (Refer to Plan 51 of Wilson et al, 1982).

Excavation of a short trench from 9422E to 9429E exposed a 2m wide zone of brecciated and silicified quartz crystal tuff with upto 30% pyrite and minor galena. Sulphides occur principally as breccia space infillings with lesser disseminated/veiny galena and pyrite at the eastern end of the trench. (Figure 16).

One metre rock chip/channel samples from the trench (KR's 103221-10327) returned values upto 0.96%Pb, 0.34%Zn, 24gm/tAg and 0.17%As.

The IP data contains some negative chargeability values and requires verification.

5.5. VOYAGER 34

The Voyager 34 area lies in favourable lithologies of the 'Wart Hill Pyroclastics' on the eastern limb of the Mt Osmund Syncline. Ground work completed the previous season (Wilson et al, 1982) indicated a strong Pb-Zn C-Horizon geochemical anomaly in the north eastern part of the grid.

Work during the 1982-83 season involved:

- extension of the grid to north and east
- extension and infill of C-Horizon sampling
- extension of geological mapping
- coverage by Dipole IP survey

5.5.1. Geology

The geological facts and interpreted boundaries are presented on Plan No's: 12,13. Outcrop in the area is generally very poor and much of the geological mapping has depended on examination of chips from Jacro auger holes used for geochemical sampling.

5.5.2. Geochemistry

C-Horizon soil samples were obtained by Jacro auger at 25m intervals to provide coverage at 100m or 200m line spacing. Sample Number locations are plotted on Plan No's 21, 23, 24.

Contoured geochemical results are presented on Plans 35,36,40,41.

The principal feature of interest is a coincident lead-zinc anomaly elongate in N-S direction at about 11800E extending from 13600N to 14000N with dubious extension to 14400N. The maximum values are 4150ppm Pb, 5400ppm Zn with subtle Ag support upto 7gm/t. Pb/Zn ratios are (favourably) moderately low. The anomaly coincides with a low swampy area of poor geological exposure but apparently underlain by fine to medium grained chloritic quartz feldspar crystal tuff. Traces of pyrite have been observed in auger cuttings. Wilson et al, 1982 reported disseminated galena and sphalerite in the auger cuttings at 13800N, 11775E.

A series of smaller Pb/Zn geochem anomalies occur on lines 13200N and 13400N coincident with the positions of interpreted E-W faults. Traces of ferruginous soil and weak gossan development have been observed at these locatlities.

It seems that the anomalies could be due to minor veiny, perhaps 'remobilized', sulphide mineralization associated with the fault fractures and are thus considered less significant than the apparently stratabound principal anomaly.

5.5.3. Dipole IP Responses

There is a broad resistivity low response associated with the pyritic chloritic tuffs in the vicinity of the principal geochemical anomaly which, however, does not give a significant chargeability response.

The eastern edge of the Voyager 34 area (east of 12200E between 13200N and 14400N) is characterized by braod areas of low resistivity with a few poorly defined weakly chargeable zones. The geology in this area, of poor outcrop and residual (Tertiary) gravel cover, is not well known.

5.6 SOUTHERN AREAS: VOYAGER 9
VOYAGER 24
VOYAGER 30

The gridded area south of line 10000N and embracing the Voyager 9, Voyager 24 and Voyager 30 areas was systematically covered by Dipole IP survey, ground magnetic survey, C-Horizon geochemical sampling and geological mapping.

5.6.1. Geology

5.6.1.1. Voyager 24-Voyager 30

Geological mapping of the Voyager 24 and Voyager 30 areas was carried out by R.J. Perring in an attempt to enhance the geological interpreation (previously reported in Wilson et al, 1981, 1982) and to determine if the source of the extensive gold drainage anomaly* could be attributed to any particular lithology or 'stratigraphic' level.

The geological observations and interpretation are presented on Plan No's: 14, 16, 18.

5.6.1.2. Geology of the Central Part of the Wart Hill Pyroclastics Centred Around Voyager 9 (contributed by P.A. Wilson) (Refer to Plan No's: 14, 15, 16, 17, 19)

As part of the exploration program over the Wart Hill Pyroclastics a broad grid measuring 3km (N-S) by 2.2km (E-W) was surveyed south of the V19-V29-V22 10000N base line. The grid extends to the east of line 9800E which is the line of demarcation separating this area from the V24 and V30 grids. Voyager 9 occurs in the central part of the new grid.

* (See also Wilson et al, 1981, 1982)

The purpose of the grid was to permit uniform geophysical and geochemical coverage of the prospective Wart Hill Pyroclastics. Grid lines were spaced at 200m intervals for dipole-dipole IP coverage and to permit a 200m x 25m soil sampling density.

The gridded area is low lying and has a southerly sloping surface which has been dissected by southerly flowing creeks, the major one being Stoney Creek in the central part of the grid. Remnant Tertiary gravel terraces can be observed in the south-eastern quadrant of the area. Vegetation cover is sparse and mainly restricted to open button grass plains promoting easy access throughout the area.

The geology will be described from the east to west since the balance of evidence suggests the whole sequence is westerly facing and dipping. On the eastern margin of the grid adjacent to the main lighthouse track a sequence of massive porphyritic lavas outcrop extensively. At least two lava units are present, the most easterly is a medium-grained biotite-quartz-orthoclase? porphyry. Euhedral quartz-feldspar crystals, up to 3mm in diameter are set in a fine-grained, creamy-buff groundmass. Black biotite flakes form up to 10 modal % of the rock. The feldspars are commonly sericitised and rodded defining a southerly plunging lineation. The lava crops out on the eastern part of the area between 8600N and 8200N and has a conformable, but locally faulted, contact against a homogeneous bedded fine-grained crystal tuff.

The tuff unit attains a maximum thickness of 200m and is overlain to the west by another, more leucocratic, porphyritic lava. In this unit the biotite content is lower compared to it's eastern counterpart. It extends onto the V22 grid to the north and was also observed to the south of the gridded area making a minimum strike length of 3km. Outcrop width varies from 1km to 200m with an overall thickening to the south. However, due to the isolated outcrops of tuffaceous material it is probable the lava has interbedded 'pyroclastic phases' which is characteristic of the massive lavas on the V19-V29 grids. Quartz lapilli crystal tuffs and chloritic quartz crystal tuffs increase in volume towards Stoney Creek.

The geology of the Voyager 9 grid has been detailed in preceeding reports (Large, 1981 and Wilson et al 1981) It comprises a sequence of coarse lithic tuffs, volcanic breccias, rhyo-dacite lavas and a group of chlorite rich lithologies referred to as quartz chlorite porphyries and 'andesites'. Outcrop of the latter lithologies continues south of the V9 grid along Stoney Creek to 7200N where they are faulted against porphyritic lavas.

The two chloritic lithologies are closely associated and sharp contacts have been mapped between the quartz rich porphyry and fine-grained massive, blue-grey 'andesitic' units. The latter commonly contain 2-5% pyrite and occasional grains of chalcopyrite.

The drainage system which forms the western boundary of the V9 area marks the approximate limit of the Stoney Creek Granite. Sporadic outcrops can be observed in an area of positive relief and thin button grass cover, which delineates the main granite outcrop. Typically the granite is a fine-medium grained porphyritic microgranite. Plates of muscovite and biotite and the high feldspar content distinguish it from the crystal tuffs which occur as roof pendants within the granite body. The granite pluton is bulbous in shape and measures approximately 1.4km by 1km and intrudes the volcanic pile terminating against a $\pm$ 70m thick unit of siliceous clastic sediments which form its western boundary.

The sediments form a series of NE trending ridges which are offset by NW-SE faults. They consist of a chaotic, poorly sorted quartzite breccia at the base and grade upwards into quartz pebble conglomerates, pebbley quartzites and massive saccharoidal quartzites and quartz sandstones. The basal breccias are composed almost entirely of massive angular quartz blocks upto 50cm in length, the angularity and closely packed nature of the rock suggests the breccia is intraformational.

Total thickness of the siliceous sediments is between 50m and 80m. Dips are near vertical to westerly dipping and facing where observed is to the west.

The sediments are overlain by a sequence of grey-green, fine-grained 'ropey' textured hornblende? bearing dacite lavas. They outcrop in the flat lying area at the base of the quartzite ridges (8800-9000N and 9900E) and are probably a continuation of those mapped on the Voyager 24 grid by Large (1981).

The most westerly outcropping rocks in the gridded area occur in the NW between 9000-1000N and west of 10200E. In the main they are a massive homogeneous, fine-medium grained bedded quartz-feldspar (sericite) crystal tuffs. A few lithic fragments were noted in the basal sections lie 9200N, 10200E). Interbedded reworked tuffs or sandstones were observed at two localities (9800N 9900E, 9200N 10200E).

5.6.2. Geochemistry

C-Horizon soils were sampled by Jacro auger at 25m intervals along lines spaced 200m apart, over most of the grid area covered by the dipole IP survey. The central part of the "Stoney Creek Microgranite' and the previously sampled * Voyager 9 and Voyager 30 were excluded from the 1982-83 sampling programme.

Soil sample location numbers are plotted on 1:2500 scale Plan Nos: 26, 27, 28, 29, 30 and 31. The -80 fractions of soils were routinely analysed for Cu, Pb, Zn, Ag and Fe by A.A.S. methods. Samples from the zone of the gold drainage anomaly were also analysed for Au. (A.A.S.) Samples from the zone of tin drainage anomalies around the granite (see also section 5.7 were also analysed for Sn and W (by XRF). Analytical results are tabulated in Appendix II and plotted at 1:2500 scale on Plan Nos: 46, 47, 48, 49, 50 and 51.

* (Wilson et al; 1981, 1982)

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Approximate representations of lead and zinc geochemical contours are given on Plan Nos: 4 and 5. Coincident lead-zinc anomalies occur at the following approximate locations:

9600N/10375E
9600N/11300E
8400N/11200E (eastern part of old Voyager 9 grid)
8000N/8800E
800N/9600E
800N/9750E
7800N/10500E
7000N/11200E
7000N/11900E

With exception of 8400N/11200E and 8000N/8800E these anomalies are of uncertain significance and continuity, due to the fairly coarse 200x25m sampling grid. Further infill sampling is recommended in cases where support can be seen in available geological and geophysical data (notably 8400N/11200E, 8000N/9750E and 7000N/11900E). (See also Anomaly Data Sheets in Appendix 1)

Copper values are generally low with a few scattered, usually single point, anomalies mostly concentrated around the eastern margin of the 'Stoney Creek microgranite' in the Voyager 9 area and on lines 9200 to 9800N around 10500 to 11000E.

Silver is also somewhat erratically distributed but does show some correlation with some of the stronger Pb-Zn anomalies.

Results of gold analyses of samples from the Voyager 24, Voyager 30 area, are somewhat disappointing. There is a NE trending zone of weakly anomalous gold upto 145ppb on lines 9200N, 9400N and 9600N which approximately co-incides with the B-Horizon gold anomaly reported by Wilson et al, 1981.

The only other anomalous gold value is 100ppb at 8400N/9200E which appears to correspond to the same lithological horizon as other gold soil anomalies of the Voyager 30 area (Wilson et al, 1982).

Results of Sn analyses of samples collected from the area of the tin drainage 'halo' around the microgranite body were likewise disappointing. An isolated maximum value of 35ppm Sn occurs at 8400N/10500E.

Tungsten values from the same area range from < 10 upto 60ppm There is a subtle but possibly coherent tungsten anomaly of upto 50ppm occurring on lines 7200N, 7400N, 7600N at about 10475E which is approximately co-incident with the axis of the large magnetic feature adjacent to south eastern margin of the 'microgranite'.

Infill Jacro sampling at 5m intervals was carried out on lines 7900N and 8100N between 8700E and 8900E to provide 'along strike' information relating to the strong Pb-Zn-Ag geochemical anomaly and galena-sphalerite-quartz vein mineralization at 8000N/8800E reported by Wilson et al, 1982. Figures 4 and 5 portray the sample locations and analytical results in profile form. The profiles appear to indicate that the mineralization on 8000N is not laterally extensive and also illustrate the typically 'spiky' character of C-Horizon metal values which is the bane of geochemical sampling and data contouring in this environment.

Infill sampling at 5m intervals was also carried out on:
Line 9200N 9550 - 9750E
Line 9600N 9250 - 9500E
as part of the planned follow up on chargeability anomalies. Geochemical profiles are presented in Figures 6 and 7.

The principal Pb-Zn anomaly centred on 9600N/9375E appears to coincide with an (interpreted) near surface chargeability resistivity anomaly. Backhoe pitting or trenching could be considered as a means of elucidating the style of mineralization.

5.6.3. Dipole-Dipole IP Responses

As noted in section 4.1.2. the 'southern areas' of the regional IP survey display more chargeability-resistivity 'character' than the north.

There is a pronounced arcuate zone of erratic high chargeability-moderate resistivity adjacent to the eastern and south eastern margin of the 'Stoney Creek microgranite' more or less coincident with the strong magnetic anomaly.

It is likely that both the IP and magnetic features are related to observed strong chlorite alteration localized near a major fracture system. At least two anomalies in this area, deserve further investigation:

9200N/11100E-11300E

A very broad and complex chargeable zone with a resistivity low anomaly at depth and coincident with an 800nT magnetic anomaly (isolated to the north of the principal magnetic anomaly) located near intersection of fault structures.

8400N/11100E-11300E

The principal IP response is a strong Resistivity low with good depth extent. Coincides with Pb-Zn geochem anomaly and eastern flank of main magnetic high adajcent to major fault zone.

(See also Appendix I for notes on other IP responses associated with the south eastern magnetic anomaly.)

The (somewhat incomplete) IP data from over the 'Stoney Creek microgranite' indicates it has a core of high chargeability-high resistivity material. Since this phenomenon has not been simply explained the previous assessment of low level of prospectivity, and consequent low exploration intensity, may need to be reviewed.

There are several broad and complex IP responses over the Voyager 24 and Voyager 30 area:

8000N/9100E

Several complex overlapping chargeability anomalies with associated broad resistivity lows occur on lines 7800N, 8000N, 8200N centred about 9100E. This zone is partly coincident with the area of anomalous gold geochemistry reported by Wilson et al, 1982, but there is no obvious direct correlation between geochemical peaks and chargeable sources. Excavation of six pits between 9100E and 9200E on 8000N revealed 2 to 5% disseminated pyrite at 9160 and 9180E with anomalous Pb, Zn and Au at the latter. (See figure 20) A geological contact is implied, at about 9150E, between quartz-feldspar porphyritic 'extrusive' rock to the west and variable rhyolitic crystal-lithic tuffs to the east.

8000N/8800E

Galena/sphalerite bearing quartz vein mineralization, exposed in a pit at 8000N/8800E (Wilson et al, 1982) may have partly contributed to the coincident chargeability-resistivity response at that locality. Geochemical infill sampling (see section 5.6.2) suggest that the mineralization is not laterally very extensive.

478077

7800N/9100E

Three pits were excavated at 9075, 9100 and 9125E on 7800N over the centre of a strong chargeability anomaly exposed weathered greenish quartz feldspar porphyry similar to that west of 9150E on 8000N but geochemical values and pyrite contents were low. (see figure 22)

The geology of the general area is not well known due to poor exposure and, as yet, the source and significance of the IP anomalies remain speculative. Further infill IP, preferably at 25m dipole spacing to obtain better resolution of the complex anomalies, with selective pitting is required to elucidate the mineral potential.

Voyager 24 9600N/9400E

A fairly shallow chargeability anomaly with good resistivity support occurs near the lower contact of the silicified agglomeratic tuff unit which hosts the low grade gold mineralization at Voyager 24. Close spaced (5m intervals) geochemical sampling over the anomaly (see Figure 7) has indicated a Pb-Zn anomaly between 9360 and 9390E. A subtle gold anomaly upto 40ppb (TS22784, TS22785, Appendix II) occurs at 9340E.

The chargeability feature may relate to possible shaley sediments interbedded with the 'Marker sandstone' horizon underlying the silicified agglomerate unit.
Selective trenching could help to identify the source of this evidently shallow chargeability/geochemical anomaly.

5.7. GOLD-TIN EXPLORATION

Wilson et al, 1982, reported on the recognition of a major gold drainage anomaly extending from Wart Hill to Voyager 30 and the prescence of a partly overlapping tin drainage anomaly around the western margin of the 'Stony Creek Microgranite'. They noted the possibility of tin bearing magnetic skarn mineralization associated with the microgranite contact and speculated on prescence of a tin halo around it.

As follow up during the 1982-83 season, drainage sampling was extended around the southern and eastern margins of the microgranite. The extent of the sampling and the results of panned concentrate analyses for Au, Sn and W are portrayed on Plan No 8.

The data appears to confirm the prescence of a tin halo around the 'microgranite' and significant extensions of the gold drainage anomaly to north and east of the 'microgranite'. However, the halo effect may be partly a function of sampling locations. It is suggested that more extensive panned concentrate sampling is required, especially over the 'microgranite' exposure to actually define the areas of anomalous gold and tin drainage geochemistry.

C-Horizon soil samples, collected as part of the regional grid coverage, from over the gold and tin drainage anomaly zones were analysed for Au and Sn, W respectively.
(Refer to Tables 2 and 3 for distribution of samples thus analysed.)
As reported in section 5.6.2., the soil geochemical results were generally disappointing.

An isolated maximum value of 35ppm Sn occurs at 8400N/10500E adjacent to the eastern margin of the microgranite. It must be concluded that the zonal distribution of tin defined by drainage sampling is not reflected and in fact barely detected by C-Horizon soil sampling. This may be due to the possibly erratic distribution of tin mineralization, perhaps in small, widely sapced veinlets which are not effectively sampled by Jacro drilling at 25 metre intervals yet contribute sufficient material to the streams to report as significant drainage anomalies subsequent to high ratios of alluvial re-concentration.

C-Horizon sampling in the Voyager 30 has not been successful in defining any particular zone of gold mineralization. Again, it is suspected that gold mineralization is of an erratic, perhaps vein controlled, nature.

However, at Voyager 24, subtle anomalies in the C-Horizon gold results outline a north east trending zone, approximately 150m wide, which co-incides with the previously defined B-Horizon gold anomaly (Wilson et al, 1981) which coincides with the previously defined B-Horizon gold anomaly (Wilson et al 1981) and the stratigraphic unit called 'silicified agglomeratic tuff' which was found to contain low grade gold mineralization in Voyager 24 DDH 1. (Wilson et al, 1981.)

The mineralization in Voyager 24 DDH 1 is rather erratic, ranging from 5ppb to 400ppb in the interval 40 to 130m (depth) with a mean value of around 70ppb.

These results are in approximate accord with the C-Horizon gold values on line 9400N between 8925E and 9050E which represents the same stratigraphic interval as the anomalous section of Voyager 24-DDH 1.

This suggests that, at least locally, the C-Horizon Jacro sampling can provide a realistic indication of gold values in the underlying primary rock and that the technique could be considered, perhaps on a closer sampling grid (say 50x10m spacings) to define the gold distribution and drilling targets.

TABLE 2 C-HORIZON SAMPLES ANALYSED FOR GOLD

Sampling at 25m intervals:

Line	9800N	8900E	to	9600E	
Line	9600N	8725E	to	9500E	
Line	9400N	8800E	to	9200E	
Line	9200N	8400E	to	9000E	
Line	8800N	9000E	to	9600E	
Line	8600N	9000E	to	9600E	
Line	8400N	9000E	to	9400E	
Line	8000N	8200E	to	8800E	
Line	8000N	10775E	to	11200E	(Au and As)
Line	7000N	9000E	to	9400E	

Sampling at 5m intervals:
(Analysis for Au and As)

Line	9600N	9250E	to	9500E	
Line	9200N	9550E	to	9750E	

TABLE 2: C- HORIZON SAMPLES ANALYSED FOR TIN-TUNGSTEN

Line	9000N	9200E - 9700E
Line	8800N	9200E - 9700E
Line	8800N	10550E - 10850E
Line	8600N	9150E - 9600E
Line	8600N	10500E - 10800E
Line	8400N	9100E - 9500E
Line	8400N	10550E - 10800E
Line	7800N	10600E - 10850E
Line	7600N	10400E - 10500E
Line	7400N	10400E - 10500E
Line	7200N	10400E - 10500E
Line	7000N	9000E - 10500E

478082

5.8 COPPER CREEK DRAINAGE ANOMALY

Drainage sediment sampling during the 1980-81 season (Wilson et al, 1981) had indicated consistent anomalous values, upto 470ppm Zn and 140ppm Pb, in the -80 mesh fractions of sediments from the lower 300m of Pleasant Creek and in Copper Creek for about 3km downstream from Pleasant Creek.

During the 1982-83 season, resampling of Copper Creek and tributaries for about 2km upstream from Boyles, Creek junction failed to confirm the previous anomalous values. Maximum values for Pb, Zn were found to be 20 and 35ppm respectively.

Sample locations and base metal values are presented on Plan Nos: 9 and 10.

Cursory inspection of outcrops in the stream banks carried out during the re-sampling traverse, did not result in discovery of significant traces of mineralization.

It is concluded that the previous (1981) anomalous values are spuriously high, possibly due to analytical errors.

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478083

5.9 LEAD ISOTOPE STUDY

Twenty-five groups of samples, of C-Horzion soils, rocks and drill core from vaious prospects within E.L. 27/76, have been analysed for lead isotope ratios by Dr. Brian Gulson and associates, of the C.S.I.R.O. Division of Mineralogy.

There is some evidence to suggest that the massive sulphide deposits of the Mt Read Volcanics of Tasmania (such as Que River, Rosebery, Hercules and Comstock) have different lead isotopic characteristics to the low tonnage vein style deposits (such as Mt Farrell, Murchison River, Queen Hill) and that the isotopic 'signatures' can be used to discriminate geochemical anomalies of the two differing mineralization types.

Lead isotopic ratios of the massive sulphide deposits typically:

i) exhibit limited dispersion within each deposit; the variation in Pb 208/206 and Pb 207/206 ratios is $< \pm$ 011%.

ii) exhibit limit differences in their average isotopic compositions between deposits.

The massive sulphide 'target signatures' are thus given as:

Pb	208/206	2.082 - 2.085
Pb	207/206	0.8520 - 0.8544
Pb	206/204	18.27 - 18.34

In contrast the isotopic compositions of vein style deposits typically:

i) exhibit a similar or larger dispersion than the massive sulphide deposits.

ii) may be different from one locality to another.

iii) are more radiogenic (higher 206/204, lower 207/206 and 208/206) than the massive sulphides.

A comparison of the differnt isotopic characteristics is given in Table 4.

Lists of isotopic analyses for the twenty five sample groups are given in Appendix V.

In an attempt to take an overview of the amassed raw Pb isotope data and to assess its usefullness in discriminating styles of mineralization graphical plots of Pb 206/Pb 204 vs. Std. Deviation and Range of values within groups of samples were prepared. Similar plots for Pb207/Pb206 against Std. Deviation were also compiled.

Mean and Std. Deviation of Pb isotopic ratios for known deposits (from Table 1, Gulson et al 1982) were plotted in the same fashion to provide comparisons and 'target' isotopic characteristics.

The following empirical observations are apparent, (but do not necessarily concur with the conclusions of Gulson et al).

1. In plots of both Pb206/Pb204 and Pb 207/206 the separation between known massive stratiform ores (Rosebery, Que River etc.) and vein style mineralization (Queen Hill, Murchinson etc.) is far more distinct in terms of the value of isotopic ratio (i.e. degree of radiogeneity) than with respect to the amount of variation (Std. Deviation) within sample groups.

TABLE 4

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COMPARISON OF ISOTOPIC DATA FOR DIFFERENT STYLES OF MINERALIZATION IN THE MT READ VOLCANIC BELT

MINERALIZATION	$^{208}Pb/^{206}Pb$	$^{207}Pb/^{206}Pb$	$^{206}Pb/^{204}Pb$	$^{207}Pb/^{204}Pb$	$^{208}Pb/^{204}Pb$
Central Lava Belt Massive Sulfides					
Que River	2.0820±9	0.8520±2	18.337±10	15.623	38.178
Rosebery	2.0848±26	0.8541±5	18.289±19	15.621	38.129
Hercules	2.0842±15	0.8538±1	18.276±11	15.604	38.090
Mt Lyell (Comstock)	2.0855±12	0.8544±3	18.269±8	15.609	38.100
Vein Style					
Mt Farrell	2.0744	0.8424	18.603	15.671	38.590
Queen Hill	2.0740±29	0.8438±10	18.519±33		
Murchison River	2.0757±9	0.8433±8	18.529±20	15.626	38.461

(from: Gulson et al, September 1982)

2. Voyager 31 and Voyager 33 (13800N - 14000N) samples have high radiogenic ratio of about the same order and degree of variation as Queen Hill, Murchison etc and the very distinct separation from the target signature and data points for most other anomalies suggests that these are indeed different styles of mineralization. The Pb-Zn bearing quartz vein of Voyager 30 has even more extreme radiogenic ratios but with low Std.Deviation (in 2 sample population). This suggests that vein style is the principal criteria rather than host rock age/type (Wart Hill Pyroclastics vs. West Sequence).

3. Chip samples from Voyager 19 lenses A, B and costean 13200N are of much lower radiogenic isotopic ratio and show distinct separation from the target signature, but of about the same level of variation.

4. Within the target signature area none of the Elliott anomalies has exactly the same character as the target ore bodies. On the 206/204 vs Std Deviation plot only Voyager 3 DDH 3 mineralization and Voyager 24 soil anomalies lie within the Que River-Rosebery-Comstock-Hercules quadrilateral. If 'Que River Ore' values (calculated from raw isotopic data in Gulson et al 1982 Sept) are deleted, then none of the anomalies lie in the enclosing quadrilateral. Likewise for 207/206 plots.

5. The sample groups which lie closest to the target quadrilateral are: Voyager 30 granite soil, and Voyager 29 rocks (selected to omit 'unusual' values) and in both cased the similarity is principally due to small sample (population) groups, leading to low Std.Deviation within the group.

6. Anomalies with acceptable levels of Std.Deviation which lie reasonably close to the target ratios are Voyager 19 South Pb/Zn, Voyager 29 baseline Pb/Zn, Voyager 33-DDH 3 mineralization and Voyager 24 soil.

7. Voyager 34 soil, Voyager 33 14200 IP and Voyager 29 West IP have acceptable Std Deviation and are slightly less radiogenic than the target ie. they plot somewhere between the target signature and the Voyager 19 mineralization groups.
Voyager 2 DDH 6 plots slightly further out towards Voyager 19 mineralization. (Despite its apparent vein like mineralization - this suggests that Pb-Zn veins in DDH 6 are derived by remobilization of low grade disseminated syngenetic mineralization???).

Conclusion:

The isotope data probably can be used to distinguish the vein style epigenetic mineralization from the volcanic associated stratiform or stratabound/veinlet mineralization.

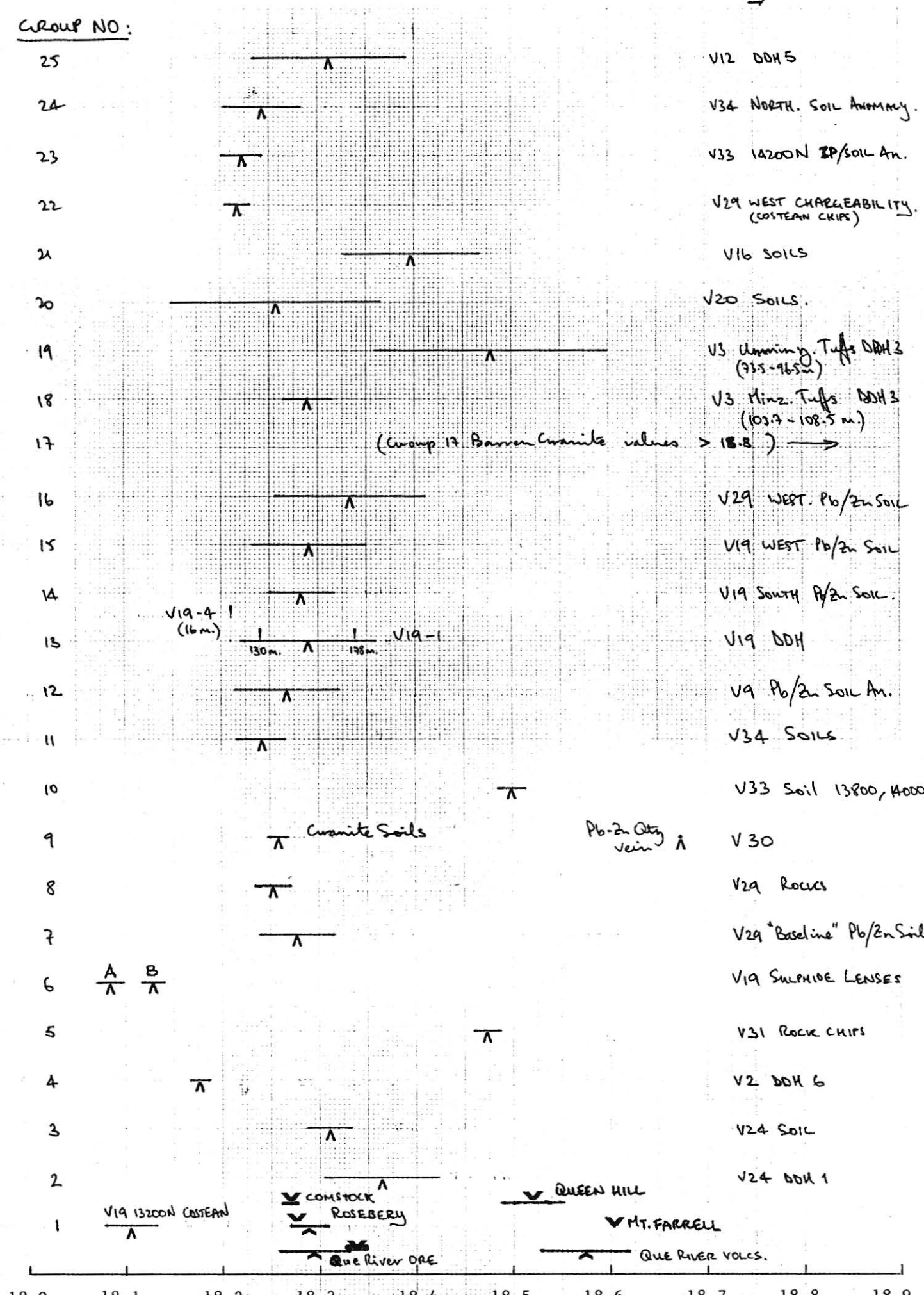
Apart from the above distinction the data cannot, I believe, be used to ascribe priority for drilling targets or confidently predict grade and size characteristics of massive ores.

The anomalously low radiogenic isotopic character of Voyager 19 mineralization which is apparently of stratiform type and obviously of high grade, suggests that the Que River, Rosebery, Comstock, Hercules 'target signature' is too restricted and does not represent all potential ore bodies of the Mt Read volcanics.

In the Elliott Bay, context it seems more useful to regard the anomalies of lowest radiogenic character as having the highest potential.

087

Figure 23



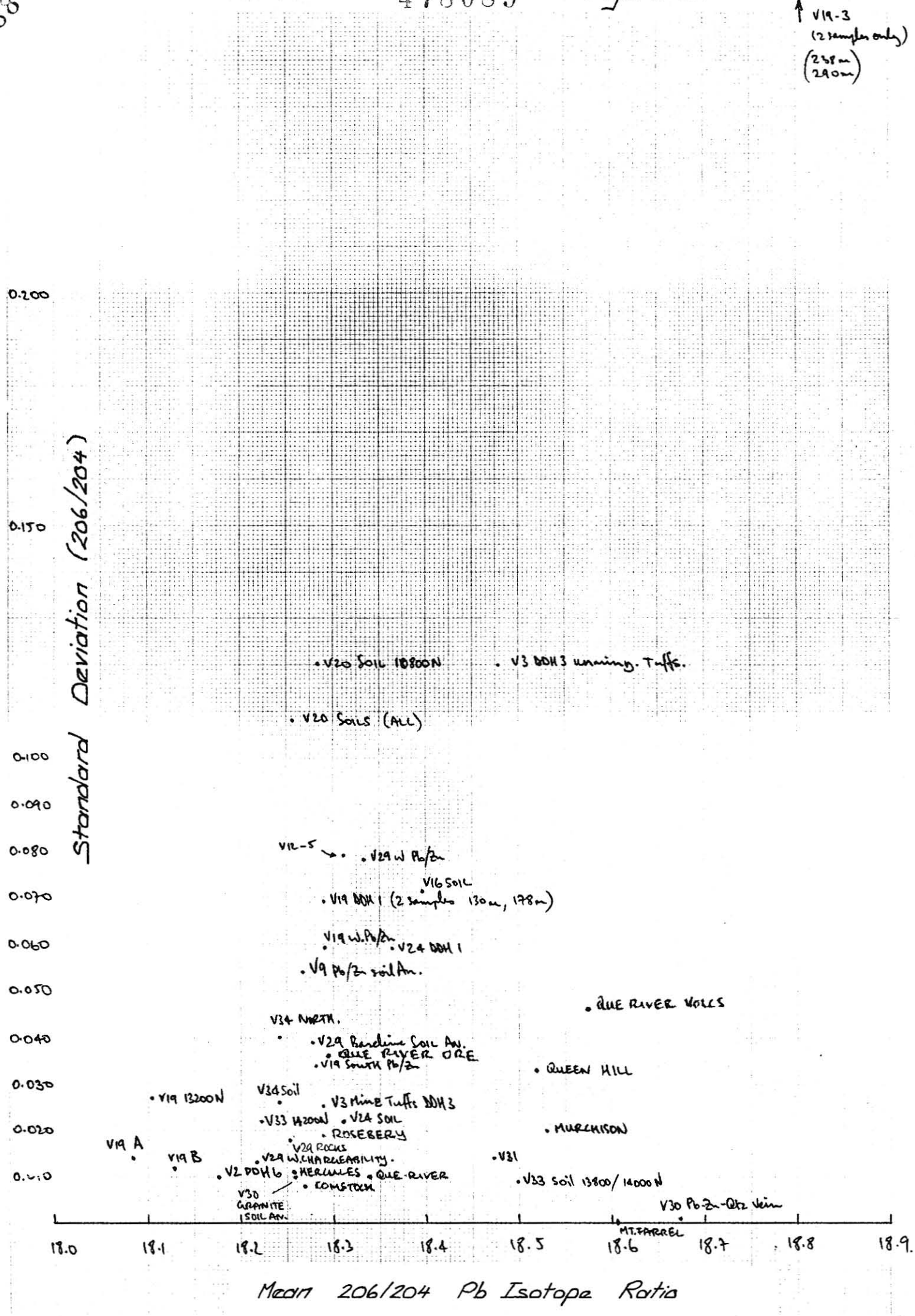
206/204

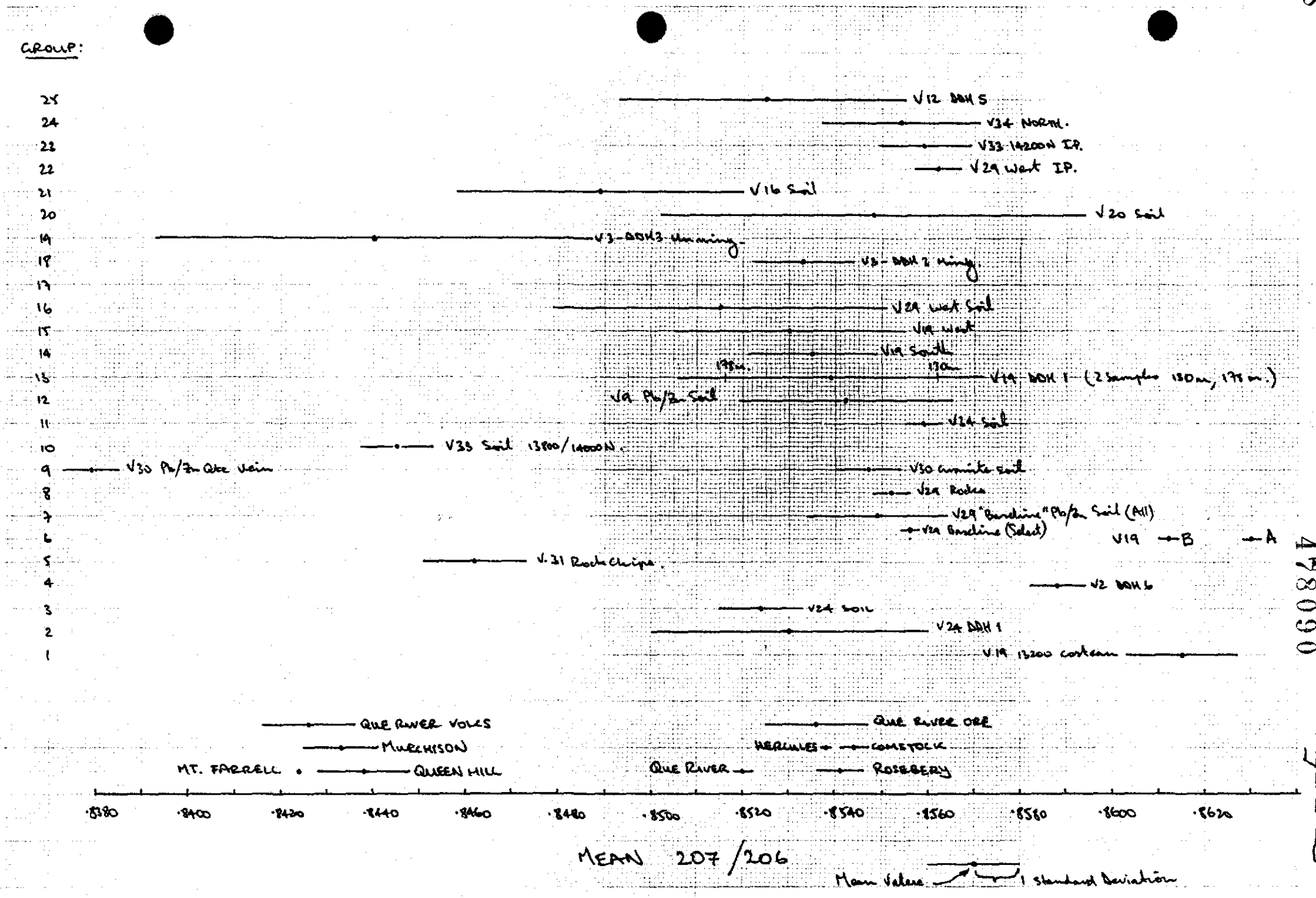
478088

088

478089

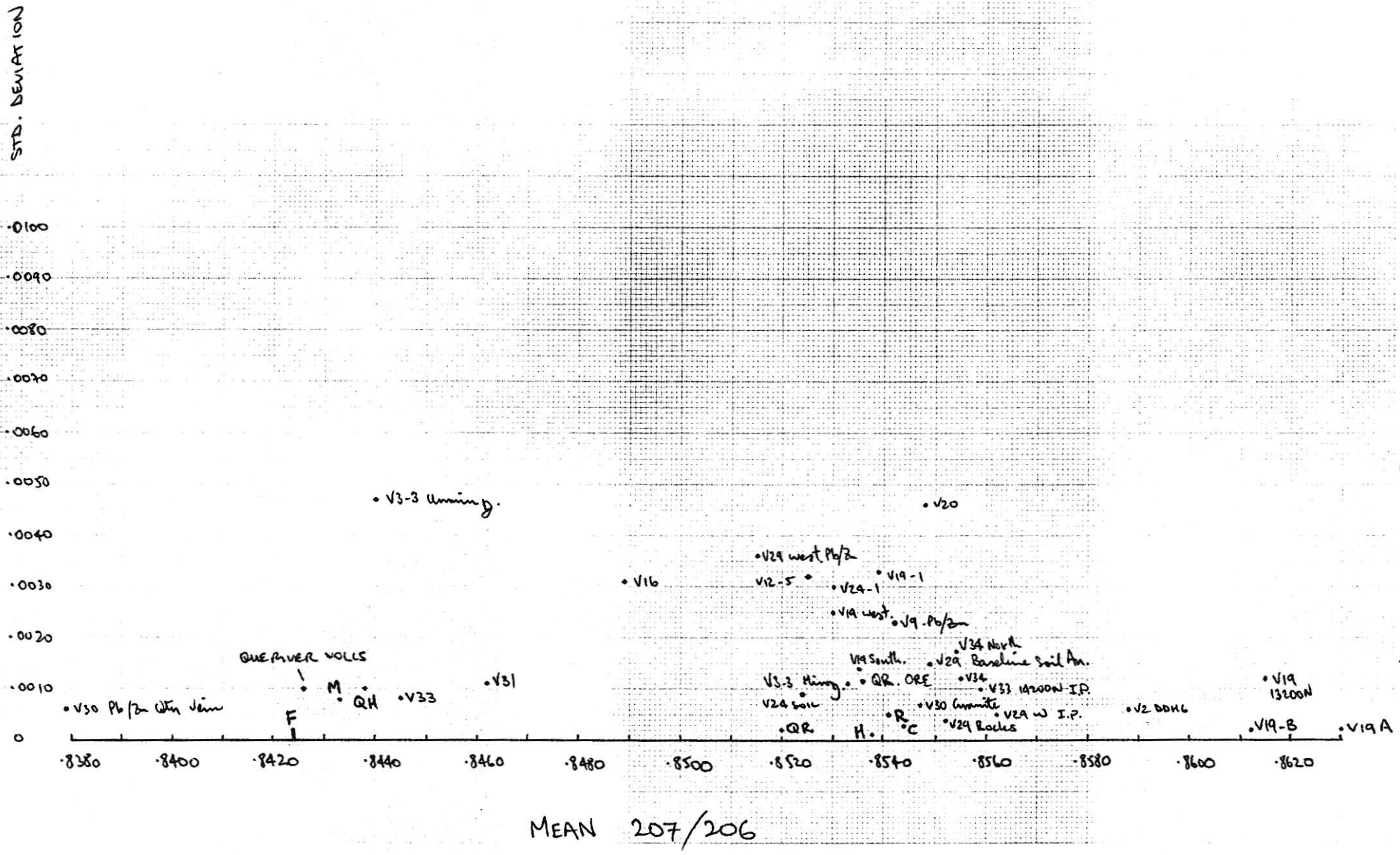
Figure 24





478090

Figure 25


STD. DEVIATION
.0100
.0090
.0080
.0070
.0060
.0050
.0040
.0030
.0020
.0010
0
V3-3 Unming.
V20
V29 west Pb/Zn
V16
V12-5
V19-1
V24-1
V19 west.
V9 Pb/Zn
V34 North
V19 South.
V29 Baseline Soil Anom.
V3-3 Hing.
QR. ORE
V34
V33 19200N I.P.
V24 Soil
V30 Unmin.
V29 W I.P.
QUE RIVER VOLCS
V30 Pb/Zn with Vein
M
QH
V33
V31
F
QR.
H.
R
C
V29 Rocks
V2 DDH6
V19 13200N
V19-B
V19A
8380
8400
8420
8440
8460
8480
8500
8520
8540
8560
8580
8600
8620
MEAN 207/206

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478093

APPENDIX 1

ANOMALY DATA SHEETS

(1983 EVALUATION)

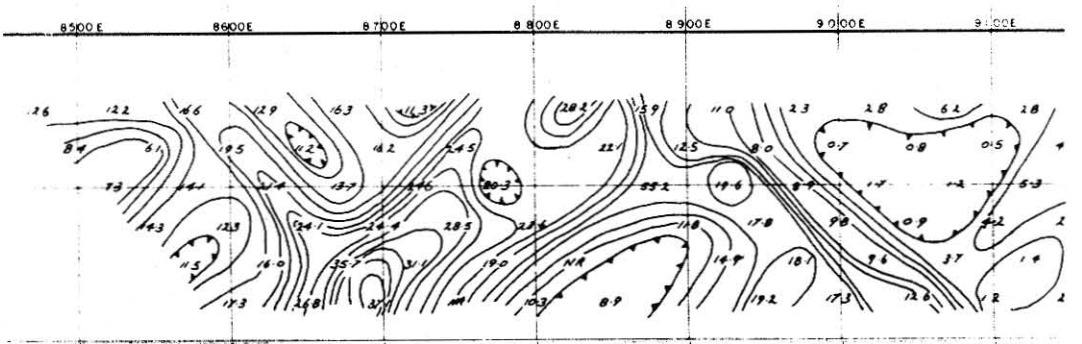
093

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

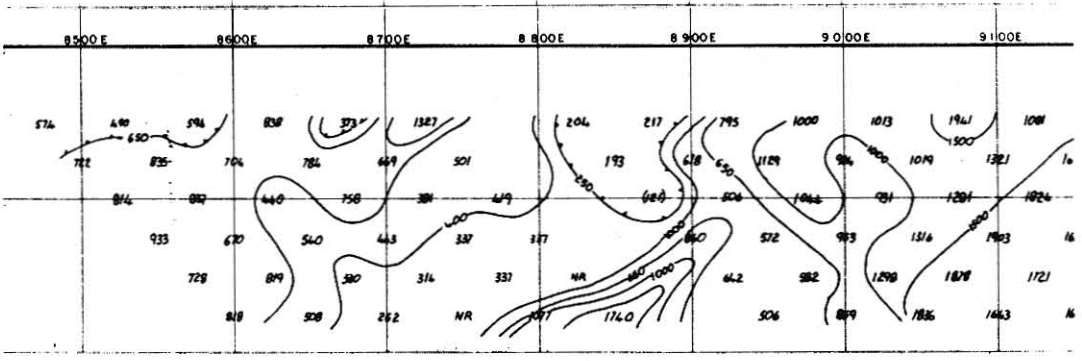
478094

TYPE	CHARGEABILITY CLASS: 7	RATING: Geology 3, Geochem 4 (14)
LOCATION	14100N/8875E (V33)	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow

5 cm

INTERP. WIDTH: Broad

INTENSITY: Upto 10 x background

RESISTIVITY: Strong resistivity anomaly confined to 100m width

METAL FACTOR:

GEOCHEMISTRY:

C-horizon: Strong Pb, Ag, Zn, Cu anomaly centred on 8900E.

Costean: Upto 3.5%Pb, 160gm/tAg in 1 metre chip samples.

GEOLOGY:

Argillaceous/graphitic? black shale with thin siliceous laminae (10% vol) 1% dissem pyrite.

Costean: 8875E - 8910E see below.

OTHER GEOPHYSICS:

TOPO/VEGETATION:

COMMENTS:

Costean: Argillaceous shales/tuffaceous siltstones west of 8896E. 6m width zone of silicification with pyrite-galena vein minz. Pyritic chloritic shale and tuffaceous sandstone to east.

RECOMMENDATION:

a) 2 DDH - 150m, 200m 2 DDH's
b) Jacro infill (5m) on lines 13800N, 13900N, 14200N
c) Infill IP 25m dipole line 14100N

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ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478095

TYPE	**C-HORIZON GEOCHEMISTRY**	**RATING:**
LOCATION	Voyager 33 14100N/8900E	

	Pb	Ag	Zn	Au	As
ELEMENTS					
PEAKS	4.1%	180gm/t	1.25%	290ppb	0.3%
BACKGROUND	<50ppm	<5gm/t	<100ppm	<20	<.02

Pb/Zn RATIO >1.0 upto 2.0

Pb ISOTOPES Pb isotopes suggest vein style mineralization.

AREA 300 x ~ 25m.

SHAPE Narrow inverted Y shape, elongate NNW.

TOPO/VEGETATION CHANNEL SAMPLING in costean on 14100N indicated average 1.1%Pb over 8m width with 87gm/t Ag over 10m width.

GEOLOGY Disseminated and vein galena-pyrite-(sphalerite) minz. associated with brecciated silicified tuffs? and pyritic-chloritic "shale" at contact between "Western sequence" (reworked tuffs) and argillaceous - black shales.

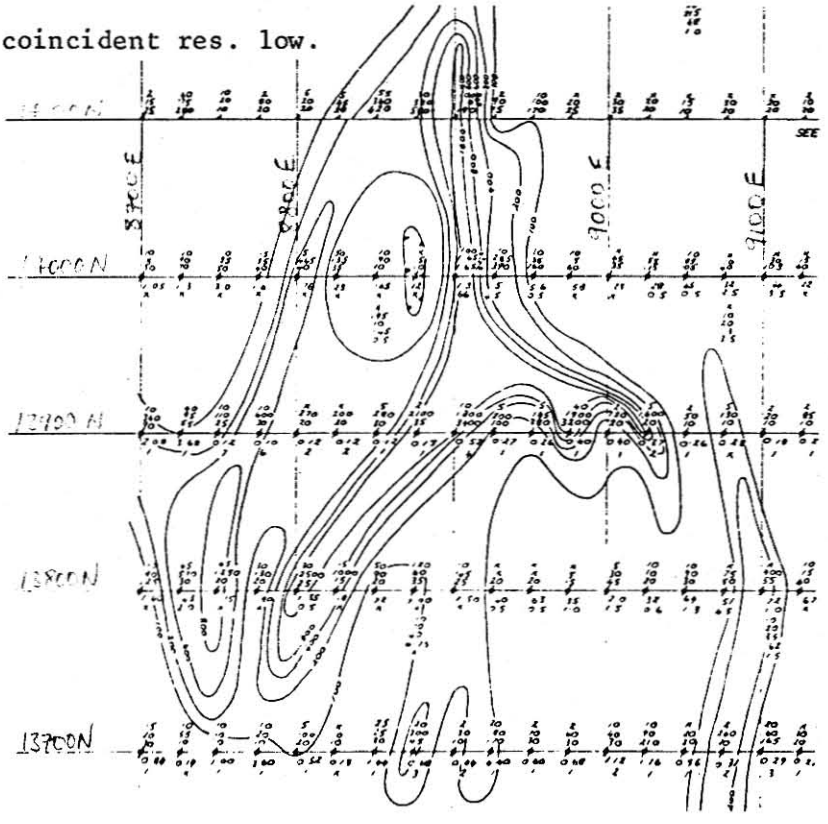
GEOPHYSICS

Chargeability:
dominated by strong chargeability of black shales immediately to west.

Resistivity: coincident res. low.

CONTOUR PLAN 1:5 000

LEAD:



5 cm

RECOMMENDATION 1 DDH inclined to east, for grade assessment.

095

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478096

TYPE	**C-HORIZON GEOCHEMISTRY** 7	**RATING:**	I.P. 1 Geology 4 Gravity 1 Pb Isotopes 1
LOCATION	Voyager 29 10400N/10100E		

ELEMENTS		Zn	Pb	Fe	Cu
PEAKS	ppm	4000	2250	8.4%	1000
BACKGROUND	"	< 50	< 50	0.5%	< 15

Pb/Zn RATIO Range 0.3 - 1.0

Pb ISOTOPES Highly favourable, isotopic ratios similar to Rosebery.

AREA 400 x 50m.

SHAPE Elongate N-S. Pb, Zn somewhat discontinuous.

Fe broad upto 150m.

TOPO/VEGETATION Slight topographic basin with distinctive low shrubby eucalypt vegetation.

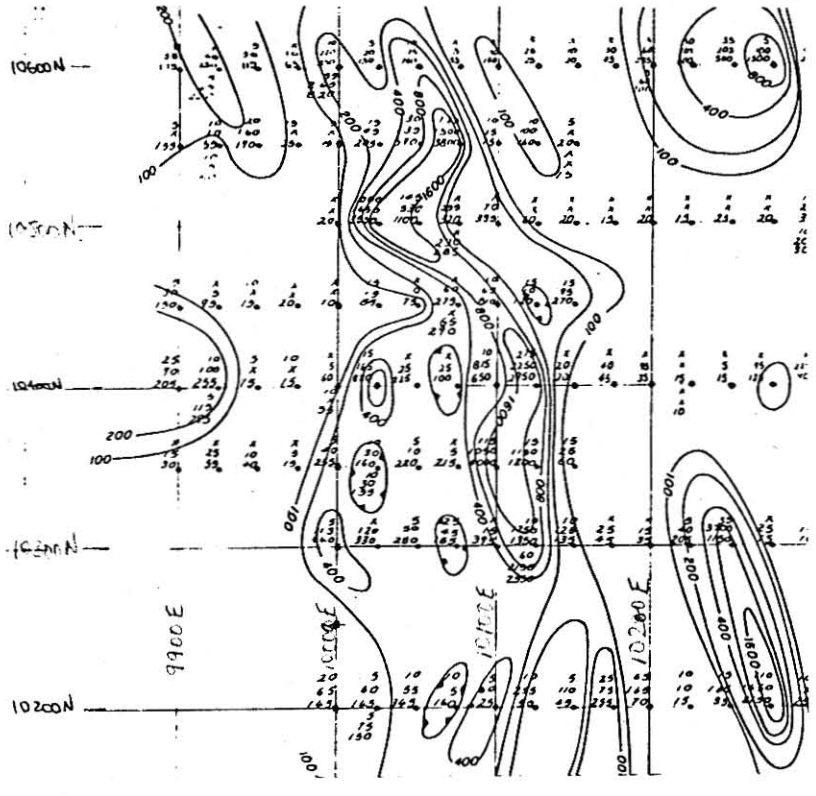
GEOLOGY Chloritic qtz xtal, qtz feldspar xtal tuffs.
Dissem. pyrite and galena observed in pit at 10500N/10020 - 10030E.

Pits and close spaced Mate augering on 10400N failed to duplicate original JACRO anomaly - surface leaching.

GEOPHYSICS * 1982 IP survey:
Chargeability anomaly on 10500N.
Resistivity: Subtle low coincident c̄ geochem anomaly.
Magnetics: Flat.
VLF-EM: No relationship to geochem.
Gravity: Coincident narrow elongate high 3ums^{-2}

CONTOUR PLAN 1:5 000

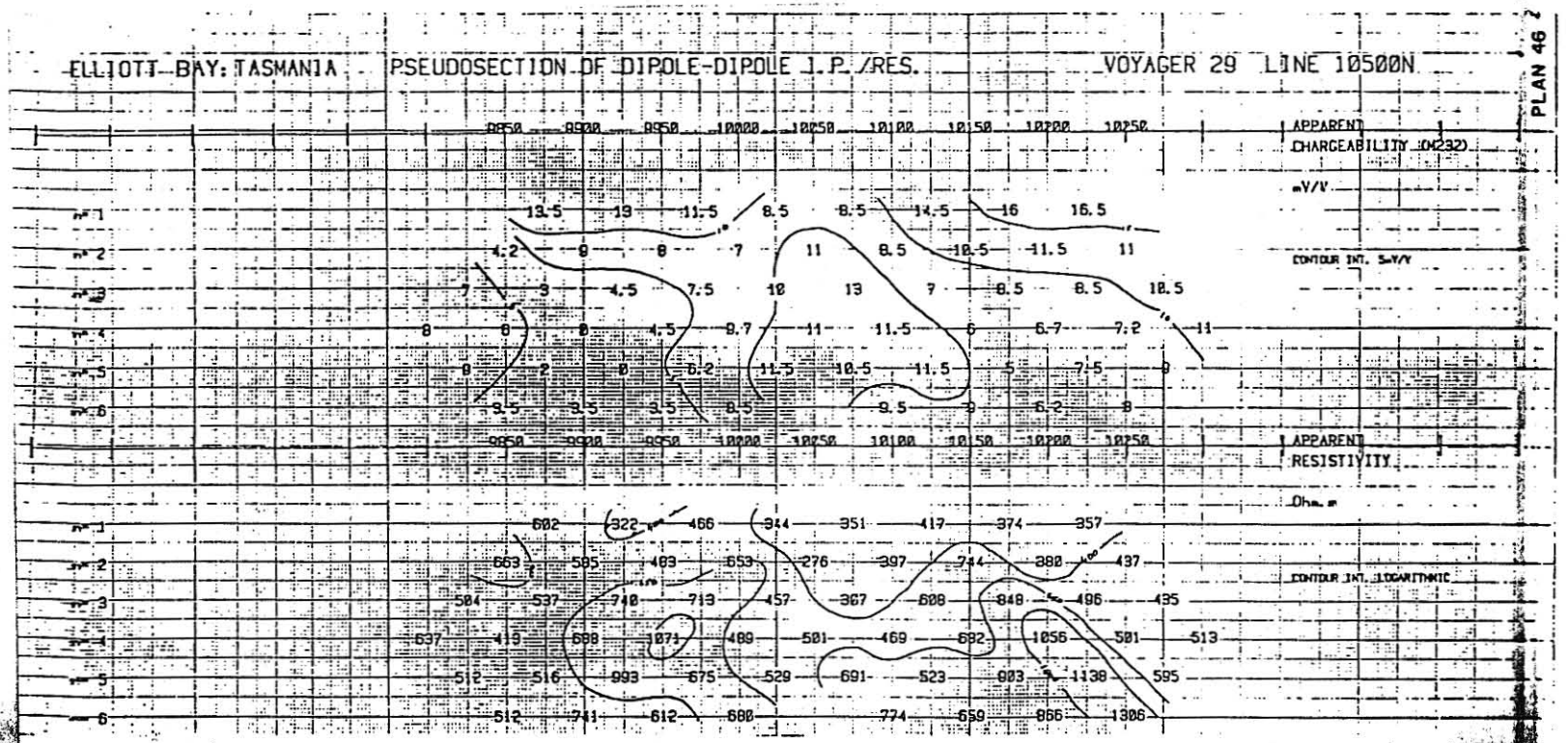
ZINC



RECOMMENDATION

1 DDH-200m

036
478097


ELLIOTT BAY: TASMANIA
PSEUDOSECTION OF DIPOLE-DIPOLE I.P./RES.
VOYAGER 29 LINE 10500N
PLAN 46
APPARENT CHARGEABILITY (M232)
mV/V
CONTOUR INT. 5mV/V
APPARENT RESISTIVITY
Ohm.m
CONTOUR INT. LOGARITHMIC

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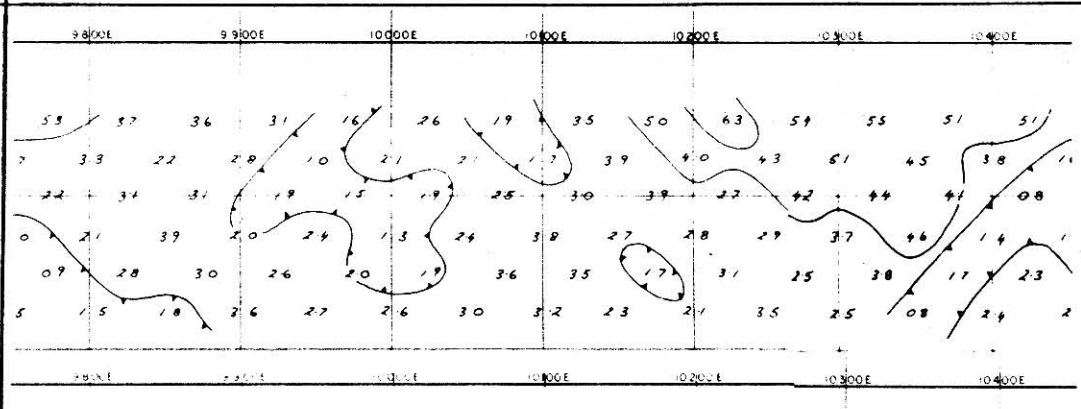
ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

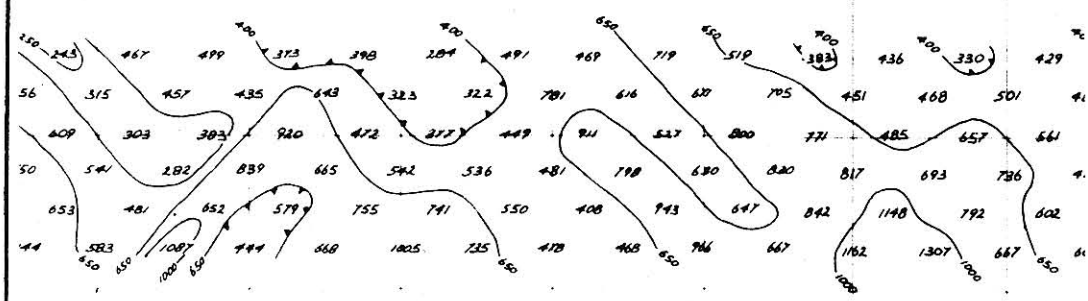
478098

TYPE	RESISTIVITY CLASS:	RATING:
LOCATION	VOYAGER 29 Geochem. Anomaly, 10200 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

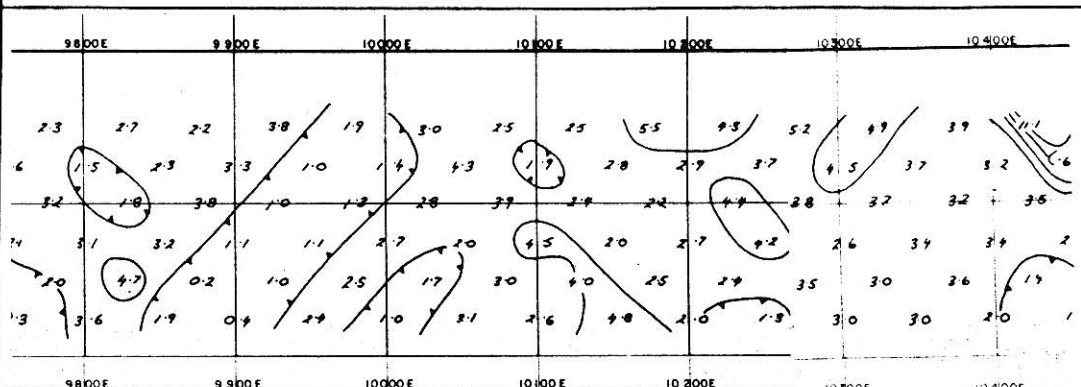
098

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

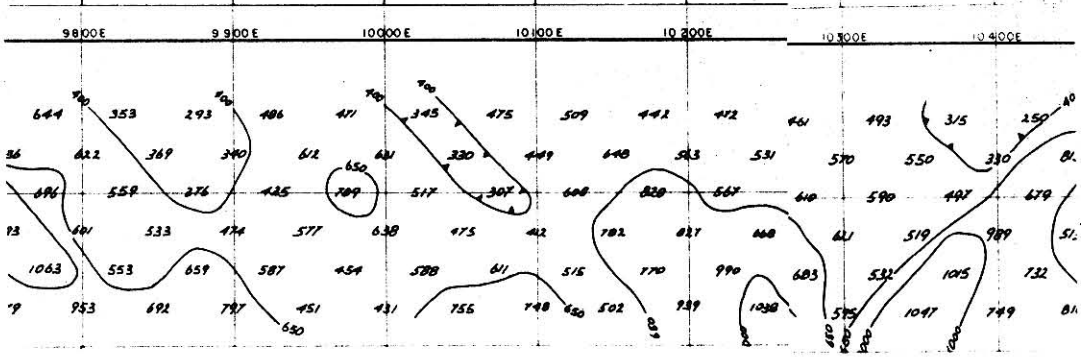
478099

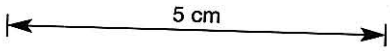
TYPE	RESISTIVITY CLASS:	RATING:
LOCATION	VOYAGER 29 Geochem. Anomaly, 10400 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION





INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

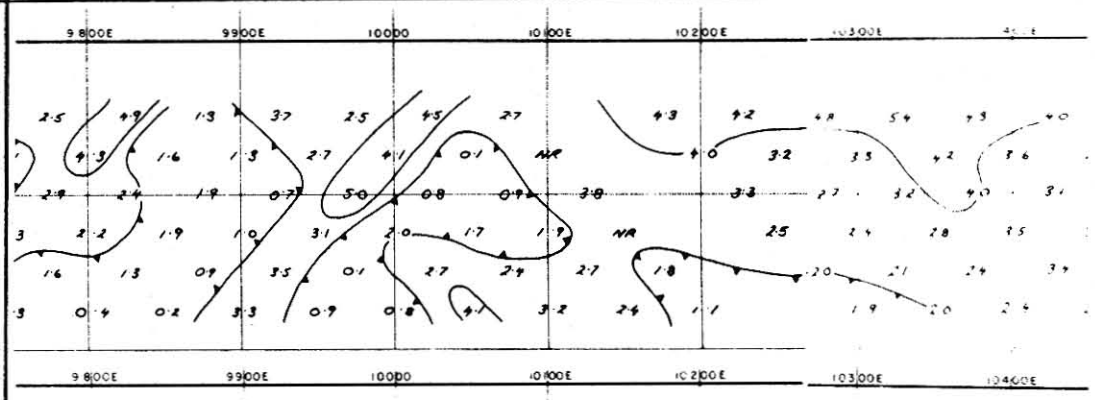
099

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

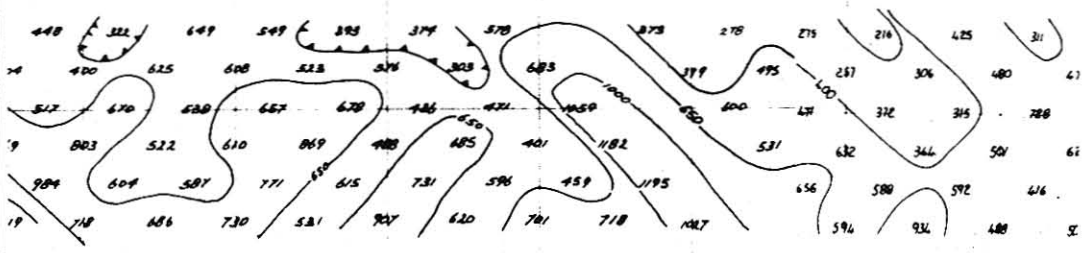
478100

TYPE	RESISTIVITY CLASS:	RATING:
LOCATION	VOYAGER 29 Geochem. Anomaly, 10600 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



5 cm

INTERP. DEPTH

INTERP. WIDTH

INTENSITY

RESISTIVITY

METAL FACTOR

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

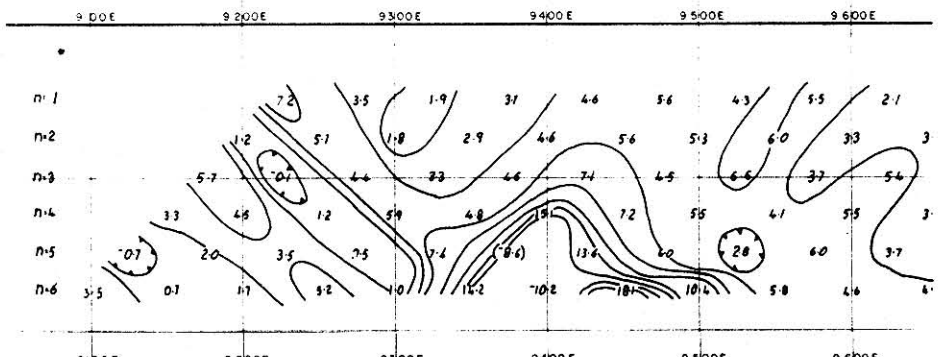
100

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

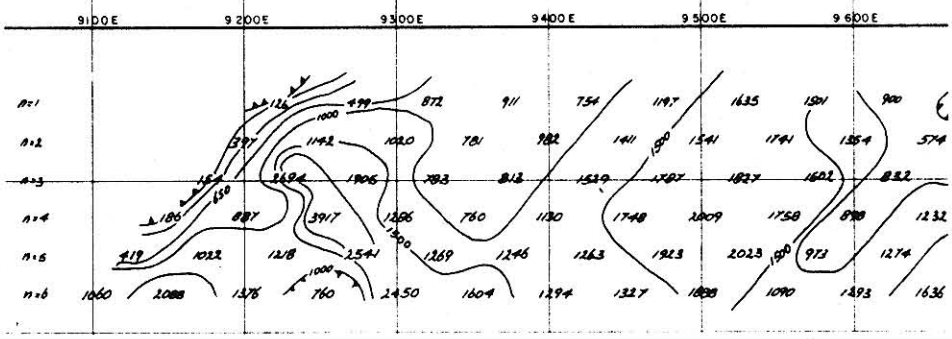
478101

TYPE	CHARGEABILITY	CLASS: 7	RATING: Geology 4 Geochem 2 (13)
LOCATION	11400N/9425E (29W)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH ~ 100m

5 cm

INTERP. WIDTH Undefinable

INTENSITY ~ 4 x Background *(some doubtful data)*

RESISTIVITY No support

METAL FACTOR Reflects chargeability pattern

GEOCHEMISTRY

C-horizon: isolated Pb peak 600ppm at 9425E weak support in Zn at 200 ppm

Pits: upto 0.96%Pb, 0.34%Zn, 24gm/tAg, 0.17%As.

GEOLOGY

Trench at 9425E exposed brecciated/silicified qxt with (upto 30%/vol) pyrite-galena minz over 2 metres width.

OTHER GEOPHYSICS

Magnetics: flat

TOPO/VEGETATION

COMMENTS

Interesting deep chargeability source * but some data questionable*.

RECOMMENDATION

Verify, infill IP 11300N, 11500N. close spaced geochem and further costeaning. 2DDH if verified. 250m.

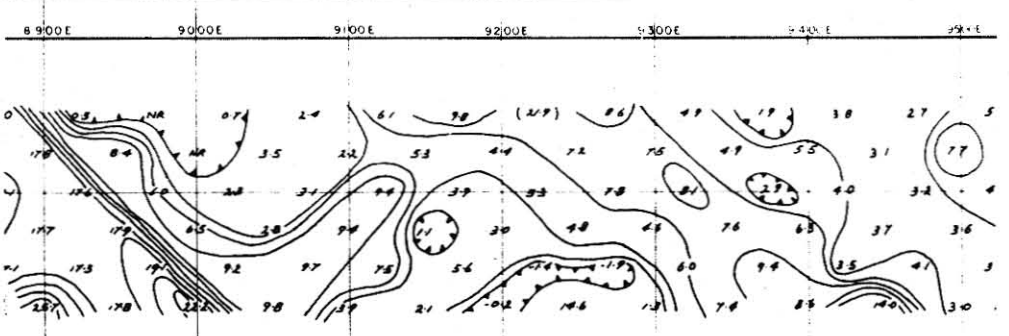
101

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

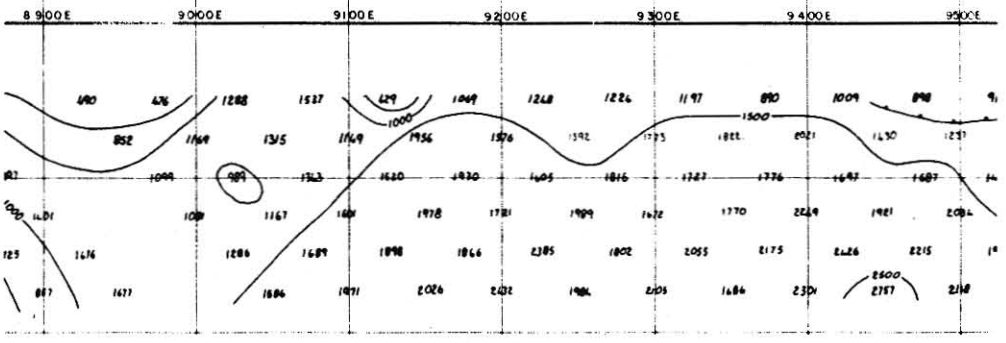
478102

TYPE	**CHARGEABILITY** **CLASS:** 6	**RATING:**	GEOLOGY 3 GEOCHEM 3 (12)
LOCATION	14200N/9200E (V33)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Shallow? but with good depth extent.

INTERP. WIDTH Broad ~ 150m

INTENSITY 2½-3 x background

5 cm

RESISTIVITY Essentially no resistivity support

METAL FACTOR Contributes nothing

GEOCHEMISTRY

C-horizon: strong Pb upto 1900ppm, Ag 6ppm, spikey Zn upto 800ppm east of 9300E.

Pits: upto 1200ppmPb, 20ppmAg.

GEOLOGY

in Pits: uniform (weathered) q(f) bi p lava; occasional unmineralized quartz stringers. (Pits excavated at 12.5m intervals 9175-9275E.

OTHER GEOPHYSICS

Magnetics: flat.

TOPO/VEGETATION

COMMENTS

Potential for chargeable source below barren qpl in synclinal axis. Suggestion of chargeability anomaly on 14100N/9200E.

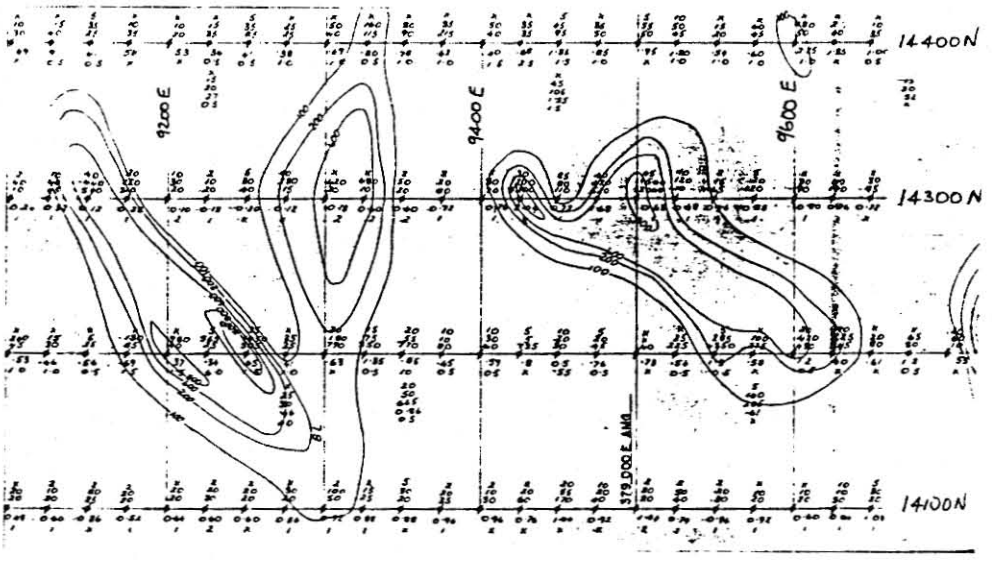
RECOMMENDATION

a) Infill IP at 25m dipoles to allow targeting
b) Costeaning over anomalous zone in pits
c) Drill 1 DDH if target emerged

VOYAGER 33 C-Horizon Geochem. / Chargeability Anomaly on 14200 N

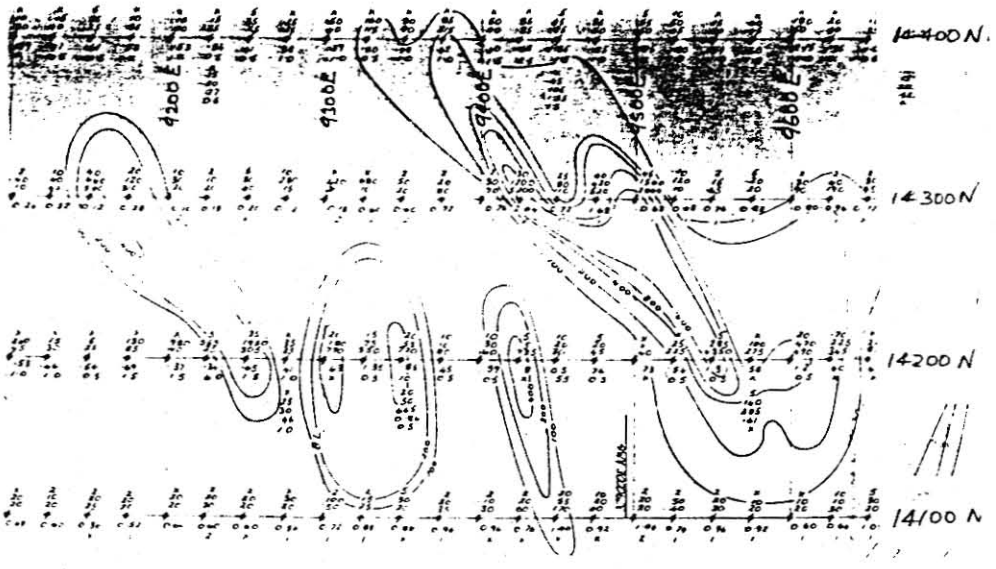
LEAD

1:5000



ZINC

1:5000



5 cm

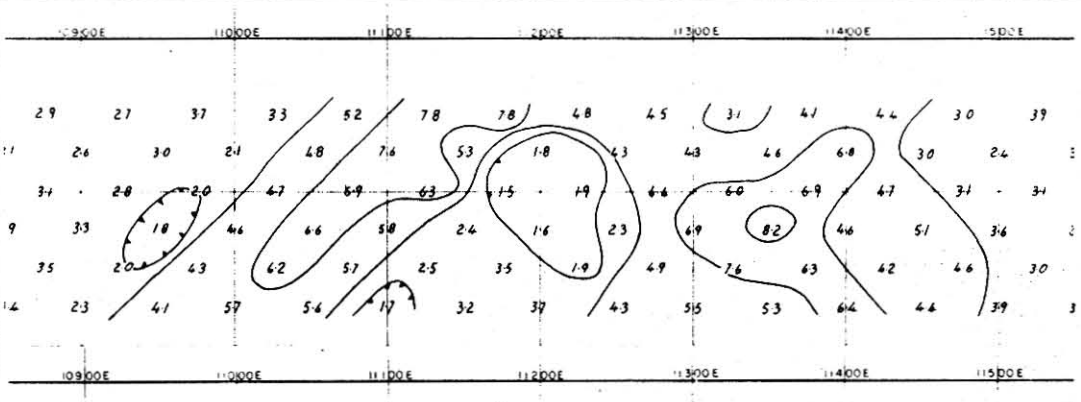
103

ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

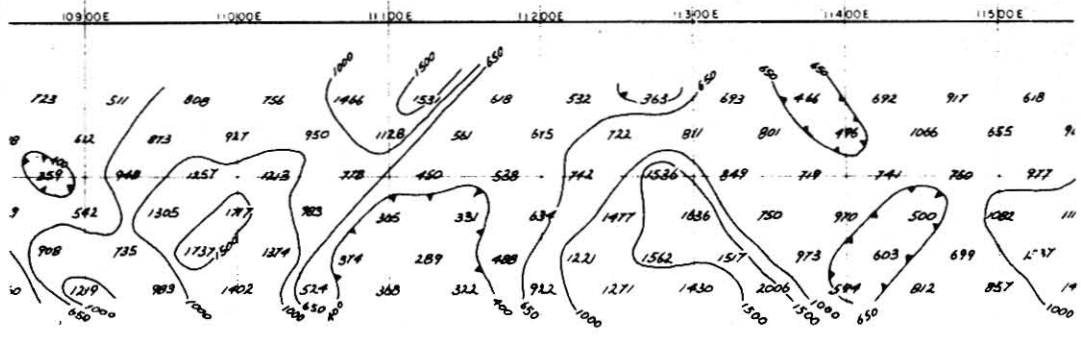
478104

TYPE	CHARGEABILITY CLASS: 5	RATING: Geology 3, Geochem 2, Other 2	(12)
LOCATION	9200N/11100E - 11300E (V9)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY

Very broad complex chargeability.



RESISTIVITY

R low anomaly at depth, coincident c̄ magnetic peak.

METAL FACTOR

Reflects chargeability, but more complex shape. Complexity unlikely to aid in interpretation

GEOCHEMISTRY

C-horizon: rather weak, max: 300Pb, 100Zn.

GEOLOGY

Chloritic qtz porphyrites etc. Chargeability may be complicated by geological structures, folds?

OTHER GEOPHYSICS

Magnetics: coincident c̄ 800nT anomaly, isolated from main V9 mag anomaly.

TOPO/VEGETATION

COMMENTS

Worthy of comparative IP computer modelling.

RECOMMENDATION

a) Jacro sampling 5m spacings. Infill magnetics. Pits
b) 25m IP follow up. Infill IP (50m dip) North and South
c) Drilling if warranted - 200m

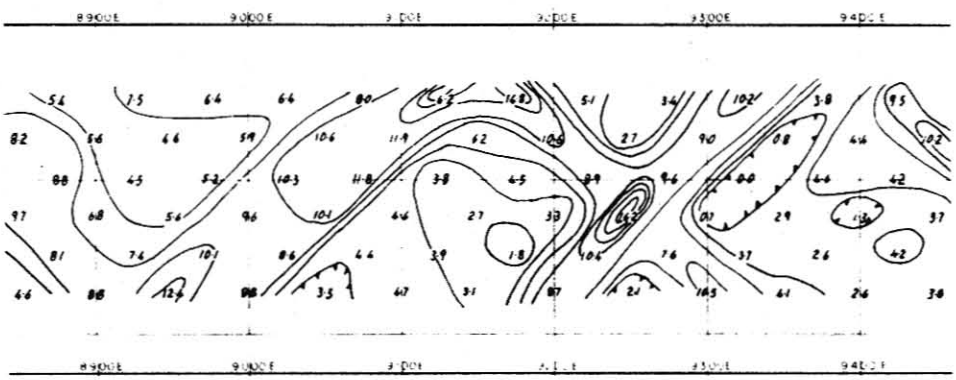
104

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

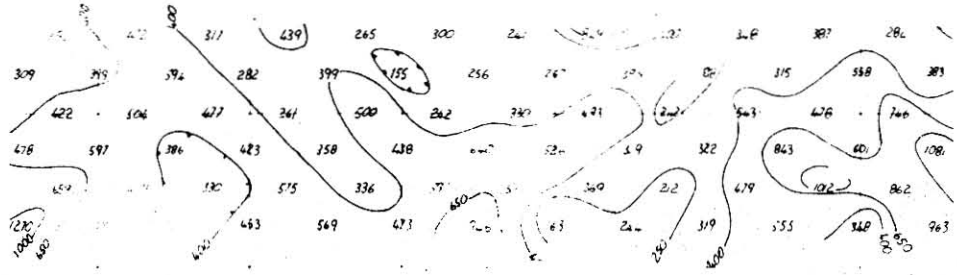
478105

TYPE	CHARGEABILITY	CLASS: 6	RATING: Geology 4, Geochem 2 (12)
LOCATION	8000N/9150E V30		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



5 cm

INTERP. DEPTH Shallow.

INTERP. WIDTH Broad, but well defined.

INTENSITY

RESISTIVITY Small R. low; broad area low background.

METAL FACTOR Some high numbers, but contributes little.

GEOCHEMISTRY

C-horizon: < 500ppmZn, <100Pb; single Au peak 100ppb at 9200E.

Pits: isolated 0.4%Pb, 0.13%Zn, 300ppbAu at 9180E.

GEOLOGY

Variable grain sized qf xtal tuffs and greenish felds-qtz porph. lava? 0.5 - 2.0% dissem pyrite; localized upto 5% pyrite in siliceous veinlets at 9180E.

OTHER GEOPHYSICS

Magnetics: flat.

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

a) Infill IP lines 7900N, 8100N 25m dipoles along 8000N — Select drill target

b) Review target on 7800N along strike depending on results.

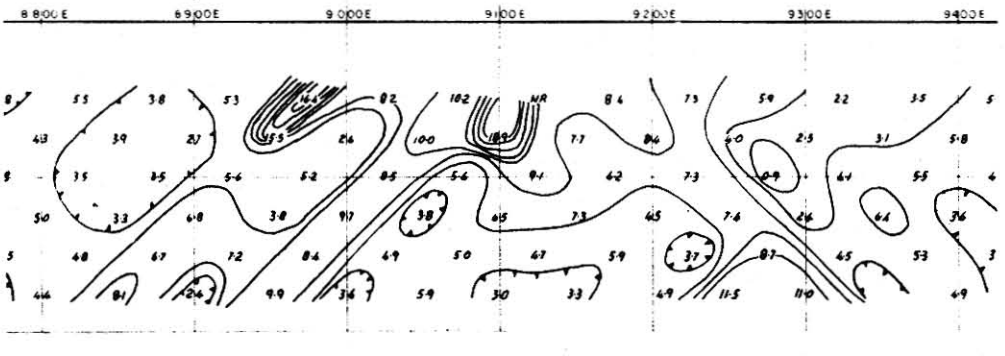
105

ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

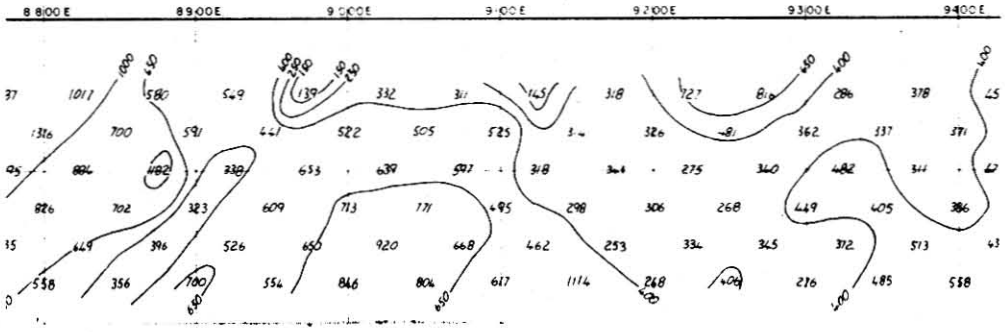
478106

TYPE	CHARGEABILITY CLASS: 6	RATING: Geology 4 Geochem 2 (12)
LOCATION	7800N/9100E (V30)	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



5 cm

INTERP. DEPTH: Shallow.

INTERP. WIDTH: Broad - possibly two or more sources.

INTENSITY: 4 x background.

RESISTIVITY: Complex, broad conductor centred 9050E.

METAL FACTOR: Strong anomaly, similiar in pattern to chargeability

GEOCHEMISTRY: C-horizon: low, < 100ppm Pb, Zn.
isolated 1200ppb Au peak at 9200E.

GEOLOGY: Not well known; siliceous agglomeratic tuff unit to east.
Pit at 9200E showed 10% pyrite but failed to confirm gold anomaly.

OTHER GEOPHYSICS: Magnetics: flat

TOPO/VEGETATION

COMMENTS: Suggestion of chargeability/resistivity anomaly at Depth on 9250E.

RECOMMENDATION: Await results of 8000N/9150E

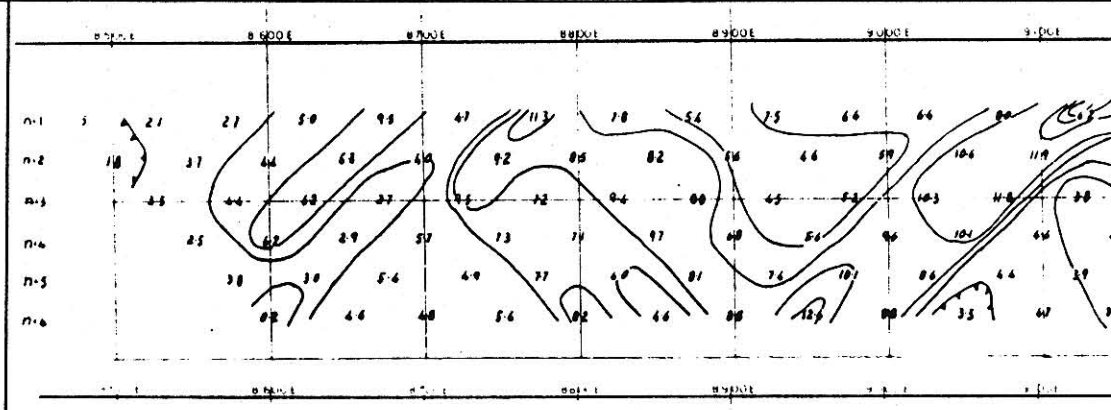
ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

106

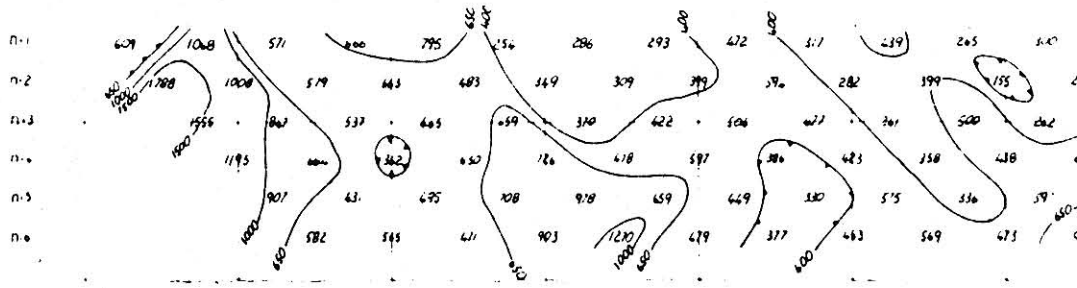
478107

TYPE	CHARGEABILITY	CLASS: 5	RATING: Geology 3, Geochem 3 (11)
LOCATION	8000N/8800E (V30)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow.

INTERP. WIDTH: Moderately broad.

INTENSITY: 3 x background.

RESISTIVITY: Coincident, discrete res. low.

METAL FACTOR: Reflects chargeability

5 cm

GEOCHEMISTRY: Strong anomalous Pb-Zn-Ag spike (1700,1700,22ppm) against low background. Infill lines 7900N, 8100N not significantly anomalous.

GEOLOGY: Galena-sphalerite minz in 20cm qtz vein in pit at 8800E. Upto 2.8%Pb, 7.8%Zn, 108gm/tAg 2.3gm/tAu (As, W, Sn are low).

OTHER GEOPHYSICS: Magnetics: flat.

TOPO/VEGETATION

COMMENTS: Broad zone /complex mutually "interfering" chargeability - may require 25m. Dipole IP follow up.

RECOMMENDATION:

- Further pitting 8700E to 8850E.
- Infill 7900N, 8100N, plus 25m dipoles on 8000N.

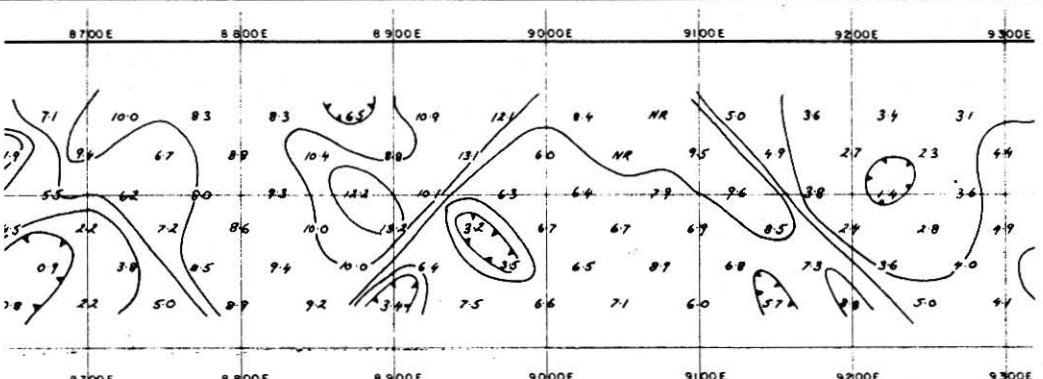
ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

107

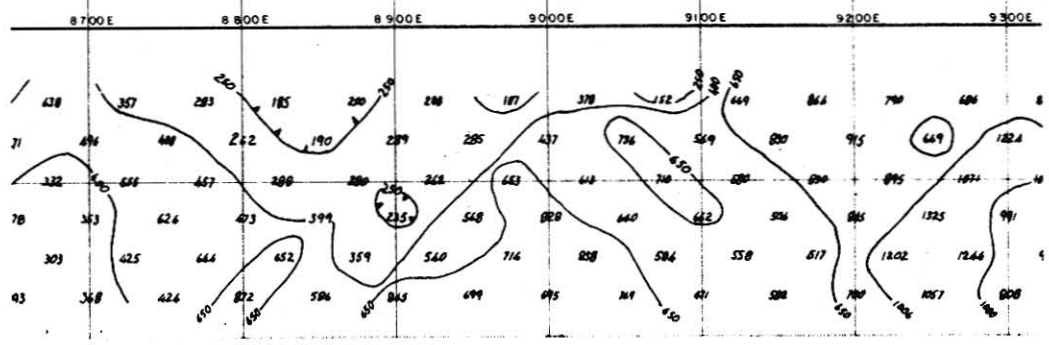
478108

TYPE	CHARGEABILITY CLASS: 6	RATING:	Geology 4 Geochem – (10)
LOCATION	8200N/8900-9100E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Shallow

INTERP. WIDTH Broad > 50m

Complex chargeability high to west.

INTENSITY 3 x background.

5 cm

RESISTIVITY Broad R low to west.

METAL FACTOR Reasonably strong, reflects chargeability.

GEOCHEMISTRY C-horizon: no supporting anomaly.

GEOLOGY Near contact of "dacitic" lava and silicified qx-l tuffs. Could be related to suspected (but not observed) black shale unit.

OTHER GEOPHYSICS Magnetics: flat.

TOPO/VEGETATION

COMMENTS Possibly strike extension of minz. qtz veins on 8000N/8800E or related to suspected blk. shales?
*(Geochem does not support extension of vein mineralization).

RECOMMENDATION
a) Infill IP at 25m dipole spacings.
b) Infill Jacro sampling. Trenching - Drilling

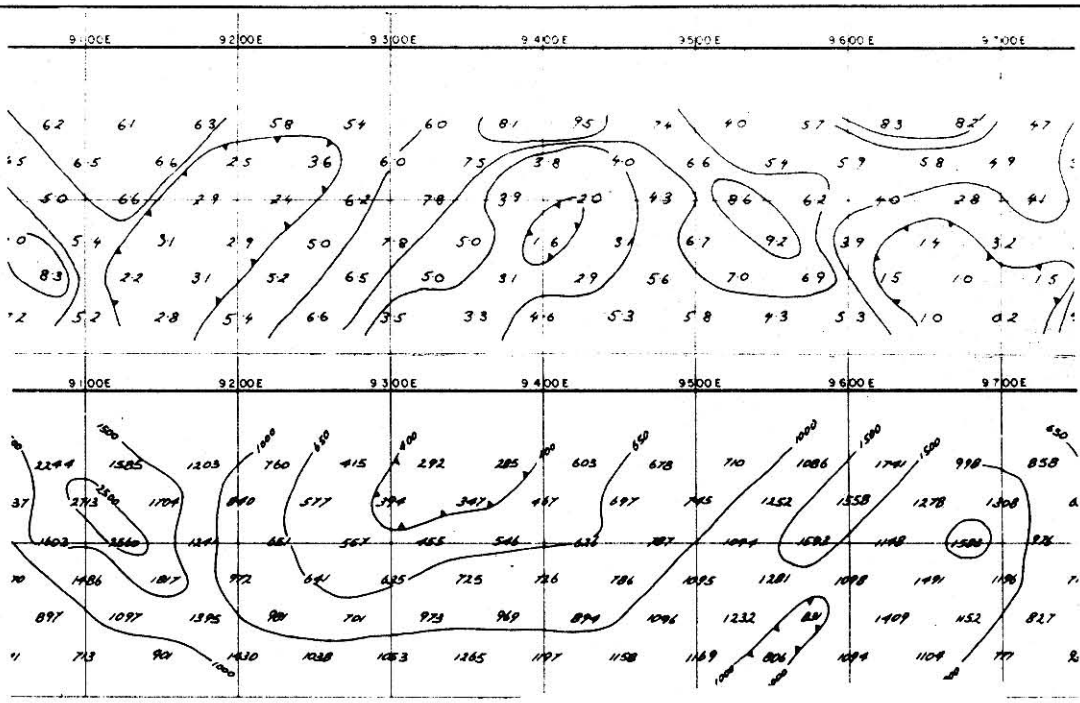
ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

108

478109

TYPE	CHARGEABILITY	CLASS: 6	RATING: Geology 4, Geochem 3 (13)
LOCATION	9600N/9400E VOYAGER 24		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION

5 cm

INTERP. DEPTH	Shallow.
INTERP. WIDTH	~ 100m. NB IP line cuts strike of rocks at 45°.
INTENSITY	3 x background.
RESISTIVITY	Good support with broad (< 400ohm.m) R low at surface.
METAL FACTOR	Pattern reflects chargeability, but more intense particularly on western flank.
GEOCHEMISTRY	5m Spaced C-horizon: Zone of spiky Pb, Zn (upto 1500, 1200ppm) over 9360-9390E and at 9430E.
GEOLOGY	Near lower contact of silicified agglomeratic tuff unit with Au potential. Possible shaley seds. in "marker horizon" may relate to IP anomaly.
OTHER GEOPHYSICS	Magnetics: flat.
TOPO/VEGETATION	
COMMENTS	Classic "surficial" anomaly - J. Sumpton will test it with computer modelling. Weaker charge/resist anomaly occurs along strike at 9400N/9175E. *Possible Au potential.
RECOMMENDATION	a) Analyse C-horizon for Au, As. - Infill IP 100m north to south. - 25m dipoles over anomaly. - evaluate drill target.

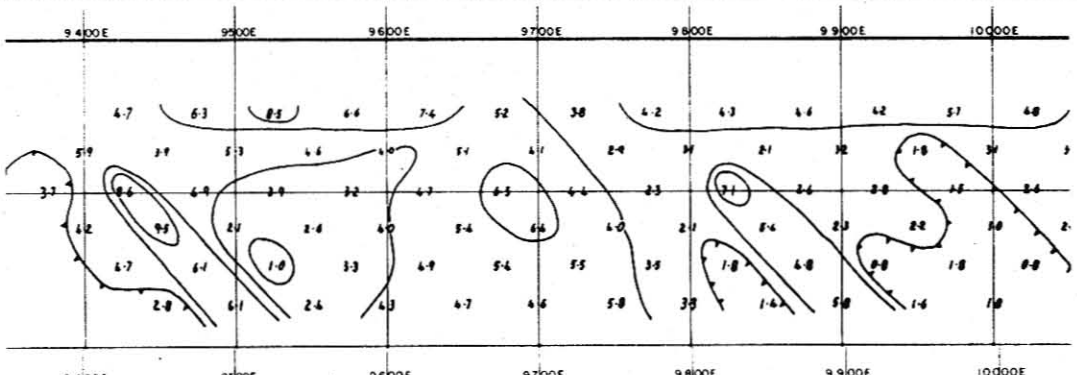
ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

109

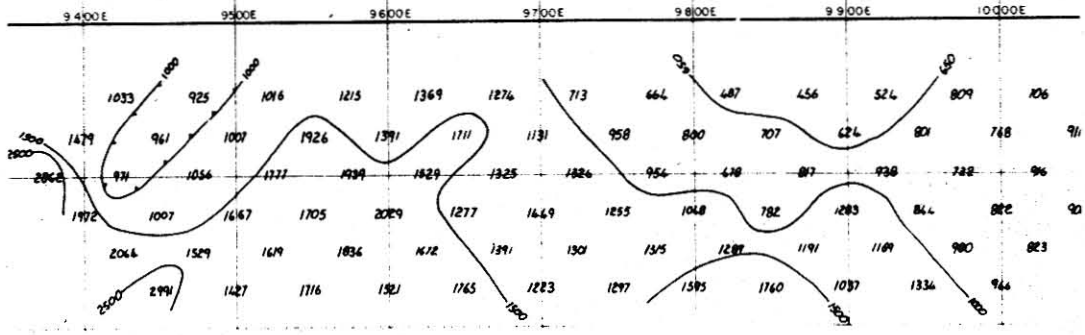
478110

TYPE	CHARGEABILITY CLASS: 6	RATING:	Geology 3 Geochem 3 (12)
LOCATION	12200N/9700E (V19)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



5 cm

INTERP. DEPTH > 50m.

INTERP. WIDTH ~ 50m.

Small, discrete source.

INTENSITY 2 x background.

RESISTIVITY - no support.

METAL FACTOR No significant expression from slight increase attributable to a rise in chargeabilities.

GEOCHEMISTRY C-horizon: narrow single Pb-Zn spike (900ppm each) at 9650E.

Costean: 9676-9700E: Pb, Zn < 200ppm.

GEOLOGY Costean exposed locally brecciated chloritic qtz-feldspar xtal (lithic) tuff. Dissem pyrite ~ 2%, locally upto 10% associated dark chlorite in brecciated zones.

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS Possible realtionship to partly defined chargeability anomaly at western end of 12400N.

RECOMMENDATION
a) Close spaced C-horizon geochem.
b) IP on lines 12400N (extension to west) and 12300N.
c) Select Drill target.

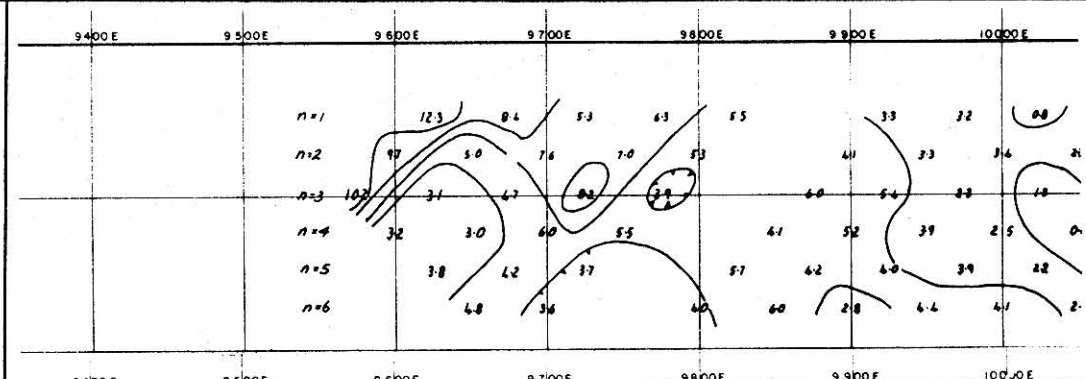
ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

110

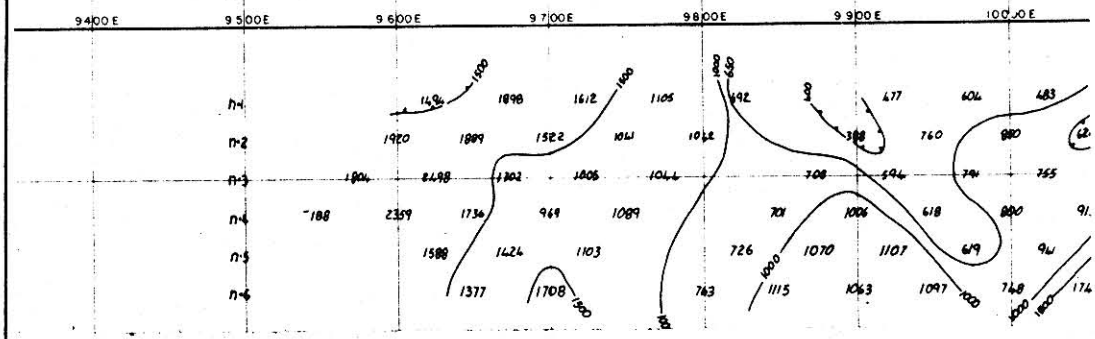
478111

TYPE	CHARGEABILITY CLASS: 5+	RATING:
LOCATION	12400N/9600E continuing to west.	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	End of line anomaly, only half defined.
INTERP. WIDTH	
INTENSITY	3 x background.
RESISTIVITY	- no supporting anomaly.
METAL FACTOR	

5 cm

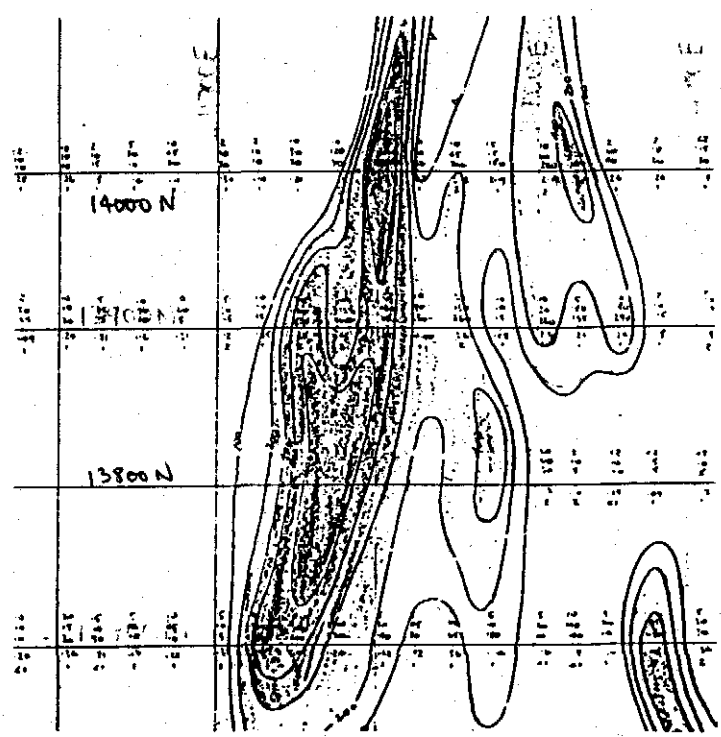
GEOCHEMISTRY	C-horizon: minor Zn-Pb anomaly at 9350E (upto 1400, 300ppm) otherwise fairly low.
GEOLOGY	Contact zone between qtz phyric lava (to east) and M.g. chloritic qtz-feldspar xtal tuffs. Silicified zones upto 1m wide with upto 5% dissem pyrite exposed in Pit at 9625-9630E.
OTHER GEOPHYSICS	Magnetics: flat.
TOPO/VEGETATION	
COMMENTS	Requires IP extension to west.
RECOMMENDATION	Extend IP to west.

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

111

478112

TYPE	C-HORIZON GEOCHEMISTRY 7	IP 2 RATING: Geology 3 (12)
LOCATION	Voyager 34 13600 - 14000N/11800E	

ELEMENTS	Pb Zn Ag
PEAKS	4150 5400 7 (ppm)
BACKGROUND	< 50 < 50 1
Pb/Zn RATIO	Range: 0.23 - 1.17 but generally <0.7.
Pb ISOTOPES	No data. Isotope data from geochem anomalies on 13400N indicate homogenous isotopic ratios similar to Rosebery target.
AREA	350 x 50m; dubious extension upto 14400N.
SHAPE	Narrow ellipse, strongly elongated N-S.
TOPO/VEGETATION	Low swampy area.
GEOLOGY	Topographic low area corresponding to zone of fine to medium grained chloritic qtz feldspar crystal tuff with traces of pyrite.
GEOPHYSICS	Chargeability: Suggestion of deep source chargeable zone upto 3 x background on 14400N. (None on 14000N, faint on 13800N.)
	Resistivity: Broad res. low coincident with area of pyritic chloritic tuffs.
CONTOUR PLAN 1:5 000	
	
RECOMMENDATION	: Close spaced geochem, pitting of geochem anomaly zone. : Await results from V29 drill hole (10400N, 10100E) : This is a similar geochem anomaly with little IP support.

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

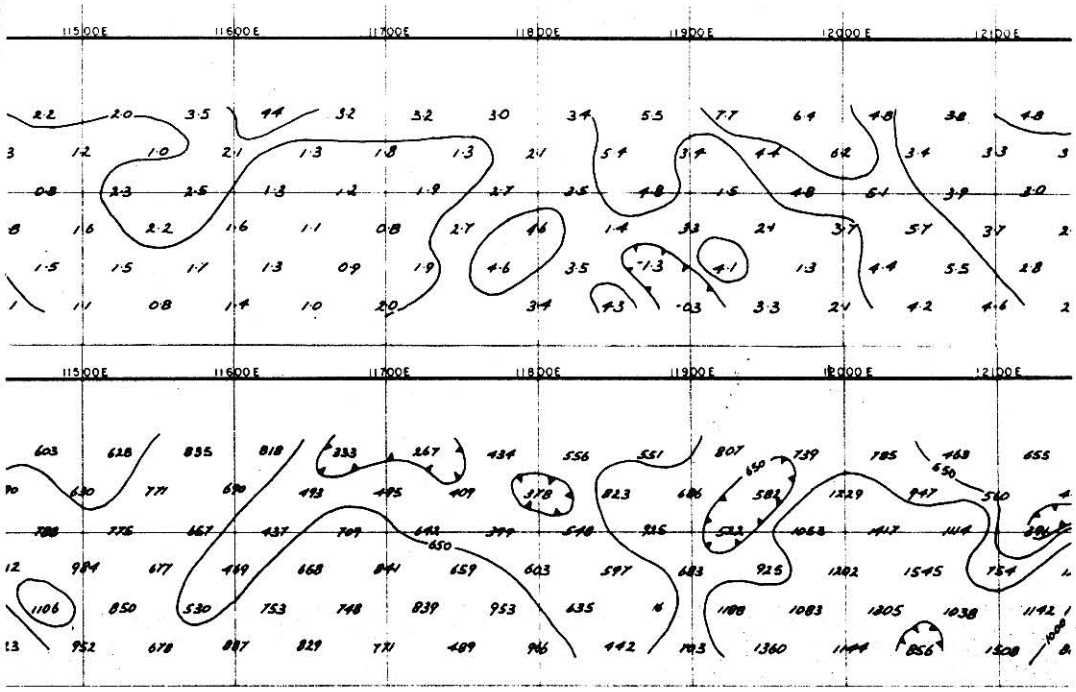
112

478113

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 34 Geochem. Anomaly;	

APPARENT CHARGEABILITY PSUEUDOSECTION

13600 N



APPARENT RESISTIVITY PSUEUDOSECTION

INTERP. DEPTH

INTERP. WIDTH

INTENSITY

RESISTIVITY

METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

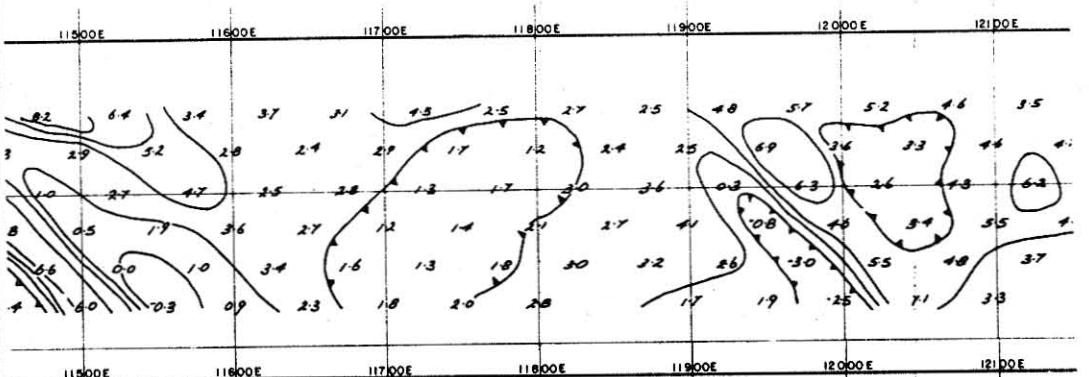
ANOMALY DATA SHEET ELLIOTT BAY E.L. 27/76

478114

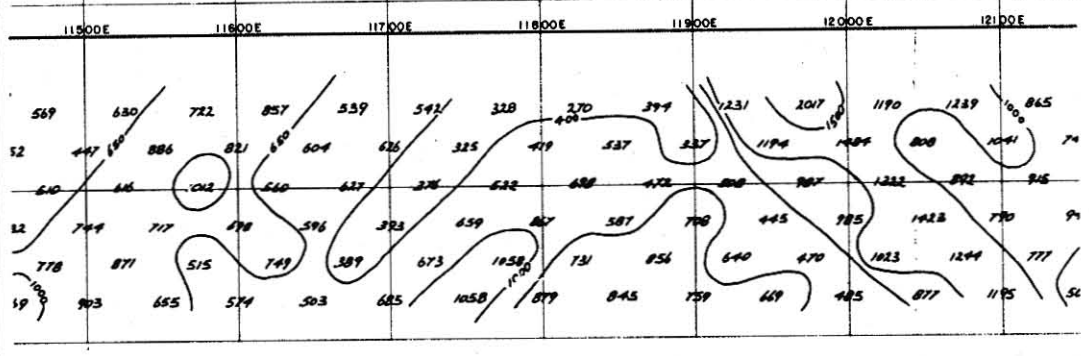
113

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 34 Geochem. Anomaly; 13800 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



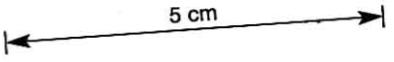
INTERP. DEPTH

INTERP. WIDTH

INTENSITY

RESISTIVITY

METAL FACTOR



GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

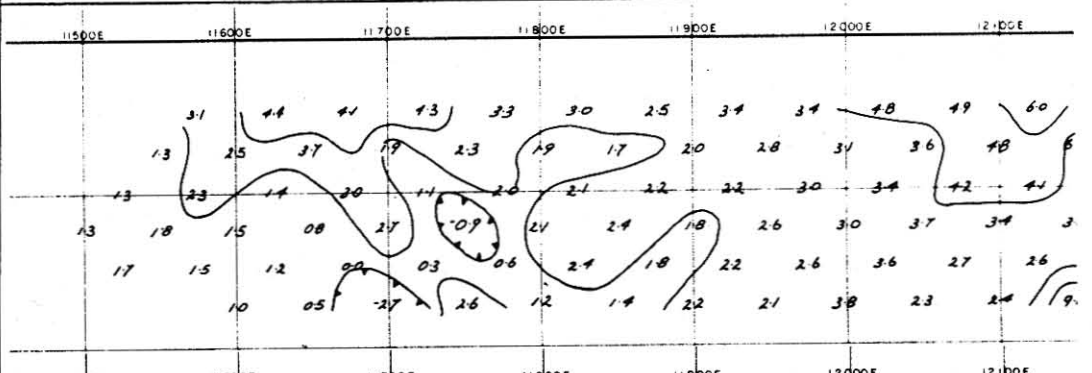
ANOMALY DATA SHEET ELLIOTT BAY E.L. 27776

478115

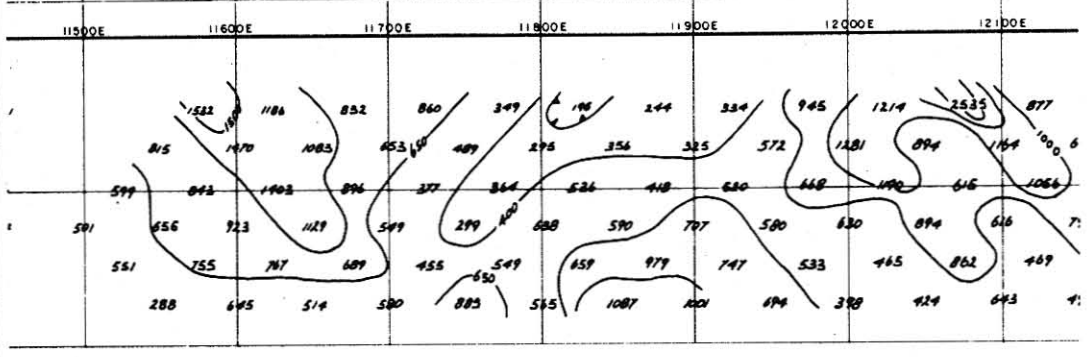
114

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 34 Geochem. Anomaly; 14000 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

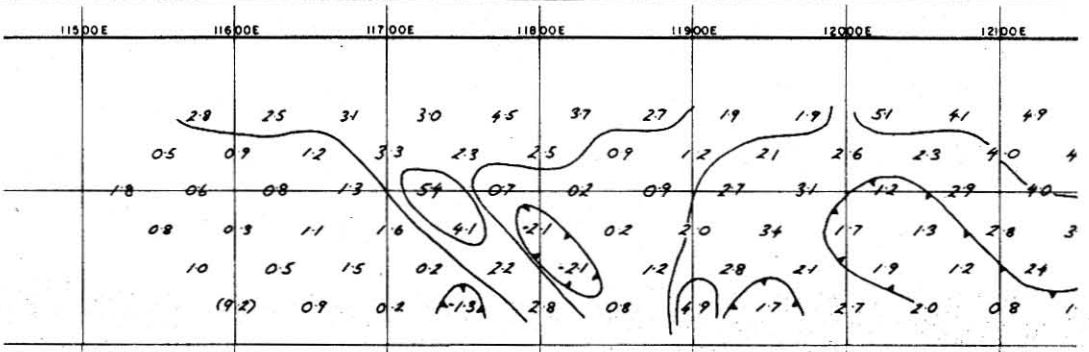
ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

115

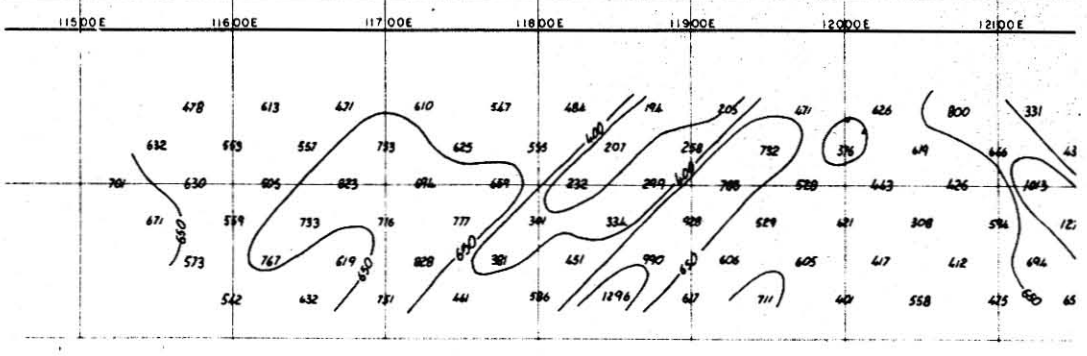
478116

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 34 Geochem. Anomaly; 14200 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

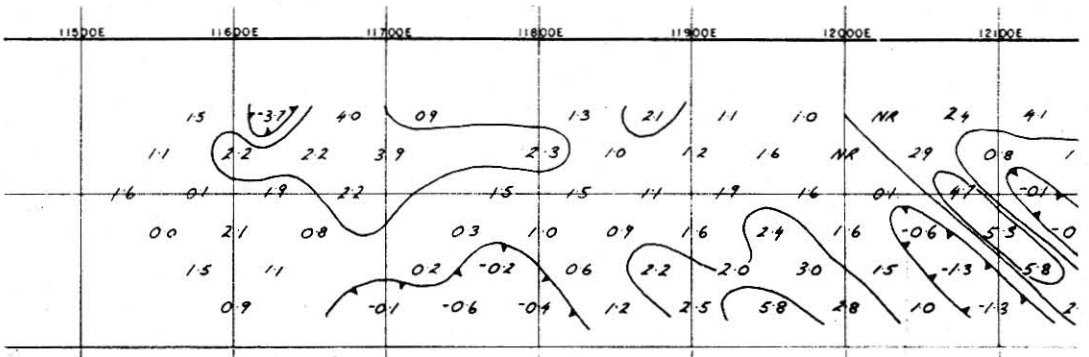
116

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

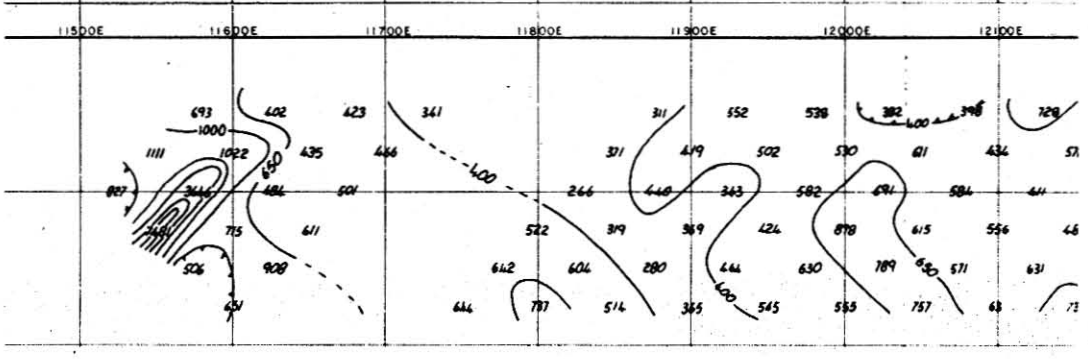
478117

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 34 Geochem. Anomaly; 14400 N	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

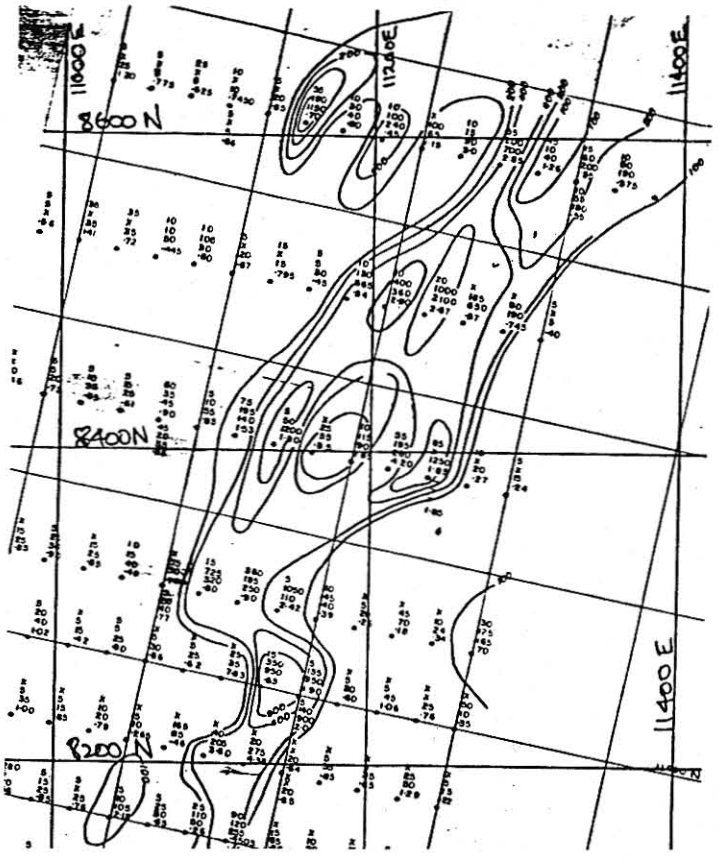
RECOMMENDATION

117

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478118

TYPE	C-HORIZON GEOCHEMISTRY 6
RATING:	IP 2 Geology 3 (11)
LOCATION	Voyager 9 8400N/11100-11300E
ELEMENTS	Zn Pb
PEAKS	2100ppm 1050ppm
BACKGROUND	<50 <50
Pb/Zn RATIO	low; generally <0.5
Pb ISOTOPES	Similar 207/206 to 204/206 Ratios to V29, Rosebery etc. but with considerable internal variation - not entirely favourable.
AREA	
SHAPE	Elongate NNE, 500 x 100m with some internal lows.
TOPO/VEGETATION	
GEOLOGY	Complex area of chloritic qtz porphyries, bounded to east by major N trending fault ? Quartz phyric lavas and qfx tuffs east of fault.
GEOPHYSICS	Magnetics: coincides with eastern flank of large double peaked magnetic anomaly. Resistivity: strong R low extends to depth.
CONTOUR PLAN 1:5 000	ZINC



5 cm

RECOMMENDATION

Infill IP on lines 8300N and 8500N.

ANOMALY DATA SHEET

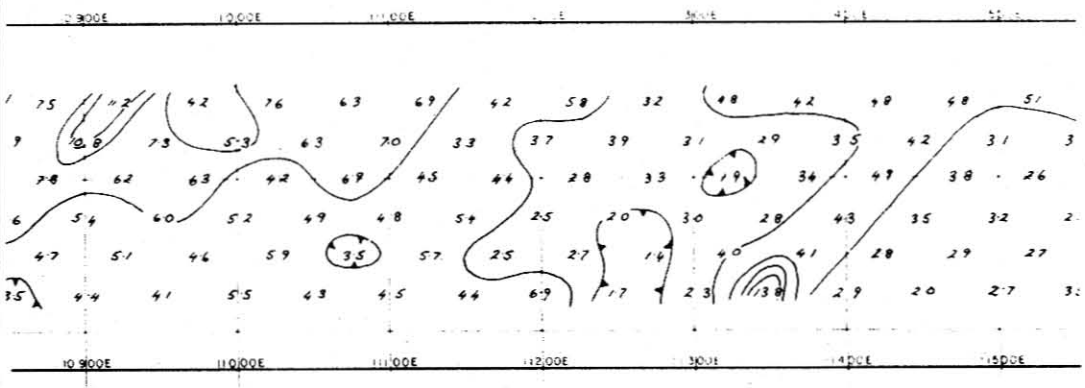
ELLIOTT BAY E.L. 27/76

118

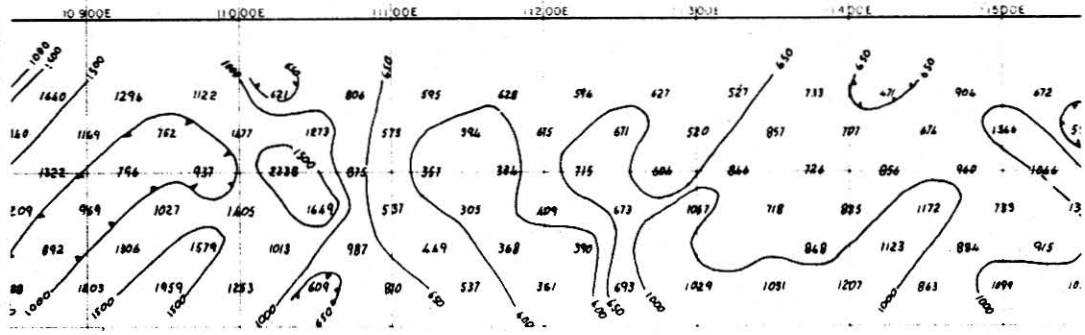
478119

TYPE	RESISTIVITY CLASS:	RATING:
LOCATION	V 9 8400 N / 11100-11300 E C-Horizon Geochem. Anomaly	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH

INTERP. WIDTH

INTENSITY

RESISTIVITY

METAL FACTOR

5 cm

GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

119

ANOMALY DATA SHEET — ELLIOTT BAY E L 27/76

478120

TYPE	C-HORIZON GEOCHEMISTRY 5	RATING:	IP 3 Geology 3 (11)
LOCATION	7000N/11900E		

ELEMENTS	Pb	Zn	Cu
PEAKS	1500	1200	200
BACKGROUND	<50	<50	-
Pb/Zn RATIO	~ 1		
Pb ISOTOPES	No data.		

AREA 100m wide anomalous zone (profile)

SHAPE ?

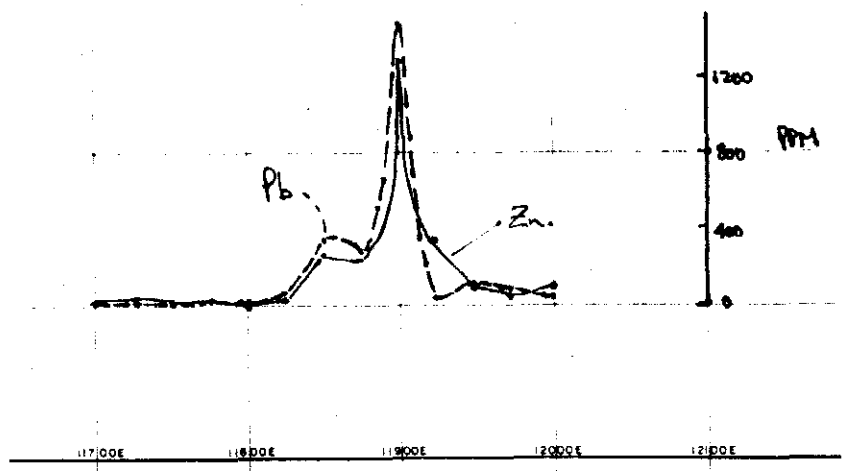
TOPO/VEGETATION

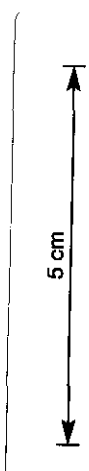
GEOLOGY Qtz-feldspar phyric acid lava (pinkish) with outliers of Tertiary siliceous gravel.

GEOPHYSICS Resisitivity: Developing Res. low at end of line (11900E).

Chargeability: Suggestion of deep source at 11800E.

PROFILE
1:5 000





RECOMMENDATION

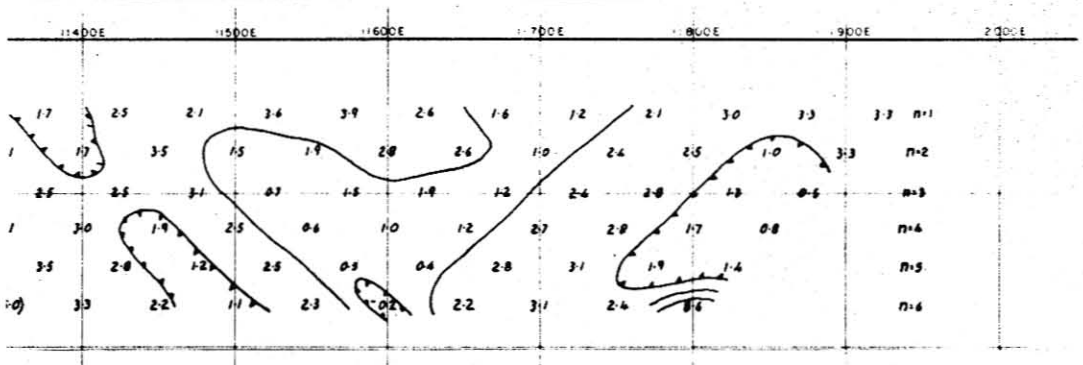
a) Further Jacro sampling to north and south.
b) Extend IP to cover end of line anomaly.
c) Trenching.

120 ANOMALY DATA SHEET ELLIOTT BAY E.L. 27/76

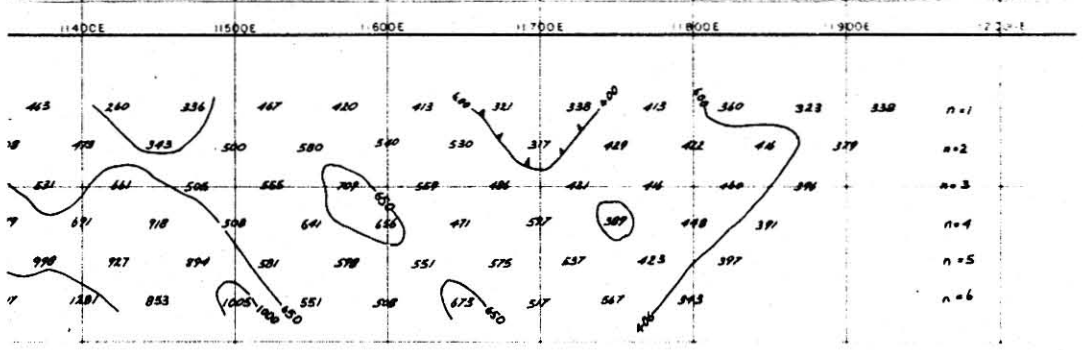
478121

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	7000 N / 11900 E C-Horizon Geochem. Anomaly	

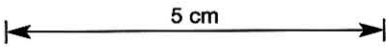
APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR



GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

APPENDIX 1 (Continued)

LOW PRIORITY ANOMALIES

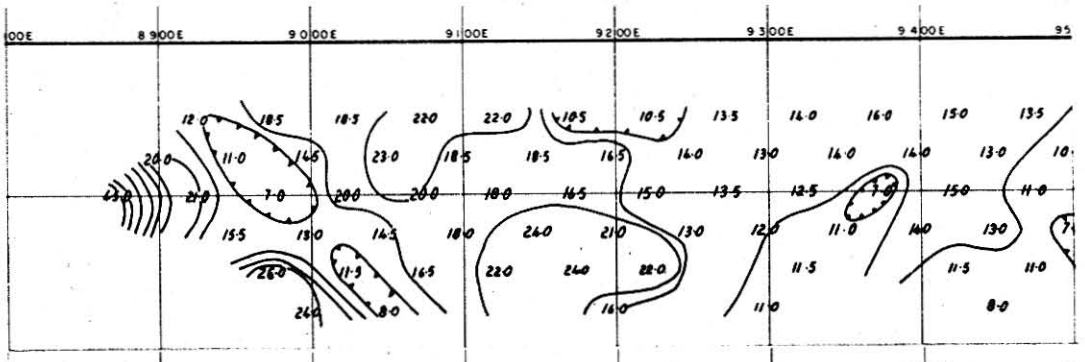
(No follow up recommended)

122 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

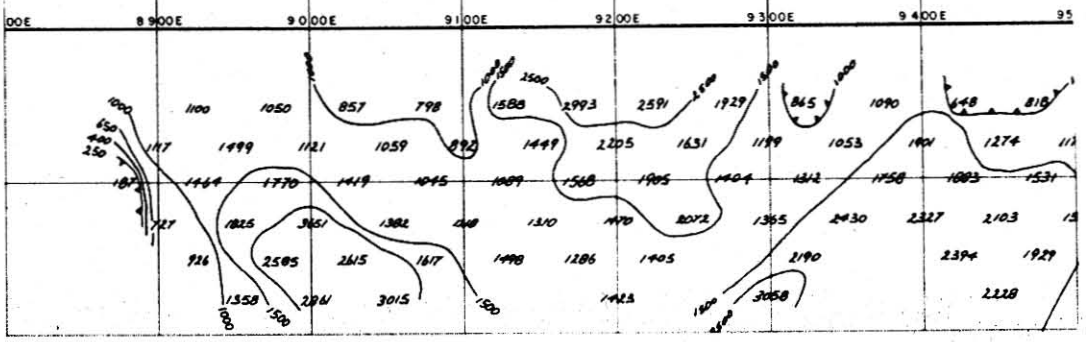
478123

TYPE	CHARGEABILITY	CLASS: 5	RATING: Geology 3, Geochem 2 (10)
LOCATION	13600N/9075E Voyager 33		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH ~ 50m
INTERP. WIDTH Broad.

Rather poor "shape" but possibly influenced by blk. shale to west.

INTENSITY 2 x background.

RESISTIVITY Faint-moderate surficial low.

METAL FACTOR Contributes nothing.

GEOCHEMISTRY C-horizon: isolated small peak 300ppm Zn, 240ppmPb, 3gm/tAg at 9075E with low background.

GEOLOGY Foliated pebbly reworked tuffs in contact with qf bi p lava (to east) at around 9130E.

Pits excavated at 12.5m centres 9050E - 9150E; low geochem.

OTHER GEOPHYSICS Magnetics: small double peaked 150nT anomaly.

TOPO/VEGETATION

COMMENTS

RECOMMENDATION N.F.

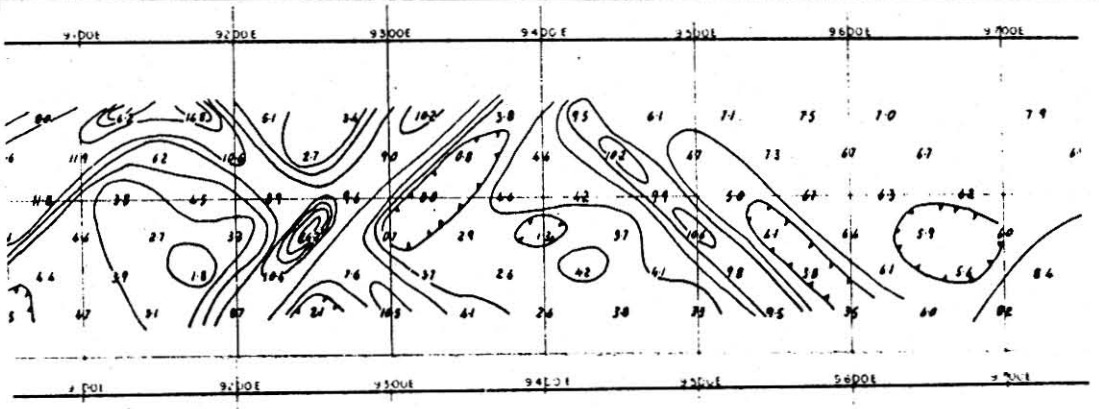
5 cm

123 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

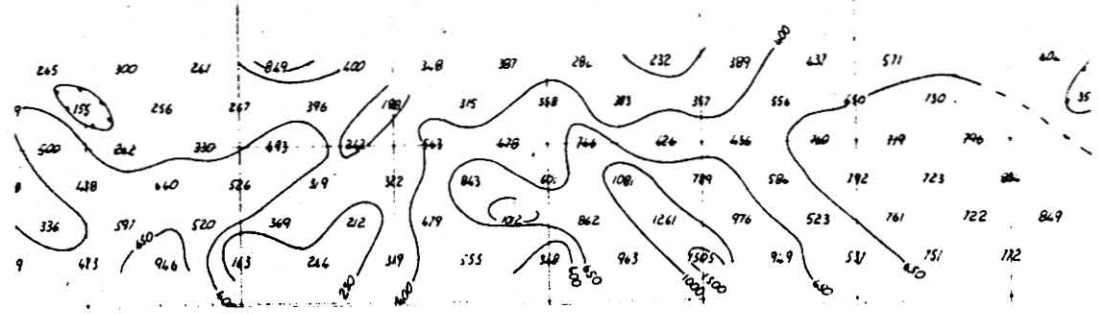
478124

TYPE	CHARGEABILITY CLASS: 5	RATING:	Geology 2 Geochem 2 (9)
LOCATION	8000N/9400E (V30)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	Comes to surface.
INTERP. WIDTH	Broad.
INTENSITY	2 x background.
RESISTIVITY	Rather poorly defined resistivity low.
METAL FACTOR	Strong anomaly similiar in pattern to chargeability
GEOCHEMISTRY	C-horizon: low, upto 400ppm Zn, Pb to east. single value of 105ppm Au at 9400E.
GEOLOGY	Siliceous conglomerate contact with qpl. Possible shaley seds associated with congl. Microgranite east of 9400E.
OTHER GEOPHYSICS	Magnetics: flat. SP: -50mV anomaly centred 9375E.
TOPO/VEGETATION	
COMMENTS	
RECOMMENDATION	

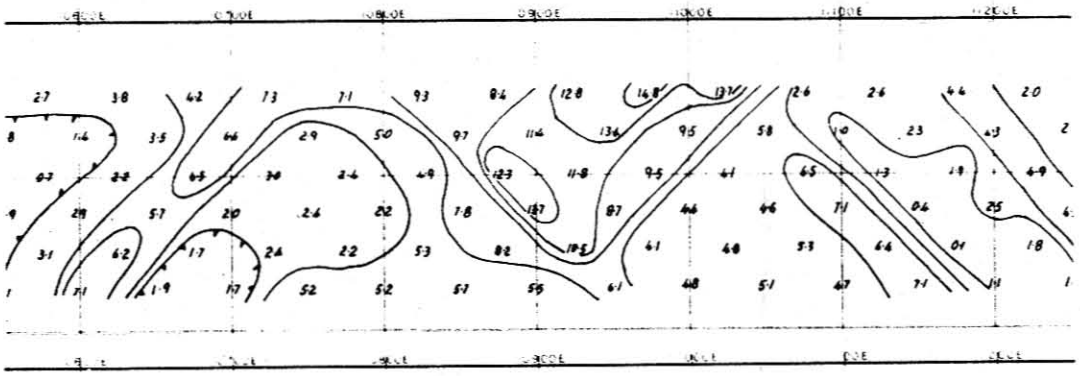
5 cm

124 ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

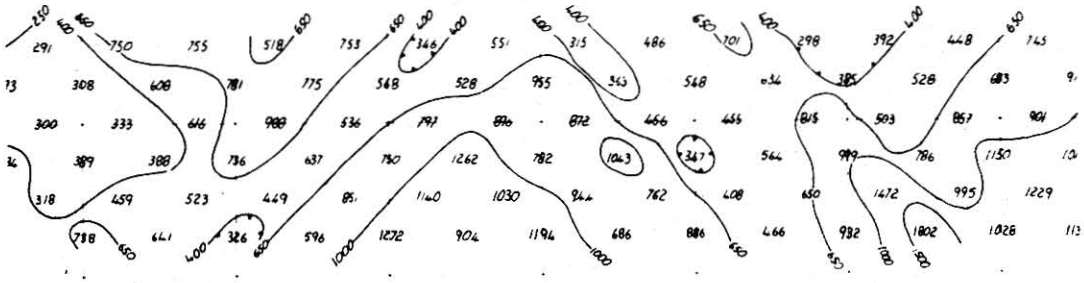
478125

TYPE	CHARGEABILITY	CLASS: 4	RATING: Geology 3, Geochem 1, Magnetics 2 (10)
LOCATION	8000N/10900E (V9 area)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Surfaces

INTERP. WIDTH Broad.

unusual V shape

INTENSITY ~ 3 x background.

5 cm

RESISTIVITY Well defined R low centred 10850E.

METAL FACTOR Resolves into 2 anomalies, one shallow, well defined centred under 10750E, the other a more amorpous blob under 10950E.

GEOCHEMISTRY C-horizon: no encouragement. (< 100ppm Pb, Zn.)

GEOLOGY Complex area of sericitic lithic qxtal tuffs and very chloritic "qtz porphyry".

OTHER GEOPHYSICS Magnetics: coincident with peak of large mag. anomaly.

TOPO/VEGETATION

COMMENTS Down graded because of unusual upright V shape. - needs modelling!

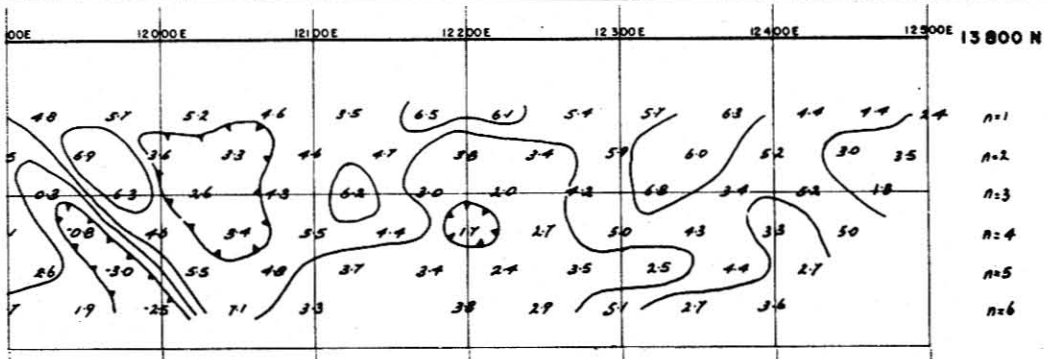
RECOMMENDATION a) 25m dipole infill from 10700 to 11100E.

125 ANOMALY DATA SHEET ELLIOTT BAY E.L. 27/76

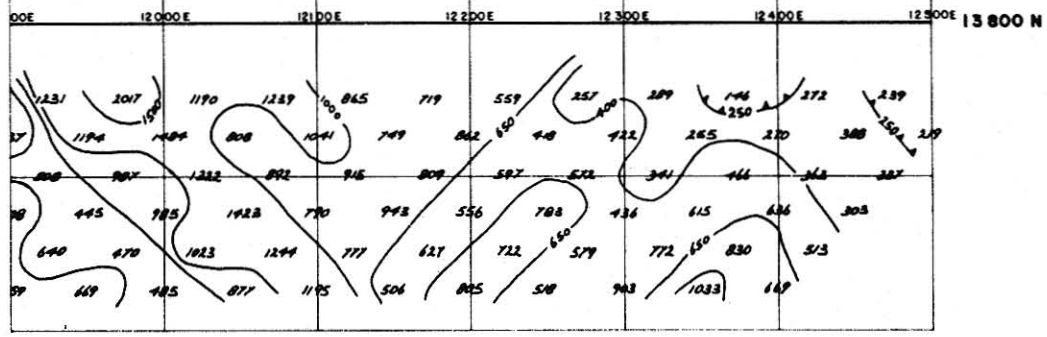
478126

TYPE	CHARGEABILITY CLASS: 4	RATING: Geology 3 Geochem 3 (10)
LOCATION	13800N/12350E V34	

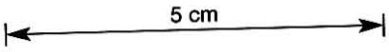
APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow.



INTERP. WIDTH: Undefined.

INTENSITY: ~ 2 x background.

RESISTIVITY: Broad, well defined R. low.

METAL FACTOR: Complex, moderately strong anomaly.

GEOCHEMISTRY: C-horizon: spiky, Zn upto 900ppm
Pb upto 500ppm

GEOLOGY: Not well exposed; chloritic crystal tuffs? outliers of superficial Tertiary gravels.

OTHER GEOPHYSICS:

TOPO/VEGETATION:

COMMENTS:

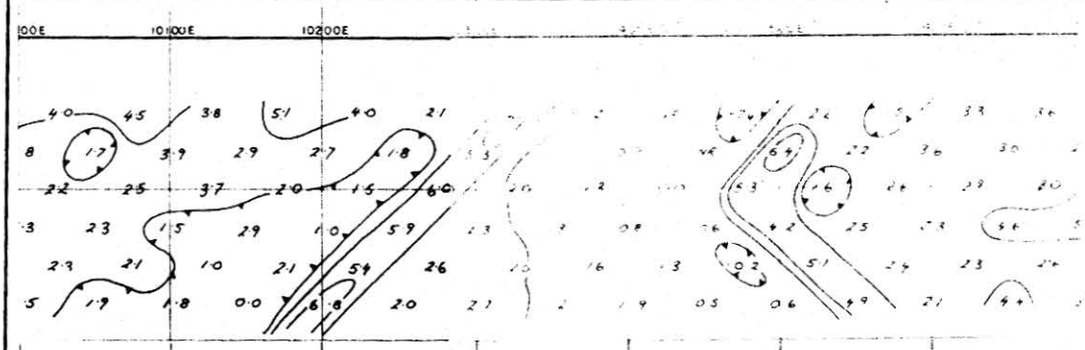
RECOMMENDATION: a) Extend IP 400m to east.

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

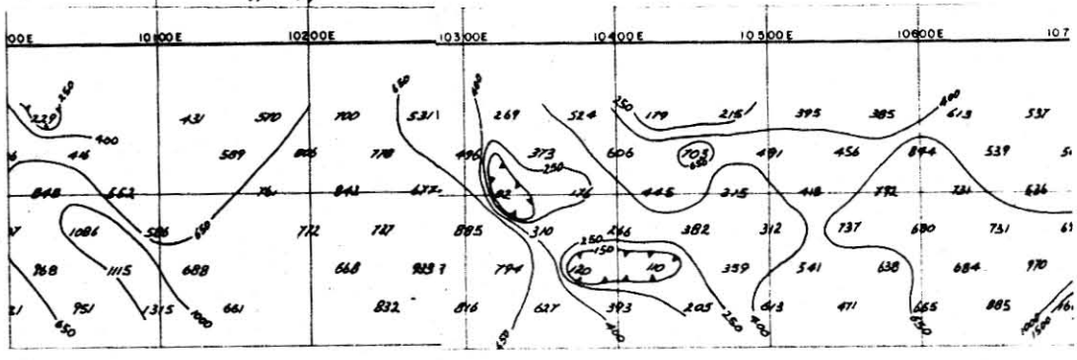
478127

TYPE	CHARGEABILITY	CLASS: 4½	RATING: Geology 3, Geochem 2, M.F. ½ (10)
LOCATION	9800N/10400E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



5 cm

INTERP. DEPTH Comes to surface.

INTERP. WIDTH < 50m.

INTENSITY 2½ x background.

RESISTIVITY Rather strong R low anomaly at depth.

METAL FACTOR Strong, broad anomaly centred under 10375E.

GEOCHEMISTRY

C-horizon: isolated spike: 1900ppmPb, 1100ppm Zn.

Pits: no geochem anomaly, due to surface leaching?

GEOLOGY Poorly known. Pits excavated at 25m intervals 10325 - 10425E exposed f-m grained sericitic qxt. No evidence of mineralization.

OTHER GEOPHYSICS Magnetics: flat.

TOPO/VEGETATION

COMMENTS May be worth testing as a resistivity target?

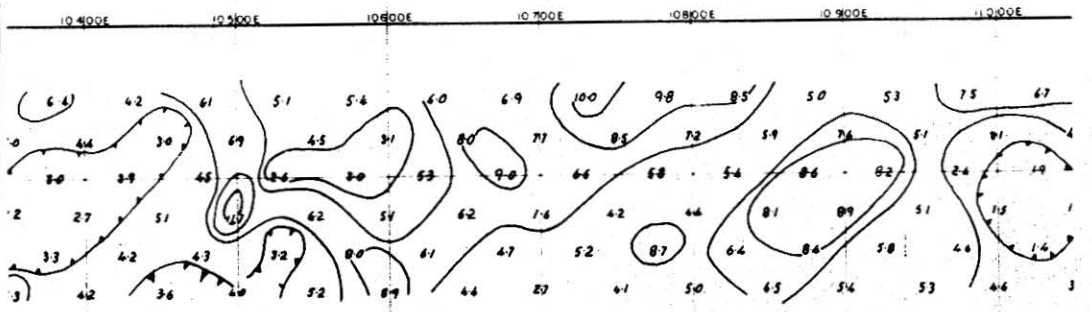
RECOMMENDATION

127 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

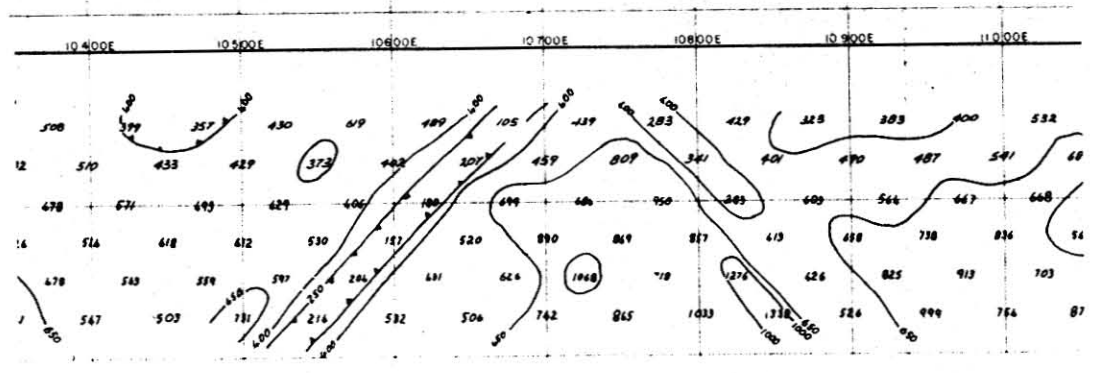
478128

TYPE	CHARGEABILITY CLASS: 3	RATING:	Geology 3 Geochem – (9) Magnetics 2 MF 1
LOCATION	7400N/10700E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY

Poorly defined ("waffly") chargeability.

5 cm

RESISTIVITY: Shallow, discrete, well defined Res. low anomaly.

METAL FACTOR: Strong well defined anomaly under 10750E.

GEOCHEMISTRY: C-horizon: no anomalous character.

GEOLOGY: Chloritic qtz porphyries etc.

OTHER GEOPHYSICS: Magnetics: coincident strong magnetic spike.

TOPO/VEGETATION

COMMENTS: Chargeability/Resistivity responses in this area may be related to magnetite-(pyrite) mineralization (same source as mag. anomaly).

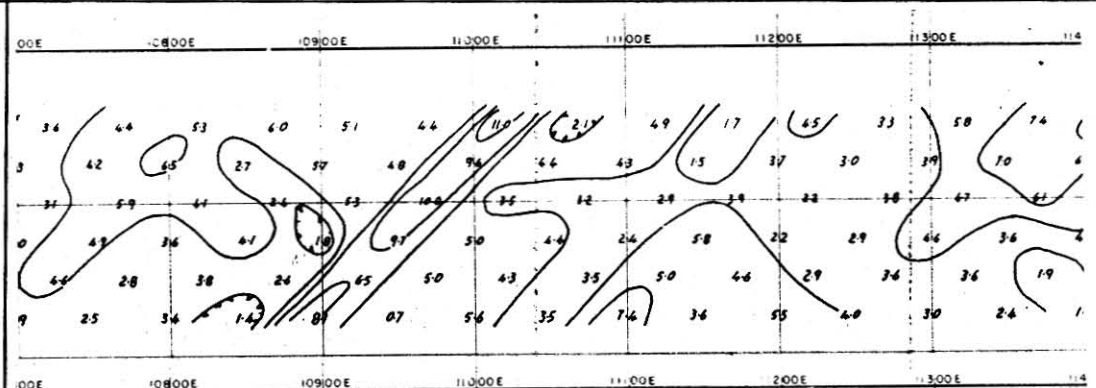
RECOMMENDATION: Costean over magnetic spike to determine cause. *

128 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

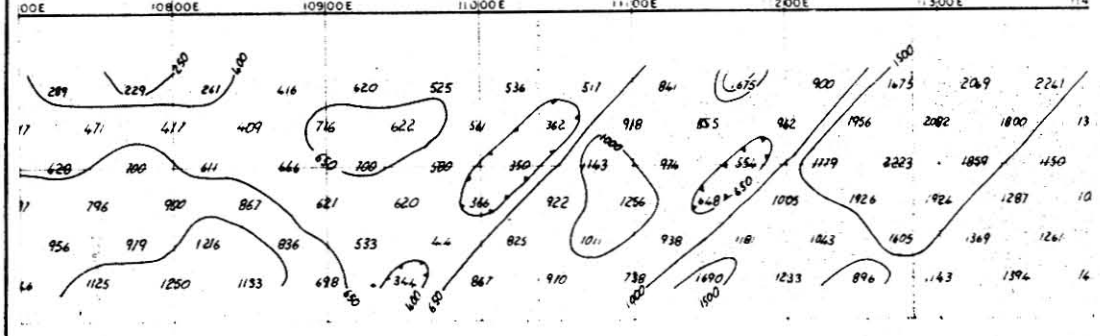
478129

TYPE	CHARGEABILITY	CLASS: 5	RATING: Geology 3 Geochem 1 (9)
LOCATION	7800N/11050E (V9)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow.

INTERP. WIDTH: Narrow.

5 cm

INTENSITY: 3 x B.G.

RESISTIVITY: Weak resistivity anomaly.

METAL FACTOR: Contributes litte.

GEOCHEMISTRY: C-horizon: low, < 100ppm Pb, Zn.

GEOLOGY:

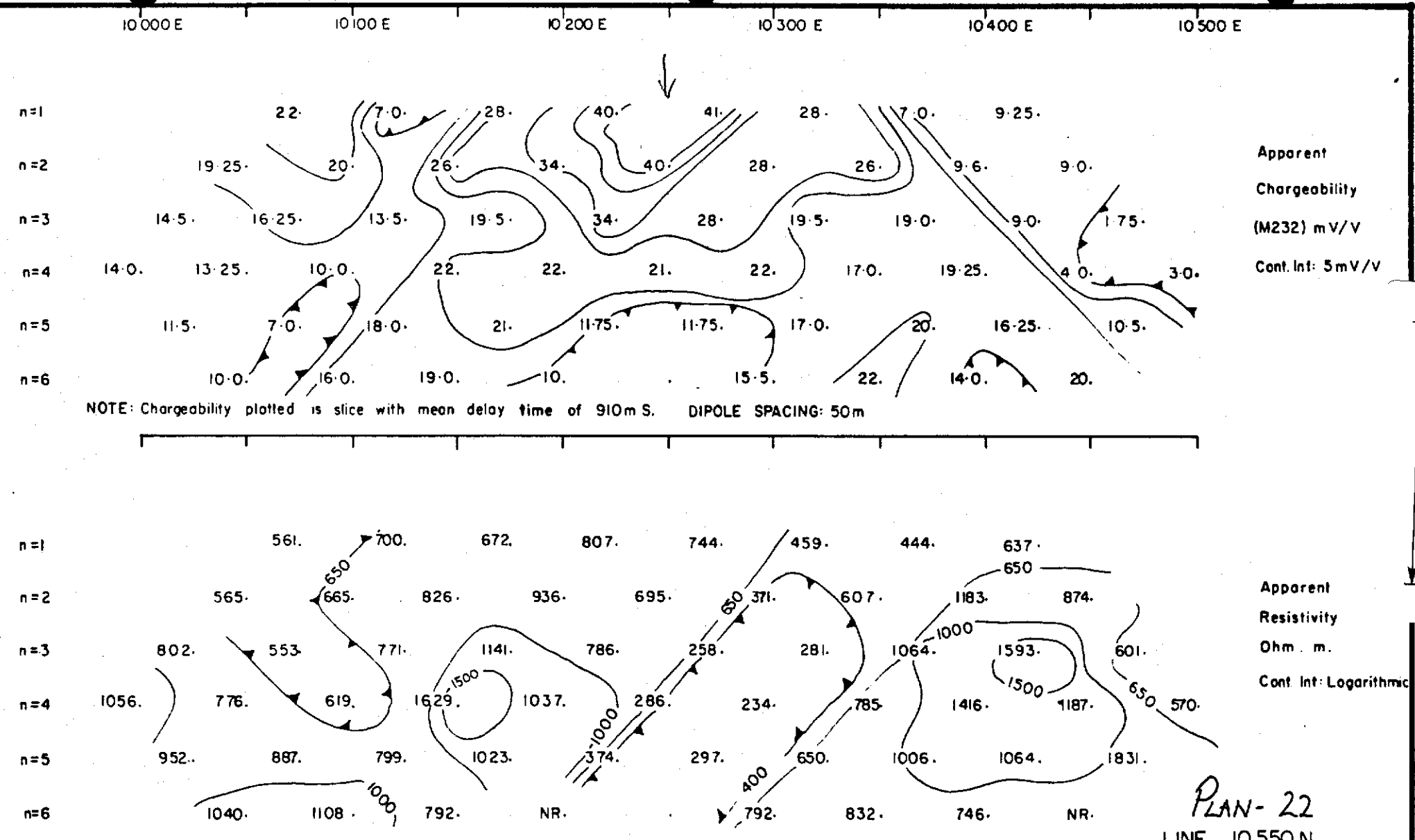
OTHER GEOPHYSICS: Magnetics: 75 metres east of narrow magnetic peak.

TOPO/VEGETATION:

COMMENTS: Probably related to strong chargeability anomaly at 10550N/10250E -(V9 Old Grid) (see over)

Associated chargeability/resist anomaly extends south through 7600N (better "shape") to 7400N/11000E.

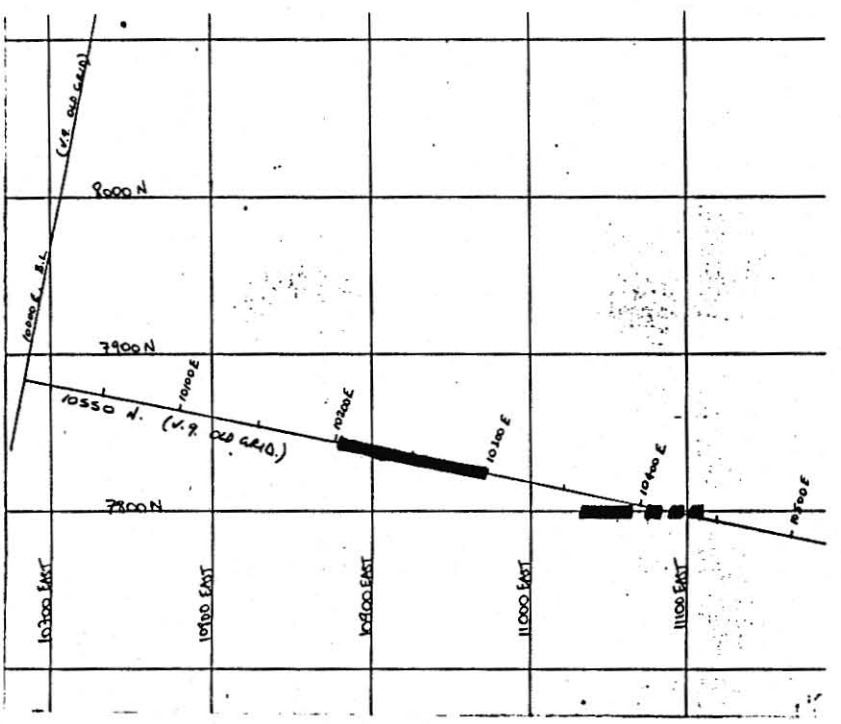
RECOMMENDATION:



PLAN - 22
LINE 10 550 N

GEOPEKO Geophysical Surveys Plan no.	Trans	Elliot 1·5kW	Obs	R.G.	AREA	ELLIOTT BAY, TASMANIA
	Recvr	Scintrex IPR-8	Drwn	R.Tognoni	PROSPECT	VOYAGER 9
	Scale	1:2500		S.S.	PLAN SHOWS	PSEUDOSECTION OF DIPOLE-DIPOLE I.P/RESITIVITY
	Date	Jan 1981				

Sketch showing relationship between Old V9 Grid and 1983 Grid.

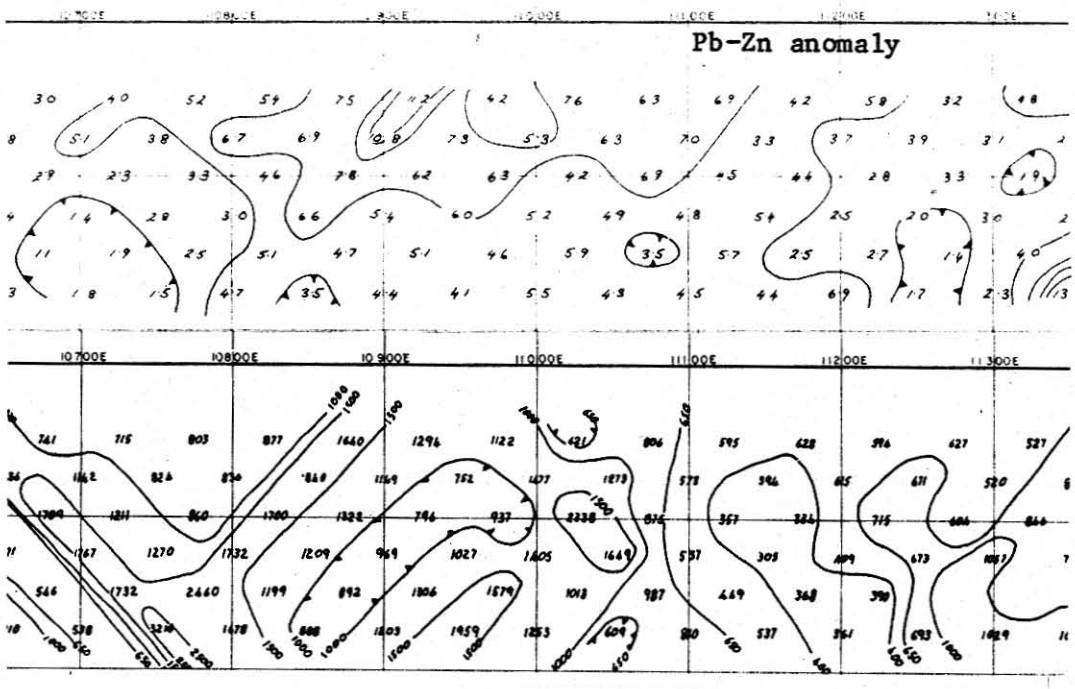


131 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478132

TYPE	CHARGEABILITY CLASS: 3	RATING: Geology 3 Geochem 3+ (9+)
LOCATION	8400N/11000E V9	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION

INTERP. DEPTH
INTERP. WIDTH
INTENSITY

) Very poorly defined.

5 cm

RESISTIVITY: < 400 ohm-m R low at depth below 11100 - 11200E.

METAL FACTOR: Contributes nothing.

GEOCHEMISTRY: C-horizon: spiky erratic zone 11100 - 11300E with upto 1200ppm Zn. Upto 3000ppm Pb in 5m spaced sampling on 11250N (old grid).

GEOLOGY: Complex xtal lithic tuffs and chloritic qtx porphyries.

OTHER GEOPHYSICS: Magnetics: coincident with broad double peaked mag anomaly of 1700 nT.

TOPO/VEGETATION

COMMENTS: Chargeability/Resistivity could be related to source of magnetic anomaly.

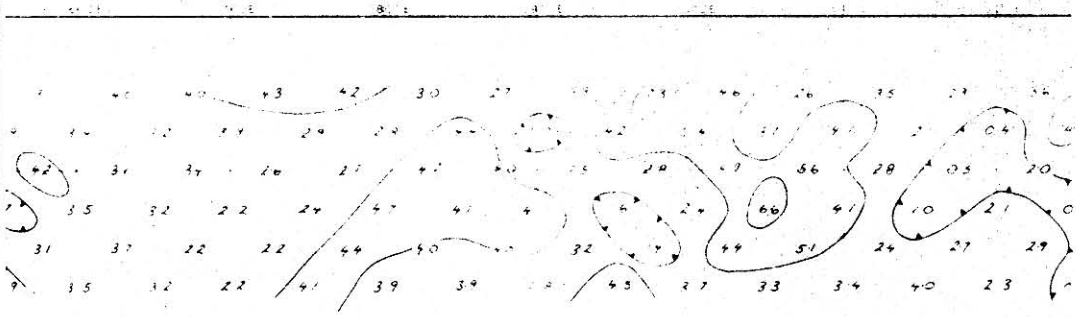
RECOMMENDATION: See geochem anomaly data sheet 8400N/11200E.

132 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

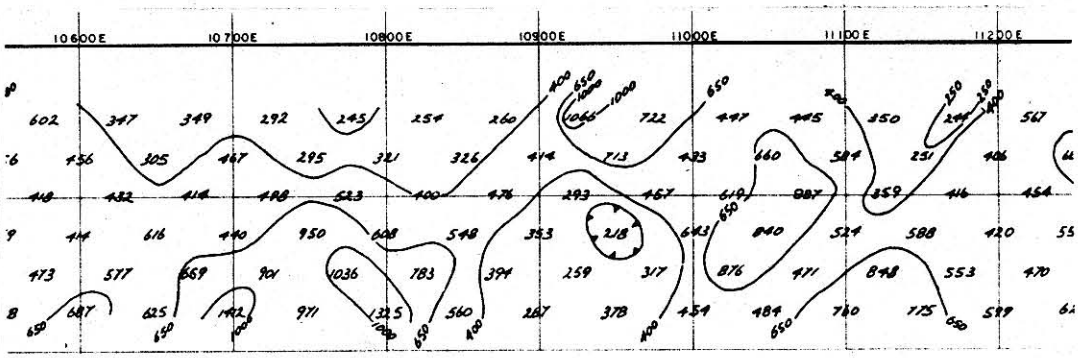
478133

TYPE	CHARGEABILITY CLASS: 4 +	RATING:	Geology 3 Geochem 2 (9+)
LOCATION	9600N/10925E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH

INTERP. WIDTH

Not well defined.

5 cm

INTENSITY

Maximum 2 x background.

RESISTIVITY

Good "concentric" R low anomaly at depth below 10925E.

METAL FACTOR

Contributes nothing.

GEOCHEMISTRY

C-horizon: isolated copper-zinc spike at 10900E (1100ppm Cu, 1000ppm Zn)
(5 gm/t Ag support)

GEOLOGY

Not well known.

Resist/chargeability could have relation to "end on" or sub surface black shales of Tyndal Group??

OTHER GEOPHYSICS

Magnetics: flat

TOPO/VEGETATION

COMMENTS

RECOMMENDATION

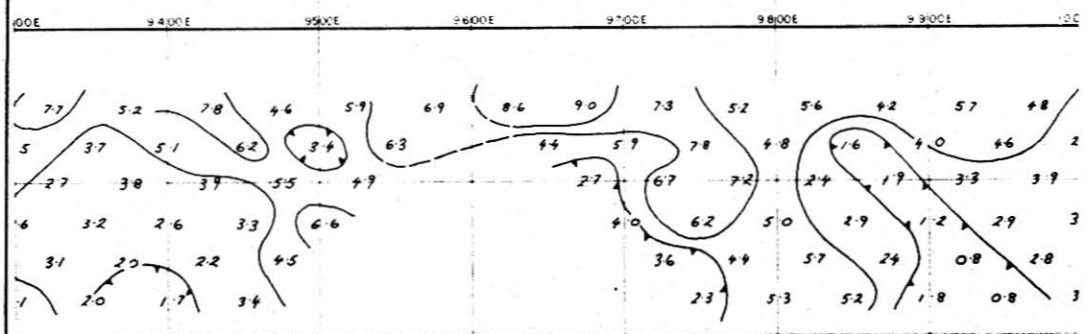
a) Close spaced Jacro samping.

133 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

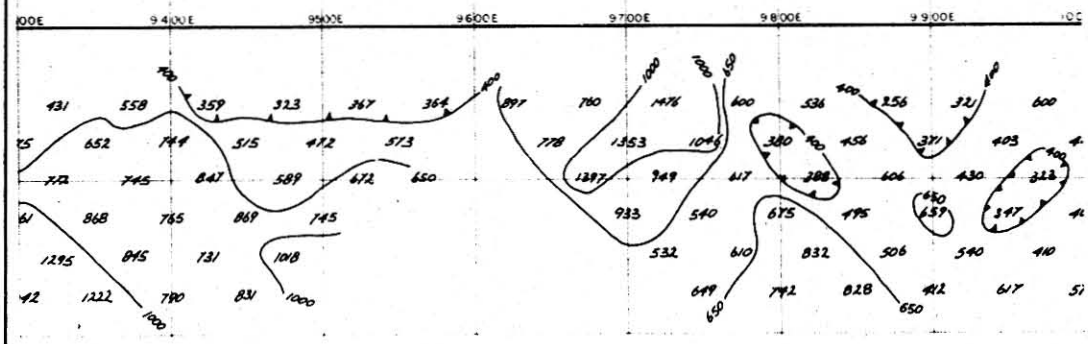
478134

TYPE	CHARGEABILITY	CLASS: 3+	RATING: Geology 3, Geochem 3 (9)
LOCATION	9200N/9650E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY

Not completely defined due to grid misalignment.
Requires repeat IP.

5 cm

METAL FACTOR: Moderate; broad well defined anomaly under 9850E.

GEOCHEMISTRY: 5m spaced C-horizon: erratic spiky zone between 9550 - 9750E with upto 800ppmPb, 700ppm Zn.

GEOLOGY: Contact of "dacitic lavas" and "tuff lavas", potential for Au minz.

OTHER GEOPHYSICS: Magnetics: flat.

TOPO/VEGETATION

COMMENTS: Occurs at area of grid misalignment.

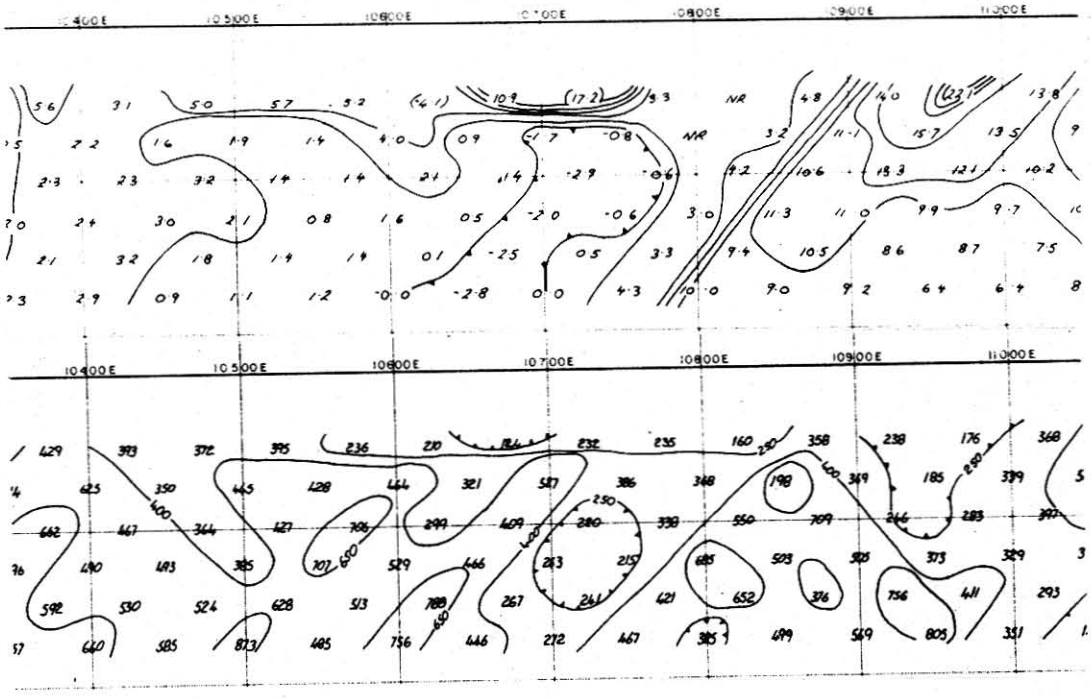
RECOMMENDATION: Requires infill IP. Au, As analysis of close spaced geochem samples.

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478135

TYPE	**RESISTIVITY** **CLASS:** 5	**RATING:**	Geology 4 Geochem – (9)
LOCATION	10800N/10725E (V29)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION

5 cm

INTERP. DEPTH Not surficial.

INTERP. WIDTH

INTENSITY < 250 ohm-m.

RESISTIVITY Discrete < 250 ohm-m Resistivity anomaly.

METAL FACTOR Contributes nothing.

GEOCHEMISTRY C-horizon: not anomalous.

GEOLOGY Geologically favourable location adjacent to Tyndal unconformity.

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS Discrete conductor at depth.
Unrelated to thin surficial chargeable/conductive zone.

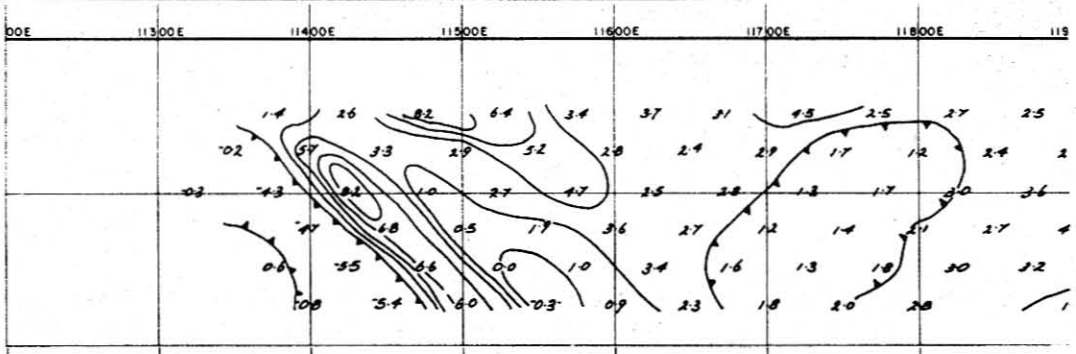
RECOMMENDATION Pitting between 10650E and 10850E.

135 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

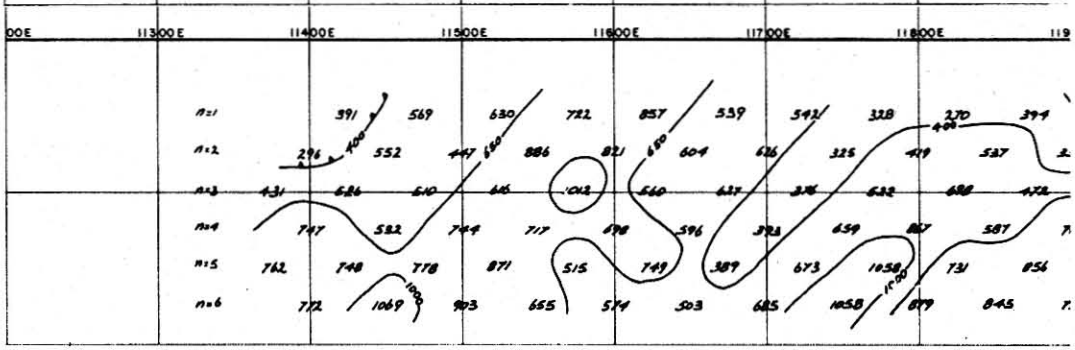
478136

TYPE	CHARGEABILITY CLASS: 3	RATING: Geology 3 Geochem 3	(9)
LOCATION	13800N/11400E - 11500E (V34)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	Shallow.
INTERP. WIDTH	Undefined.
	Poor "Shape"
INTENSITY	Upto 2½ x background.
RESISTIVITY	Moderate low ~ 400 ohm-m
METAL FACTOR	Reflects chargeability

5 cm

GEOCHEMISTRY: C-horizon: Pb upto 800ppm, weak Zn, Cu, Ag support.

GEOLOGY: Contact zone at approx. 10425E between qfp1. (to west) and ser. qfxt.

OTHER GEOPHYSICS: Magnetics: flat.

TOPO/VEGETATION

COMMENTS

RECOMMENDATION: a) Jacro 5m infill 10300E - 10500E.

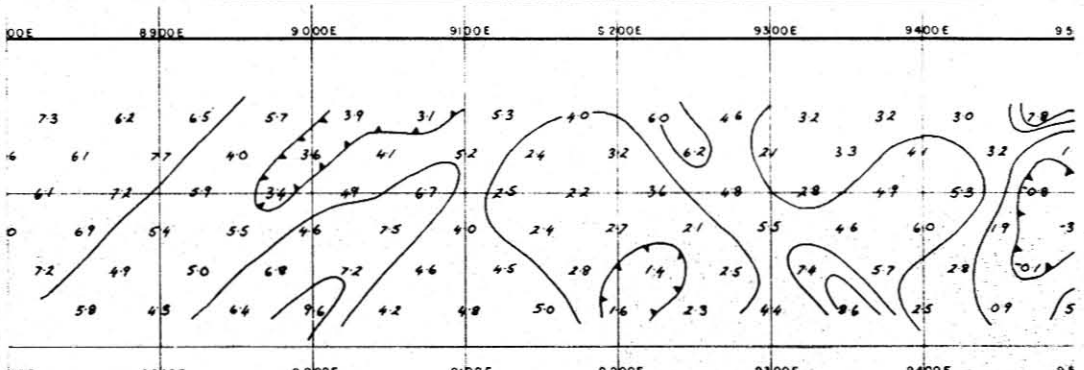
136

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

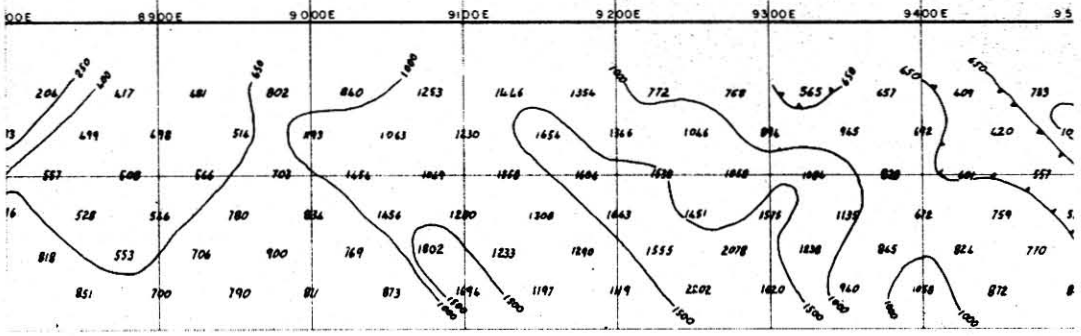
478137

TYPE	**CHARGEABILITY** **CLASS:** 4	**RATING:** Geology 3, Geochem 2 (9)
LOCATION	8400N/9150E	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Shallow.

INTERP. WIDTH Broad ~ 150m. Not well defined

INTENSITY 3 x background.

RESISTIVITY - no supporting anomaly.

METAL FACTOR Contributes nothing.

5 cm

GEOCHEMISTRY C-horizon: isolated Pb 450ppm, Ag 14gm/t value at 9225E.

isolated 100ppbAu at 9200E.

GEOLOGY Contact between dacitic lava and silicified lithic xtal tuff units - suspected blk. shale may exist at this horizon.

OTHER GEOPHYSICS

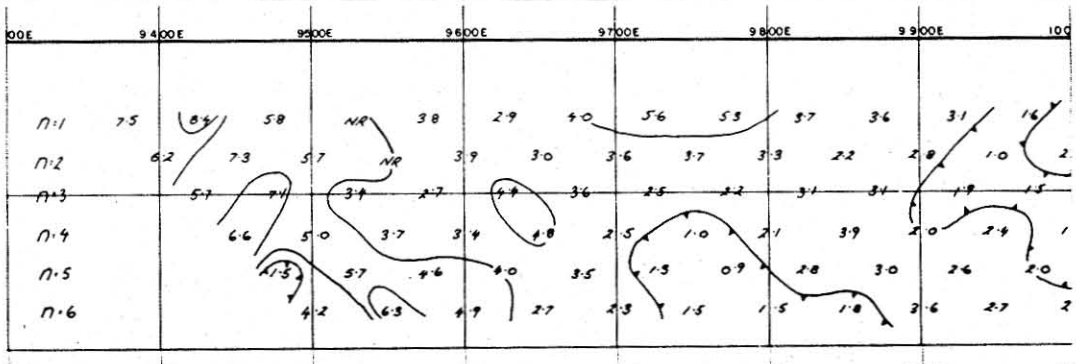
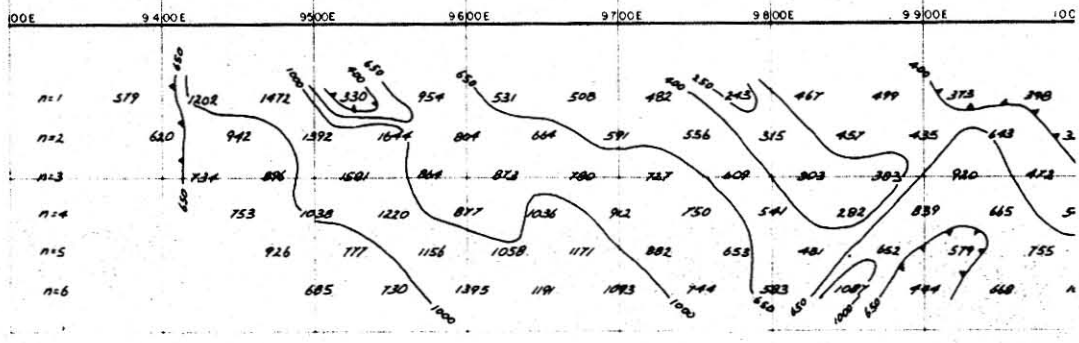
TOPO/VEGETATION

COMMENTS Not well defined.

RECOMMENDATION Infill Jacro sampling at 5m.

137 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478138

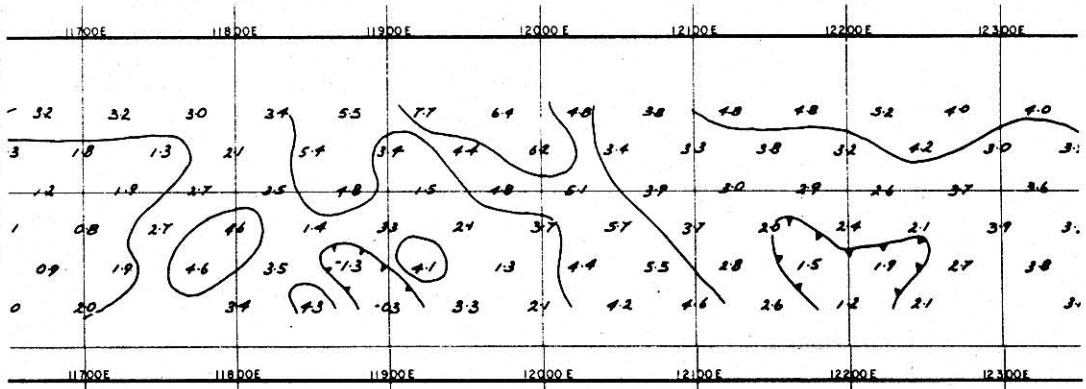
TYPE	CHARGEABILITY CLASS: RATING: 9 on 10600N
LOCATION	10200N/9400E
APPARENT CHARGEABILITY PSUEUDOSECTION	
APPARENT RESISTIVITY PSUEUDOSECTION	
INTERP. DEPTH INTERP. WIDTH INTENSITY RESISTIVITY METAL FACTOR	) Undefined ("waffly") end of line anomaly requires IP extension to west. 5 cm
GEOCHEMISTRY	C-horizon: not anomalous.
GEOLOGY	Autobrecciated qp lava?
OTHER GEOPHYSICS	Magnetics: flat.
TOPO/VEGETATION	
COMMENTS	Maybe extension of 'camp shales'. Better defined on 10600N - needs further IP to west (400m).
RECOMMENDATION	

138 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

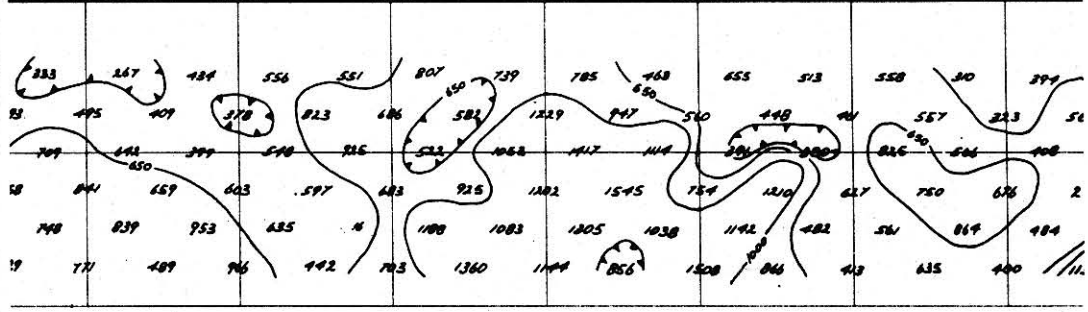
478139

TYPE	CHARGEABILITY	CLASS: 4	RATING: Geology 3, Geochem 2 (9)
LOCATION	13600N/12000E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow.

INTERP. WIDTH: ~ 100m?

5 cm

INTENSITY: max: 2 x background.

RESISTIVITY: Small, discrete, fairly weak (<600 ohmm) R low.

METAL FACTOR: Contributes nothing.

GEOCHEMISTRY: C-horizon: spiky Zn upto 1000ppm.
Pb < 200ppm

GEOLOGY: Not well exposed; m.g. sericitic qxt.

OTHER GEOPHYSICS:

TOPO/VEGETATION:

COMMENTS:

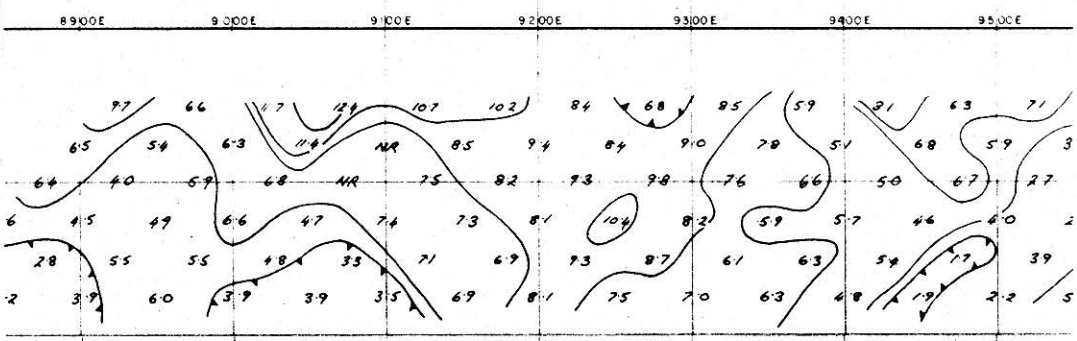
RECOMMENDATION: N.F.

139 ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

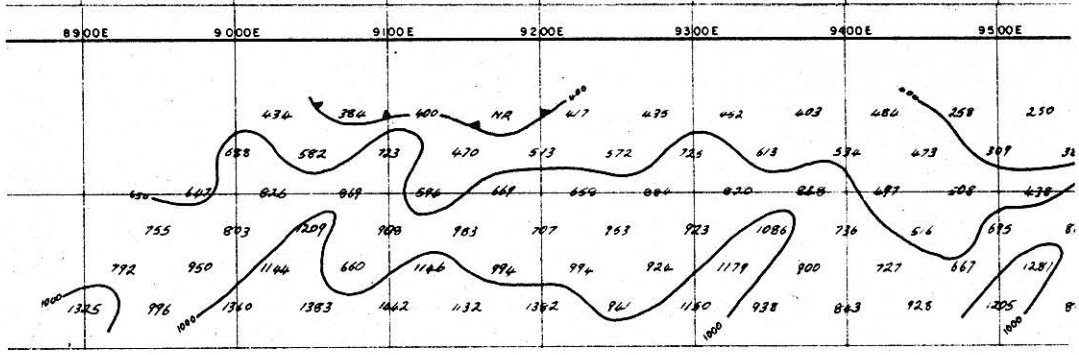
478140

TYPE	**CHARGEABILITY** **CLASS:** 4	**RATING:**	Geology 3 Geochem 2 (9)
LOCATION	8800N/9000 - 9350E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Shallow but extending to depth.

INTERP. WIDTH Very broad ~ 350m.

INTENSITY 3 x background.

5 cm

RESISTIVITY Weak, surficial. Res. anomaly.

METAL FACTOR Contributes nothing.

GEOCHEMISTRY C-horizon: not anomalous Minor Pb (400)-Zn(800) Anomaly at 9375E.

GEOLOGY "Dacitic" lavas.

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS Broad chargeable zone without good "shape".

Could be due to broad pyritic zone or related to RJP's suspected blk. shale at dacite eastern contact.

Extends along strike to 8600N. west of 9100E.

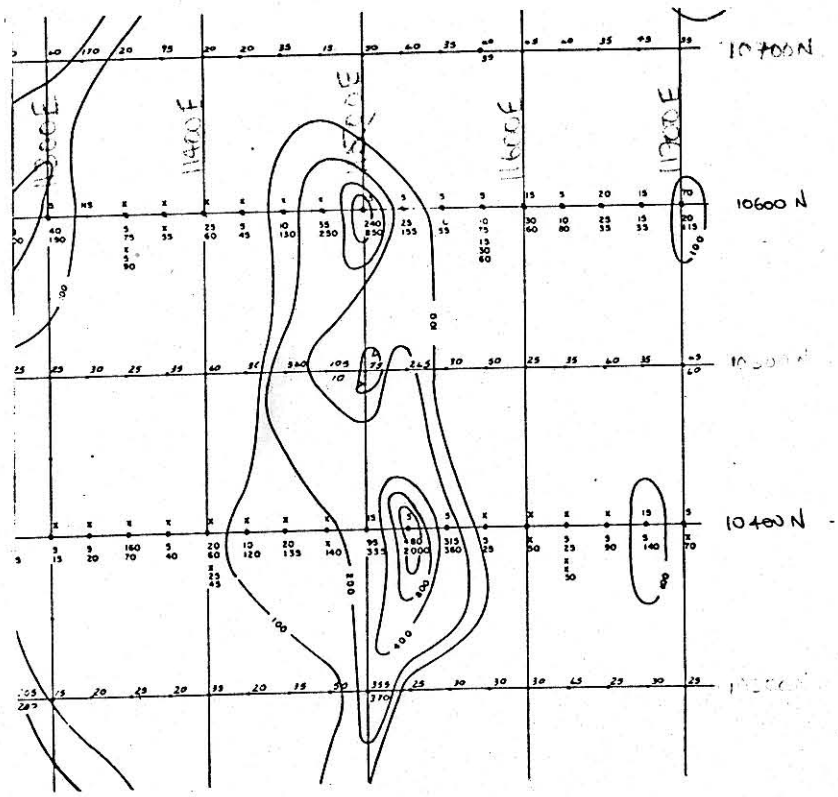
RECOMMENDATION N.F.

140. ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478141

TYPE	C-HORIZON GEOCHEMISTRY 5	RATING:	IP 1 Geology 3 (9)
LOCATION	Voyager 22 11500E/10300 - 10600N		

ELEMENTS	Zn Pb
PEAKS	2000 500
BACKGROUND	<50 < 40
Pb/Zn RATIO	low ~ 0.25
Pb ISOTOPES	No data.
AREA	300 x <75 metres.
SHAPE	Narrow elongate N-S, dubious continuity.
TOPO/VEGETATION	Eucalypt scrub in low lying area of fracture controlled drainage.
GEOLOGY	Anomaly appears associated with north trending fault along 11500E; adjacent lithology is quartz phyric acid lava, abundant qtz veining to west of fault.
GEOPHYSICS	Resisitivity: subtle resistivity response. Chargeability: - Magnetics: flat.
CONTOUR PLAN 1:5 000	ZINC



5 cm

RECOMMENDATION N.F.

111

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478142

TYPE	C-HORIZON GEOCHEMISTRY 4	RATING:	IP 2 Geology 3 (9)
LOCATION	Voyager 9 9600N/11250 - 11350E		

ELEMENTS	Pb	Zn	Ag
PEAKS	2600	2400	7
BACKGROUND	<50	<50	
Pb/Zn RATIO			
Pb ISOTOPES	No data.		

AREA
SHAPE

Very spikey anomalous zone 11250 - 11350E generally anti-pathetic relationship between Pb-Zn.
Weaker (~ 600ppm) Pb, Zn support at 9400N/11200-11225E.

TOPO/VEGETATION

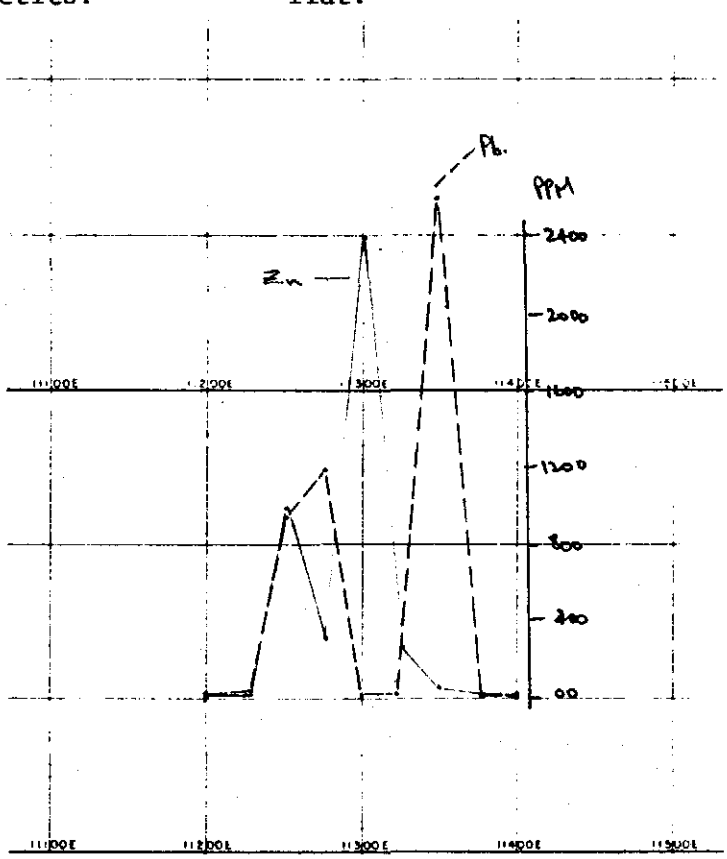
GEOLOGY

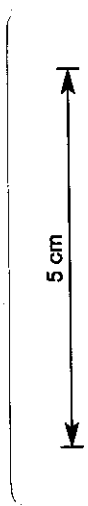
Sericitic quartz crystal-lithic tuffs, "chloritic quartz porphyries" to south.

GEOPHYSICS

Resistivity: well defined surficial low at 11250E.
Chargeability: -
Magnetics: - flat.

PROFILE
1:5 000





RECOMMENDATION

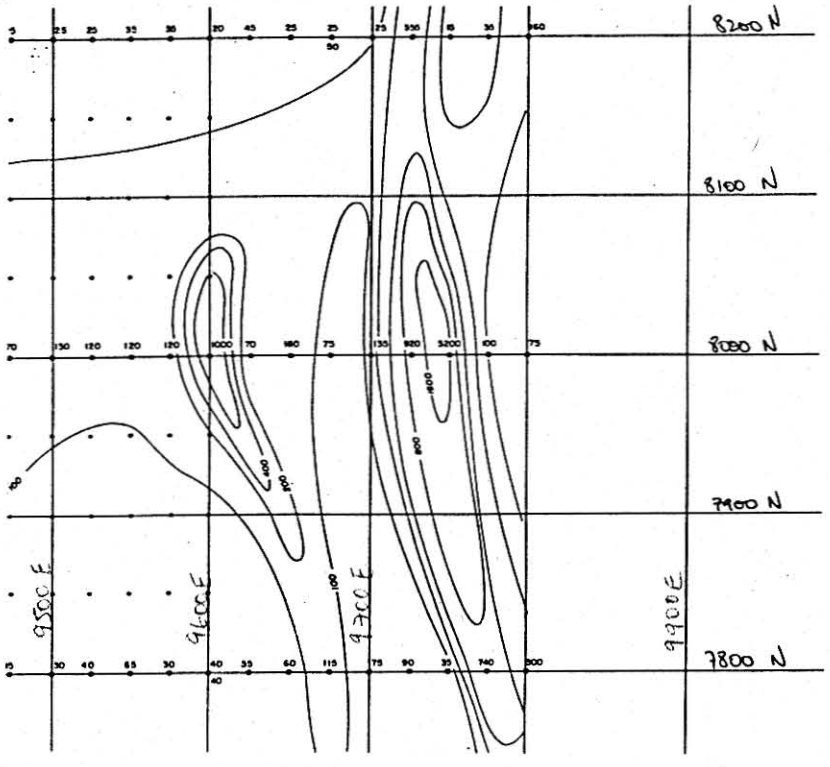
N.F.

142 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478143

TYPE	C-HORIZON GEOCHEMISTRY 5	RATING:	Geology 1 IP 3 (9)
LOCATION	Voyager 30 8000N/9700 - 9800E		

ELEMENTS	Pb Zn Au
PEAKS	5200ppm 1100ppm 110ppb
BACKGROUND	Rather spikey, (<100 to about 300ppm Pb, Zn)
Pb/Zn RATIO	High, >4
Pb ISOTOPES	Highly favourable, isotopic ratios similar to Rosebery.
AREA SHAPE	50m wide, indications of weak anomalies (400-700ppm) on 8200N and 7800N to north and south. Approx 300m strike length.
TOPO/VEGETATION	
GEOLOGY	Within Stoney Creek microgranite.
GEOPHYSICS	Magnetics: essentially flat. Chargeability: Partly defined, deep sourced chargeable zone below 9700 - 9800E. * (One diagonal is missing from data.) Resisitivity: small surficial Res. low.
CONTOUR PLAN 1:5 000	LEAD:





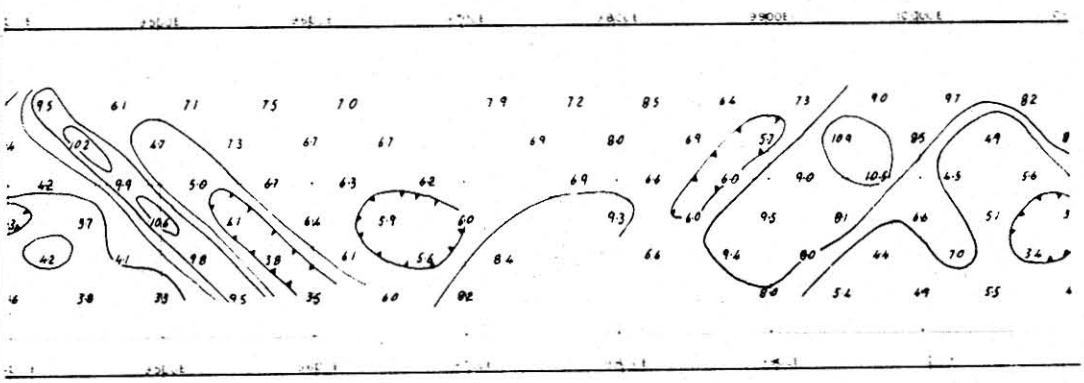
RECOMMENDATION	N.F.

143 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478144

TYPE	CHARGEABILITY CLASS:	RATING:
LOCATION	V 30 8000N / 9700-9800E C-Horizon Geochem. Anomaly	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



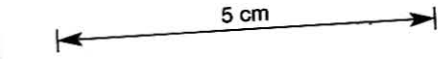
INTERP. DEPTH

INTERP. WIDTH

INTENSITY

RESISTIVITY

METAL FACTOR



GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

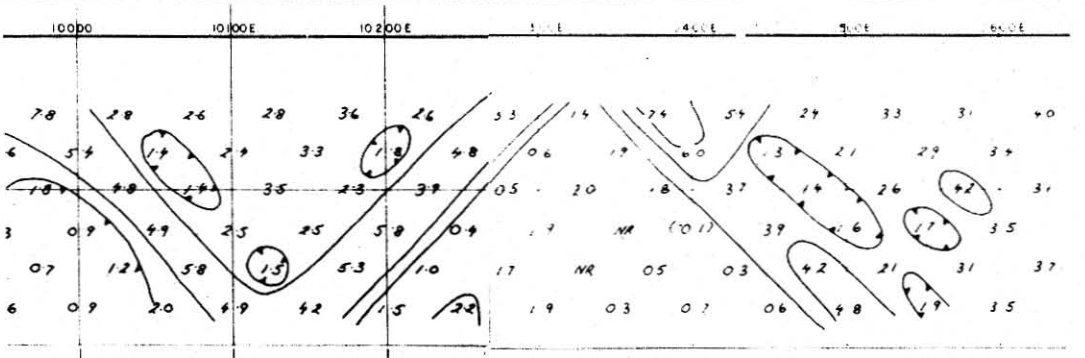
RECOMMENDATION

144 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

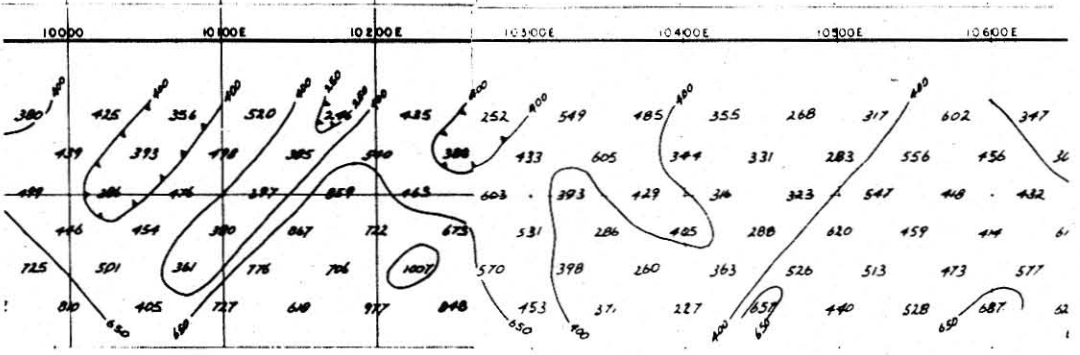
478145

TYPE	CHARGEABILITY	CLASS: 3½	RATING: Geology 2, Geochem 2½, Metal Factor ½ (8½)
LOCATION	9600N/10325E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	Shallow.
INTERP. WIDTH	~ 100m.
INTENSITY	2 x background.
RESISTIVITY	Assoc. zone low Resist. but <u>not</u> discrete, close coincident.
METAL FACTOR	Strong Surficial Anomaly
GEOCHEMISTRY	C-horizon: rather low except for isolated spike at 10375E: 2400ppm Zn, 400ppm Pb, (90Cu). Pits: no geochem support.
GEOLOGY	Not known. Pits: fine grained sericitic qxt-qxlt.
OTHER GEOPHYSICS	Magnetics: flat
TOPO/VEGETATION	
COMMENTS	
RECOMMENDATION	N.F.

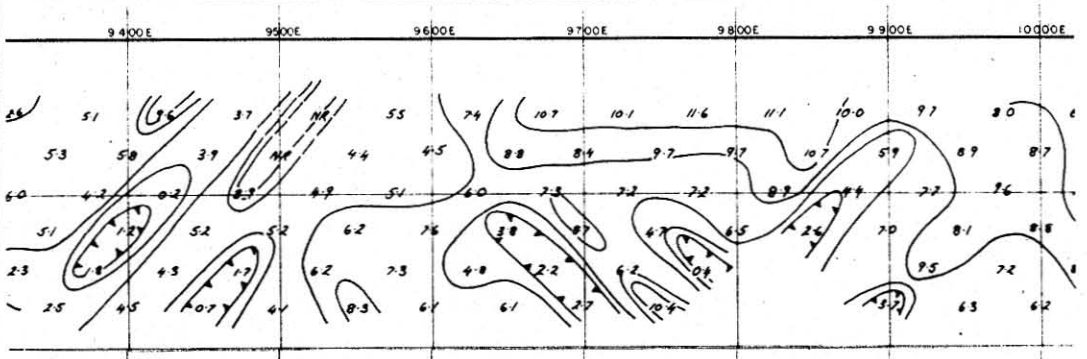
5 cm

145 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

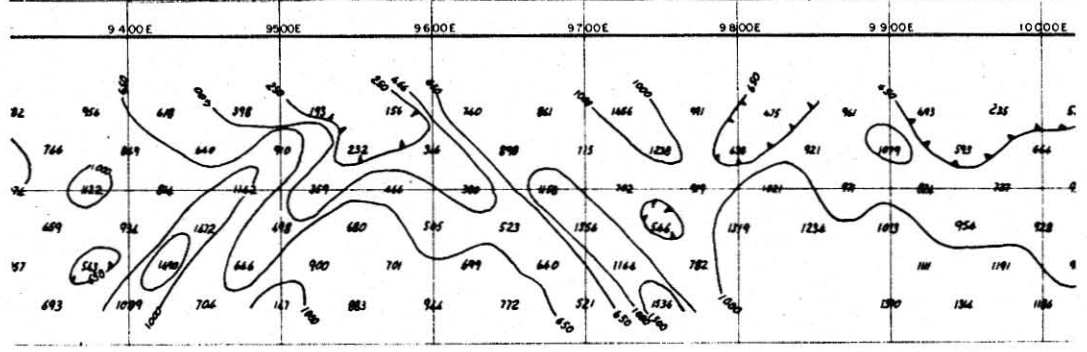
478146

TYPE	RESISTIVITY CLASS: 5	RATING: Geology 3, Geochem - (8)
LOCATION	8200N/9500-9600E	

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY

5 cm

RESISTIVITY: Good <200ohm-m, R. anomaly. Near Surface.

METAL FACTOR: Reflects resistivity.

GEOCHEMISTRY: C-horizon: not anomalous.

GEOLOGY: Contact between tuffs and siliceous conglomerate.

Resistivity could be associated with shaley seds. related to conglomerate??

OTHER GEOPHYSICS: Magnetics: slight gradient positive to east.

TOPO/VEGETATION

COMMENTS: Skeletal chargeability anomaly but with strong Resistivity low.

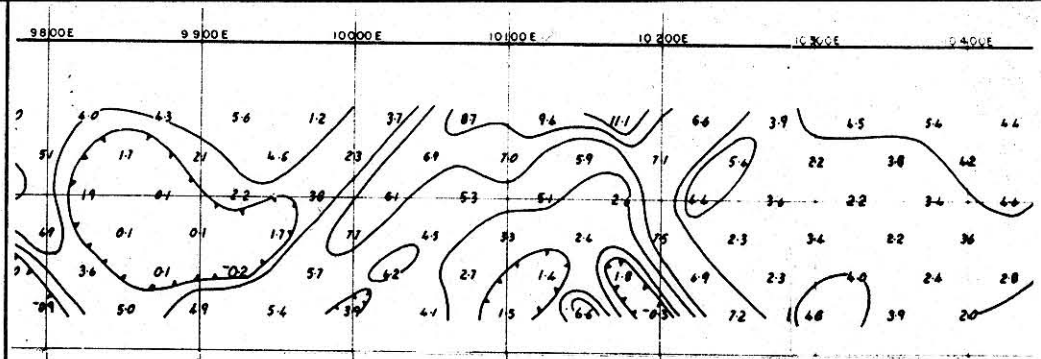
RECOMMENDATION: N.F.

146 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

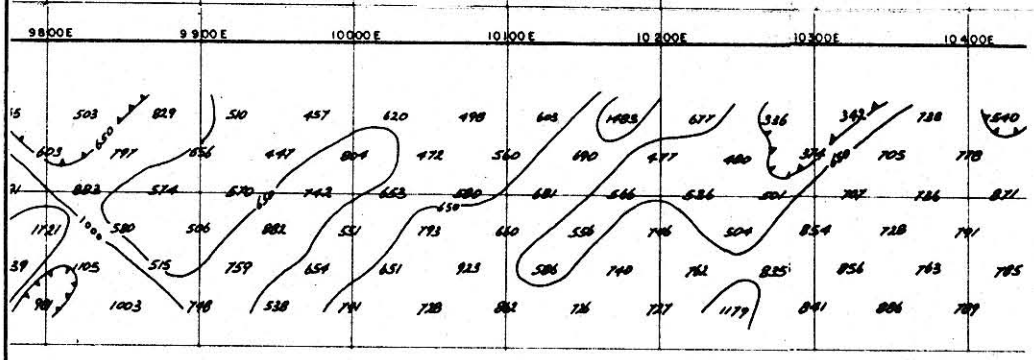
478147

TYPE	CHARGEABILITY CLASS: 6	RATING:	Geology 2 Geochem - (8)
LOCATION	11400N/10050 - 10250E (V29)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow.

INTERP. WIDTH: Broad.

INTENSITY: ~ 2½ x background

RESISTIVITY: R low coincident c̄ eastern edge of charge. anomaly.

METAL FACTOR: Reflects chargeability.

5 cm

GEOCHEMISTRY: C-horizon: no support, < 100ppm in Pb, Zn.

Pits: no support, < 50ppm Pb, Zn.

Pits excavated 10m intervals 10080-10150E.

GEOLOGY: Variable medium to coarse grained sericitic quartz crystal (lithic) tuffs. V. rare pyrite (< 0.2%) in occassional fractures

OTHER GEOPHYSICS: Magnetics: flat.

TOPO/VEGETATION

COMMENTS: N.F.

RECOMMENDATION

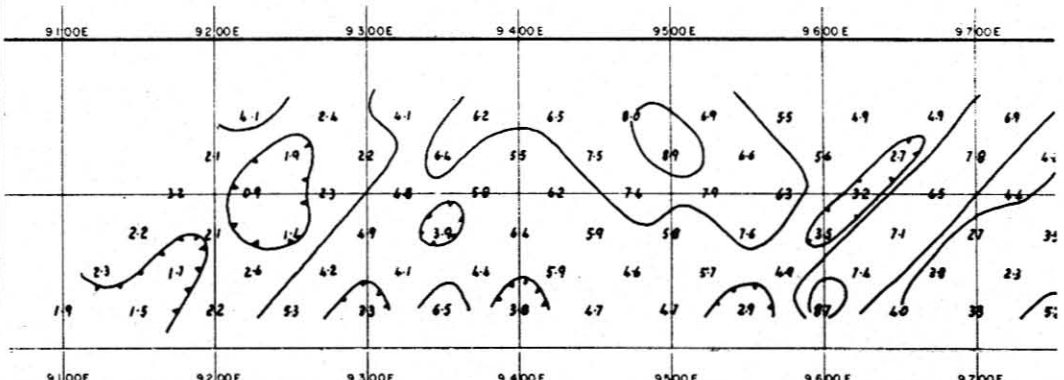
117

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

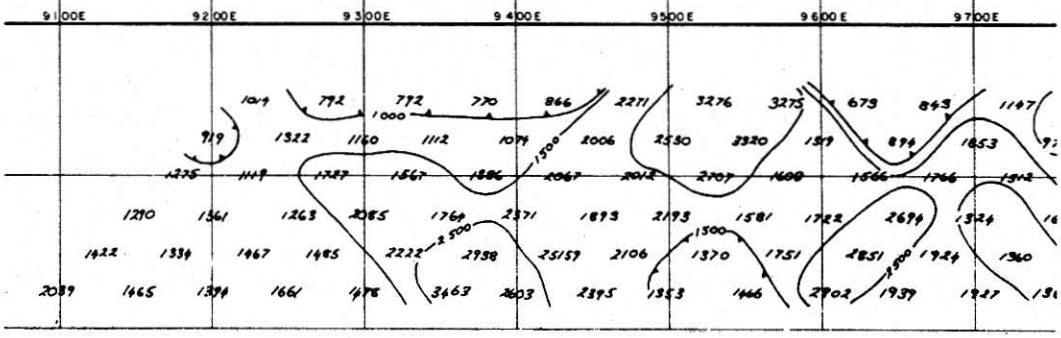
478148

TYPE	**CHARGEABILITY** **CLASS:** 6	**RATING:**	Geology 2 Geochem - (8)
LOCATION	11600N/9400-9500E (V29W)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH Shallow.

INTERP. WIDTH Broad ~ 200m.

5 cm

INTENSITY 2½ x background.

RESISTIVITY Weak, shallow resistivity low anomaly.

METAL FACTOR Contributes nothing.

GEOCHEMISTRY

C-horizon: very low
Pits: very low
) no support

(Pits excavated 25m intervals 9400-9500E)

GEOLOGY Qfx-1 tuffs and q(fbi) phyric lava near western edge of large qpl body. Heavy white quartz veining at 9475, 9500E, (upto 280ppbAu in one sample.)*

OTHER GEOPHYSICS Magnetics: flat.

TOPO/VEGETATION

COMMENTS

RECOMMENDATION N.F.

148 ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

478149

TYPE	C-HORIZON GEOCHEMISTRY 4	RATING:	IP 1 Geology 2 (8) Pb Isotope 1
LOCATION	Voyager 34 13200, 13400N/11600 - 12000E		

ELEMENTS	Pb	Zn
PEAKS	4000ppm	8000ppm
BACKGROUND	<50	<50
Pb/Zn RATIO	High, range 0.1 to 17, commonly >1	
Pb ISOTOPES	Highly favourable, isotopic ratios similar to V29, Rosebery.	
AREA	Several small (<100m dia.) single value anom.	
SHAPE	Several rather "spotty" isolated peaks without coherence.	
TOPO/VEGETATION	Scrub vegetation and drainage influenced by east trending faults.	
GEOLOGY	Sericitic to chloritic qtz xtal tuffs and qtz-biotite phyric lavas. Geochem. anomalies cluster along easterly fault traces.	
GEOPHYSICS	Resistivity: small, weak R lows coincide with geochem peaks. Broad zones of R low to east. Chargeability: surficial? broad zone on 13400N/11850-12200E.	
CONTOUR PLAN 1:5 000		
RECOMMENDATION	N.F.	

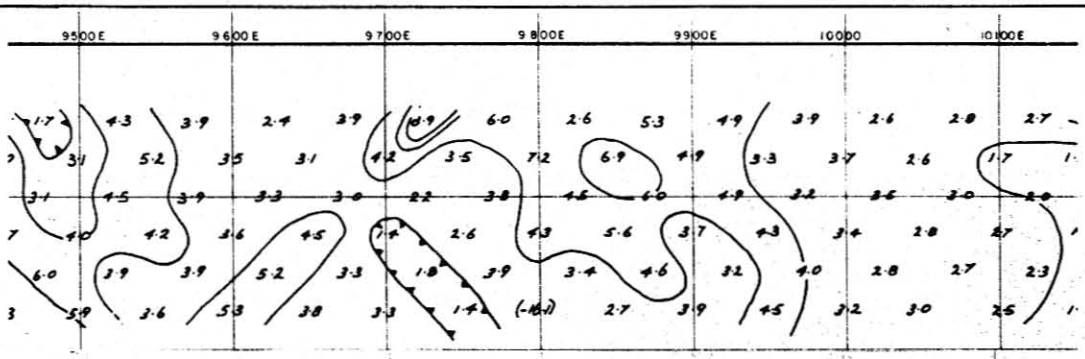
149

ANOMALY DATA SHEET ELLIOTT BAY E.L.27/76

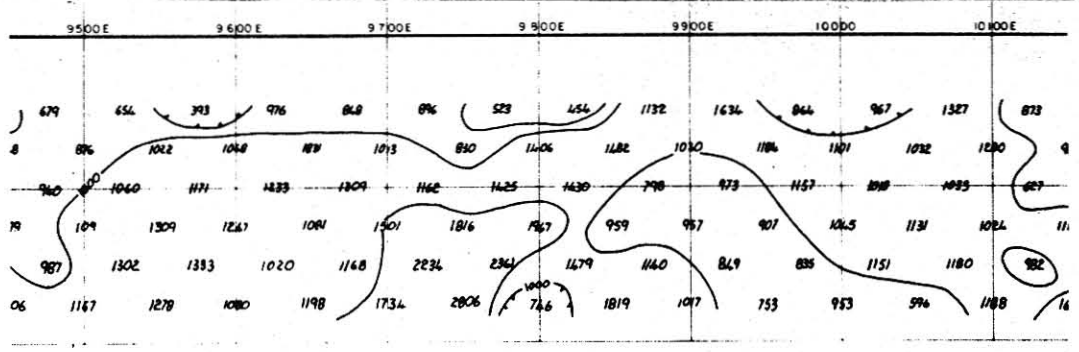
478150

TYPE	CHARGEABILITY	CLASS: 3	RATING: Geology 4, Geochem 2 (8)
LOCATION	12600N/9800E V19		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH

Poorly defined.

5 cm

INTENSITY: 2 x background.

RESISTIVITY: Not significant.

METAL FACTOR: Contributes nothing.

GEOCHEMISTRY:

C-horizon: fairly flat, low Pb spikes: < 500ppm.

Pits: no geochem anomaly (max 200ppm Pb).

GEOLOGY:

Pits excavated 10m centres 9850 - 9900E.

Barren qtz phryric rhyolitic lava.

OTHER GEOPHYSICS: Magnetics: flat.

TOPO/VEGETATION

COMMENTS

RECOMMENDATION: N.F.

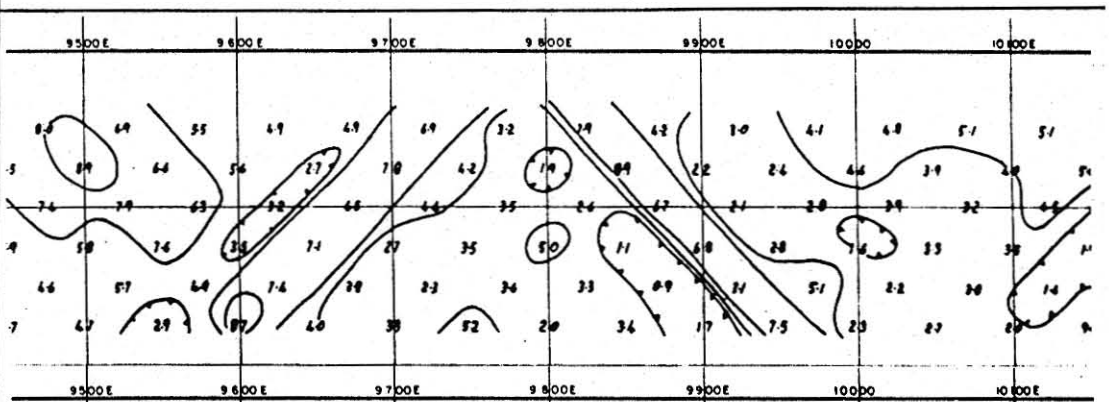
150

ANOMALY DATA SHEET ELLIOTT BAY E.L. 27/76

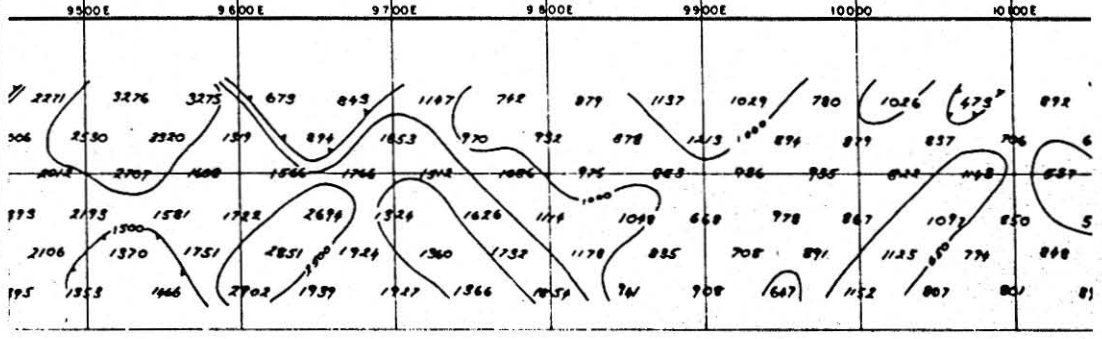
478151

TYPE	CHARGEABILITY	CLASS: 4	RATING: Geology 3 / Geochem - (7)
LOCATION	11600N/9800E		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: V. shallow, comes to surface.

INTERP. WIDTH: ~ 50m.

INTENSITY: 2 x background.

RESISTIVITY: - no support.

5 cm

METAL FACTOR: Contributes nothing.

GEOCHEMISTRY: C-horizon: no anomaly (< 200ppm Pb, Zn).

Pits: very low (< 50ppm Pb/Zn) *Pits @ 25m intervals 9700 - 9800E, leached sericitic locally chloritic qxt.

GEOLOGY: Layered sericitic quartz-crystal-lithic tuffs including narrow "marker sandstone" unit. Charge. anomaly may relate to shaly seds assoc c "marker sst"?

OTHER GEOPHYSICS:

TOPO/VEGETATION:

COMMENTS: Narrow, well defined chargeability suggestive of blk. shale type anomaly.

RECOMMENDATION: N.F.

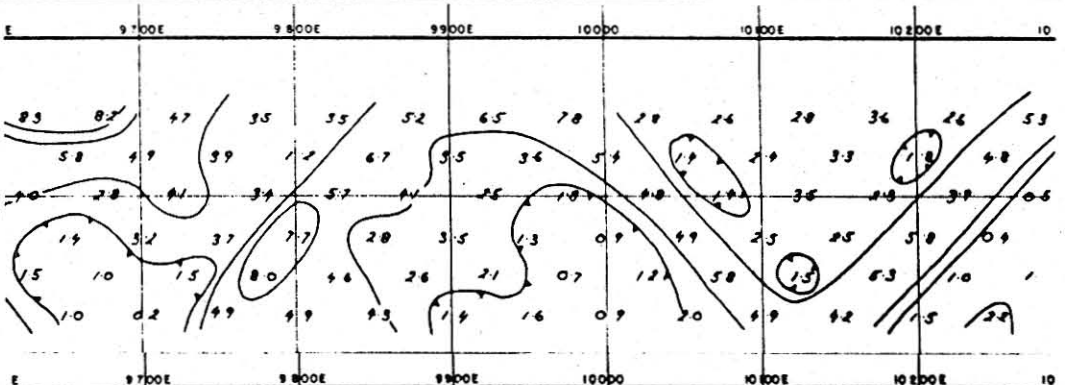
ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

151

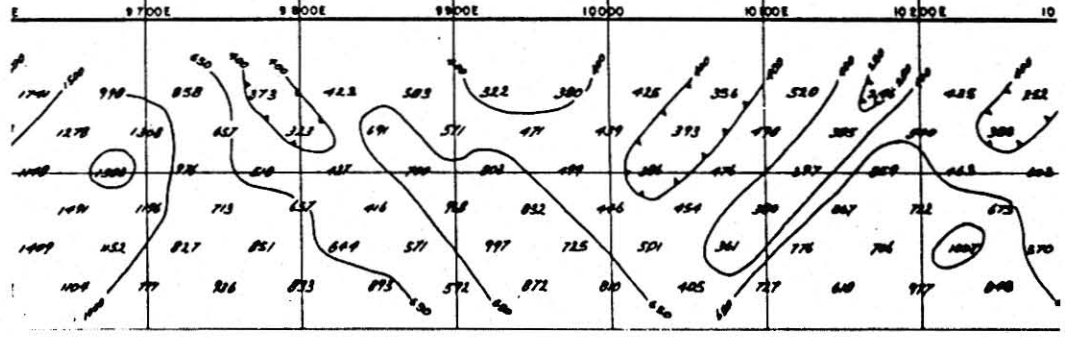
478152

TYPE	CHARGEABILITY	CLASS: 4	RATING: Geology 3, Geochem - (7)
LOCATION	9600N/9950E *(9400N/9500E see over)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	Shallow.
INTERP. WIDTH	~ 100m.
INTENSITY	2 x background.
RESISTIVITY	Near surface R low anomaly - weak support.
METAL FACTOR	Reflects chargeability
GEOCHEMISTRY	C-horizon - not anomalous.
GEOLOGY	Not well known.
OTHER GEOPHYSICS	
TOPO/VEGETATION	
COMMENTS	Chargeability zone rather "hollow". Possible along strike extension to 9400N/9500E, latter is better developed though only partly defined and without resistivity support. *See over.
RECOMMENDATION	N.F.

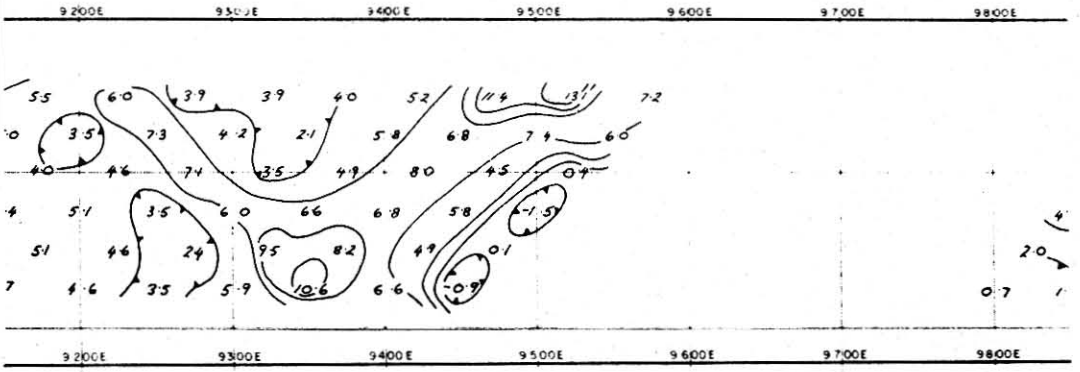
132

ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

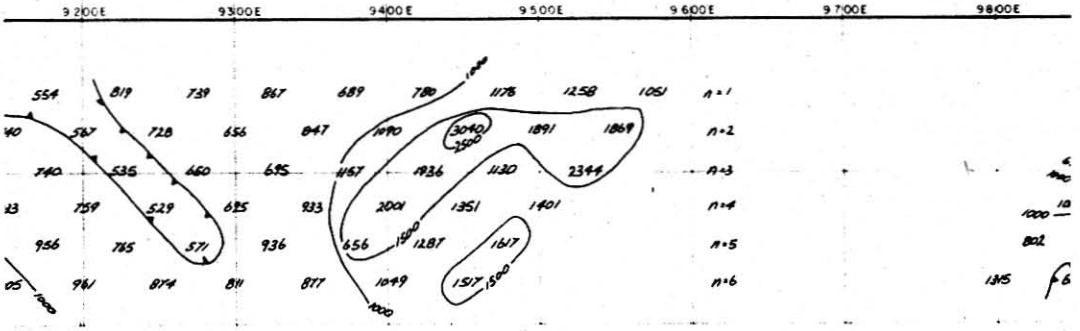
478153

TYPE	CHARGEABILITY CLASS:	RATING: 7
LOCATION	9400N / 9500E	

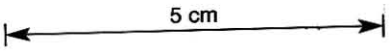
APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH
INTERP. WIDTH
INTENSITY
RESISTIVITY
METAL FACTOR



GEOCHEMISTRY

GEOLOGY

OTHER GEOPHYSICS

TOPO/VEGETATION

COMMENTS

RECOMMENDATION: N.F.

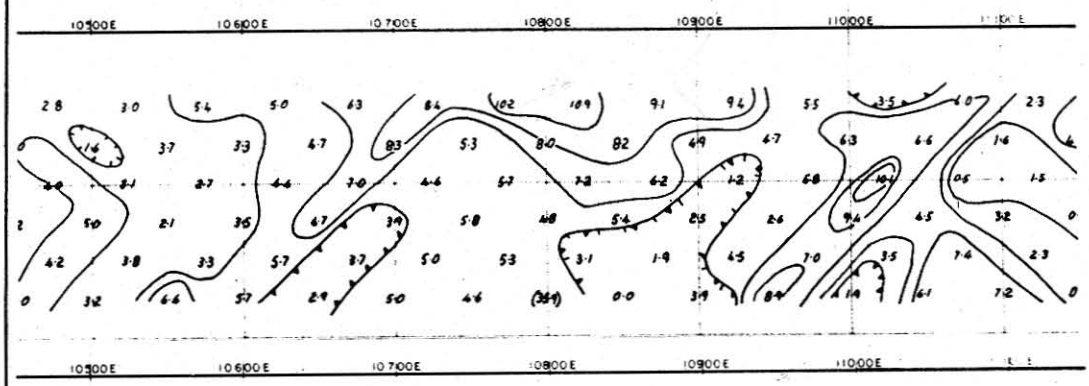
153

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

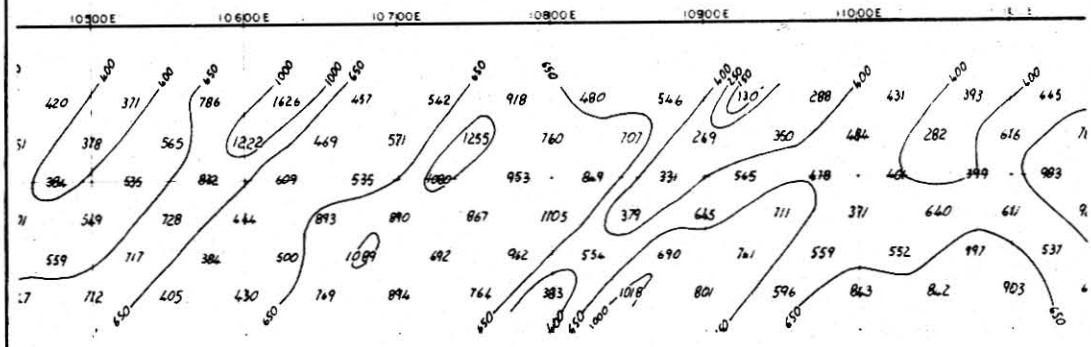
478154

TYPE	CHARGEABILITY	CLASS: 3	RATING: Geology 3 / Geochem – (6)
LOCATION	7600N/10800E (V9)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH	Shallow.
INTERP. WIDTH	Broad.
INTENSITY	2½ x background.
RESISTIVITY	- no support.
METAL FACTOR	Reflects chargeability
GEOCHEMISTRY	C-horizon: low, no anomalous character.
GEOLOGY	Complex.
OTHER GEOPHYSICS	Magnetics: coincident with east flank of mag. high.
TOPO/VEGETATION	
COMMENTS	
RECOMMENDATION	N.F.

5 cm

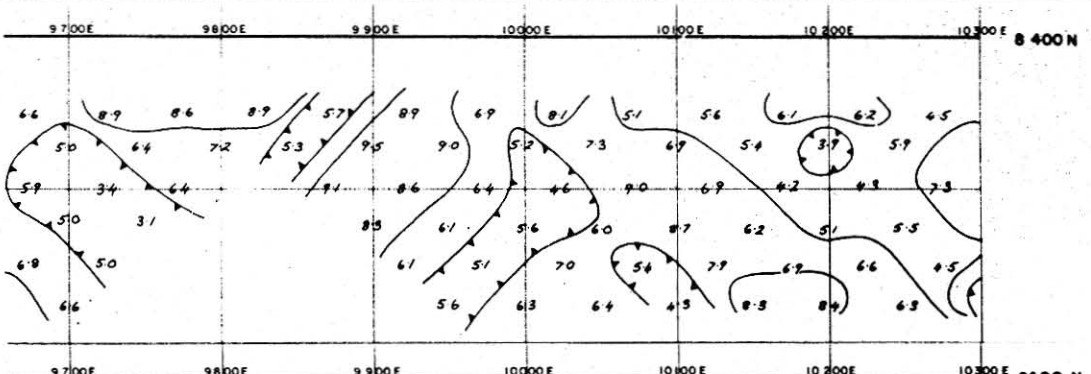
ANOMALY DATA SHEET — ELLIOTT BAY E.L. 27/76

154

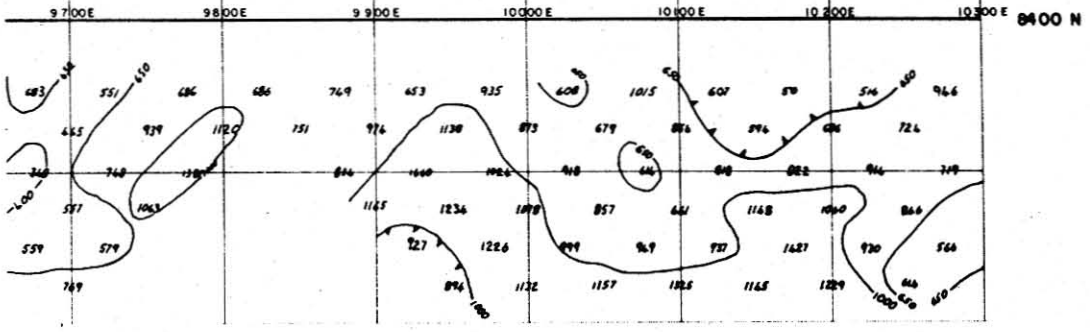
478155

TYPE	CHARGEABILITY CLASS: 5	RATING:	Geology 1 Geochem - (6)
LOCATION	8400N/10000E (V30)		

APPARENT CHARGEABILITY PSUEUDOSECTION



APPARENT RESISTIVITY PSUEUDOSECTION



INTERP. DEPTH: Shallow but with depth extent?

INTERP. WIDTH: Broad.

INTENSITY: 3 x background.

RESISTIVITY: - no support.

METAL FACTOR: Reflects chargeability

5 cm

GEOCHEMISTRY: C-horizon: no support.

GEOLOGY: Within Stoney Creek microgranite.

OTHER GEOPHYSICS: Magnetics: positive gradient to east, western flank of main V9 anomaly.

TOPO/VEGETATION

COMMENTS: "Enigmatic" chargeability zone within microgranite body. Extends through 8200N to 8000N where chargeability character is better. Suggests that large area of "granite" is chargeable.

RECOMMENDATION: Further C-horizon geochem ?

155

ANOMALY DATA SHEET — ELLIOTT BAY E.L.27/76

478156

TYPE	C-HORIZON GEOCHEMISTRY 3	RATING:	IP 1 Geology1 (5)
LOCATION	7800N/10500E		

ELEMENTS	Pb	Zn
PEAKS	0.36%	0.25%
BACKGROUND	<100	<100
Pb/Zn RATIO	1.5	
Pb ISOTOPES	No data.	

AREA
SHAPE

Single value anomaly in 25m x 200m sampling density.

TOPO/VEGETATION

GEOLOGY

Single sample anomaly (25m intervals) within Stoney Creek microgranite.

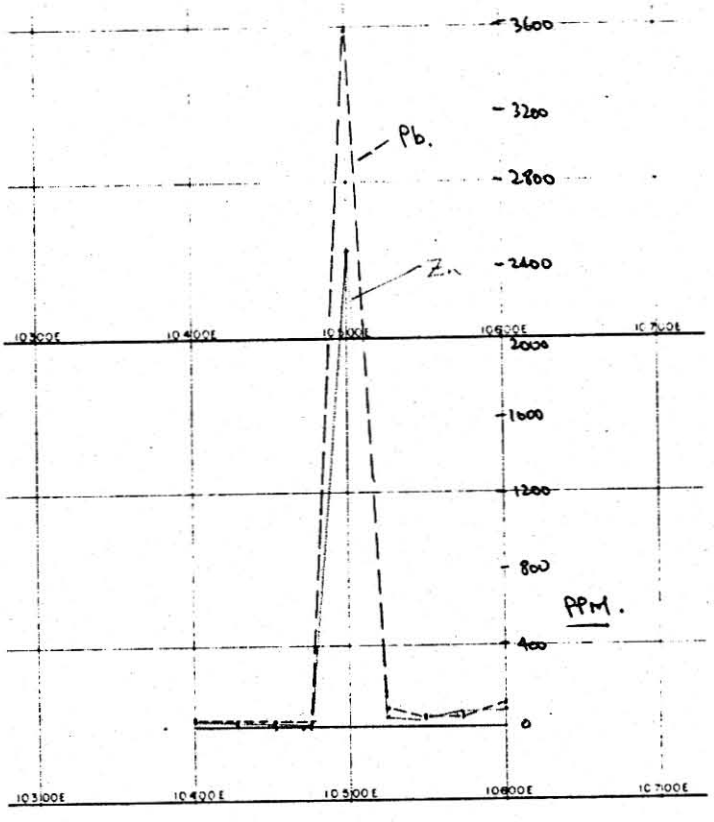
GEOPHYSICS

Magnetics: positive easterly gradient on western flank of large magnetic anomaly.

Chargeability: -

Resistivity: indication of poorly defined coincident R low.

PROFILE
1:5 000



5 cm

RECOMMENDATION

N.F.

478157

APPENDIX II

C-HORIZON SOIL GEOCHEMICAL ANALYSES

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OFFICE & LABORATORY
P.O. BOX 66
EVERTON PARK QLD 4053

Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: A084 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 25/01/93 GORDON, DEVONPORT TAS. 7310
Date Completed 28/01/93 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 18751	5	10	10	1	0.10	
TS 18752	2	15	15	1	960	m
TS 18753	2	20	10	2	0.11	
TS 18754	2	20	20	1	0.12	
TS 18755	2	10	10	1	0.13	
TS 18756	2	45	25	2	0.25	
TS 18757	<2	40	10	2	800	m
TS 18758	<2	30	20	1	0.21	
TS 18759	20	60	165	3	0.29	
TS 18760	2	240	20	2	0.31	
TS 18761	<2	20	20	1	0.56	
TS 18762	10	90	210	1	1.16	
TS 18763	10	40	30	2	1.12	
TS 18764	2	60	30	1	0.68	
TS 18765	2	70	30	1	0.60	
TS 18766	20	180	170	1	4.40	
TS 18767	2	30	10	2	0.44	
TS 18768	20	300	45	3	0.48	
TS 18769	25	30	10	1	1.44	
TS 18770	<2	10	10	<1	0.13	
TS 18771	5	100	20	1	0.52	
TS 18772	10	20	10	1	3.60	
TS 18773	10	10	10	1	1.00	
TS 18774	10	55	10	<1	0.14	
TS 18775	15	20	30	1	0.84	
TS 18776	30	110	240	1	0.52	
TS 18777	2	20	15	<1	0.38	
TS 18778	<2	10	10	1	0.29	
TS 18779	2	20	10	4	0.14	
TS 18780	2	40	10	1	0.19	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature:

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4781158

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Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18781	2	20	10	1	0.31	
TS 18782	2	35	10	2	0.19	
TS 18783	2	85	10	1	0.20	
TS 18784	2	20	10	1	0.18	
TS 18785	5	130	10	<1	0.28	
TS 18786	2	50	10	1	0.26	
TS 18787	5	0.16	% 20	2	0.37	
TS 18788	2	120	20	1	0.40	
TS 18789	40	0.19	% 0.32	% 1	0.40	
TS 18790	5	145	380	1	0.26	
TS 18791	5	200	100	1	0.27	
TS 18792	10	0.18	% 0.34	% 4	0.52	
TS 18793	2	0.21	% 35	1	0.13	
TS 18794	5	280	30	1	0.12	
TS 18795	<2	200	20	2	0.12	
TS 18796	<2	270	20	2	0.12	
TS 18797	10	600	30	6	0.10	
TS 18798	10	110	25	7	0.12	
TS 18799	40	95	55	1	3.68	
TS 18800	10	340	90	1	2.08	
TS 18801	2	100	50	1	0.72	
TS 18802	<2	30	20	1	0.56	
TS 18803	2	20	20	<1	0.60	
TS 18804	2	20	30	2	0.60	
TS 18805	<2	20	20	1	0.64	
TS 18806	2	20	20	1	0.52	
TS 18807	2	20	25	<1	0.36	
TS 18808	2	10	20	1	0.60	
TS 18809	<2	20	20	1	0.48	
TS 18810	<2	30	20	1	0.36	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: G. Dunn

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478159

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Date Received 25/01/83 GORDON, DEVONPORT TAS. 7310
Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 20

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	b	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18811	<2	15	10	<1	0.38	
TS 18812	<2	20	20	1	0.31	
TS 18813	2	30	35	1	1.08	
TS 18814	<2	20	25	1	0.60	
TS 18815	10	100	170	1	4.32	
TS 18816	2	90	75	1	0.48	
TS 18817	0.10 %	>1.0 %	190	>25	1.88	
TS 18818	30	380	580	6	2.36	
TS 18819	55	340	420	3	1.24	
TS 18820	5	145	20	1	0.20	
TS 18821	5	20	20	<1	0.44	
TS 18822	2	80	20	<1	0.22	
TS 18823	10	20	10	1	0.42	
TS 18824	40	175	280	2	5.84	
TS 18825	2	15	25	<1	1.60	
TS 18826	2	15	25	1	0.88	
TS 18827	5	30	20	<1	0.88	
TS 18828	2	20	35	1	0.96	
TS 18829	2	10	30	<1	0.96	
TS 18830	2	20	60	<1	0.76	
TS 18831	20	55	170	<1	1.00	
TS 18832	10	20	40	<1	0.92	
TS 18833	2	20	20	2	1.04	
TS 18834	2	50	40	1	0.74	
TS 18835	2	20	30	1	0.96	
TS 18836	<2	10	20	1	0.92	
TS 18837	<2	10	20	1	0.60	
TS 18838	10	10	30	1	0.64	
TS 18839	5	30	20	2	1.08	
TS 18840	2	20	120	1	1.20	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX ALSEY 42344

LABORATORY REPORT

Batch No.: A084 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 25/01/83 GORDON, DEVONPORT TAS. 7310
Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18841	5	30	480	1	2.00	
TS 18842	10	25	330	1	2.36	
TS 18843	<2	10	10	<1	0.10	
TS 18844	<2	10	<2	1	0.10	
TS 18845	5	30	160	1	2.00	
TS 18846	35	25	40	1	1.56	
TS 18847	<2	10	10	1	0.16	
TS 18848	2	10	20	1	0.60	
TS 18849	10	20	30	1	0.56	
TS 18850	2	10	20	1	0.80	
TS 18851	60	25	40	1	1.48	
TS 18852	20	10	10	1	0.36	
TS 18853	25	10	20	3	0.10	
TS 18854	10	10	10	1	2.04	
TS 18855	2	10	<2	<1	0.12	
TS 18856	2	10	20	1	0.72	
TS 18857	2	10	10	<1	0.22	
TS 18858	40	20	90	2	3.00	
TS 18859	10	10	25	1	1.16	
TS 18860	15	10	10	1	0.88	
TS 18861	2	20	40	1	2.80	
TS 18862	<2	20	10	1	0.72	
TS 18863	2	20	5	<1	0.38	
TS 18864	<2	10	15	1	0.80	
TS 18865	2	10	20	<1	0.18	
TS 18866	2	15	20	<1	0.38	
TS 18867	5	20	80	1	0.64	
TS 18868	2	30	95	<1	0.72	
TS 18869	2	40	190	1	0.96	
TS 18870	2	30	90	1	0.80	

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LABORATORY REPORT

Batch No.: A084 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 25/01/83 GORDON, DEVONPORT TAS. 7310
Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18871	5	20	20	1	0.88	
TS 18872	2	15	65	1	0.76	
TS 18873	10	120	10	1	0.48	
TS 18874	45	0.15 %	0.20 %	1	0.68	
TS 18875	40	420	520	1	1.68	
TS 18876	25	80	110	1	0.72	
TS 18877	30	0.12 %	0.52 %	<1	2.04	
TS 18878	2	30	70	1	0.76	
TS 18879	2	20	80	1	0.72	
TS 18880	2	50	20	2	0.40	
TS 18881	<2	680	10	2	0.60	
TS 18882	<2	420	20	2	0.18	
TS 18883	10	230	15	1	0.12	
TS 18884	5	30	40	<1	0.20	
TS 18885	2	10	20	1	0.18	
TS 18886	10	30	20	2	0.10	
TS 18887	20	120	310	1	0.28	
TS 18888	40	640	540	1	0.12	
TS 18889	10	40	45	1	0.32	
TS 18890	2	40	10	1	0.24	
TS 18891	<2	10	10	1	0.24	
TS 18892	2	10	10	1	0.14	
TS 18893	10	40	170	2	8.00	
TS 18894	2	30	50	1	2.80	
TS 18895	2	20	10	1	0.76	
TS 18896	<2	10	10	1	0.32	
TS 18897	65	800	0.11 %	1	0.36	
TS 18898	2	40	25	1	0.84	
TS 18899	15	40	30	1	1.12	
TS 18900	5	25	40	1	1.36	

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LABORATORY REPORT

Batch No.: A084 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 25/01/83 GORDON. DEVONPORT TAS. 7310
Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	a	a	a	a	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18901	2	20	10	1	0.72	
TS 18902	<2	10	20	1	1.00	
TS 18903	5	20	20	1	1.12	
TS 18904	25	40	65	<1	1.28	
TS 18905	2	15	30	<1	1.96	
TS 18906	<2	15	15	1	0.66	
TS 18907	<2	10	20	<1	0.52	
TS 18908	2	15	10	1	0.16	
TS 18909	<2	20	20	<1	0.38	
TS 18910	<2	10	20	1	0.40	
TS 18911	<2	20	20	2	0.28	
TS 18912	2	20	15	3	0.68	
TS 18913	2	20	10	1	0.52	
TS 18914	<2	10	5	1	0.56	
TS 18915	<2	10	10	1	0.24	
TS 18916	<2	10	10	<1	0.32	
TS 18917	2	10	2	<1	0.16	
TS 18918	2	10	10	1	0.24	
TS 18919	<2	10	10	1	0.28	
TS 18920	2	40	15	<1	0.38	
TS 18921	5	20	90	1	0.38	
TS 18922	5	40	115	1	0.36	
TS 18923	<2	<5	2	<1	0.10	
TS 18924	10	260	30	1	3.20	
TS 18925	10	20	10	<1	1.20	
TS 18926	<2	<5	10	1	0.12	
TS 18927	15	20	20	<1	0.84	
TS 18928	5	30	10	1	0.56	
TS 18929	<2	15	10	1	0.24	
TS 18930	20	50	210	1	2.08	

UNITS LEGEND ----- a - Parts per million b - Parts per billion % - percent
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LABORATORY REPORT

Batch No.: A084 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 25/01/83 GORDON. DEVONPORT TAS. 7310
Date Completed 28/01/83 N.S.W. 2072

Order No.: K 743, KP 2949 Sample Type: SOILS No. of Samples: 201

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18931	2	35	50	1	3.20	
TS 18932	2	20	20	1	0.52	
TS 18933	2	20	30	1	0.56	
TS 18934	2	40	90	1	0.58	
TS 18935	2	30	50	1	0.56	
TS 18936	2	20	30	1	0.64	
TS 18937	2	20	20	1	0.44	
TS 18938	5	105	130	1	0.60	
TS 18939	<2	20	50	1	0.76	
TS 18940	<2	20	40	1	0.64	
TS 18941	<2	20	55	1	0.60	
TS 18942	<2	20	40	1	0.72	
TS 18943	<2	40	30	1	0.56	
TS 18944	35	30	110	1	0.76	
TS 18945	2	25	10	1	0.64	
TS 18946	20	140	90	1	1.40	
TS 18947	10	60	70	1	1.44	
TS 18948	15	30	45	1	0.88	
TS 18949	25	60	70	1	2.80	
TS 18950	20	20	20	1	0.48	
TS 18951	10	20	25	<1	0.60	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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LABORATORY REPORT

Batch No.: A084R
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 25/01/83
Date Completed 28/01/83

Order No.: K 743, KP 2949
Sample Type: SOILS
No. of Samples: 1

SAMPLE NO.	Pb	Ag	ELEMENTS
	%	m	UNITS
	A101	A101	METHODS
TS 18817	1.56	188	

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LABORATORY REPORT

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Batch No.: B065 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 17/02/83 N.S.W. 2072

Order No.: K 605 Sample Type: SOIL No. of Samples: 96

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	ELEMENTS
	m	m	m	m	%	b	UNITS
	G001	G001	G001	G001	G001	PM205	METHODS
TS 18952	10	50	25	2	1.04	<3	
TS 18953	2	15	10	1	0.52	10	
TS 18954	10	15	10	1	0.54	3	
TS 18955	10	20	30	1	2.40	<3	
TS 18956	5	10	10	1	0.54	3	
TS 18957	2	40	5	<1	0.14	<3	
TS 18958	2	10	2	<1	0.05	<3	
TS 18959	2	10	2	<1	0.03	<3	
TS 18960	10	10	15	<1	0.86	<3	
TS 18961	15	75	95	1	0.38	5	
TS 18962	2	15	15	1	0.68	3	
TS 18963	10	20	25	1	2.16	5	
TS 18964	2	5	5	<1	0.34	5	
TS 18965	10	20	45	1	2.88	4	
TS 18966	5	40	45	1	1.36	10	
TS 18967	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
TS 18968	5	5	5	<1	0.09	3	
TS 18969	10	20	35	1	0.96	5	
TS 18970	10	15	10	<1	0.34	3	
TS 18971	5	30	50	2	3.36	10	
TS 18972	5	15	10	1	0.72	5	
TS 18973	5	20	20	<1	0.84	3	
TS 18974	10	10	15	<1	0.68	5	
TS 18975	10	10	15	1	0.48	5	
TS 18976	5	10	5	1	0.40	5	
TS 18977	10	10	5	8	0.08	5	
TS 18978	10	15	5	4	0.12	5	
TS 18979	10	15	25	1	0.68	3	
TS 18980	10	20	30	1	0.88	5	
TS 18981	5	10	20	1	0.96	3	

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LABORATORY REPORT

Batch No.: 8065 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 17/02/83 N.S.W. 2072

Order No.: K 605 Sample Type: SOIL No. of Samples: 96

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	ELEMENTS
	m	m	m	m	%	b	UNITS
	G001	G001	G001	G001	G001	PM205	METHODS
TS 18982	5	10	10	<1	0.42	5	
TS 18983	10	10	5	1	0.42	5	
TS 18984	10	25	50	2	2.88	5	
TS 18985	10	10	10	<1	0.44	<3	
TS 18986	30	125	85	1	0.42	5	
TS 18987	5	10	5	1	0.26	5	
TS 18988	40	440	65	1	0.22	5	
TS 18989	10	15	15	1	0.15	5	
TS 18990	5	10	10	1	0.12	25	
TS 18991	2	10	5	<1	0.10	35	
TS 18992	5	10	15	1	0.12	25	
TS 18993	2	10	5	<1	0.09	5	
TS 18994	10	10	10	1	0.08	90	
TS 18995	2	15	2	1	0.08	10	
TS 18996	10	10	2	<1	0.10	15	
TS 18997	2	5	5	<1	0.14	10	
TS 18998	10	10	10	1	0.46	5	
TS 18999	2	15	15	1	0.08	5	
TS 19000	10	35	100	1	1.04	10	
TS 19001	10	30	50	1	4.08	75	
TS 19002	40	80	45	1	1.20	5	
TS 19003	5	20	25	1	0.80	5	
TS 19004	25	80	360	1	3.44	5	
TS 19005	10	50	240	1	0.66	3	
TS 19006	10	40	30	<1	0.20	10	
TS 19007	10	20	5	<1	0.16	10	
TS 19008	10	20	5	<1	0.10	10	
TS 19009	2	10	2	<1	0.08	20	
TS 19010	5	20	20	<1	0.14	20	
TS 19011	2	10	5	<1	0.10	5	

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LABORATORY REPORT

Batch No.: B065 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 17/02/83 N.S.W. 2072

Order No.: K 605 Sample Type: SOIL No. of Samples: 96

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	ELEMENTS
	m	m	m	m	%	b	UNITS
	G001	G001	G001	G001	G001	PM205	METHODS
TS 19012	2	10	5	1	0.14	3	
TS 19013	10	20	35	1	0.28	5	
TS 19014	10	20	55	1	1.00	3	
TS 19015	10	10	20	1	1.60	3	
TS 19016	5	10	10	1	0.22	5	
TS 19017	5	10	15	1	0.40	5	
TS 19018	5	10	10	1	0.28	5	
TS 19019	2	10	10	1	0.34	3	
TS 19020	40	330	400	1	1.28	5	
TS 19021	10	20	65	<1	0.78	5	
TS 19022	30	30	95	1	5.60	5	
TS 19023	10	400	410	1	4.48	10	
TS 19220	2	10	15	1	0.60	5	
TS 19221	5	10	15	<1	0.44	5	
TS 19222	2	15	20	1	0.78	5	
TS 19223	2	20	15	<1	0.56	5	
TS 19224	2	10	10	1	0.24	10	
TS 19225	110	880	0.19 %	1	1.52	5	
TS 19226	260	120	115	1	0.38	10	
TS 19227	10	20	85	1	0.28	30	
TS 19228	2	10	5	1	0.09	<3	
TS 19229	2	10	10	<1	0.10	<3	
TS 19230	40	90	50	3	0.14	95	
TS 19231	10	10	15	1	0.04	20	
TS 19232	10	30	30	1	0.08	145	
TS 19233	5	10	10	1	0.12	55	
TS 19234	10	20	20	1	0.14	60	
TS 19235	10	15	25	1	0.14	140	
TS 19236	10	15	15	1	0.14	25	
TS 19237	5	15	15	1	0.10	60	

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g - Grams a - Absorbance

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Batch No.: B065 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 17/02/83 N.S.W. 2072

Order No.: K 605 Sample Type: SOIL No. of Samples: 96

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	ELEMENTS
	m	m	m	m	%	b	UNITS
	G001	G001	G001	G001	G001	PM205	METHODS
TS 19238	5	25	5	1	0.08	10	
TS 19239	2	35	5	<1	0.08	3	
TS 19240	5	15	75	1	1.76	<3	
TS 19241	10	60	800	1	0.78	5	
TS 19242	2	40	135	<1	0.28	3	
TS 19243	2	15	5	<1	0.22	3	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: B066 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	ppm	ppm	ppm	ppm	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
19024	2	10	25	1	0.84	
19025	10	10	65	1	2.08	
19026	10	140	35	1	0.94	
19027	10	20	40	1	2.16	
19028	10	20	25	1	2.32	
19029	20	120	170	1	1.28	
19030	30	45	95	1	2.40	
19031	5	15	160	1	3.60	
19032	10	170	95	1	0.42	
19033	2	10	15	<1	0.24	
19034	2	10	5	<1	0.12	
19035	2	5	5	<1	0.14	
19036	2	45	120	<1	0.12	
19037	2	10	10	<1	0.16	
19038	2	50	210	<1	0.23	
19039	2	10	10	1	800 ppm	
19040	5	40	90	<1	0.14	
19041	2	20	65	1	0.84	
19042	10	30	230	2	3.60	
19043	2	10	5	1	0.14	
19044	20	90	50	1	0.24	
19045	10	40	30	1	0.82	
19046	15	145	195	1	0.82	
19047	5	10	5	<1	0.14	
19048	10	10	15	1	0.27	
19049	20	210	195	1	0.18	
19050	10	65	80	1	0.13	
19051	10	330	380	1	0.18	
19052	2	20	10	<1	0.20	
19053	10	175	370	1	0.44	

UNITS LEGEND ----- ppm - Parts per million ppb - Parts per billion % - percent
g - Grams a - Absorbance

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AUSTRALIAN LABORATORY SERVICES PTY. LTD.

CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY
P.O. BOX 66
EVERTON PARK QLD 4053

Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: B066 | Client: GEOPEKO LIMITED, | Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, | Address: P.O. BOX 598,
Date Received 11/02/93 | GORDON. | DEVONPORT TAS. 7310
Date Completed 21/02/93 | N.S.W. 2072

Order No.: K 604 | Sample Type: SOIL | No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
19054	50	0.19	% 900	1	0.42	
19055	5	45	40	<1	0.15	
19056	5	15	10	<1	0.16	
19057	80	270	40	2	0.18	
19058	2	100	10	<1	800 m	
19059	10	120	170	<1	0.26	
19060	5	25	70	1	0.90	
19061	10	35	60	<1	0.22	
19062	10	70	300	1	0.66	
19063	30	30	45	1	0.90	
19064	10	50	90	1	0.48	
19065	10	90	150	1	1.36	
19066	10	80	105	1	0.42	
19067	10	85	45	1	0.86	
19068	130	40	40	2	0.58	
19069	20	50	35	2	0.30	
19070	10	20	10	2	0.66	
19071	230	45	15	2	0.70	
19072	10	10	10	1	0.49	
19073	20	30	5	1	0.26	
19074	20	80	120	1	0.40	
19075	10	20	5	1	0.28	
19076	5	10	15	1	0.46	
19077	2	10	5	1	0.32	
19078	195	180	185	1	0.46	
19079	5	20	290	<1	0.26	
19080	10	20	15	1	0.60	
19081	5	15	15	1	1.56	
19082	60	110	15	1	0.28	
19083	2	20	5	<1	0.38	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: B066 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19084	10	40	45	<1	0.42	
19085	10	50	15	1	0.38	
19086	5	10	20	<1	0.32	
19087	45	20	160	1	0.38	
19088	10	30	85	1	0.54	
19089	2	10	15	1	0.30	
19090	25	410	240	1	0.26	
19091	20	210	320	1	0.56	
19092	<2	10	10	<1	0.24	
19093	10	30	75	1	0.50	
19094	2	10	100	1	2.72	
19095	2	10	35	1	1.48	
19096	2	10	15	1	0.62	
19097	2	15	30	1	1.44	
19098	10	35	90	1	2.72	
19099	5	30	110	1	1.68	
19100	5	40	80	1	2.40	
19101	10	240	100	2	3.12	
19102	2	20	10	1	0.38	
19103	2	10	20	1	0.56	
19104	2	5	15	<1	0.32	
19105	2	100	75	1	0.64	
19106	10	30	25	1	0.30	
19107	5	10	30	1	0.70	
19108	5	10	70	1	0.22	
19109	5	10	15	1	0.28	
19110	2	10	20	1	0.40	
19111	5	20	30	1	0.56	
19112	5	190	220	2	3.36	
19113	10	20	10	1	0.42	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: 8066 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 11/02/83 GORDON.
Date Completed 21/02/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19114	2	20	15	1	0.78	
19115	2	15	15	1	0.48	
19116	2	10	20	1	0.94	
19117	2	10	10	1	0.30	
19118	2	40	35	1	0.24	
19119	5	25	25	1	0.11	
19120	10	15	20	1	0.44	
19121	2	20	15	1	0.96	
19122	2	10	10	1	0.34	
19123	10	70	15	1	1.04	
19124	2	10	20	1	0.78	
19125	10	10	20	1	0.72	
19126	5	30	130	2	2.24	
19127	2	20	15	1	0.62	
19128	2	20	10	1	0.20	
19129	5	10	15	1	0.42	
19130	10	20	15	1	0.30	
19131	5	25	15	1	0.18	
19132	5	10	10	1	0.22	
19133	5	10	15	1	0.32	
19134	5	10	15	1	0.36	
19135	5	10	10	<1	0.26	
19136	5	10	10	1	0.17	
19137	10	145	175	2	3.68	
19138	5	75	30	1	1.28	
19139	5	25	35	1	1.52	
19140	5	20	45	1	1.92	
19141	30	110	100	2	2.32	
19142	10	115	135	1	2.88	
19143	10	20	40	1	1.44	

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LABORATORY REPORT

Batch No.: B066 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	a	a	a	a	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19144	10	10	30	1	1.28	
19145	5	15	35	1	1.04	
19146	5	0.26 %	65	2	1.52	
19147	5	30	240	1	2.48	
19148	10	20	0.24 %	1	2.08	
19149	15	0.12 %	320	7	0.88	
19150	5	960	0.10 %	1	0.24	
19151	10	40	20	1	0.22	
19152	10	15	30	1	0.56	
19153	20	40	120	1	1.76	
19154	10	60	30	<1	0.24	
19155	5	40	450	<1	0.94	
19156	5	15	90	1	1.44	
19157	20	25	40	1	0.82	
19158	20	15	30	<1	0.74	
19159	5	10	80	<1	0.36	
19160	2	10	10	1	0.96	
19161	10	20	65	1	1.16	
19162	5	10	10	<1	0.22	
19163	2	5	5	<1	0.10	
19164	0.11 %	170	0.10 %	4	0.42	
19165	10	10	70	1	0.38	
19166	110	45	35	1	0.32	
19167	10	10	30	<1	0.19	
19168	5	10	10	<1	0.14	
19169	5	40	20	1	0.58	
19170	5	20	10	1	0.48	
19171	10	30	20	1	0.46	
19172	65	150	100	2	0.42	
19173	120	75	510	2	0.66	

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g - Grams s - Absorbance

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Certificate No. 4781774

Authorised Person for Company

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LABORATORY REPORT

Batch No.: B066 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19174	10	70	90	1	0.36	
19175	10	40	70	1	0.42	
19176	10	20	100	1	2.80	
19177	20	120	170	2	0.74	
19178	10	75	400	1	0.54	
19179	20	120	95	2	0.48	
19180	10	160	195	1	0.23	
19181	2	10	10	<1	0.16	
19182	10	10	20	<1	0.29	
19183	2	10	15	<1	0.30	
19184	<2	10	20	1	0.38	
19185	70	410	0.24	% 1	4.00	
19186	10	20	120	<1	0.64	
19187	10	15	40	<1	0.50	
19188	20	30	25	1	0.56	
19189	10	110	270	<1	0.66	
19190	2	40	130	<1	0.38	
19191	2	10	20	1	0.88	
19192	5	5	30	1	0.16	
19193	2	10	20	1	0.26	
19194	2	15	20	<1	0.32	
19195	2	5	30	<1	0.34	
19196	2	2	20	<1	0.26	
19197	2	5	15	<1	0.28	
19198	5	10	40	<1	0.24	
19199	2	2	10	<1	0.24	
19200	10	10	10	1	0.14	
19201	5	10	20	1	0.28	
19202	2	70	150	1	0.74	
19203	<2	10	10	<1	0.20	

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LABORATORY REPORT

Batch No.: B066
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 11/02/83
Date Completed 21/02/83

Order No.: K 604
Sample Type: SOIL
No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19204	2	5	10	<1	0.14	
19205	2	80	40	<1	0.14	
19206	2	40	155	<1	0.26	
19207	2	<5	10	<1	0.12	
19208	2	60	25	1	0.29	
19209	<2	5	20	1	0.84	
19210	2	10	50	1	1.76	
19211	2	5	30	1	1.76	
19212	2	5	20	1	1.52	
19213	10	20	80	1	2.56	
19214	2	15	20	1	1.44	
19215	2	20	25	1	1.72	
19216	2	10	10	1	0.70	
19217	2	10	20	<1	0.66	
19218	2	10	20	<1	0.48	
19219	2	5	10	3	0.28	
19244	2	10	20	<1	0.30	
19245	2	10	25	<1	0.42	
19246	2	10	15	<1	0.29	
19247	2	5	10	3	0.40	
19248	2	10	10	<1	0.26	
19249	2	5	10	1	0.32	
19250	2	30	70	<1	0.46	
19251	2	20	60	<1	0.66	
19252	10	15	85	1	1.56	
19253	15	30	80	2	2.48	
19254	10	20	45	2	2.32	
19255	2	10	20	1	1.12	
19256	5	20	30	2	0.88	
19257	2	50	25	2	0.86	

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Signature: G. Dunn

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Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 604 Sample Type: SOIL No. of Samples: 223

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
19258	10	10	20	<1	0.40	
19259	2	10	30	<1	1.44	
19260	10	20	10	<1	0.70	
19261	2	10	30	1	1.36	
19262	5	20	30	2	0.96	
19263	15	15	65	<1	2.00	
19264	10	15	25	1	0.90	
19265	15	10	20	2	0.60	
19266	5	10	20	1	0.58	
19267	20	10	25	1	0.88	
19268	2	10	10	<1	0.48	
19269	5	10	20	1	0.60	
19270	2	10	20	1	0.54	

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Computer Dynamics Company

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LABORATORY REPORT

Batch No.: B114 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 18/02/83 GORDON,
Date Completed 25/02/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	a	a	a	a	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19271	25	110	230	3	1.92	
TS 19272	2	135	230	1	0.36	
TS 19273	5	50	75	1	0.18	
TS 19274	20	60	15	2	0.20	
TS 19275	110	40	240	1	0.52	
TS 19276	10	10	15	1	0.32	
TS 19277	2	5	10	1	0.32	
TS 19278	10	5	15	1	0.64	
TS 19279	10	5	15	1	0.44	
TS 19280	10	10	60	1	0.46	
TS 19281	2	5	10	1	0.40	
TS 19282	10	10	10	1	0.64	
TS 19283	2	10	10	2	0.22	
TS 19284	10	195	180	2	0.28	
TS 19285	2	210	270	1	0.36	
TS 19286	10	45	540	1	0.62	
TS 19287	2	15	100	1	1.40	
TS 19288	2	10	80	1	1.48	
TS 19289	2	10	10	1	0.64	
TS 19290	30	170	220	1	1.28	
TS 19291	2	10	25	1	1.26	
TS 19292	5	40	125	1	0.52	
TS 19293	15	45	125	1	0.28	
TS 19294	15	130	210	1	0.72	
TS 19295	60	85	160	2	0.96	
TS 19296	90	100	90	2	0.78	
TS 19297	15	35	100	1	0.88	
TS 19298	15	25	75	2	2.80	
TS 19299	10	25	40	1	0.32	
TS 19300	50	85	65	4	0.56	

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Signature:

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Computer Resources Company

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LABORATORY REPORT

Batch No.: B114 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 18/02/83 GORDON,
Date Completed 25/02/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	ppm	ppm	ppm	ppm	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19301	80	200	155	3	0.88	
TS 19302	10	50	15	3	0.44	
TS 19303	2	10	10	2	0.60	
TS 19304	2	20	10	1	0.38	
TS 19305	190	30	20	1	0.34	
TS 19306	5	5	50	1	0.64	
TS 19307	15	0.10 %	25	2	0.96	
TS 19308	2	15	70	1	0.72	
TS 19309	80	50	90	1	1.16	
TS 19310	15	20	50	1	0.78	
TS 19311	10	20	40	1	0.76	
TS 19312	2	5	5	1	0.44	
TS 19313	2	5	80	1	2.56	
TS 19314	2	<5	10	1	0.52	
TS 19315	30	5	25	1	0.22	
TS 19316	5	10	15	1	0.68	
TS 19317	125	5	160	1	0.96	
TS 19318	5	<5	35	6	1.00	
TS 19319	2	<5	40	2	0.40	
TS 19320	5	5	20	1	0.40	
TS 19321	2	<5	15	<1	0.28	
TS 19322	15	40	55	<1	0.16	
TS 19323	20	310	510	2	0.84	
TS 19324	2	670	610	1	0.44	
TS 19325	5	190	115	1	0.32	
TS 19326	15	95	70	1	0.30	
TS 19327	10	40	65	1	2.16	
TS 19328	5	25	75	1	1.56	
TS 19329	2	25	150	2	2.40	
TS 19330	2	25	110	1	2.24	

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LABORATORY REPORT

Batch No.: B114 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/02/83 N.S.W. 2072

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19331	420	120	140	2	1.12	
TS 19332	10	180	320	2	2.08	
TS 19333	10	65	200	1	3.28	
TS 19334	10	165	340	1	4.00	
TS 19335	2	20	155	1	3.68	
TS 19336	10	30	70	1	2.64	
TS 19337	10	35	60	1	1.92	
TS 19338	5	5	15	1	0.32	
TS 19339	2	<5	10	1	0.28	
TS 19340	5	<5	15	1	0.36	
TS 19341	2	<5	15	1	0.20	
TS 19342	2	10	10	1	0.16	
TS 19343	5	15	10	2	0.36	
TS 19344	2	10	20	1	0.50	
TS 19345	2	10	10	1	1.04	
TS 19346	2	5	15	1	0.50	
TS 19347	2	5	10	1	0.24	
TS 19348	10	80	90	1	2.80	
TS 19356	10	25	110	1	2.56	
TS 19357	10	10	70	2	2.40	
TS 19358	2	5	10	1	0.34	
TS 19359	5	30	40	1	0.80	
TS 19360	5	45	55	1	0.30	
TS 19361	20	200	90	2	0.40	
TS 19362	10	10	70	1	2.04	
TS 19363	10	55	80	2	2.32	
TS 19364	5	125	120	1	0.88	
TS 19365	2	5	10	1	0.10	
TS 19366	2	10	45	2	1.76	
TS 19367	2	5	15	1	0.56	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: B114 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/02/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/02/83 N.S.W. 2072

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19368	5	25	100	2	3.60	
TS 19369	5	10	10	1	0.28	
TS 19370	5	5	10	<1	0.12	
TS 19371	2	5	10	1	0.16	
TS 19372	2	5	10	1	0.12	
TS 19373	5	5	5	<1	0.08	
TS 19374	5	10	20	1	0.22	
TS 19375	5	10	10	1	0.32	
TS 19376	5	20	95	2	3.44	
TS 19377	5	10	45	1	2.56	
TS 19378	5	20	125	1	4.08	
TS 19379	5	200	220	1	3.12	
TS 19380	5	15	100	1	2.72	
TS 19381	10	30	100	1	1.96	
TS 19382	5	35	105	1	2.40	
TS 19383	5	15	80	1	1.76	
TS 19384	5	25	30	1	0.96	
TS 19385	35	280	70	1	0.88	
TS 19386	15	10	100	1	3.76	
TS 19387	15	5	50	1	2.72	
TS 19388	60	20	20	<1	0.50	
TS 19389	25	10	65	1	2.64	
TS 19390	15	30	55	1	0.28	
TS 19391	20	30	55	1	0.28	
TS 19392	2	<5	2	<1	0.05	
TS 19393	5	120	240	1	0.68	
TS 19394	80	45	250	1	2.24	
TS 19395	5	25	110	1	1.76	
TS 19396	2	10	30	1	1.12	
TS 19397	10	50	20	1	0.88	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/02/83 N.S.W. 2072

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19398	5	25	70	1	1.36	
TS 19399	5	15	35	1	1.16	
TS 19400	5	10	50	<1	1.16	
TS 19401	5	20	50	<1	0.88	
TS 19402	10	10	30	1	0.26	
TS 19403	20	10	60	1	1.12	
TS 19404	5	5	30	1	0.56	
TS 19405	10	25	10	1	0.38	
TS 19406	10	15	10	1	0.28	
TS 19407	5	10	10	<1	0.24	
TS 19408	5	100	90	1	0.20	
TS 19409	5	45	60	<1	0.16	
TS 19410	5	25	125	1	0.40	
TS 19411	2	5	10	1	0.20	
TS 19412	<2	<5	10	1	0.22	
TS 19413	5	5	30	1	0.40	
TS 19414	5	85	110	2	0.38	
TS 19415	5	35	175	2	0.76	
TS 19416	<2	10	45	<1	0.24	
TS 19417	5	25	70	1	0.58	
TS 19418	<2	<5	10	<1	0.28	
TS 19419	2	10	25	1	0.72	
TS 19420	2	20	35	<1	0.44	
TS 19421	2	10	15	1	0.44	
TS 19422	2	10	20	1	0.50	
TS 19423	<2	5	20	<1	0.48	
TS 19424	5	5	25	1	0.56	
TS 19425	2	5	20	<1	0.56	
TS 19426	<2	<5	15	<1	0.56	
TS 19427	<2	10	15	1	0.44	

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LABORATORY REPORT

Batch No.: 8114 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/02/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/02/83 N.S.W. 2072

Order No.: 608 Sample Type: SOIL No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 19428	65	640	340	1	0.44	
TS 19429	<2	10	15	1	0.32	
TS 19430	15	140	220	1	0.72	
TS 19431	2	10	20	1	0.64	
TS 19432	2	10	15	1	0.52	
TS 19433	2	5	45	1	1.76	
TS 19434	<2	10	25	1	1.16	
TS 19435	<2	10	50	1	1.16	
TS 19436	15	70	240	1	1.96	
TS 19437	10	10	105	1	2.40	
TS 19438	<2	5	15	<1	0.56	
TS 19439	<2	25	45	1	0.80	
TS 19440	<2	5	55	1	1.60	
TS 19441	<2	10	50	<1	1.04	
TS 19442	<2	15	95	1	1.88	
TS 19443	<2	5	10	<1	0.32	
TS 19444	<2	5	95	1	1.72	
TS 19445	<2	<5	40	1	0.76	
TS 19446	<2	<5	10	<1	0.34	
TS 19447	<2	10	40	1	0.76	
TS 19448	<2	10	30	1	0.60	
TS 19449	<2	5	5	<1	0.28	
TS 19450	<2	50	20	1	0.34	
TS 21251	<2	5	10	1	0.32	
TS 21252	<2	5	5	<1	0.18	
TS 21253	<2	15	10	<1	0.36	
TS 21254	2	50	120	1	0.32	
TS 21255	<2	5	10	1	0.28	
TS 21256	<2	5	10	1	0.30	
TS 21257	<2	40	10	<1	0.36	

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LABORATORY REPORT

Batch No.: B114
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 18/02/83
Date Completed 25/02/83

Order No.: 608
Sample Type: SOIL
No. of Samples: 204

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21258	<2	5	10	1	0.30	
TS 21259	<2	10	10	<1	0.22	
TS 21260	<2	5	10	1	0.40	
TS 21261	2	50	10	1	0.32	
TS 21262	<2	15	45	<1	0.24	
TS 21263	2	10	10	1	0.14	
TS 21264	10	40	10	1	0.16	
TS 21265	15	25	10	1	0.16	
TS 21266	5	25	20	2	0.12	
TS 21267	15	110	35	4	0.16	
TS 21268	2	20	60	1	1.36	
TS 21269	2	20	35	<1	0.72	
TS 21270	<2	10	10	<1	0.38	
TS 21271	2	5	5	<1	0.22	
TS 21272	2	10	45	<1	1.92	
TS 21273	2	10	35	<1	1.28	
TS 21274	2	10	25	<1	0.68	
TS 21275	<2	10	40	<1	0.64	
TS 21276	2	15	10	<1	0.40	
TS 21277	5	10	5	1	0.20	
TS 21278	<2	5	10	<1	0.44	
TS 21279	2	10	30	1	0.64	
TS 21280	5	10	35	1	1.08	
TS 21281	<2	10	30	<1	0.68	

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LABORATORY REPORT

Batch No.: C116 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21640	2	<5	10	1	0.15	
TS 21641	<2	10	20	1	0.16	
TS 21642	2	10	10	1	0.24	
TS 21643	<2	10	10	1	0.18	
TS 21644	2	10	10	1	0.21	
TS 21645	10	10	20	1	0.21	
TS 21646	<2	10	10	1	0.28	
TS 21647	10	10	10	1	0.26	
TS 21648	2	10	15	1	0.18	
TS 21649	5	30	10	1	0.14	
TS 21650	10	45	20	1	0.11	
TS 21651	2	10	20	1	0.30	
TS 21652	2	10	10	1	0.14	
TS 21653	10	30	20	1	0.21	
TS 21654	10	120	70	3	0.29	
TS 21655	30	0.40	% 0.54	% 6	1.28	
TS 21656	10	70	90	1	0.17	
TS 21657	10	45	200	2	3.18	
TS 21658	15	15	180	1	2.19	
TS 21659	10	60	260	2	2.89	
TS 21660	5	120	660	1	0.68	
TS 21661	2	60	40	1	0.24	
TS 21662	2	10	20	1	0.20	
TS 21663	<2	15	30	1	0.18	
TS 21664	<2	10	10	1	0.17	
TS 21665	<2	10	30	1	0.12	
TS 21666	2	10	20	<1	0.24	
TS 21667	5	10	20	1	0.20	
TS 21668	<2	10	10	1	0.22	
TS 21669	2	30	10	2	0.21	

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Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001		ELEMENTS UNITS METHODS
TS 21670	2	10	10	<1	0.30		
TS 21671	<2	10	10	<1	0.24		
TS 21672	<2	10	60	1	0.23		
TS 21673	15	40	10	2	0.17		
TS 21674	2	55	90	<1	0.26		
TS 21675	10	20	45	1	0.35		
TS 21676	30	220	60	1	0.71		
TS 21677	2	15	120	<1	0.48		
TS 21678	5	50	60	1	0.38		
TS 21679	2	20	45	1	0.54		
TS 21680	<2	240	270	1	0.68		
TS 21681	5	30	20	1	0.49		
TS 21682	10	50	145	<1	0.47		
TS 21683	10	20	150	<1	0.24		
TS 21684	2	10	2	<1	120	m	
TS 21685	2	10	<2	<1	60	m	
TS 21686	5	20	120	1	0.22		
TS 21687	2	20	30	1	0.34		
TS 21688	2	10	2	1	60	m	
TS 21689	<2	10	<2	<1	120	m	
TS 21690	2	10	2	<1	0.19		
TS 21691	2	15	<2	<1	300	m	
TS 21692	5	20	10	<1	0.12		
TS 21693	10	10	10	<1	0.10		
TS 21694	2	10	10	<1	900	m	
TS 21695	<2	10	2	<1	320	m	
TS 21696	2	10	2	<1	300	m	
TS 21697	2	10	<2	<1	150	m	
TS 21698	5	60	95	1	0.42		
TS 21699	2	30	20	1	0.23		

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 21700	5	30	60	1	1.81		
TS 21701	2	25	70	1	0.51		
TS 21702	10	120	310	1	0.65		
TS 21703	10	55	80	1	0.55		
TS 21704	10	45	125	1	1.09		
TS 21705	10	70	40	1	1.17		
TS 21706	20	85	30	2	0.91		
TS 21707	5	30	70	1	0.26		
TS 21708	2	45	270	1	2.29		
TS 21709	10	30	155	1	0.49		
TS 21710	2	20	15	1	0.47		
TS 21711	5	90	100	1	1.01		
TS 21712	5	50	240	1	1.16		
TS 21713	5	145	130	1	1.21		
TS 21714	<2	40	150	1	1.84		
TS 21715	2	20	140	1	1.73		
TS 21716	5	170	280	1	2.38		
TS 21717	5	90	85	1	1.12		
TS 21718	2	30	30	<1	1.11		
TS 21719	2	10	30	1	0.75		
TS 21720	5	20	20	1	0.31		
TS 21721	10	30	20	1	0.47		
TS 21722	<2	10	2	<1	60	m	
TS 21723	<2	10	2	<1	60	m	
TS 21724	<2	10	2	<1	50	m	
TS 21725	<2	10	2	<1	40	m	
TS 21726	10	20	15	<1	0.40		
TS 21727	2	15	25	<1	800	m	
TS 21728	2	30	10	<1	0.22		
TS 21729	2	20	35	<1	0.62		

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 21730	2	10	55	1	0.24		
TS 21731	2	40	120	<1	0.25		
TS 21732	2	30	80	<1	0.21		
TS 21733	5	70	200	1	0.46		
TS 21734	2	10	10	<1	0.16		
TS 21735	2	65	350	<1	0.18		
TS 21736	2	40	115	<1	0.17		
TS 21737	2	45	80	1	0.26		
TS 21738	30	220	200	<1	0.19		
TS 21739	2	25	90	<1	0.16		
TS 21740	2	40	30	<1	0.35		
TS 21741	15	40	500	<1	0.20		
TS 21742	10	110	40	1	0.13		
TS 21743	<2	35	30	1	0.24		
TS 21744	2	40	60	1	0.10		
TS 21745	2	15	20	1	0.21		
TS 21746	2	30	50	1	1.26		
TS 21747	10	20	30	1	1.11		
TS 21748	2	165	210	1	3.17		
TS 21749	<2	5	5	1	360	m	
TS 21750	10	10	10	1	0.31		
TS 21751	2	70	420	1	0.46		
TS 21752	<2	15	40	1	800	m	
TS 21753	<2	10	10	1	0.10		
TS 21754	<2	5	15	1	0.15		
TS 21755	<2	25	60	<1	0.30		
TS 21756	5	20	200	<1	0.36		
TS 21757	2	10	20	1	0.15		
TS 21758	<2	10	10	<1	0.15		
TS 21759	10	25	3	<1	0.10		

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LABORATORY REPORT

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Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 21760	5	20	10	1	0.17		
TS 21761	5	20	140	<1	0.36		
TS 21762	2	10	10	<1	0.14		
TS 21763	15	10	10	<1	0.11		
TS 21764	10	15	10	1	0.22		
TS 21765	10	15	20	1	0.17		
TS 21766	2	10	10	<1	0.17		
TS 21767	2	10	5	<1	0.14		
TS 21768	2	140	160	<1	0.25		
TS 21769	20	25	2	<1	730	m	
TS 21770	5	10	<2	<1	590	m	
TS 21771	5	10	<2	<1	725	m	
TS 21772	10	10	10	1	0.18		
TS 21773	5	20	45	1	0.58		
TS 21774	2	20	40	1	0.22		
TS 21775	2	25	130	1	0.37		
TS 21776	2	10	40	1	0.22		
TS 21777	2	15	35	1	0.32		
TS 21778	5	10	20	1	0.24		
TS 21779	2	10	30	1	0.23		
TS 21780	2	20	20	1	0.23		
TS 21781	<2	10	10	1	0.14		
TS 21782	2	10	20	1	0.22		
TS 21783	10	210	460	1	0.66		
TS 21784	20	200	390	2	3.50		
TS 21785	5	30	180	1	3.30		
TS 21786	30	580	0.25	% 2	2.70		
TS 21787	10	30	155	2	3.20		
TS 21788	5	25	110	1	3.00		
TS 21789	20	240	260	2	4.20		

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g - Grams a - Absorbance

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Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C116 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21790	60	90	190	1	1.22	
TS 21791	2	20	60	1	1.72	
TS 21792	<2	15	50	1	1.16	
TS 21793	2	30	70	1	0.86	
TS 21794	<2	40	170	1	0.94	
TS 21795	2	45	40	1	0.54	
TS 21796	<2	60	100	2	0.50	
TS 21797	2	10	20	<1	0.14	
TS 21798	2	20	20	1	0.28	
TS 21799	20	30	20	1	1.15	
TS 21800	5	20	20	1	0.40	
TS 21801	10	10	30	1	0.34	
TS 21802	2	10	10	1	0.24	
TS 21803	<2	50	20	1	0.25	
TS 21804	2	10	30	1	0.33	
TS 21805	2	15	40	1	0.20	
TS 21806	2	10	25	1	0.27	
TS 21807	20	50	25	1	0.51	
TS 21808	2	70	30	1	0.30	
TS 21809	2	10	10	<1	0.20	
TS 21810	<2	30	10	1	0.17	
TS 21811	<2	10	10	<1	0.12	
TS 21812	<2	30	230	1	0.96	
TS 21813	10	20	10	<1	0.25	
TS 21814	10	45	70	<1	0.36	
TS 21815	<2	50	10	<1	0.31	
TS 21816	2	10	20	<1	0.25	
TS 21817	<2	10	10	1	0.31	
TS 21818	2	10	40	<1	0.23	
TS 21819	5	10	15	<1	0.14	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature:

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C116 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 22/03/83 GORDON,
Date Completed 25/03/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	p	p	p	p	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 21820	<2	15	25	<1	0.24	
TS 21821	2	15	20	<1	0.37	
TS 21822	10	10	40	<1	0.45	
TS 21823	10	30	70	<1	0.38	
TS 21824	2	50	15	<1	0.28	
TS 21825	<2	10	20	1	0.60	
TS 21826	2	10	20	<1	0.70	
TS 21827	2	10	20	<1	0.65	
TS 21828	2	10	20	<1	0.28	
TS 21829	5	30	30	1	0.19	
TS 21830	2	20	10	<1	0.15	
TS 21831	2	10	10	<1	0.13	
TS 21832	2	10	10	<1	0.13	
TS 21833	2	10	10	1	0.10	
TS 21834	5	55	120	1	0.31	
TS 21835	2	10	20	1	0.26	
TS 21836	2	20	30	1	0.26	
TS 21837	2	35	95	1	0.43	
TS 21838	<2	20	20	<1	0.30	
TS 21839	10	20	90	<1	0.49	
TS 21840	<2	10	30	<1	0.41	
TS 21841	<2	10	10	<1	0.32	
TS 21842	10	20	10	1	0.24	
TS 21843	25	190	160	1	0.39	
TS 21844	10	50	90	1	0.58	
TS 21845	10	60	210	2	2.94	
TS 21846	20	35	50	1	2.43	
TS 21847	10	20	20	1	0.88	
TS 21848	2	15	20	<1	800 m	
TS 21849	<2	55	90	<1	0.31	

UNITS LEGEND ----- p - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX AUSEV 42344

LABORATORY REPORT

Batch No.: C116 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 611 Sample Type: SOIL No. of Samples: 219

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	p	p	p	p	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 21850	<2	10	10	<1	600	m
TS 21851	2	10	10	<1	0.10	
TS 21852	<2	10	30	<1	0.10	
TS 21853	<2	10	20	<1	700	m
TS 21854	<2	10	40	<1	0.18	
TS 21855	<2	10	15	<1	0.10	
TS 21856	5	140	840	2	0.18	
TS 21857	2	20	15	<1	700	m
TS 21858	2	10	10	<1	0.10	

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LABORATORY REPORT

Batch No.: C019 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 609 Sample Type: SOILS No. of Samples: 95

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	As	Au	ELEMENTS
	m	m	m	m	m	m	b	UNITS
	G001	G001	G001	G001	G001	G004	PM205	METHODS
TS 22001	30	0.11	% 180	0.67	% 2	35	5	
TS 22002	30	20	65	0.24	% 1	12	3	
TS 22003	60	30	2	0.16	% 1	6	3	
TS 22004	15	20	10	360	1	2	3	
TS 22005	45	25	15	0.14	% 1	5	10	
TS 22006	10	10	5	230	1	2	15	
TS 22007	5	15	<2	460	<1	2	10	
TS 22008	5	20	<2	390	<1	8	10	
TS 22009	5	10	15	440	<1	4	3	
TS 22010	2	15	2	560	<1	2	5	
TS 22011	2	15	<2	460	<1	8	10	
TS 22012	5	10	10	620	<1	<1	3	
TS 22013	2	10	10	920	1	2	5	
TS 22014	2	75	<2	650	2	75	50	
TS 22015	2	280	<2	970	1	12	10	
TS 22016	2	290	<2	750	<1	2	3	
TS 22017	<2	270	5	620	1	<1	3	
TS 22018	2	155	30	700	1	2	50	
TS 22019	20	70	30	390	5	16	5	
TS 22020	90	0.24	% 840	0.69	% 5	30	5	
TS 22021	105	700	80	0.26	% 2	8	<3	
TS 22022	10	40	10	810	3	16	<3	
TS 22023	5	30	<2	860	3	2	3	
TS 22024	10	155	15	0.10	% 4	6	5	
TS 22025	10	0.12	% 10	0.13	% 15	10	10	
TS 22026	5	360	15	0.36	% 2	4	<3	
TS 22027	20	250	60	0.67	% 2	13	<3	
TS 22028	20	200	55	1.21	% 2	11	<3	
TS 22029	15	20	40	1.26	% 1	7	<3	
TS 22030	25	0.12	% 45	0.47	% 3	88	3	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: G. Dunn

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C019 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 609 Sample Type: SOILS No. of Samples: 95

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	As	Au	ELEMENTS
	m	m	m	m	m	m	b	UNITS
	G001	G001	G001	G001	G001	G004	PM205	METHODS
TS 22031	10	220	30	0.18	% 2	7	10	
TS 22032	10	55	5	0.15	% 1	6	5	
TS 22033	110	340	0.38	% 0.63	% 5	50	5	
TS 22034	5	5	5	0.16	% 1	6	5	
TS 22035	10	20	15	0.24	% 1	4	5	
TS 22036	10	410	0.14	% 0.18	% 1	100	5	
TS 22037	10	370	0.80	% 1.12	% 1	580	35	
TS 22038	10	0.56	% 0.60	% 0.52	% 1	430	35	
TS 22039	20	680	250	0.28	% 5	40	45	
TS 22040	30	>1.0	% 0.98	% 1.63	% 9	0.11	% 330	
TS 22041	15	0.37	% 0.48	% 0.40	% 3	130	25	
TS 22042	10	25	15	0.28	% 2	7	5	
TS 22043	10	20	10	0.28	% 6	10	10	
TS 22044	10	20	5	0.15	% 8	4	5	
TS 22045	10	40	25	480	2	3	20	
TS 22046	25	35	50	2.90	% 1	130	<3	
TS 22047	15	460	980	5.08	% 1	45	<3	
TS 22048	10	25	80	3.54	% 1	12	3	
TS 22049	420	>1.0	% 0.24	% 0.94	% >25	0.11	% 290	
TS 22050	60	>1.0	% >1.0	% 0.28	% >25	45	85	
TS 22051	30	>1.0	% 0.86	% 0.26	% >25	40	75	
TS 22052	20	>1.0	% 0.60	% 0.63	% >25	240	60	
TS 22053	10	760	145	0.12	% 16	30	30	
TS 22054	10	600	100	0.13	% 8	10	30	
TS 22055	90	0.26	% 75	0.11	% >25	40	70	
TS 22056	10	0.84	% 0.36	% 0.37	% 12	195	40	
TS 22057	30	0.13	% 50	780	16	10	60	
TS 22058	30	0.28	% 620	0.12	% 6	80	10	
TS 22059	10	0.24	% 0.29	% 0.29	% 2	185	85	
TS 22060	30	95	270	2.92	% 2	270	3	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C019 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 609 Sample Type: SOILS No. of Samples: 95

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	As	Au
ELEMENTS	m	m	m	m	m	m	b
UNITS	G001	G001	G001	G001	G001	G004	PM205
METHODS							
TS 22061	20	480	250	1.28	% 1	120	5
TS 22062	70	760	0.13	% 0.71	% 5	170	10
TS 22063	55	310	310	1.04	% 2	65	5
TS 22064	40	520	125	0.64	% 4	50	5
TS 22065	40	350	90	0.92	% 3	65	3
TS 22066	45	150	240	0.54	% 2	25	<3
TS 22067	30	60	50	0.19	% 1	8	<3
TS 22068	90	400	520	1.10	% 1	25	<3
TS 22069	5	75	2	0.18	% <1	4	<3
TS 22070	10	270	25	0.70	% 2	12	15
TS 22071	10	110	15	0.26	% <1	4	3
TS 22072	10	20	15	0.22	% <1	4	<3
TS 22073	10	25	15	0.38	% 1	6	<3
TS 22074	10	15	10	0.25	% 1	5	3
TS 22075	40	0.60 %	760	0.94	% 14	0.31 %	170
TS 22076	50	0.33 %	0.28 %	0.84	% 8	135	50
TS 22077	15	175	125	0.16	% 1	10	15
TS 22078	10	45	70	0.17	% 3	6	3
TS 22079	10	20	10	0.24	% 1	4	5
TS 22080	10	20	15	0.15	% 3	3	3
TS 22081	20	30	15	0.21	% 1	3	<3
TS 22082	10	25	15	0.30	% 1	4	<3
TS 22083	10	25	10	0.19	% 1	3	<3
TS 22084	10	80	20	0.33	% 1	5	3
TS 22085	10	65	10	0.27	% <1	4	3
TS 22086	5	25	5	0.19	% <1	3	<3
TS 22087	10	70	120	4.46	% 1	10	3
TS 22088	20	90	250	5.00	% 2	20	3
TS 22089	2	20	10	0.16	% 1	2	3
TS 22090	5	40	85	2.78	% 1	15	3

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C019 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 609 Sample Type: SOILS No. of Samples: 95

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	As	Au	ELEMENTS
	m	m	m	m	m	m	b	UNITS
	G001	G001	G001	G001	G001	G004	PM205	METHODS
TS 22091	10	100	120	0.64	% <1	7	<3	
TS 22092	5	110	250	2.75	% 1	185	3	
TS 22093	<2	20	20	0.14	% <1	7	3	
TS 22094	2	10	2	600	<1	1	3	
TS 22095	5	15	5	650	1	2	3	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C019R
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 04/03/83
Date Completed 11/03/83

Order No.: K 609
Sample Type: SOILS
No. of Samples: 6

SAMPLE NO.	Pb % A101	Zn % A101	Ag m A101	ELEMENTS UNITS METHODS
TS 22040	1.63		10	
TS 22049	4.06		135	
TS 22050	1.81	1.18	180	
TS 22051	1.03		150	
TS 22052	1.31		72	
TS 22055			26	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C091-1 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 23/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 31/03/83 N.S.W. 2072

Order No.: VERBAL RL/GK Sample Type: +80# No. of Samples: 47

SAMPLE NO.	Sn	W	ELEMENTS
	m	m	UNITS
	XRF 1A	XRF 1A	METHODS
EX C019 TS 22049	10	60	
EX C019 TS 22050	10	130	
EX C019 TS 22051	10	50	
EX C019 TS 22052	10	50	
EX C019 TS 22053	15	10	
EX C019 TS 22054	20	10	
EX C019 TS 22055	<5	10	
EX C019 TS 22056	10	40	
EX C019 TS 22057	10	10	
EX C019 TS 22058	<5	20	
EX C019 TS 22059	<5	30	
EX C019 TS 22060	<5	10	
EX C019 TS 22061	10	<10	
EX C019 TS 22062	<5	10	
EX C019 TS 22063	10	10	
EX C019 TS 22064	<5	<10	
EX C019 TS 22065	5	10	
EX C019 TS 22066	<5	<10	
EX C019 TS 22067	5	<10	
EX C019 TS 22068	5	10	
EX C019 TS 22069	10	<10	
EX C019 TS 22070	10	<10	
EX C019 TS 22071	5	10	
EX C019 TS 22072	<5	<10	
EX C019 TS 22073	5	<10	
EX C019 TS 22074	5	<10	
EX C019 TS 22075	10	20	
EX C019 TS 22076	<5	50	
EX C019 TS 22077	5	20	
EX C019 TS 22078	<5	10	

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LABORATORY REPORT

Batch No.: C091-1 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 23/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 31/03/83 N.S.W. 2072

Order No.: VERBAL RL/GK Sample Type: +80# No. of Samples: 47

SAMPLE NO.	Sn	W	ELEMENTS
	p	p	UNITS
	XRF 1A	XRF 1A	METHODS
EX C019 TS 22079	5	<10	
EX C019 TS 22080	<5	10	
EX C019 TS 22081	<5	<10	
EX C019 TS 22082	5	10	
EX C019 TS 22083	<5	10	
EX C019 TS 22084	5	20	
EX C019 TS 22085	5	<10	
EX C019 TS 22086	5	<10	
EX C019 TS 22087	<5	10	
EX C019 TS 22088	5	<10	
EX C019 TS 22089	<5	10	
EX C019 TS 22090	<5	<10	
EX C019 TS 22091	<5	10	
EX C019 TS 22092	<5	20	
EX C019 TS 22093	5	20	
EX C019 TS 22094	<5	20	
EX C019 TS 22095	<5	10	

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C018 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	%	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21282	5	30	30	0.24	1	
TS 21283	2	230	95	0.14	1	
TS 21284	2	40	40	0.43	1	
TS 21285	<2	10	5	970	1	
TS 21286	<2	20	<2	0.11	1	
TS 21287	<2	10	5	900	<1	
TS 21288	10	60	5	440	1	
TS 21289	2	25	20	330	<1	
TS 21290	2	50	15	0.13	<1	
TS 21291	2	10	15	0.23	4	
TS 21292	2	10	15	0.23	1	
TS 21293	2	10	15	0.25	1	
TS 21294	5	290	145	0.14	1	
TS 21295	2	10	10	0.20	1	
TS 21296	2	10	5	0.29	<1	
TS 21297	2	15	5	0.15	<1	
TS 21298	2	20	15	0.25	<1	
TS 21299	2	25	45	0.22	<1	
TS 21300	2	20	60	0.67	1	
TS 21301	2	10	10	0.34	1	
TS 21302	2	10	50	0.83	<1	
TS 21303	10	25	35	0.39	<1	
TS 21304	2	185	15	0.48	1	
TS 21305	10	150	40	0.93	1	
TS 21306	2	70	220	0.18	<1	
TS 21307	2	20	35	0.20	<1	
TS 21308	5	20	180	1.75	<1	
TS 21309	10	20	240	1.87	1	
TS 21310	2	10	10	0.19	<1	
TS 21311	30	70	240	2.87	1	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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Analytical Chemists, Geochemists, Metallurgists

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C018 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21312	5	10	25	0.70	% <1	
TS 21313	5	10	2	0.27	% <1	
TS 21314	2	10	20	0.34	% <1	
TS 21315	2	10	2	610	<1	
TS 21316	2	10	5	990	<1	
TS 21317	2	10	30	0.14	% <1	
TS 21318	10	25	15	0.21	% 1	
TS 21319	30	100	55	0.15	% <1	
TS 21320	40	50	10	0.12	% <1	
TS 21321	10	125	20	0.18	% <1	
TS 21322	10	130	250	0.32	% <1	
TS 21323	10	45	115	1.65	% <1	
TS 21324	2	15	30	1.17	% <1	
TS 21325	2	20	50	1.44	% <1	
TS 21326	5	10	45	0.94	% <1	
TS 21327	10	40	90	1.66	% 1	
TS 21328	10	20	30	1.31	% 1	
TS 21329	10	10	30	1.31	% 3	
TS 21330	10	30	45	2.54	% 2	
TS 21331	10	80	100	3.13	% 2	
TS 21332	2	20	10	510	1	
TS 21333	5	65	10	720	<1	
TS 21334	5	10	10	0.20	% 1	
TS 21335	5	20	40	1.52	% 1	
TS 21336	5	20	50	1.44	% 1	
TS 21337	5	20	45	1.73	% 1	
TS 21338	2	15	40	1.69	% 1	
TS 21339	5	20	10	0.23	% <1	
TS 21340	2	10	30	0.77	% <1	
TS 21341	5	10	10	690	15	

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Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21342	5	20	10	0.22	% 1	
TS 21343	2	10	10	0.33	% <1	
TS 21344	2	15	40	1.56	% 1	
TS 21345	5	10	10	0.18	% 1	
TS 21346	5	10	10	0.56	% 1	
TS 21347	10	40	10	0.26	% 1	
TS 21348	10	10	10	0.28	% 1	
TS 21349	10	30	5	0.13	% 1	
TS 21350	10	20	20	0.61	% 1	
TS 21351	10	20	20	0.83	% 1	
TS 21352	10	125	5	0.28	% 1	
TS 21353	60	80	300	4.35	% 2	
TS 21354	40	60	330	5.73	% 1	
TS 21355	15	30	100	3.15	% 1	
TS 21356	10	60	160	4.60	% 1	
TS 21357	10	40	170	2.96	% 1	
TS 21358	10	20	20	0.37	% 6	
TS 21359	5	75	110	0.31	% 1	
TS 21360	5	20	20	0.22	% 1	
TS 21361	5	100	60	0.19	% 1	
TS 21362	20	60	300	1.77	% 1	
TS 21363	5	10	20	0.24	% 1	
TS 21364	5	30	40	0.25	% 1	
TS 21365	5	75	430	0.25	% <1	
TS 21366	40	460	0.13 %	0.51	% 1	
TS 21367	10	35	20	0.16	% 4	
TS 21368	10	150	175	0.94	% 2	
TS 21369	10	170	210	0.22	% 1	
TS 21370	2	10	20	0.18	% <1	
TS 21371	<2	20	10	0.12	% 1	

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Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21372	<2	20	5	0.15	% <1	
TS 21373	2	280	10	0.17	% 1	
TS 21374	15	15	10	0.32	% 1	
TS 21375	2	20	10	0.15	% 1	
TS 21376	5	10	10	0.15	% 1	
TS 21377	2	10	10	0.29	% <1	
TS 21378	2	10	20	0.74	% 1	
TS 21379	5	60	30	1.24	% 1	
TS 21380	20	0.19	% 80	1.12	% 1	
TS 21381	10	90	40	2.03	% 3	
TS 21382	5	30	40	2.07	% 1	
TS 21383	20	120	420	3.16	% 1	
TS 21384	5	40	160	1.08	% 1	
TS 21385	10	160	150	2.24	% 1	
TS 21386	10	840	280	2.28	% 1	
TS 21387	10	0.11	% 20	0.72	% 1	
TS 21388	10	0.44	% 780	2.04	% 5	
TS 21389	10	310	310	1.71	% 1	
TS 21390	20	400	340	1.53	% 1	
TS 21391	10	20	95	0.94	% 1	
TS 21392	10	20	210	1.29	% 1	
TS 21393	10	30	110	0.85	% 1	
TS 21394	10	50	330	1.14	% 1	
TS 21395	250	800	0.80	% 2.47	% 3	
TS 21396	10	180	310	2.52	% 1	
TS 21397	10	20	260	2.06	% 1	
TS 21398	10	50	150	2.96	% 1	
TS 21399	10	20	175	2.48	% 1	
TS 21400	10	20	95	1.43	% 1	
TS 21401	10	40	290	2.46	% 1	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21402	15	25	130	2.22	% 1	
TS 21403	10	60	160	1.35	% 3	
TS 21404	10	45	145	2.04	% 1	
TS 21405	10	240	160	2.33	% 5	
TS 21406	15	40	160	2.79	% 1	
TS 21407	60	140	120	1.60	% 1	
TS 21408	10	60	160	3.05	% 1	
TS 21409	10	90	230	0.60	% <1	
TS 21410	10	30	65	0.31	% <1	
TS 21411	15	30	145	0.41	% <1	
TS 21412	5	20	15	0.52	% 1	
TS 21413	5	20	20	0.47	% <1	
TS 21414	<2	10	10	0.21	% <1	
TS 21415	2	210	10	0.26	% <1	
TS 21416	2	20	20	0.72	% 1	
TS 21417	2	20	30	1.53	% 1	
TS 21418	2	70	10	0.90	% 2	
TS 21419	2	10	10	0.14	% <1	
TS 21420	<2	190	10	0.18	% <1	
TS 21421	2	20	10	910	<1	
TS 21422	<2	15	5	0.13	% <1	
TS 21423	2	170	560	0.22	% <1	
TS 21424	2	10	15	0.18	% <1	
TS 21425	35	560	720	1.84	% 2	
TS 21426	<2	20	220	0.54	% 1	
TS 21427	2	20	10	0.17	% 1	
TS 21428	<2	10	10	0.28	% 1	
TS 21429	<2	10	10	0.40	% <1	
TS 21430	<2	10	5	900	1	
TS 21431	<2	10	10	0.30	% 1	

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g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C018
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 04/03/83
Date Completed 11/03/83

Order No.: K 610
Sample Type: SOILS
No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21432	2	20	20	0.87	% 1	
TS 21433	2	20	10	0.16	% 1	
TS 21434	2	20	10	0.22	% <1	
TS 21435	2	30	10	0.12	% <1	
TS 21436	5	10	10	0.26	% 1	
TS 21437	5	15	10	0.12	% 2	
TS 21438	5	20	10	0.16	% 1	
TS 21439	5	70	20	950	1	
TS 21440	2	15	20	0.19	% 1	
TS 21441	2	10	10	0.15	% <1	
TS 21442	2	10	10	0.18	% <1	
TS 21443	2	10	10	0.18	% <1	
TS 21444	2	10	20	0.23	% <1	
TS 21445	2	15	20	0.27	% 1	
TS 21446	2	10	10	0.12	% 1	
TS 21447	2	10	10	0.19	% 1	
TS 21448	10	25	145	2.42	% 3	
TS 21449	20	195	840	3.22	% 2	
TS 21450	10	90	310	2.07	% 1	
TS 21451	5	50	350	0.98	% 1	
TS 21452	5	30	280	0.84	% 1	
TS 21453	5	50	50	0.26	% 1	
TS 21454	10	70	25	1.12	% 1	
TS 21455	2	10	10	0.26	% <1	
TS 21456	5	70	50	1.39	% 1	
TS 21457	2	960	10	0.35	% 2	
TS 21458	10	350	430	0.76	% 1	
TS 21459	10	20	240	0.61	% 1	
TS 21460	2	40	200	0.55	% 1	
TS 21461	5	120	600	1.77	% 1	

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LABORATORY REPORT

Batch No.: C018
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
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N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 04/03/83
Date Completed 11/03/83

Order No.: K 610
Sample Type: SOILS
No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag
	m	m	m	m	m
	G001	G001	G001	G001	G001
TS 21462	10	0.20 %	390	1.35 %	1
TS 21463	5	40	20	0.73 %	3
TS 21464	5	20	20	0.91 %	1
TS 21465	10	50	190	0.36 %	1
TS 21466	10	20	20	0.52 %	1
TS 21467	5	450	210	0.71 %	1
TS 21468	2	20	20	0.71 %	1
TS 21469	5	20	100	1.42 %	2
TS 21470	5	10	10	0.19 %	<1
TS 21471	5	110	15	0.43 %	1
TS 21472	5	10	5	0.14 %	<1
TS 21473	10	95	320	1.35 %	1
TS 21474	5	45	50	0.27 %	<1
TS 21475	10	30	160	1.16 %	1
TS 21476	10	70	45	0.80 %	1
TS 21477	10	30	150	1.39 %	1
TS 21478	25	145	30	0.58 %	1
TS 21479	10	80	410	2.39 %	1
TS 21480	10	30	130	2.83 %	2
TS 21481	80	100	175	2.40 %	1
TS 21482	10	20	140	1.46 %	1
TS 21483	10	40	260	0.76 %	1
TS 21484	10	40	160	2.05 %	1
TS 21485	20	260	280	2.34 %	1
TS 21486	10	20	195	2.76 %	1
TS 21487	10	30	270	3.51 %	1
TS 21488	10	40	130	1.95 %	1
TS 21489	20	20	70	1.80 %	1
TS 21490	10	125	170	2.04 %	1
TS 21491	10	40	0.16 %	7.50 %	1

ELEMENTS
UNITS
METHODS

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g - Grams a - Absorbance

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Date Completed 11/03/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21492	20	45	200	2.76	% 1	
TS 21493	20	20	125	2.99	% 1	
TS 21494	10	20	30	1.00	% 1	
TS 21495	10	200	310	2.63	% 1	
TS 21496	10	20	80	2.14	% 2	
TS 21497	30	55	60	1.24	% 1	
TS 21498	10	10	70	2.14	% 1	
TS 21499	15	30	180	1.45	% 1	
TS 21500	10	30	30	0.79	% 1	
TS 21501	10	15	20	0.37	% 1	
TS 21502	10	20	50	0.46	% 1	
TS 21503	15	90	230	5.97	% 3	
TS 21504	10	100	250	2.34	% 1	
TS 21505	20	175	380	3.47	% 2	
TS 21506	10	160	190	2.08	% 1	
TS 21507	10	0.11 %	370	3.64	% 4	
TS 21508	2	60	410	1.86	% 1	
TS 21509	20	40	100	0.32	% 2	
TS 21510	5	95	110	1.42	% 1	
TS 21511	50	60	400	3.55	% 2	
TS 21512	10	960	320	1.25	% 1	
TS 21513	10	100	135	1.87	% 1	
TS 21514	20	310	290	0.89	% 1	
TS 21515	10	240	60	0.69	% 1	
TS 21516	5	70	145	0.58	% <1	
TS 21517	10	85	60	0.79	% <1	
TS 21518	10	40	40	0.53	% 2	
TS 21519	5	400	0.11 %	1.03	% 2	
TS 21520	20	310	380	1.50	% 1	
TS 21521	15	260	260	0.92	% 1	

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Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21522	20	95	195	1.44	% 1	
TS 21523	10	220	560	2.03	% 1	
TS 21524	2	20	20	0.21	% <1	
TS 21525	5	25	15	0.17	% <1	
TS 21526	10	60	30	0.47	% <1	
TS 21527	2	30	15	1.39	% <1	
TS 21528	10	40	40	0.47	% <1	
TS 21529	2	20	20	0.31	% <1	
TS 21530	5	30	95	2.23	% 1	
TS 21531	2	10	10	0.52	% <1	
TS 21532	2	15	10	0.16	% <1	
TS 21533	2	15	10	0.25	% <1	
TS 21534	2	20	10	0.27	% <1	
TS 21535	5	200	570	0.32	% <1	
TS 21536	5	20	10	0.15	% 1	
TS 21537	2	10	20	0.19	% <1	
TS 21538	10	10	10	0.24	% <1	
TS 21539	20	15	20	0.34	% 1	
TS 21540	15	10	30	0.21	% <1	
TS 21541	5	10	10	0.17	% 1	
TS 21542	10	15	10	0.21	% 1	
TS 21543	5	10	5	0.31	% 1	
TS 21544	10	370	960	3.95	% 2	
TS 21545	10	0.13 %	0.14 %	2.09	% 3	
TS 21546	5	270	370	1.24	% 1	
TS 21547	5	20	190	1.62	% 1	
TS 21548	2	45	70	0.92	% 1	
TS 21549	5	70	65	0.56	% 1	
TS 21550	5	10	180	1.14	% 1	
TS 21551	5	20	10	0.16	% <1	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

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Date Received 04/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 11/03/83 N.S.W. 2072

Order No.: K 610 Sample Type: SOILS No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21552	10	440	140	0.18	% <1	
TS 21553	5	20	10	0.20	% 1	
TS 21554	10	165	680	0.46	% 1	
TS 21555	5	30	30	0.34	% 2	
TS 21556	5	20	10	0.35	% <1	
TS 21557	2	20	10	0.41	% <1	
TS 21558	5	30	20	0.56	% <1	
TS 21559	5	20	10	0.31	% <1	
TS 21560	10	160	0.10	% 1.18	% 1	
TS 21561	5	25	195	1.02	% 1	
TS 21562	2	210	390	0.68	% 1	
TS 21563	2	10	20	0.62	% 1	
TS 21564	10	20	30	0.80	% 1	
TS 21565	5	20	40	1.03	% 1	
TS 21566	2	10	20	0.70	% 1	
TS 21567	5	50	350	1.26	% 1	
TS 21568	10	60	450	0.77	% 1	
TS 21569	2	35	80	1.10	% 1	
TS 21570	35	230	250	1.70	% 1	
TS 21571	10	105	95	0.66	% 1	
TS 21572	10	20	65	0.55	% 1	
TS 21573	2	10	10	180	<1	
TS 21574	2	10	10	1.34	% <1	
TS 21575	<2	10	<2	190	<1	
TS 21576	<2	10	2	380	<1	
TS 21577	10	30	180	0.77	% 1	
TS 21578	15	410	310	0.78	% 2	
TS 21579	20	720	90	0.93	% 2	
TS 21580	10	45	145	2.88	% 1	
TS 21581	10	10	50	2.13	% 1	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C018
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 04/03/83
Date Completed 11/03/83

Order No.: K 610
Sample Type: SOILS
No. of Samples: 303

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	ELEMENTS
	m	m	m	m	m	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21582	5	20	90	1.67	% 1	
TS 21583	10	110	140	2.16	% <1	
TS 21584	5	30	110	2.52	% 1	

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	a	a	a	a	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20000	10	20	40	1	1.12	
TS 20001	2	20	30	<1	0.50	
TS 20002	<2	15	40	<1	0.86	
TS 20003	<2	<5	10	<1	0.11	
TS 20004	10	40	40	1	0.29	
TS 20005	2	10	70	1	1.40	
TS 20006	<2	50	170	1	0.48	
TS 20007	10	110	45	1	0.62	
TS 20008	5	10	20	1	0.32	
TS 20009	5	10	20	1	0.45	
TS 20010	2	150	75	<1	0.12	
TS 20011	<2	40	65	<1	0.59	
TS 20012	2	90	160	1	0.81	
TS 20013	<2	20	50	1	1.01	
TS 20014	20	15	120	1	2.30	
TS 20015	30	20	40	<1	1.09	
TS 20016	5	15	85	1	1.70	
TS 20017	5	15	140	1	1.87	
TS 20018	2	10	30	1	1.43	
TS 20019	<2	5	10	<1	0.26	
TS 20020	2	50	60	<1	0.63	
TS 20021	2	10	30	<1	0.30	
TS 20022	2	40	120	<1	0.27	
TS 20023	5	20	15	<1	0.19	
TS 20024	5	100	80	<1	0.76	
TS 20025	2	170	130	1	0.12	
TS 20026	2	110	130	1	0.29	
TS 20027	2	5	20	<1	0.36	
TS 20028	2	10	30	<1	0.36	
TS 20029	<2	10	20	<1	0.46	

UNITS LEGEND ----- a - Parts per million b - Parts per billion % - percent
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LABORATORY REPORT

Batch No.: C169
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 599,
DEVONPORT TAS. 7310

Date Received 29/03/83
Date Completed 06/04/83

Order No.: K 616, KP 2976
Sample Type: SOILS
No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20030	<2	10	30	1	0.99	
TS 20031	<2	10	40	1	0.65	
TS 20032	<2	10	20	<1	0.44	
TS 20033	<2	10	15	<1	0.25	
TS 20034	<2	20	10	<1	0.38	
TS 20035	<2	10	10	<1	0.32	
TS 20036	2	60	40	<1	0.49	
TS 20037	<2	10	20	<1	0.23	
TS 20038	<2	45	30	<1	0.43	
TS 20039	<2	10	20	<1	0.35	
TS 20040	<2	10	15	<1	0.29	
TS 20041	2	10	10	<1	0.25	
TS 20042	2	10	10	1	0.30	
TS 20043	2	10	10	<1	0.26	
TS 20044	<2	10	15	1	0.27	
TS 20045	2	210	80	1	0.54	
TS 20046	5	50	195	1	1.02	
TS 20047	<2	60	25	1	0.54	
TS 20048	2	30	15	1	0.68	
TS 20049	10	40	35	2	1.58	
TS 20050	2	250	15	1	0.49	
TS 20051	2	50	50	<1	0.36	
TS 20052	<2	15	25	<1	0.42	
TS 20053	2	<5	20	1	0.40	
TS 20054	10	100	195	1	6.20	
TS 20055	2	10	20	<1	0.49	
TS 20056	2	10	60	1	1.50	
TS 20057	2	30	130	1	0.87	
TS 20058	2	<5	20	<1	0.59	
TS 20059	<2	5	10	<1	0.53	

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 29/03/93 GORDON,
Date Completed 06/04/93 N.S.W. 2072

Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 20060	2	10	20	<1	0.37	
TS 20061	2	30	20	<1	0.47	
TS 20062	65	450	170	14	2.68	
TS 20063	<2	15	40	<1	0.33	
TS 20064	2	30	20	1	0.22	
TS 20065	<2	10	10	1	0.33	
TS 20066	5	40	60	<1	0.29	
TS 20067	190	20	210	<1	1.20	
TS 20068	2	20	60	1	0.68	
TS 20069	2	25	10	1	0.42	
TS 20070	10	10	30	1	0.95	
TS 20071	10	10	50	1	0.82	
TS 20072	2	10	90	1	2.57	
TS 20073	<2	5	15	1	0.36	
TS 20074	2	10	120	1	2.14	
TS 20075	10	10	55	<1	1.44	
TS 20076	5	10	90	1	2.03	
TS 20077	2	15	70	1	2.08	
TS 20078	2	15	50	1	0.66	
TS 20079	2	40	90	<1	0.89	
TS 20080	10	30	60	1	0.68	
TS 20081	5	95	10	<1	500 m	
TS 20082	10	50	90	1	1.29	
TS 20083	430	150	50	1	0.96	
TS 20084	115	70	170	3	1.07	
TS 20085	50	30	210	2	0.94	
TS 20086	2	10	20	1	0.76	
TS 20087	20	25	50	1	1.27	
TS 20088	5	30	30	1	0.64	
TS 20089	20	80	80	1	0.50	

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 29/03/83
Date Completed 06/04/83

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	p	p	p	p	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20090	5	20	25	1	0.83	
TS 20091	20	80	40	2	0.58	
TS 20092	20	110	20	1	0.46	
TS 20093	2	10	15	<1	0.48	
TS 20094	5	15	35	<1	1.57	
TS 20095	2	10	10	<1	0.26	
TS 20096	2	10	20	<1	0.58	
TS 20097	20	20	45	1	1.57	
TS 20098	10	35	60	1	0.97	
TS 20099	2	15	20	<1	1.03	
TS 20100	2	10	40	<1	0.49	
TS 20101	2	10	10	<1	0.16	
TS 20102	5	100	60	1	1.59	
TS 20103	2	30	60	<1	0.78	
TS 20104	2	10	10	<1	0.10	
TS 20105	5	20	170	1	0.24	
TS 20106	2	20	155	1	1.00	
TS 20107	10	60	80	1	1.16	
TS 20108	2	20	30	1	1.16	
TS 20109	2	15	20	1	0.70	
TS 20110	2	10	15	1	0.25	
TS 20111	10	10	30	1	0.55	
TS 20112	2	10	25	1	0.68	
TS 20113	2	10	10	<1	0.25	
TS 20114	5	10	10	1	0.18	
TS 20115	5	10	10	1	0.16	
TS 20116	5	20	20	1	0.33	
TS 20117	10	25	20	<1	0.82	
TS 20118	2	20	20	1	0.58	
TS 20119	5	10	10	<1	0.20	

UNITS LEGEND ----- p - Parts per million b - Parts per billion % - percent
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Signature: A.J. Wilkinson

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 217, Address: P.O. BOX 590,
Date Received 29/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20120	2	5	5	<1	200 m	
TS 20121	5	30	45	1	1.69	
TS 20122	5	20	260	1	1.95	
TS 20123	10	50	140	1	1.00	
TS 20124	10	110	90	1	0.52	
TS 20125	5	45	90	1	1.03	
TS 20126	10	80	70	<1	0.70	
TS 20127	10	35	120	1	2.94	
TS 20128	2	30	90	1	1.20	
TS 20129	25	90	170	1	2.24	
TS 20130	20	360	270	2	1.33	
TS 20131	2	40	30	1	0.70	
TS 20132	10	20	95	1	2.51	
TS 20133	10	90	350	1	1.84	
TS 20134	10	40	35	<1	0.66	
TS 20135	10	60	100	<1	1.14	
TS 20136	5	10	10	<1	0.18	
TS 20137	5	20	10	1	0.28	
TS 20138	2	10	10	<1	0.16	
TS 20139	20	90	20	1	0.26	
TS 20140	2	10	10	<1	0.20	
TS 20141	5	10	10	<1	0.20	
TS 20142	10	10	15	1	0.19	
TS 20143	20	35	80	1	3.49	
TS 20144	20	35	150	1	3.19	
TS 20145	10	60	50	1	2.69	
TS 20146	10	40	25	1	1.37	
TS 20147	10	40	40	1	3.38	
TS 20148	10	30	100	1	1.87	
TS 20149	10	40	40	<1	0.31	

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g - Grams a - Absorbance

Signature:

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20150	5	20	45	<1	0.37	
TS 20151	10	20	50	<1	1.56	
TS 20152	10	80	80	1	3.04	
TS 20153	2	20	30	1	1.02	
TS 20154	<2	10	20	<1	0.41	
TS 20155	10	20	55	1	2.99	
TS 20156	10	20	50	1	5.60	
TS 20157	5	60	30	1	2.02	
TS 20158	20	20	45	1	3.19	
TS 20159	10	20	30	1	0.84	
TS 20160	20	20	40	1	2.17	
TS 20161	5	15	20	<1	0.96	
TS 20162	10	20	20	1	0.21	
TS 20163	10	840	0.17	% 22	0.26	
TS 20164	10	170	460	1	2.69	
TS 20165	2	95	155	1	1.49	
TS 20166	5	100	170	1	2.01	
TS 20167	5	30	50	1	0.53	
TS 20168	5	30	20	<1	0.31	
TS 20169	2	20	10	<1	0.41	
TS 20170	5	15	20	<1	0.42	
TS 20171	2	15	25	1	1.10	
TS 20172	2	15	20	1	0.82	
TS 20173	2	10	45	1	1.28	
TS 20174	10	30	175	1	3.21	
TS 20175	2	15	110	1	3.41	
TS 20176	2	10	60	1	2.61	
TS 20177	<2	20	20	1	0.81	
TS 20178	<2	10	60	1	0.72	
TS 20179	<2	210	300	1	1.35	

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 20180	<2	20	50	1	3.36		
TS 20181	10	30	40	1	1.85		
TS 20182	10	10	65	1	2.43		
TS 20183	40	490	165	1	1.99		
TS 20184	<2	20	30	<1	0.88		
TS 20185	<2	5	10	<1	500	m	
TS 20186	<2	10	25	1	0.65		
TS 20187	10	40	30	1	0.15		
TS 20188	20	30	50	1	2.01		
TS 20189	10	30	10	1	900	m	
TS 20190	<2	10	10	1	900	m	
TS 20191	45	40	70	1	2.79		
TS 20192	<2	80	5	<1	0.10		
TS 20193	10	145	40	1	2.29		
TS 20194	10	30	60	1	3.44		
TS 20195	<2	10	30	1	1.03		
TS 20196	<2	15	30	1	1.59		
TS 20197	<2	10	20	1	1.43		
TS 20198	<2	10	145	1	3.31		
TS 20199	2	10	20	1	0.63		
TS 20200	80	45	185	1	5.24		
TS 20201	10	10	10	<1	0.42		
TS 20202	10	40	30	1	2.73		
TS 20203	20	20	20	1	0.66		
TS 20204	30	130	640	2	3.15		
TS 20205	10	40	35	1	1.20		
TS 20206	5	35	20	1	1.48		
TS 20207	10	100	145	1	3.52		
TS 20208	20	130	360	1	3.92		
TS 20209	5	<5	10	<1	0.10		

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 29/03/93 GORDON,
Date Completed 06/04/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 20210	20	30	70	1	0.96	
TS 20211	35	45	60	1	1.91	
TS 20212	10	45	70	1	1.62	
TS 20213	10	60	80	1	1.28	
TS 20214	20	20	80	1	1.28	
TS 20215	5	20	95	1	0.65	
TS 20216	2	40	20	1	0.94	
TS 20217	5	20	30	1	0.64	
TS 20218	2	100	30	1	0.26	
TS 20219	5	15	40	1	1.10	
TS 20220	5	15	120	1	3.46	
TS 20221	2	15	190	1	4.29	
TS 20222	<2	10	40	<1	1.87	
TS 20223	2	20	20	1	0.95	
TS 20224	2	10	40	<1	1.58	
TS 20225	15	10	50	1	2.29	
TS 20226	10	20	40	1	2.36	
TS 20227	2	10	20	<1	1.86	
TS 20228	10	15	45	<1	1.93	
TS 20229	10	120	60	<1	1.47	
TS 20230	5	10	30	1	1.62	
TS 20231	2	50	95	1	1.69	
TS 20232	5	95	280	1	2.19	
TS 20233	5	10	40	<1	1.36	
TS 20234	2	10	35	1	1.31	
TS 20235	5	10	30	1	0.99	
TS 20236	2	10	30	1	2.11	
TS 20237	10	20	160	1	2.97	
TS 20238	10	10	30	1	1.45	
TS 20239	10	20	140	1	2.92	

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 20240	<2	10	30	1	1.18	
TS 20241	<2	10	30	1	1.25	
TS 20242	2	15	110	1	0.96	
TS 20243	<2	10	20	1	0.42	
TS 20244	2	5	5	<1	0.10	
TS 20245	2	20	30	1	1.37	
TS 20246	5	40	100	1	2.67	
TS 20247	30	30	190	1	2.06	
TS 20248	55	120	110	2	1.96	
TS 20249	<2	15	45	1	1.83	
TS 20250	<2	<5	15	<1	0.12	
TS 21982	<2	5	10	1	0.52	
TS 21983	<2	<5	10	1	0.35	
TS 21984	<2	5	20	1	0.47	
TS 21985	30	20	40	1	0.61	
TS 21986	10	10	30	1	1.66	
TS 21987	10	35	30	1	0.62	
TS 21988	5	40	10	1	0.38	
TS 21989	<2	10	20	1	0.91	
TS 21990	2	15	15	1	0.68	
TS 21991	<2	10	20	1	0.46	
TS 21992	<2	10	10	2	0.27	
TS 21993	10	75	10	1	0.27	
TS 21994	100	50	220	1	0.92	
TS 21995	90	40	100	1	0.39	
TS 21996	<2	25	90	1	0.34	
TS 21997	210	130	450	2	0.67	
TS 21998	40	90	190	1	0.86	
TS 21999 *	50	25	55	2	1.52 *	
TS 22151	2	20	50	1	1.28	

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g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: C169 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 06/04/83 N.S.W. 2072

Order No.: K 616, KP 2976 Sample Type: SOILS No. of Samples: 290

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22152	20	15	240	<1	0.78	
TS 22153	20	75	90	1	2.06	
TS 22154	30	70	230	1	2.50	
TS 22155	<2	15	40	1	2.02	
TS 22156	10	20	30	1	1.99	
TS 22157	2	10	70	1	3.34	
TS 22158	5	210	80	1	1.00	
TS 22159	<2	10	40	1	0.73	
TS 22160	5	30	30	1	0.66	
TS 22161	2	15	40	1	0.90	
TS 22162	2	10	65	1	2.41	
TS 22163	5	30	10	1	0.36	
TS 22164	5	50	40	1	1.17	
TS 22165	10	10	50	1	1.54	
TS 22166	2	10	65	1	2.59	
TS 22167	2	10	20	1	1.67	
TS 22168	10	20	20	1	0.65	
TS 22169	5	20	85	1	2.49	
TS 22170	10	20	20	1	0.75	
TS 22171	2	10	35	1	1.94	

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LABORATORY REPORT

Batch No.: C117 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 612 Sample Type: SOILS No. of Samples: 36

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 18525	20	120	220	2	1.40		
TS 18526	80	100	80	1	0.66		
TS 18527	20	40	45	5	0.12		
TS 18528	10	20	10	1	600	m	
TS 18529	20	175	80	7	0.12		
TS 18530	2	45	105	2	1.80		
TS 18531	5	40	50	<1	0.42		
TS 18532	2	15	20	9	700	m	
TS 18533	2	55	20	11	800	m	
TS 18534	2	15	50	1	0.60		
TS 18535	2	45	20	1	0.26		
TS 18536	30	45	60	<1	600	m	
TS 18537	<2	15	25	1	0.60		
TS 18538	5	20	20	1	0.20		
TS 18539	20	0.20	% 80	1	0.62		
TS 18540	2	20	80	1	1.10		
TS 18541	2	190	10	1	0.25		
TS 18542	2	15	15	4	800	m	
TS 18543	2	50	220	1	0.43		
TS 18544	10	30	135	1	3.40		
TS 18545	5	35	35	1	0.84		
TS 18546	20	330	350	1	1.15		
TS 18547	10	10	20	1	0.11		
TS 18548	10	55	150	1	3.00		
TS 18549	10	60	30	1	0.42		
TS 18550	20	110	320	1	3.80		
TS 18551	<2	10	5	2	0.10		
TS 18552	5	100	710	1	0.56		
TS 18553	5	260	290	1	0.62		
TS 18554	2	25	10	<1	0.19		

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LABORATORY REPORT

Batch No.: C117 Client: GEOPEKO LIMITED.
Address: P.O. BOX 217.
Date Received 22/03/83 GORDON.
Date Completed 25/03/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 612 Sample Type: SOILS No. of Samples: 36

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	p	p	p	p	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18555	5	35	30	1	0.26	
TS 18556	2	25	20	1	0.13	
TS 18557	2	20	15	1	0.12	
TS 18558	2	20	10	<1	0.18	
TS 18559	2	20	40	<1	0.15	
TS 18560	2	35	10	1	0.12	

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LABORATORY REPORT

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Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 178

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 21585	2	60	30	2	0.17		
TS 21586	2	10	5	2	0.10		
TS 21587	<2	10	20	<1	0.25		
TS 21588	<2	5	5	1	900	m	
TS 21589	<2	10	5	1	0.12		
TS 21590	<2	10	10	3	900	m	
TS 21591	<2	20	10	1	0.16		
TS 21592	2	20	30	<1	0.27		
TS 21593	2	50	20	1	0.31		
TS 21594	<2	20	60	1	1.42		
TS 21595	10	0.12	% 750	1	1.40		
TS 21596	2	105	115	1	1.39		
TS 21597	<2	20	195	1	0.86		
TS 21598	2	680	340	1	0.70		
TS 21599	<2	2	<5	<1	300	m	
TS 21600	10	190	150	1	0.61		
TS 21601	<2	20	30	1	0.51		
TS 21602	2	45	25	1	0.50		
TS 21603	5	470	20	1	0.45		
TS 21604	2	140	110	1	0.53		
TS 21605	5	90	15	1	0.19		
TS 21606	2	60	15	1	0.60		
TS 21607	2	100	10	1	0.41		
TS 21608	10	390	870	3	2.23		
TS 21609	10	390	520	3	2.19		
TS 21610	20	190	130	2	2.07		
TS 21611	10	25	115	1	1.65		
TS 21612	25	200	520	2	0.92		
TS 21613	2	30	90	1	0.27		
TS 21614	2	10	10	2	0.19		

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Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 179

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001	ELEMENTS UNITS METHODS
TS 21615	2	10	15	1	0.18	
TS 21616	10	180	290	1	0.24	
TS 21617	5	180	135	1	0.21	
TS 21618	10	30	260	1	2.50	
TS 21619	10	10	15	1	0.28	
TS 21620	20	130	360	2	3.60	
TS 21621	10	90	330	1	4.00	
TS 21622	5	460	0.11	% 2	0.49	
TS 21623	30	450	460	2	0.43	
TS 21624	30	0.11	% 0.15	% 2	0.85	
TS 21625	10	20	15	1	0.25	
TS 21626	5	30	15	2	0.12	
TS 21627	10	20	5	1	0.31	
TS 21628	10	20	10	1	0.16	
TS 21629	5	15	15	1	0.21	
TS 21630	10	10	20	1	0.24	
TS 21631	2	30	25	1	900 m	
TS 21632	10	40	70	1	0.10	
TS 21633	<2	20	10	1	0.10	
TS 21634	<2	10	10	1	800 m	
TS 21635	2	10	5	1	0.35	
TS 21636	2	15	10	<1	0.40	
TS 21637	<2	10	10	1	0.45	
TS 21638	2	10	20	1	0.47	
TS 21639	10	30	15	<1	0.22	
TS 21859	<2	10	10	<1	0.36	
TS 21860	<2	10	25	<1	1.08	
TS 21861	<2	10	10	<1	0.37	
TS 21862	<2	10	10	<1	0.30	
TS 21863	<2	40	30	<1	0.65	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/03/83 GORDON, DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 178

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001	ELEMENTS UNITS METHODS
TS 21864	2	15	5	1	0.34	
TS 21865	<2	10	5	<1	0.25	
TS 21866	2	40	10	1	0.27	
TS 21867	2	30	60	<1	1.39	
TS 21868	<2	10	10	<1	0.25	
TS 21869	<2	10	35	<1	0.49	
TS 21870	2	40	20	<1	0.60	
TS 21871	2	10	15	<1	0.38	
TS 21872	2	40	15	1	0.65	
TS 21873	<2	10	10	1	0.37	
TS 21874	2	185	20	<1	1.07	
TS 21875	2	40	20	1	0.93	
TS 21876	10	400	760	1	0.65	
TS 21877	5	150	70	1	0.72	
TS 21878	2	90	130	1	1.61	
TS 21879	<2	30	15	1	0.31	
TS 21880	2	30	160	<1	0.63	
TS 21881	2	50	105	<1	0.93	
TS 21882	2	65	145	<1	0.54	
TS 21883	<2	10	10	<1	0.15	
TS 21884	10	135	90	<1	0.28	
TS 21885	2	10	10	1	0.15	
TS 21886	2	10	10	<1	0.19	
TS 21887	2	20	10	<1	0.12	
TS 21888	2	15	30	<1	0.53	
TS 21889	2	10	15	<1	0.25	
TS 21890	5	20	15	1	0.21	
TS 21891	2	10	30	<1	0.79	
TS 21892	2	70	20	<1	0.14	
TS 21893	2	40	125	1	0.36	

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LABORATORY REPORT

Batch No.: C118 Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
Date Received 22/03/83 GORDON,
Date Completed 25/03/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 178

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 21894	2	30	60	<1	0.34	
TS 21895	2	10	10	<1	0.22	
TS 21896	5	10	10	<1	0.28	
TS 21897	5	20	75	<1	1.22	
TS 21898	2	20	30	<1	1.09	
TS 21899	2	25	135	<1	1.80	
TS 21900	2	50	40	<1	0.54	
TS 21901	2	30	65	<1	1.20	
TS 21902	10	20	25	<1	0.14	
TS 21903	<2	10	5	1	800 m	
TS 21904	185	70	55	2	1.66	
TS 21905	2	30	170	<1	0.18	
TS 21906	2	20	105	<1	0.25	
TS 21907	5	80	25	<1	0.17	
TS 21908	10	35	5	<1	0.20	
TS 21909	40	180	90	1	0.21	
TS 21910	30	65	20	<1	0.19	
TS 21911	5	30	5	<1	0.19	
TS 21912	20	25	15	1	0.24	
TS 21913	5	20	20	1	0.48	
TS 21914	15	30	25	1	0.97	
TS 21915	10	20	15	1	0.51	
TS 21916	5	35	5	1	0.32	
TS 21917	5	110	155	1	0.28	
TS 21918	2	20	40	1	0.77	
TS 21919	2	15	25	1	0.46	
TS 21920	5	10	10	<1	0.14	
TS 21921	2	10	10	<1	0.25	
TS 21922	2	10	5	<1	0.17	
TS 21923	10	15	5	<1	2.82	

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LABORATORY REPORT

Batch No.: C118 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 178

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001		ELEMENTS UNITS METHODS
TS 21924	<2	10	10	<1	0.28		
TS 21925	20	45	145	1	3.00		
TS 21926	2	10	10	<1	0.39		
TS 21927	10	20	110	1	4.60		
TS 21928	20	20	70	<1	0.11		
TS 21929	10	55	30	<1	800	m	
TS 21930	5	10	5	<1	500	m	
TS 21931	2	10	<2	1	0.10		
TS 21932	5	30	65	1	1.92		
TS 21933	2	30	55	1	1.74		
TS 21934	5	60	25	<1	0.25		
TS 21935	5	30	20	1	0.92		
TS 21936	<2	10	5	2	900	m	
TS 21937	2	35	40	2	2.42		
TS 21938	<2	10	5	1	0.11		
TS 21939	5	10	5	1	0.11		
TS 21940	2	10	5	1	0.16		
TS 21941	2	10	10	1	0.23		
TS 21942	<2	10	10	1	0.32		
TS 21943	20	35	10	1	900	m	
TS 21944	<2	25	10	1	0.19		
TS 21945	2	2	5	1	0.14		
TS 21946	2	15	15	1	0.53		
TS 21947	2	15	20	1	1.08		
TS 21948	20	180	490	2	6.70		
TS 21949	<2	10	10	1	0.26		
TS 21950	5	140	55	1	1.15		
TS 21951	<2	10	5	<1	0.17		
TS 21952	2	20	145	1	1.70		
TS 21953	2	130	340	1	1.77		

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LABORATORY REPORT

Batch No.: C118 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 22/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 25/03/83 N.S.W. 2072

Order No.: K 613, KP 2972 Sample Type: SOILS No. of Samples: 178

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001		ELEMENTS UNITS METHODS
TS 21954	2	80	50	1	0.49		
TS 21955	2	70	5	1	800	m	
TS 21956	2	410	155	1	0.37		
TS 21957	5	15	10	1	0.34		
TS 21958	15	290	520	2	3.70		
TS 21959	2	70	35	1	0.51		
TS 21960	20	150	35	<1	0.14		
TS 21961	10	30	5	<1	660	m	
TS 21962	5	160	100	1	1.27		
TS 21963	2	30	100	1	1.25		
TS 21964	2	30	35	<1	0.13		
TS 21965	5	180	20	1	0.14		
TS 21966	<2	10	5	1	0.15		
TS 21967	2	10	10	1	0.16		
TS 21968	2	10	15	1	0.59		
TS 21969	2	140	60	1	2.06		
TS 21970	5	10	5	1	0.14		
TS 21971	<2	20	60	1	2.12		
TS 21972	<2	10	10	<1	0.41		
TS 21973	5	80	165	1	2.26		
TS 21974	2	210	100	<1	0.59		
TS 21975	2	155	460	1	0.34		
TS 21976	2	960	620	1	0.28		
TS 21977	10	100	890	1	3.09		
TS 21978	2	75	430	1	0.46		
TS 21979	<2	5	15	<1	0.42		
TS 21980	<2	10	5	<1	0.68		
TS 21981	<2	10	15	<1	0.82		

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LABORATORY REPORT

Batch No.: C118-1
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON,
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 22/03/83
Date Completed 25/03/83

Order No.: K 613
Sample Type: SOILS
No. of Samples: 25

SAMPLE NO.	Au b PM205
	ELEMENTS UNITS METHODS
TS 21861	<3
TS 21862	3
TS 21863	3
TS 21864	3
TS 21865	5
TS 21866	3
TS 21867	5
TS 21868	3
TS 21869	5
TS 21870	5
TS 21871	5
TS 21872	5
TS 21873	5
TS 21874	3
TS 21875	5
TS 21876	3
TS 21877	5
TS 21878	5
TS 21879	5
TS 21880	<3
TS 21881	<3
TS 21882	<3
TS 21883	<3
TS 21884	<3
TS 21885	5

UNITS LEGEND ----- a - Parts per million b - Parts per billion % - percent
g - Grams s - Absorbance

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C169-1
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 29/03/83
Date Completed 08/04/83

Order No.: K 616
Sample Type: SOILS
No. of Samples: 67

SAMPLE NO.	Au b PM205
	ELEMENTS UNITS METHODS
TS 20018	<3
TS 20019	<3
TS 20020	<3
TS 20021	<3
TS 20022	<3
TS 20023	<3
TS 20024	<3
TS 20025	<3
TS 20026	<3
TS 20027	<3
TS 20028	<3
TS 20029	<3
TS 20030	<3
TS 20031	<3
TS 20032	<3
TS 20033	<3
TS 20034	<3
TS 20035	<3
TS 20036	<3
TS 20037	<3
TS 20038	<3
TS 20039	<3
TS 20040	<3
TS 20041	<3
TS 20042	<3
TS 20053	<3
TS 20054	<3
TS 20055	<3
TS 20056	<3
TS 20057	<3

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Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310
Date Received 29/03/83
Date Completed 08/04/83

Order No.: K 616 Sample Type: SOILS No. of Samples: 67

SAMPLE NO.	Au b PM205	ELEMENTS UNITS METHODS
TS 20058	<3	
TS 20059	<3	
TS 20060	<3	
TS 20061	100	
TS 20062	<3	
TS 20063	<3	
TS 20064	<3	
TS 20065	<3	
TS 20066	<3	
TS 20067	<3	
TS 20068	<3	
TS 20069	<3	
TS 20152	<3	
TS 20153	<3	
TS 20154	<3	
TS 20155	<3	
TS 20156	<3	
TS 20157	<3	
TS 20158	<3	
TS 20159	<3	
TS 20160	<3	
TS 20161	<3	
TS 20162	<3	
TS 20163	<3	
TS 20189	<3	
TS 20190	<3	
TS 20191	<3	
TS 20192	<3	
TS 20193	<3	
TS 20194	<3	

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Date Received 29/03/83
Date Completed 08/04/83

Order No.: K 616
Sample Type: SOILS
No. of Samples: 67

SAMPLE NO.	Au b PM205	ELEMENTS UNITS METHODS
TS 20195	<3	
TS 20196	<3	
TS 20197	<3	
TS 20198	<3	
TS 20199	<3	
TS 20200	<3	
TS 20201	<3	

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Batch No.: D002 Client: GEOPEKO LIMITED,
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Date Completed 13/04/83 N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22172	5	20	80	1	0.64	
TS 22173	2	95	75	2	1.16	
TS 22174	2	15	30	1	0.86	
TS 22175	<2	10	15	1	0.68	
TS 22176	<2	5	20	1	0.48	
TS 22177	<2	5	5	1	0.10	
TS 22178	2	20	30	1	0.52	
TS 22179	<2	10	20	1	0.56	
TS 22180	<2	10	15	<1	0.28	
TS 22181	10	200	270	2	1.48	
TS 22182	10	90	80	2	3.80	
TS 22183	30	390	370	3	4.00	
TS 22184	<2	25	85	1	4.00	
TS 22185	<2	20	55	2	1.64	
TS 22186	<2	20	15	<1	0.52	
TS 22187	<2	20	35	1	1.48	
TS 22188	<2	40	60	<1	0.78	
TS 22189	<2	25	80	1	0.84	
TS 22190	<2	15	75	1	1.80	
TS 22191	<2	10	10	1	0.18	
TS 22192	2	70	25	1	0.18	
TS 22193	<2	110	90	1	0.32	
TS 22194	2	70	80	1	0.58	
TS 22195	<2	15	15	1	0.26	
TS 22196	2	30	35	<1	1.00	
TS 22197	<2	25	45	1	1.52	
TS 22198	10	10	20	1	0.96	
TS 22199	20	30	30	1	2.40	
TS 22200	10	20	35	1	2.20	
TS 22201	2	10	35	1	2.40	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22202	10	10	35	1	2.28	
TS 22203	10	15	45	1	2.48	
TS 22204	<2	80	15	<1	0.54	
TS 22205	10	20	25	<1	1.72	
TS 22206	10	20	75	1	3.40	
TS 22207	<2	<5	10	<1	0.22	
TS 22208	<2	10	80	<1	0.40	
TS 22209	<2	10	15	<1	0.40	
TS 22210	2	5	35	<1	0.28	
TS 22211	<2	10	10	<1	0.26	
TS 22212	<2	5	25	<1	0.44	
TS 22213	10	5	10	1	0.24	
TS 22214	5	5	10	<1	0.16	
TS 22215	5	5	5	<1	0.12	
TS 22216	10	10	10	<1	0.20	
TS 22217	<2	5	10	<1	0.52	
TS 22218	20	30	30	<1	1.32	
TS 22219	10	15	45	<1	2.24	
TS 22220	<2	5	5	<1	800 m	
TS 22221	<2	10	5	<1	0.18	
TS 22222	10	5	25	<1	0.24	
TS 22223	30	90	130	<1	1.40	
TS 22224	20	20	40	1	1.08	
TS 22225	10	20	55	1	1.88	
TS 22226	10	15	30	1	0.52	
TS 22227	10	15	25	<1	0.66	
TS 22228	2	10	70	1	1.68	
TS 22229	20	60	55	1	1.04	
TS 22230	5	20	30	1	1.12	
TS 22231	2	70	60	<1	0.36	

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Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22232	<2	45	160	<1	0.78	
TS 22233	2	20	25	<1	0.54	
TS 22234	2	15	15	1	0.36	
TS 22235	5	30	90	1	3.00	
TS 22236	5	10	30	1	1.40	
TS 22237	<2	10	25	<1	1.52	
TS 22238	2	10	30	1	1.60	
TS 22239	2	10	30	<1	1.16	
TS 22240	10	10	60	1	3.80	
TS 22241	10	30	50	1	1.76	
TS 22242	<2	5	15	<1	0.56	
TS 22243	<2	10	30	<1	1.52	
TS 22244	<2	10	35	<1	1.56	
TS 22245	2	30	35	<1	1.36	
TS 22246	<2	10	45	<1	1.20	
TS 22247	<2	10	20	<1	1.20	
TS 22248	2	20	135	1	2.84	
TS 22249	2	70	110	<1	2.00	
TS 22250	20	120	115	<1	0.44	
TS 22251	2	65	230	<1	1.68	
TS 22252	2	10	45	<1	1.44	
TS 22253	2	85	85	<1	0.66	
TS 22254	10	115	270	1	1.72	
TS 22255	<2	15	20	<1	0.84	
TS 22256	<2	30	30	<1	1.04	
TS 22257	<2	10	15	<1	0.52	
TS 22258	<2	55	380	<1	1.20	
TS 22259	<2	10	95	<1	1.84	
TS 22260	<2	10	30	<1	0.48	
TS 22261	20	15	20	<1	0.24	

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Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22262	30	10	15	<1	0.28	
TS 22263	15	60	70	1	3.12	
TS 22264	<2	10	10	<1	0.28	
TS 22265	5	15	20	<1	0.70	
TS 22266	2	20	120	<1	1.36	
TS 22267	2	45	95	<1	0.76	
TS 22268	2	20	45	<1	0.80	
TS 22269	2	30	30	<1	0.64	
TS 22270	2	10	20	<1	1.08	
TS 22271	2	100	320	<1	1.72	
TS 22272	5	75	60	1	1.48	
TS 22273	2	40	120	<1	1.08	
TS 22274	10	40	85	<1	2.28	
TS 22275	10	25	125	<1	3.56	
TS 22276	2	20	120	<1	2.16	
TS 22277	2	25	90	1	1.20	
TS 22278	2	25	45	<1	0.48	
TS 22279	2	20	50	<1	1.04	
TS 22280	5	85	260	1	1.36	
TS 22281	10	40	80	<1	2.60	
TS 22282	2	10	60	<1	3.04	
TS 22283	2	10	65	1	1.76	
TS 22284	10	10	15	<1	1.64	
TS 22285	2	10	15	1	0.60	
TS 22286	<2	5	20	<1	0.76	
TS 22287	30	30	30	1	1.52	
TS 22288	<2	5	20	1	0.80	
TS 22289	2	20	20	1	0.22	
TS 22290	10	10	15	<1	0.16	
TS 22291	<2	<5	20	<1	0.44	

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Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22292	2	10	20	1	0.40	
TS 22293	2	30	50	1	1.60	
TS 22294	2	25	40	1	1.44	
TS 22295	<2	5	20	<1	0.20	
TS 22296	<2	20	20	1	0.64	
TS 22297	2	20	95	1	2.20	
TS 22298	10	155	0.15 %	1	1.64	
TS 22299	20	70	50	<1	0.84	
TS 22300	10	25	60	1	1.72	
TS 22301	2	5	10	<1	0.84	
TS 22302	40	75	270	1	5.20	
TS 22303	2	10	95	<1	1.64	
TS 22304	30	30	165	2	5.60	
TS 22305	2	15	10	1	0.26	
TS 22306	65	60	360	2	6.44	
TS 22307	5	25	70	1	1.92	
TS 22308	30	340	0.26 %	3	5.60	
TS 22309	5	30	30	<1	0.20	
TS 22310	40	120	550	1	0.28	
TS 22311	30	50	150	1	4.08	
TS 22312	2	45	90	1	0.24	
TS 22313	10	700	500	1	0.20	
TS 22314	10	125	750	1	0.32	
TS 22315	10	20	25	1	0.28	
TS 22316	5	30	150	1	0.28	
TS 22317	2	30	75	1	0.12	
TS 22318	2	55	310	2	3.80	
TS 22319	2	20	50	2	0.40	
TS 22320	2	85	130	2	0.18	
TS 22321	5	10	180	7	0.32	

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Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22322	2	15	75	2	0.50	
TS 22323	2	15	35	1	0.42	
TS 22324	5	20	25	1	0.76	
TS 22325	2	10	30	1	0.20	
TS 22326	5	75	35	1	0.24	
TS 22327	<2	75	75	1	0.18	
TS 22328	2	10	10	1	0.20	
TS 22329	2	35	20	1	0.18	
TS 22330	2	20	20	1	0.22	
TS 22331	<2	20	30	1	0.52	
TS 22332	2	10	10	1	0.12	
TS 22333	2	5	30	1	0.16	
TS 22334	<2	5	20	1	0.32	
TS 22335	2	20	35	1	0.24	
TS 22336	2	20	15	1	0.20	
TS 22337	10	70	30	1	0.24	
TS 22338	20	350	280	2	0.64	
TS 22339	10	300	250	1	1.56	
TS 22340	110	0.15	% 0.13	% 3	4.88	
TS 22341	10	50	350	1	0.48	
TS 22342	5	120	110	<1	0.40	
TS 22343	30	90	50	1	1.88	
TS 22344	10	45	100	1	0.38	
TS 22345	<2	20	20	<1	0.18	
TS 22346	2	20	15	1	0.30	
TS 22347	2	20	40	1	0.30	
TS 22348	70	110	380	2	1.04	
TS 22349	10	20	35	1	0.42	
TS 22350	10	25	30	1	0.16	
TS 22351	5	<5	2	1	60 m	

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Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 22352	5	<5	<2	1	60	m	
TS 22353	2	<5	<2	1	40	m	
TS 22354	2	<5	<2	1	40	m	
TS 22355	5	<5	<2	1	40	m	
TS 22356	2	<5	<2	1	40	m	
TS 22357	2	<5	2	1	40	m	
TS 22358	10	5	5	1	0.12		
TS 22359	10	15	15	1	0.38		
TS 22360	5	15	30	1	0.38		
TS 22361	15	275	80	3	0.84		
TS 22362	10	145	40	1	0.20		
TS 22363	20	20	80	1	0.18		
TS 22364	10	70	110	1	800	m	
TS 22365	5	45	125	1	1.52		
TS 22366	2	5	10	<1	400	m	
TS 22367	5	5	10	<1	0.14		
TS 22368	10	190	200	2	0.46		
TS 22369	2	50	410	<1	0.20		
TS 22370	2	30	150	<1	0.14		
TS 22371	2	10	120	<1	0.18		
TS 22372	<2	20	55	<1	0.18		
TS 22373	10	50	165	1	0.12		
TS 22374	2	35	180	1	1.12		
TS 22375	30	35	450	1	2.96		
TS 22376	2	15	50	<1	0.34		
TS 22377	<2	20	350	<1	0.80		
TS 22378	2	40	290	<1	1.64		
TS 22379	20	50	220	<1	1.20		
TS 22380	2	20	70	<1	0.62		
TS 22381	5	70	550	<1	1.40		

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Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22382	2	100	190	<1	1.72	
TS 22383	2	20	110	<1	0.76	
TS 22384	2	25	80	<1	1.00	
TS 22385	15	60	165	1	4.08	
TS 22386	2	25	120	<1	0.64	
TS 22387	5	20	60	1	0.24	
TS 22388	2	20	15	1	0.22	
TS 22389	5	25	95	1	0.18	
TS 22390	2	5	15	1	0.16	
TS 22391	10	75	550	2	6.44	
TS 22392	10	15	65	<1	0.28	
TS 22393	2	10	45	1	0.32	
TS 22394	2	20	25	1	0.24	
TS 22395	2	5	10	1	0.34	
TS 22396	2	20	15	1	1.44	
TS 22397	2	10	15	1	0.26	
TS 22398	10	15	5	1	0.30	
TS 22399	15	5	2	<1	0.20	
TS 22400	2	5	5	1	0.76	
TS 22401	5	5	20	1	1.40	
TS 22402	10	15	10	1	0.60	
TS 22403	2	5	10	1	0.40	
TS 22404	<2	<5	10	<1	0.20	
TS 22405	10	5	20	1	0.70	
TS 22406	5	15	30	1	3.64	
TS 22407	2	15	110	1	3.60	
TS 22408	<2	15	45	1	2.60	
TS 22409	30	760	90	1	1.20	
TS 22410	45	80	170	1	2.40	
TS 22411	15	25	50	1	1.44	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: D002 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	ppm	ppm	ppm	ppm	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22412	10	20	135	1	3.80	
TS 22413	<2	<5	50	<1	0.52	
TS 22414	<2	<5	15	<1	0.34	
TS 22415	<2	<5	5	<1	0.40	
TS 22416	15	<5	20	<1	0.36	
TS 22417	<2	5	10	1	0.40	
TS 22418	<2	10	80	1	1.44	
TS 22419	<2	10	20	1	0.70	
TS 22420	10	10	20	1	0.88	
TS 22421	<2	10	10	1	0.48	
TS 22422	10	10	35	1	2.64	
TS 22423	5	20	40	1	1.72	
TS 22424	10	10	55	1	3.64	
TS 22425	<2	10	20	1	1.56	
TS 22426	<2	20	40	1	2.36	
TS 22427	<2	15	50	1	3.44	
TS 22428	<2	10	15	1	0.66	
TS 22429	<2	10	25	1	0.62	
TS 22430	<2	25	70	1	1.10	
TS 22431	5	15	100	1	1.96	
TS 22432	<2	20	20	1	0.36	
TS 22433	<2	15	45	1	0.18	
TS 22434	<2	15	20	<1	0.48	
TS 22435	<2	5	20	<1	0.34	
TS 22436	<2	10	5	1	0.40	
TS 22437	<2	20	5	1	0.18	
TS 22438	15	20	50	1	2.28	
TS 22439	<2	10	30	1	0.48	
TS 22440	<2	10	100	1	1.60	
TS 22441	<2	10	40	1	0.88	

UNITS LEGEND ----- p - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: 0002 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	a	a	a	a	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 22442	<2	50	55	<1	0.44	
TS 22443	10	90	300	2	4.48	
TS 22444	<2	15	15	1	0.70	
TS 22445	10	40	175	1	1.60	
TS 22446	5	40	150	1	2.72	
TS 22447	<2	30	60	1	0.42	
TS 22448	<2	30	45	1	1.00	
TS 22449	<2	20	5	1	0.18	
TS 22450	<2	15	20	1	1.08	
TS 22451	<2	15	40	2	1.80	
TS 22452	<2	5	<2	<1	600 m	
TS 22453	<2	50	25	1	0.84	
TS 22454	<2	20	30	1	0.80	
TS 22455	2	10	25	3	0.24	
TS 22456	<2	20	15	1	0.18	
TS 22457	<2	15	15	1	0.22	
TS 22458	<2	10	10	1	0.32	
TS 22459	<2	10	2	<1	0.10	
TS 22460	<2	25	55	1	1.10	
TS 22461	<2	15	10	1	0.26	
TS 22462	<2	70	45	1	0.20	
TS 22463	<2	25	5	1	0.14	
TS 22464	<2	15	15	1	0.22	
TS 22465	<2	10	2	1	600 m	
TS 22466	<2	10	5	1	0.18	
TS 22467	<2	10	15	1	0.30	
TS 22468	2	45	240	1	3.08	
TS 22469	<2	30	60	1	0.24	
TS 22470	15	0.11 %	300	1	0.16	
TS 22471	<2	20	10	<1	0.26	

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LABORATORY REPORT

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22472	2	20	20	1	0.30	
TS 22473	2	10	20	1	0.44	
TS 22474	<2	10	15	<1	0.46	
TS 22475	10	65	70	1	1.48	
TS 22476	<2	35	30	1	0.48	
TS 22477	<2	30	35	<1	0.50	
TS 22478	330	110	80	1	0.58	
TS 22479	45	50	135	1	2.40	
TS 22480	10	20	10	1	0.32	
TS 22481	2	20	10	1	0.58	
TS 22482	2	20	10	1	0.62	
TS 22483	10	20	10	1	0.12	
TS 22484	2	20	5	1	0.12	
TS 22485	<2	5	5	1	0.22	
TS 22486	5	5	10	1	0.48	
TS 22487	5	<5	<2	1	0.10	
TS 22488	5	<5	2	1	0.36	
TS 22489	15	15	90	2	6.20	
TS 22490	5	10	30	1	1.48	
TS 22491	<2	5	5	1	0.32	
TS 22492	2	5	10	1	3.64	
TS 22493	2	10	20	1	4.40	
TS 22494	<2	10	10	1	1.88	
TS 22495	<2	10	2	1	0.30	
TS 22496	<2	10	60	1	3.00	
TS 22497	<2	15	50	1	4.80	
TS 22498	<2	10	20	1	1.96	
TS 22499	<2	10	90	1	1.32	
TS 22500	<2	10	20	<1	0.72	
TS 22501	<2	15	30	1	1.36	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 22502	2	15	20	1	0.42	
TS 22503	<2	50	210	1	1.40	
TS 22504	<2	10	5	1	600	m
TS 22505	<2	35	60	1	0.60	
TS 22506	25	65	550	1	0.52	
TS 22507	<2	50	135	1	3.48	
TS 22508	<2	15	10	<1	600	m
TS 22509	<2	30	90	1	0.10	
TS 22510	<2	15	10	1	0.16	
TS 22511	<2	25	80	1	1.52	
TS 22512	<2	20	95	1	0.60	
TS 22513	<2	15	15	1	0.68	
TS 22514	<2	15	20	1	0.80	
TS 22515	<2	25	110	<1	1.16	
TS 22516	<2	20	75	<1	0.26	
TS 22517	<2	45	270	1	3.88	
TS 22518	<2	50	50	1	0.44	
TS 22519	<2	95	950	2	6.00	
TS 22520	50	280	600	2	2.56	
TS 22521	15	50	140	1	0.92	
TS 22522	<2	20	40	1	1.28	
TS 22523	<2	15	5	<1	800	m
TS 22524	<2	25	15	1	0.14	
TS 22525	<2	35	130	1	0.42	
TS 22526	<2	10	2	1	0.20	
TS 22527	<2	10	5	1	0.16	
TS 22528	<2	10	5	1	0.10	
TS 22529	<2	15	5	1	0.20	
TS 22530	<2	10	10	1	0.22	
TS 22531	<2	150	75	1	0.20	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 05/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 13/04/83 N.S.W. 2072

Order No.: K 709 Sample Type: SOILS No. of Samples: 368

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22532	<2	70	40	1	0.48	
TS 22533	<2	15	20	1	0.24	
TS 22534	<2	10	15	1	0.16	
TS 22535	<2	50	45	1	0.30	
TS 22536	<2	20	20	1	0.20	
TS 22537	<2	10	20	1	0.22	
TS 22538	<2	15	30	1	0.20	
TS 22539	25	50	140	1	2.80	

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Batch No.: D002-1
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
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N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 06/04/83
Date Completed 13/04/83

Order No.: K 709
Sample Type: SOIL
No. of Samples: 17

SAMPLE NO.	Au	ELEMENTS
	b	UNITS
	PM205	METHODS
TS 22248	5	
TS 22249	<3	
TS 22250	<3	
TS 22251	5	
TS 22252	<3	
TS 22253	<3	
TS 22254	<3	
TS 22255	<3	
TS 22256	<3	
TS 22257	3	
TS 22258	<3	
TS 22259	<3	
TS 22260	<3	
TS 22261	<3	
TS 22262	<3	
TS 22263	30	
TS 22264	3	

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LABORATORY REPORT

Batch No.: D082 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS, 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22540	<2	20	30	1	0.81	
TS 22541	<2	25	15	1	0.55	
TS 22542	<2	25	15	1	0.64	
TS 22543	<2	20	15	1	0.76	
TS 22544	30	0.36	% 0.25	% 3	1.09	
TS 22545	2	90	45	1	1.04	
TS 22546	<2	45	45	1	1.00	
TS 22547	2	45	60	1	0.54	
TS 22548	2	120	90	1	1.54	
TS 22549	2	105	90	1	0.63	
TS 22550	10	85	155	1	1.71	
TS 22551	<2	25	15	1	0.82	
TS 22552	2	30	15	1	0.57	
TS 22553	15	120	600	1	1.52	
TS 22554	2	20	30	<1	0.82	
TS 22555	2	125	40	1	1.25	
TS 22556	10	25	25	1	1.56	
TS 22557	<2	25	20	1	0.88	
TS 22558	<2	15	10	1	0.82	
TS 22559	30	20	10	<1	0.69	
TS 22560	10	20	10	<1	0.73	
TS 22561	<2	25	10	<1	0.99	
TS 22562	2	25	60	1	3.36	
TS 22563	10	20	70	1	3.17	
TS 22564	<2	10	10	<1	0.77	
TS 22565	<2	10	10	<1	1.13	
TS 22566	<2	.15	30	1	2.64	
TS 22567	<2	20	35	1	3.59	
TS 22568	40	20	65	1	2.29	
TS 22569	2	40	35	<1	0.55	

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L A B O R A T O R Y R E P O R T

Batch No.: D082
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
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N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 18/04/83
Date Completed 22/04/83

Order No.: K 619
Sample Type: SOIL
No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22570	10	30	45	1	2.01	
TS 22571	<2	15	20	<1	0.64	
TS 22572	<2	35	250	1	3.18	
TS 22573	5	30	160	1	2.65	
TS 22574	5	20	110	1	2.78	
TS 22575	<2	10	20	1	0.71	
TS 22576	10	40	105	1	3.96	
TS 22577	<2	10	30	1	1.08	
TS 22578	20	120	300	1	5.24	
TS 22579	20	65	170	1	1.88	
TS 22580	<2	20	15	1	0.58	
TS 22581	<2	10	20	1	0.99	
TS 22582	<2	10	20	1	1.30	
TS 22583	<2	10	10	<1	0.92	
TS 22584	<2	15	10	1	0.38	
TS 22585	2	75	65	1	0.40	
TS 22586	<2	20	135	1	0.47	
TS 22587	20	15	15	<1	0.61	
TS 22588	<2	10	2	<1	0.08	
TS 22589	2	40	10	1	0.71	
TS 22590	<2	45	105	1	1.94	
TS 22591	10	180	500	1	2.14	
TS 22592	<2	20	10	1	0.40	
TS 22593	<2	10	5	<1	0.14	
TS 22594	<2	30	100	1	0.73	
TS 22595	10	155	5	1	0.12	
TS 22596	<2	10	5	1	0.10	
TS 22597	<2	15	25	1	0.91	
TS 22598	10	40	20	1	0.12	
TS 22599	<2	10	10	1	0.07	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D082 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22600	<2	15	5	<1	0.06	
TS 22601	<2	15	10	>25	0.22	
TS 22602	2	20	10	1	0.18	
TS 22603	10	35	65	4	0.27	
TS 22604	<2	20	10	1	0.13	
TS 22605	<2	20	10	1	0.08	
TS 22606	<2	50	480	1	3.03	
TS 22607	10	250	170	1	1.86	
TS 22608	10	300	40	1	2.69	
TS 22609	40	50	20	1	1.14	
TS 22610	35	65	370	1	1.10	
TS 22611	20	60	70	1	1.06	
TS 22612	20	65	80	1	0.70	
TS 22613	80	45	130	1	3.01	
TS 22614	60	90	320	1	1.41	
TS 22615	10	70	185	<1	0.65	
TS 22616	30	340	240	1	1.28	
TS 22617	<2	30	10	1	0.32	
TS 22618	40	30	75	<1	1.71	
TS 22619	2	30	40	<1	1.03	
TS 22620	5	35	30	<1	0.60	
TS 22621	10	45	90	<1	1.09	
TS 22622	190	100	30	<1	0.76	
TS 22623	5	150	85	5	0.38	
TS 22624	10	15	10	<1	0.33	
TS 22625	2	40	40	<1	0.23	
TS 22626	2	20	25	<1	0.23	
TS 22627	20	15	10	<1	0.13	
TS 22628	10	15	10	1	0.36	
TS 22629	75	10	20	1	0.96	

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LABORATORY REPORT

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22630	2	10	40	1	0.89	
TS 22631	<2	10	15	1	0.70	
TS 22632	10	20	100	1	2.14	
TS 22633	2	20	60	1	3.81	
TS 22634	10	210	45	1	2.35	
TS 22635	15	50	300	2	5.82	
TS 22636	5	45	30	1	2.74	
TS 22637	2	15	30	1	0.84	
TS 22638	5	20	10	<1	0.25	
TS 22639	10	50	165	2	2.88	
TS 22640	2	20	20	<1	0.42	
TS 22641	2	15	60	2	2.89	
TS 22642	45	250	330	3	6.06	
TS 22643	<2	10	10	<1	0.43	
TS 22644	5	10	20	<1	1.02	
TS 22645	2	30	30	1	1.60	
TS 22646	<2	10	35	1	1.13	
TS 22647	2	10	20	<1	0.47	
TS 22648	2	10	30	<1	0.92	
TS 22649	2	10	40	1	1.29	
TS 22650	2	10	30	<1	0.66	
TS 22651	5	25	40	<1	0.90	
TS 22652	2	25	125	1	1.52	
TS 22653	5	40	75	2	1.47	
TS 22654	10	125	230	1	1.06	
TS 22655	<2	20	20	<1	0.29	
TS 22656	5	105	85	1	1.50	
TS 22657	5	20	110	1	1.57	
TS 22658	2	30	100	2	4.13	
TS 22659	15	350	600	2	1.84	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: D082 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22660	10	70	145	1	1.79	
TS 22661	5	20	190	1	1.87	
TS 22662	5	30	200	1	1.78	
TS 22663	5	75	280	1	1.61	
TS 22664	<2	30	125	1	1.51	
TS 22665	2	25	105	1	1.84	
TS 22666	2	175	310	1	1.90	
TS 22667	2	95	340	1	1.54	
TS 22668	5	170	120	1	0.84	
TS 22669	5	175	40	<1	0.39	
TS 22670	<2	75	320	<1	1.05	
TS 22671	2	45	140	<1	1.14	
TS 22672	<2	30	70	<1	0.15	
TS 22673	2	35	110	<1	0.14	
TS 22674	5	85	220	1	0.22	
TS 22675	5	20	230	1	1.95	
TS 22676	<2	20	95	<1	0.36	
TS 22677	<2	30	130	<1	0.34	
TS 22678	<2	30	60	<1	0.20	
TS 22679	10	40	35	<1	0.69	
TS 22680	2	15	35	1	1.80	
TS 22681	2	10	45	1	1.88	
TS 22682	2	20	40	<1	0.83	
TS 22683	2	10	60	<1	1.40	
TS 22684	15	15	85	1	0.98	
TS 22685	15	25	130	<1	0.30	
TS 22686	210	0.11	% 0.11	% 1	0.26	
TS 22687	5	35	10	<1	0.17	
TS 22688	15	150	210	<1	0.26	
TS 22689	20	40	40	1	1.20	

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g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D082 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22690	20	30	80	1	1.00	
TS 22691	15	140	220	<1	0.96	
TS 22692	10	25	40	1	2.24	
TS 22693	10	30	50	1	1.89	
TS 22694	5	20	35	1	2.19	
TS 22695	10	80	240	1	2.13	
TS 22696	5	30	240	2	2.30	
TS 22697	10	70	360	2	1.15	
TS 22698	45	30	50	1	0.28	
TS 22699	2	40	100	1	0.79	
TS 22700	15	45	25	1	0.27	
TS 22701	2	45	95	1	0.17	
TS 22702	15	80	10	3	0.11	
TS 22703	2	15	10	1	0.13	
TS 22704	5	15	10	1	0.12	
TS 22705	5	20	15	2	0.16	
TS 22706	<2	15	10	1	0.13	
TS 22707	2	20	10	1	0.10	
TS 22708	5	20	10	1	0.21	
TS 22709	<2	15	10	3	0.17	
TS 22710	2	20	10	1	0.12	
TS 22711	5	15	2	1	0.13	
TS 22712	20	25	5	1	0.13	
TS 22713	<2	20	40	1	0.13	
TS 22714	<2	45	65	1	0.09	
TS 22715	<2	35	15	1	0.08	
TS 22716	5	40	45	1	0.23	
TS 22717	5	20	60	2	0.22	
TS 22718	5	25	30	1	0.56	
TS 22719	5	20	25	1	0.85	

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Batch No.: D082 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON, DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 619 Sample Type: SOIL No. of Samples: 207

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22720	10	25	60	3	1.06	
TS 22721	10	25	90	3	1.08	
TS 22722	10	115	260	3	1.52	
TS 22723	10	20	40	1	1.42	
TS 22724	5	25	10	1	0.44	
TS 22725	5	15	15	1	0.73	
TS 22726	5	390	220	2	0.78	
TS 22727	10	180	240	1	1.16	
TS 22728	20	100	270	1	0.77	
TS 22729	10	85	150	1	0.57	
TS 22730	10	260	270	1	0.55	
TS 22731	15	250	10	1	0.48	
TS 22732	15	115	10	1	0.52	
TS 22733	25	105	50	1	0.52	
TS 22734	15	60	200	1	0.75	
TS 22735	10	60	270	1	0.91	
TS 22736	10	130	190	1	0.66	
TS 22737	15	540	240	1	0.46	
TS 22738	20	90	25	1	0.31	
TS 22739	5	580	110	1	0.39	
TS 22740	5	250	170	<1	0.35	
TS 22741	15	360	250	1	0.51	
TS 22742	5	180	90	<1	0.28	
TS 22743	2	135	175	<1	0.27	
TS 22744	2	120	200	<1	0.40	
TS 22745	<2	20	70	1	0.38	
TS 22746	2	20	15	<1	0.50	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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LABORATORY REPORT

Batch No.: D082R
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
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N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 18/04/83
Date Completed 26/04/83

Order No.: K 619
Sample Type: SOIL
No. of Samples: 1

SAMPLE NO.	Ag	ELEMENTS
	m	UNITS
	A101	METHODS
22601	28	

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LABORATORY REPORT

Batch No.: D129
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
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N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 27/04/83
Date Completed 09/05/83

Order No.: TELEX 26-4-83
Sample Type: -80# EX BATCHES
No. of Samples: 152

SAMPLE NO.	Sn ppm XRF 1A	W ppm XRF 1A
EX C018 TS 21282	<5	10
EX C018 TS 21283	<5	10
EX C018 TS 21284	<5	20
EX C018 TS 21285	<5	10
EX C018 TS 21286	<5	10
EX C018 TS 21287	<5	10
EX C018 TS 21288	<5	10
EX C018 TS 21289	<5	10
EX C018 TS 21290	<5	10
EX C018 TS 21291	<5	<10
EX C018 TS 21292	<5	10
EX C018 TS 21293	<5	20
EX C018 TS 21294	<5	20
EX C018 TS 21295	5	<10
EX C018 TS 21296	<5	10
EX C018 TS 21297	<5	10
EX C018 TS 21298	<5	10
EX C018 TS 21299	<5	20
EX C118 TS 21869	<5	20
EX C118 TS 21870	<5	<10
EX C118 TS 21871	<5	10
EX C118 TS 21872	<5	<10
EX C118 TS 21873	<5	<10
EX C118 TS 21874	<5	<10
EX C118 TS 21875	<5	<10
EX C118 TS 21876	<5	<10
EX C118 TS 21877	<5	10
EX C118 TS 21878	5	10
EX C118 TS 21879	<5	10
EX C118 TS 21880	<5	10

ELEMENTS
UNITS
METHODS

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g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D129 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 09/05/83 N.S.W. 2072

Order No.: TELEX 26-4-83 Sample Type: -80# EX BATCHES No. of Samples: 152

SAMPLE NO.	Sn	W	ELEMENTS
	m	m	UNITS
	XRF 1A	XRF 1A	METHODS
EX C118 TS 21881	<5	<10	
EX C118 TS 21882	<5	<10	
EX C118 TS 21883	<5	<10	
EX C118 TS 21884	<5	30	
EX C118 TS 21885	<5	10	
EX C118 TS 21886	<5	10	
EX C118 TS 21887	<5	10	
EX C118 TS 21888	<5	<10	
EX C118 TS 21889	<5	10	
EX C118 TS 21918	<5	10	
EX C118 TS 21919	<5	10	
EX C118 TS 21920	<5	<10	
EX C118 TS 21921	<5	10	
EX C118 TS 21922	<5	20	
EX C169 TS 20018	<5	10	
EX C169 TS 20019	<5	20	
EX C169 TS 20020	<5	20	
EX C169 TS 20021	<5	20	
EX C169 TS 20022	<5	10	
EX C169 TS 20023	<5	<10	
EX C169 TS 20024	<5	10	
EX C169 TS 20025	<5	<10	
EX C169 TS 20026	<5	10	
EX C169 TS 20027	<5	10	
EX C169 TS 20028	<5	10	
EX C169 TS 20029	<5	20	
EX C169 TS 20030	<5	10	
EX C169 TS 20031	<5	10	
EX C169 TS 20032	<5	10	
EX C169 TS 20033	<5	20	

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g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D129 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 09/05/83 N.S.W. 2072

Order No.: TELEX 26-4-83 Sample Type: -80# EX BATCHES No. of Samples: 152

SAMPLE NO.	Sn m XRF 1A	W m XRF 1A	ELEMENTS UNITS METHODS
EX C169 TS 20034	<5	10	
EX C169 TS 20035	<5	20	
EX C169 TS 20036	<5	10	
EX C169 TS 21982	5	10	
EX C169 TS 21983	5	10	
EX C169 TS 21984	10	10	
EX C169 TS 21985	10	<10	
EX C169 TS 20057	10	20	
EX C169 TS 20058	<5	30	
EX C169 TS 20059	5	20	
EX C169 TS 20060	5	10	
EX C169 TS 20061	<5	20	
EX C169 TS 20062	<5	10	
EX C169 TS 20063	10	10	
EX C169 TS 20064	15	10	
EX C169 TS 20065	5	20	
EX C169 TS 20066	10	10	
EX C169 TS 20067	5	20	
EX C169 TS 20068	5	30	
EX C169 TS 20069	5	60	
EX C169 TS 20070	5	10	
EX C169 TS 20071	10	10	
EX C169 TS 20072	<5	10	
EX C169 TS 20073	5	20	
EX C169 TS 20092	35	10	
EX C169 TS 20093	10	<10	
EX C169 TS 20094	10	<10	
EX C169 TS 20095	10	<10	
EX C169 TS 20096	5	<10	
EX D002 TS 22248	10	10	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D129 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 09/05/83 N.S.W. 2072

Order No.: TELEX 26-4-83 Sample Type: -80# EX BATCHES No. of Samples: 152

SAMPLE NO.	Sn	W	ELEMENTS
	m	m	UNITS
	XRF 1A	XRF 1A	METHODS
EX D002 TS 22249	<5	10	
EX D002 TS 22250	5	10	
EX D002 TS 22251	10	10	
EX D002 TS 22252	5	10	
EX D002 TS 22253	<5	10	
EX D002 TS 22254	5	10	
EX D002 TS 22255	5	<10	
EX D002 TS 22256	<5	<10	
EX D002 TS 22257	<5	<10	
EX D002 TS 22258	<5	10	
EX D002 TS 22259	<5	10	
EX D002 TS 22260	5	<10	
EX D002 TS 22261	5	10	
EX D002 TS 22262	10	10	
EX D002 TS 22263	10	10	
EX D002 TS 22264	5	20	
EX D002 TS 22265	10	<10	
EX D002 TS 22266	10	10	
EX D002 TS 22267	25	<10	
EX D002 TS 22268	<5	<10	
EX D002 TS 22269	5	<10	
EX D002 TS 22270	<5	10	
EX D002 TS 22271	<5	20	
EX D002 TS 22272	<5	<10	
EX D002 TS 22273	5	<10	
EX D002 TS 22274	<5	10	
EX D002 TS 22275	10	<10	
EX D002 TS 22276	5	<10	
EX D002 TS 22277	<5	10	
EX D002 TS 22278	10	10	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D129 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 09/05/83 N.S.W. 2072

Order No.: TELEX 26-4-83 Sample Type: -80# EX BATCHES No. of Samples: 152

SAMPLE NO.	Sn m XRF 1A	W m XRF 1A	ELEMENTS UNITS METHODS
EX D002 TS 22279	5	<10	
EX D002 TS 22280	5	<10	
EX D002 TS 22281	10	10	
EX D002 TS 22282	15	20	
EX D002 TS 22283	15	20	
EX D002 TS 22284	5	<10	
EX D002 TS 22405	5	10	
EX D002 TS 22406	10	40	
EX D002 TS 22407	10	30	
EX D002 TS 22408	15	20	
EX D002 TS 22409	10	20	
EX D002 TS 22410	<5	<10	
EX D002 TS 22411	25	20	
EX D002 TS 22412	10	30	
EX D002 TS 22413	10	40	
EX D002 TS 22414	5	20	
EX D002 TS 22475	15	30	
EX D002 TS 22476	5	30	
EX D002 TS 22477	<5	50	
EX D002 TS 22478	20	30	
EX D002 TS 22479	10	30	
EX D082 TS 22548	20	10	
EX D082 TS 22549	15	20	
EX D082 TS 22550	5	30	
EX D082 TS 22551	10	20	
EX D082 TS 22552	<5	20	
EX D082 TS 22553	5	10	
EX D082 TS 22554	<5	<10	
EX D082 TS 22555	<5	20	
EX D082 TS 22556	10	30	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D129
Date Received 27/04/83
Date Completed 09/05/83

Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: TELEX 26-4-83

Sample Type: -80# EX BATCHES

No. of Samples: 152

SAMPLE NO.	Sn	W	ELEMENTS
	p	p	UNITS
	XRF 1A	XRF 1A	METHODS
EX D082 TS 22557	5	30	
EX D082 TS 22558	10	20	

UNITS LEGEND ----- p - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: E006 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/05/83 GORDON. DEVONPORT TAS. 7310
Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 18580	30	145	230	1	0.60	
TS 18581	<2	35	10	<1	0.20	
TS 18582	<2	20	10	<1	0.35	
TS 18583	<2	45	40	1	1.34	
TS 18584	60	0.16	% 600	1	0.97	
TS 18585	<2	370	10	<1	0.45	
TS 18586	20	150	660	<1	0.18	
TS 22747	10	20	130	1	0.10	
TS 22748	<2	60	170	<1	0.17	
TS 22749	10	310	720	1	0.41	
TS 22750	<2	95	170	<1	0.26	
TS 22751	10	320	245	1	0.21	
TS 22752	<2	165	500	1	0.24	
TS 22753	<2	200	105	<1	0.30	
TS 22754	10	100	30	1	0.27	
TS 22755	<2	260	160	<1	0.18	
TS 22756	20	270	65	1	0.15	
TS 22757	<2	55	60	<1	0.17	
TS 22758	<2	55	95	<1	0.23	
TS 22759	<2	45	130	<1	0.19	
TS 22760	<2	120	140	<1	0.22	
TS 22761	30	370	100	<1	0.26	
TS 22762	10	840	375	<1	0.57	
TS 22763	<2	45	20	<1	0.29	
TS 22764	<2	65	40	<1	0.22	
TS 22765	20	220	25	1	0.21	
TS 22766	40	680	55	1	0.14	
TS 22767	20	320	175	1	0.20	
TS 22768	10	320	320	<1	0.33	
TS 22769	10	145	155	1	0.30	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: G F Kilmister

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LABORATORY REPORT

Batch No.: E006 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 04/05/83 GORDON, DEVONPORT TAS. 7310
Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	
	m	m	m	m	%	ELEMENTS
	G001	G001	G001	G001	G001	UNITS
						METHODS
TS 22770	10	25	40	<1	0.33	
TS 22771	10	35	15	2	0.43	
TS 22772	<2	20	10	1	0.24	
TS 22773	<2	15	15	1	0.15	
TS 22774	40	190	20	1	930	m
TS 22775	50	300	195	1	0.51	
TS 22776	30	135	200	1	0.69	
TS 22777	10	55	310	1	0.43	
TS 22778	<2	20	105	<1	0.35	
TS 22779	<2	40	130	<1	0.30	
TS 22780	<2	20	80	<1	0.24	
TS 22781	10	25	90	<1	0.45	
TS 22782	<2	15	10	<1	0.15	
TS 22783	<2	20	140	<1	0.65	
TS 22784	10	40	70	<1	0.70	
TS 22785	600	140	180	1	0.45	
TS 22786	30	95	70	1	0.96	
TS 22787	10	240	125	<1	0.24	
TS 22788	20	95	205	<1	0.26	
TS 22789	50	115	470	1	0.39	
TS 22790	10	100	0.12	% <1	1.05	
TS 22791	70	640	600	<1	1.34	
TS 22792	130	820	760	1	1.89	
TS 22793	30	230	115	<1	0.45	
TS 22794	10	30	20	1	0.45	
TS 22795	<2	35	30	<1	0.72	
TS 22796	<2	40	20	1	0.43	
TS 22797	<2	15	15	1	0.42	
TS 22798	<2	10	15	1	0.45	
TS 22799	<2	20	15	1	0.76	

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Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22800	<2	10	15	1	0.55	
TS 22801	<2	25	10	1	0.48	
TS 22802	10	0.15	% 20	1	0.44	
TS 22803	10	25	20	1	0.82	
TS 22804	<2	20	20	1	0.81	
TS 22805	<2	30	20	1	0.80	
TS 22806	<2	15	15	<1	0.62	
TS 22807	<2	15	20	<1	0.97	
TS 22808	<2	10	15	1	0.54	
TS 22809	<2	15	15	<1	0.47	
TS 22810	<2	40	85	<1	0.68	
TS 22811	<2	20	30	<1	0.79	
TS 22812	<2	15	25	<1	0.63	
TS 22813	<2	10	15	<1	0.79	
TS 22814	<2	15	20	<1	1.02	
TS 22815	<2	20	20	<1	0.76	
TS 22816	<2	20	20	1	0.70	
TS 22817	<2	10	10	1	910 m	
TS 22818	<2	20	35	1	1.10	
TS 22819	<2	25	35	1	1.11	
TS 22820	<2	45	50	2	1.50	
TS 22821	<2	25	35	1	1.32	
TS 22822	20	25	320	2	5.90	
TS 22823	<2	20	40	1	1.00	
TS 22824	<2	35	40	1	1.00	
TS 22825	<2	30	30	1	0.87	
TS 22826	<2	70	145	1	0.63	
TS 22827	<2	100	90	1	0.38	
TS 22828	70	145	470	4	5.40	
TS 22829	<2	400	15	2	0.27	

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Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22830	10	65	20	1	0.30	
TS 22831	20	30	20	1	0.66	
TS 22832	<2	35	10	1	0.20	
TS 22833	<2	40	75	1	0.80	
TS 22834	<2	15	15	1	0.54	
TS 22835	<2	20	30	<1	0.67	
TS 22836	<2	15	35	<1	0.79	
TS 22837	<2	20	125	1	1.68	
TS 22838	20	85	470	1	2.00	
TS 22839	<2	120	105	1	1.50	
TS 22840	30	720	0.10 %	1	2.54	
TS 22841	20	40	300	1	3.02	
TS 22842	50	55	310	1	2.01	
TS 22843	10	115	195	<1	1.19	
TS 22844	<2	45	20	<1	0.37	
TS 22845	<2	50	15	1	0.24	
TS 22846	<2	25	30	<1	0.81	
TS 22847	10	560	0.17 %	2	2.06	
TS 22848	<2	40	295	<1	1.22	
TS 22849	10	40	350	1	1.97	
TS 22850	30	270	920	<1	0.81	
TS 22851	80	0.17 %	600	1	1.22	
TS 22852	10	250	175	<1	1.48	
TS 22853	10	340	25	1	0.44	
TS 22854	90	540	0.28 %	2	3.66	
TS 22855	10	130	70	2	0.53	
TS 22856	70	260	0.11 %	2	2.73	
TS 22857	20	95	70	<1	0.55	
TS 22858	80	520	200	1	0.37	
TS 22859	80	520	380	<1	0.41	

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Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22860	20	120	470	1	0.52	
TS 22861	20	165	240	1	0.43	
TS 22862	10	40	15	1	0.39	
TS 22863	<2	40	20	<1	0.52	
TS 22864	<2	35	45	1	1.40	
TS 22865	200	0.24 %	0.27 %	4	2.02	
TS 22866	<2	55	25	1	0.31	
TS 22867	<2	55	30	<1	1.32	
TS 22868	<2	220	10	1	0.15	
TS 22869	<2	45	10	1	0.23	
TS 22870	<2	350	10	<1	0.34	
TS 22871	10	300	15	<1	0.69	
TS 22872	<2	60	20	2	0.82	
TS 22873	<2	385	20	3	0.65	
TS 22874	<2	145	15	3	0.36	
TS 22875	<2	15	10	2	0.12	
TS 22876	<2	15	10	2	0.14	
TS 22877	<2	40	20	1	0.35	
TS 22878	<2	20	15	2	0.64	
TS 22879	<2	70	<2	2	750 m	
TS 22880	<2	220	20	2	0.24	
TS 22881	<2	120	45	1	0.60	
TS 22882	<2	100	30	1	0.20	
TS 22883	<2	45	35	1	0.41	
TS 22884	<2	145	40	2	0.38	
TS 22885	<2	75	35	1	0.49	
TS 22886	<2	60	25	1	0.50	
TS 22887	<2	25	20	1	0.37	
TS 22888	<2	15	10	<1	0.16	
TS 22889	<2	20	40	1	0.38	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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Signature:

Analytical Chemists Geochemists Mineralogists

This is to certify that the statements given herein are correct to the best of our knowledge and belief. Samples will be retained for one month from the date of this report unless otherwise requested. Results apply to samples as received. This report may not be reproduced except in full.

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Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22890	<2	105	180	1	0.52	
TS 22891	10	120	200	1	0.81	
TS 22892	20	440	600	1	0.66	
TS 22893	20	145	650	1	0.50	
TS 22894	10	60	75	1	0.58	
TS 22895	<2	60	30	1	0.31	
TS 22896	<2	30	15	1	0.65	
TS 22897	<2	20	20	1	0.52	
TS 22898	<2	25	25	1	0.49	
TS 22899	10	65	50	1	0.76	
TS 22900	<2	70	145	1	0.83	
TS 22901	10	100	45	1	0.48	
TS 22902	<2	20	40	1	0.88	
TS 22903	<2	20	35	1	0.76	
TS 22904	<2	25	80	1	0.98	
TS 22905	<2	40	40	1	0.60	
TS 22906	40	90	45	1	0.14	
TS 22907	10	40	20	1	0.16	
TS 22908	10	20	50	1	0.57	
TS 22909	<2	15	105	1	1.26	
TS 22910	<2	25	75	1	1.14	
TS 22911	<2	20	15	1	0.26	
TS 22912	<2	55	25	1	0.33	
TS 22913	N.R.	N.R.	N.R.	N.R.	N.R.	
TS 22914	<2	10	25	<1	0.39	
TS 22915	<2	50	15	<1	0.15	
TS 22916	<2	15	20	1	0.38	
TS 22917	10	130	115	1	1.61	
TS 22918	20	55	20	1	1.14	
TS 22919	<2	105	105	<1	0.14	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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Date Completed 10/05/83 N.S.W. 2072

Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22920	<2	500	460	<1	0.18	
TS 22921	<2	15	190	<1	0.76	
TS 22922	<2	30	265	1	0.56	
TS 22923	<2	140	155	1	0.18	
TS 22924	<2	35	100	1	0.13	
TS 22925	<2	20	110	1	0.20	
TS 22926	<2	15	60	1	0.39	
TS 22927	<2	190	460	1	0.40	
TS 22928	<2	10	20	1	0.25	
TS 22929	<2	10	10	<1	0.15	
TS 22930	<2	10	<2	1	0.13	
TS 22931	<2	10	10	1	0.23	
TS 22932	<2	55	190	1	1.70	
TS 22933	<2	30	460	1	2.55	
TS 22934	20	95	900	2	3.33	
TS 22935	<2	55	470	2	4.40	
TS 22936	<2	25	210	1	1.75	
TS 22937	<2	35	180	1	1.35	
TS 22938	<2	25	350	2	2.20	
TS 22939	<2	30	250	2	1.66	
TS 22940	<2	20	10	3	0.22	
TS 22941	<2	10	<2	1	0.15	
TS 22942	<2	10	5	<1	0.14	
TS 22943	<2	15	20	1	0.19	
TS 22944	<2	15	10	<1	0.19	
TS 22945	<2	20	10	1	0.11	
TS 22946	<2	15	10	1	0.22	
TS 22947	10	35	60	8	0.22	
TS 22948	<2	20	120	2	3.60	
TS 22949	<2	20	15	1	0.12	

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Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe		ELEMENTS
	m	m	m	m	%		UNITS
	G001	G001	G001	G001	G001		METHODS
TS 22950	10	90	40	1	950	m	
TS 22951	10	10	10	1	700	m	
TS 22952	10	20	30	2	1.02		
TS 22953	10	25	45	2	1.76		
TS 22954	<2	20	45	2	1.96		
TS 22955	25	30	95	3	3.70		
TS 22956	<2	35	30	1	1.23		
TS 22957	20	310	0.10	% 2	2.04		
TS 22958	20	160	0.14	% 2	2.17		
TS 22959	10	65	260	1	0.83		
TS 22960	15	30	90	1	0.73		
TS 22961	10	15	20	1	0.67		
TS 22962	<2	20	30	1	0.40		
TS 22963	25	20	35	2	0.45		
TS 22964	30	155	0.12	% 1	0.70		
TS 22965	<2	50	115	1	0.57		
TS 22966	10	35	225	1	1.80		
TS 22967	10	40	10	1	860	m	
TS 22968	<2	35	170	1	0.26		
TS 22969	<2	20	60	1	1.18		
TS 22970	<2	30	65	1	0.84		
TS 22971	10	40	35	1	0.27		
TS 22972	10	55	30	1	0.39		
TS 22973	10	40	40	1	0.48		
TS 22974	10	60	95	1	0.53		
TS 22975	10	75	235	1	0.85		
TS 22976	<2	40	660	1	0.67		
TS 22977	<2	55	500	1	0.68		
TS 22978	<2	25	35	1	0.51		
TS 22979	<2	45	370	1	0.63		

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Order No.: K 621, KP 2989 Sample Type: SOILS No. of Samples: 266

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	ELEMENTS
	m	m	m	m	%	UNITS
	G001	G001	G001	G001	G001	METHODS
TS 22980	<2	20	60	1	0.45	
TS 22981	20	480	500	1	0.75	
TS 22982	<2	20	130	1	0.34	
TS 22983	<2	25	20	1	0.25	
TS 22984	<2	40	10	2	0.24	
TS 22985	130	960	75	1	1.30	
TS 22986	<2	80	190	1	0.42	
TS 22987	<2	105	370	2	1.22	
TS 18561	<2	45	55	1	0.71	
TS 18563	<2	20	140	1	2.00	
TS 18564	10	30	15	1	0.42	
TS 18565	10	20	115	2	5.20	
TS 18566	<2	15	20	1	0.62	
TS 18567	<2	20	10	<1	0.15	
TS 18568	<2	50	90	<1	0.71	
TS 18569	10	20	70	1	2.51	
TS 18570	10	120	160	2	3.73	
TS 18571	10	20	65	2	3.57	
TS 18572	20	80	180	2	1.51	
TS 18573	<2	25	25	1	0.31	
TS 18574	<2	140	75	1	0.52	
TS 18575	40	250	325	2	6.00	
TS 18576	10	80	140	1	1.31	
TS 18577	<2	20	<2	1	830 m	
TS 18578	<2	15	10	<1	0.41	
TS 18579	<2	20	65	<1	0.19	

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Date Completed 04/07/83 N.S.W. 2072

Order No.: TELEX 22.6.83 Sample Type: PULPS EX BATCHES No. of Samples: 107

SAMPLE NO.	Au	As
	b	m
	PM204	G004
EX D082 TS 22607	<3	10
EX D082 TS 22608	<3	5
EX D082 TS 22609	<3	6
EX D082 TS 22610	<3	5
EX D082 TS 22611	<3	9
EX D082 TS 22612	5	5
EX D082 TS 22613	3	6
EX D082 TS 22614	<3	6
EX D082 TS 22615	<3	10
EX D082 TS 22616	<3	8
EX D082 TS 22617	<3	4
EX D082 TS 22618	3	18
EX D082 TS 22619	<3	5
EX D082 TS 22620	<3	5
EX D082 TS 22621	<3	5
EX D082 TS 22725	<3	4
EX D082 TS 22726	<3	10
EX D082 TS 22727	<3	16
EX D082 TS 22728	<3	20
EX D082 TS 22729	<3	18
EX D082 TS 22730	<3	25
EX D082 TS 22731	<3	4
EX D082 TS 22732	<3	4
EX D082 TS 22733	<3	5
EX D082 TS 22734	3	14
EX D082 TS 22735	5	12
EX D082 TS 22736	3	30
EX D082 TS 22737	3	14
EX D082 TS 22738	<3	4
EX D082 TS 22739	3	10

ELEMENTS
UNITS
METHODS

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
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LABORATORY REPORT

Batch No.: F138 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/06/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/07/83 N.S.W. 2072

Order No.: TELEX 22.6.83 Sample Type: PULPS EX BATCHES No. of Samples: 107

SAMPLE NO.	Au	As	ELEMENTS
	b	m	UNITS
	PM204	G004	METHODS
EX D082 TS 22740	<3	6	
EX D082 TS 22741	<3	10	
EX D082 TS 22742	5	5	
EX D082 TS 22743	<3	4	
EX D082 TS 22744	<3	5	
EX D082 TS 22745	<3	4	
EX D082 TS 22746	<3	3	
EX E006 TS 22747	<3	4	
EX E006 TS 22748	<3	6	
EX E006 TS 22749	<3	16	
EX E006 TS 22750	<3	6	
EX E006 TS 22751	<3	6	
EX E006 TS 22752	<3	6	
EX E006 TS 22753	<3	6	
EX E006 TS 22754	<3	4	
EX E006 TS 22755	<3	5	
EX E006 TS 22756	<3	4	
EX E006 TS 22757	3	4	
EX E006 TS 22758	<3	5	
EX E006 TS 22759	<3	5	
EX E006 TS 22760	3	5	
EX E006 TS 22761	<3	6	
EX E006 TS 22762	<3	12	
EX E006 TS 22763	<3	4	
EX E006 TS 22764	<3	4	
EX E006 TS 22765	3	4	
EX E006 TS 22766	5	6	
EX E006 TS 22767	<3	6	
EX E006 TS 22768	<3	8	
EX E006 TS 22769	<3	6	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: G J Kilmister

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OFFICE & LABORATORY
P.O. BOX 66
EVERTON PARK QLD 4053

Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: F138 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE,
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 22/06/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/07/83 N.S.W. 2072

Order No.: TELEX 22.6.83 Sample Type: PULPS EX BATCHES No. of Samples: 107

SAMPLE NO.	Au	As	ELEMENTS
	b	m	UNITS
	PM204	G004	METHODS
EX E006 TS 22770	<3	6	
EX E006 TS 22771	<3	6	
EX E006 TS 22772	<3	4	
EX E006 TS 22773	<3	4	
EX E006 TS 22774	<3	5	
EX E006 TS 22775	<3	20	
EX E006 TS 22776	<3	35	
EX E006 TS 22777	<3	10	
EX E006 TS 22778	<3	9	
EX E006 TS 22779	<3	9	
EX E006 TS 22780	<3	7	
EX E006 TS 22781	<3	11	
EX E006 TS 22782	<3	4	
EX E006 TS 22783	<3	25	
EX E006 TS 22784	40	30	
EX E006 TS 22785	20	35	
EX E006 TS 22786	5	40	
EX E006 TS 22787	3	6	
EX E006 TS 22788	<3	6	
EX E006 TS 22789	3	9	
EX E006 TS 22790	10	40	
EX E006 TS 22791	3	20	
EX E006 TS 22792	3	20	
EX E006 TS 22793	5	7	
EX E006 TS 22794	<3	3	
EX E006 TS 22795	<3	4	
EX E006 TS 22796	3	3	
EX E006 TS 22797	5	3	
EX E006 TS 22798	<3	5	
EX E006 TS 22799	<3	4	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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EVERTON PARK QLD 4053

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: F138
Date Received 22/06/83
Date Completed 04/07/83

Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON,
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Order No.: TELEX 22.6.83
Sample Type: PULPS EX BATCHES
No. of Samples: 107

SAMPLE NO.	Au	As	ELEMENTS
	b	m	UNITS
	PM204	G004	METHODS
EX E006 TS 22800	<3	3	
EX E006 TS 22801	<3	4	
EX E006 TS 22802	<3	14	
EX E006 TS 22803	<3	10	
EX E006 TS 22804	<3	7	
EX E006 TS 22805	<3	4	
EX E006 TS 22806	<3	2	
EX E006 TS 22807	3	4	
EX E006 TS 22808	5	4	
EX E006 TS 22809	<3	3	
EX E006 TS 22810	<3	5	
EX E006 TS 22811	<3	3	
EX E006 TS 22812	<3	3	
EX E006 TS 22813	<3	3	
EX E006 TS 22814	<3	3	
EX E006 TS 22815	5	3	
EX E006 TS 22816	<3	3	

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g - Grams a - Absorbance

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APPENDIX III

DRAINAGE SAMPLE ANALYSES

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TELEX ALSEV 42344

ELLIOT

LABORATORY REPORT

Batch No.: B067 | Client: GEOPEKO LIMITED, | Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, | Address: P.O. BOX 98,
Date Received 11/02/83 | GORDON. | DEVONPORT TAS. 7310
Date Completed 21/02/83 | N.S.W. 2072

Order No.: K 748 | Sample Type: CONCENTRATES | No. of Samples: 22

SAMPLE NO.	Au	S.Wt.
	b	g
	PM205	
TDA 7701	1.2	m 45.3
TDA 7702	3.9	m 31.7
TDA 7703	630	47.9
TDA 7704	55	35.8
TDA 7705	7.4	m 67.8
TDA 7706	670	61.2
TDA 7707	2.4	m 33.3
TDA 7708	10.2	m 24.8
TDA 7709	13.0	m 33.9
TDA 7710	1.09	m 32.3
TDA 7711	160	24.4
TDA 7712	2.3	m 30.6
TDA 7713	18.0	m 25.7
TDA 7714	1.1	m 47.2
TDA 7715	11.3	m 30.3
TDA 7716	690	52.2
TDA 7717	3.6	m 27.7
TDA 7718	2.0	m 63.7
TDA 7719	2.1	m 62.2
TDA 7720	12.0	m 49.1
TDA 7721	1.3	m 20.7
TDA 7722	390	44.8

ELEMENTS
UNITS
METHODS

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: G. Quinn

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LABORATORY REPORT

Batch No.: B067-1 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 590,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 21/02/83 N.S.W. 2072

Order No.: K 749 Sample Type: CONCENTRATES No. of Samples: 22

SAMPLE NO.	Sn	W	S.Wt.
	a	a	g
	XRF 1A	XRF 1A	
TDB 7701	435	30	41.9
TDB 7702	100	30	42.4
TDB 7703	40	20	72.4
TDB 7704	160	40	32.0
TDB 7705	20	20	44.9
TDB 7706	15	20	50.6
TDB 7707	30	30	45.9
TDB 7708	240	20	47.5
TDB 7709	50	30	32.3
TDB 7710	175	20	55.9
TDB 7711	100	40	25.3
TDB 7712	180	40	21.6
TDB 7713	5	20	61.3
TDB 7714	10	20	40.4
TDB 7715	15	40	33.8
TDB 7716	10	30	44.6
TDB 7717	25	20	45.6
TDB 7718	5	30	42.7
TDB 7719	<5	50	25.5
TDB 7720	5	20	63.1
TDB 7721	120	70	15.7
TDB 7722	90	10	68.5

ELEMENTS
UNITS
METHODS

UNITS LEGEND ----- a - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature:

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LABORATORY REPORT

Batch No.: C170 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 08/04/83 N.S.W. 2072

Order No.: K 617, KP 2977 Sample Type: SOILS No. of Samples: 19

SAMPLE NO.	Cu	Pb	Zn	Fe	Ag	Au	W	ELEMENTS
	m	m	m	%	m	b	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	METHODS
TD 6751	10	20	15	0.63	1	75	10	
TD 6752	20	15	30	0.99	1	30	20	
TD 6753	10	10	10	0.80	1	3	30	
TD 6754	<2	5	5	0.18	<1	10	<10	
TD 6755	2	10	10	0.40	<1	10	20	
TD 6756	2	10	10	0.31	<1	5	<10	
TD 6757	5	10	10	0.42	1	3	10	
TD 6758	10	10	10	0.79	1	5	50	
TD 6759	5	10	10	0.44	1	3	20	
TD 6760	2	<5	5	0.19	<1	5	20	
TD 6761	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
TD 6762	2	10	10	0.50	1	3	20	
TD 6763	2	5	10	0.34	<1	3	10	
TD 6764	<2	10	10	0.36	<1	3	10	
TD 6765	<2	5	5	0.22	<1	3	<10	
TD 6766	<2	5	10	0.33	<1	<3	10	
TD 6767	<2	10	35	0.33	<1	3	10	
TD 6768	<2	10	15	0.37	<1	10	10	
TD 6769	<2	10	20	0.30	<1	<3	20	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature:

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APPENDIX IV

ROCK CHIP SAMPLE ANALYSES

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Ph 07 3525577
TELEX ALSEV 42344

ELIOT

LABORATORY REPORT

Batch No.: B068 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 11/02/83 GORDON. DEVONPORT TAS. 7310
Date Completed 17/02/83 N.S.W. 2072

Order No.: K 747 Sample Type: ROCK No. of Samples: 15

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	As	Sb	Au	ELEMENTS
	m	m	m	m	%	m	m	b	UNITS
	G001	G001	G001	G001	G001	G004	G013	PM205	METHODS
KR 10772	<2	5	10	<1	0.40	1	<1	5	
KR 10773	<2	5	10	<1	0.34	5	7	125	
KR 10774	2	10	10	<1	1.80	21	<1	5	
KR 10775	2	5	5	<1	0.39	<1	<1	<3	
KR 10776	2	20	5	<1	0.26	2	<1	35	
KR 10777	2	25	2	<1	0.20	<1	<1	5	
KR 10778	2	<5	5	<1	0.22	<1	<1	3	
KR 10779	2	<5	2	<1	0.16	<1	<1	<3	
KR 10780	2	<5	2	<1	0.22	<1	<1	<3	
KR 10781	2	5	5	<1	0.18	<1	<1	<3	
KR 10782	2	5	5	1	0.20	<1	<1	460	
KR 10783	2	<5	5	<1	0.22	<1	<1	3	
KR 10784	2	5	5	<1	0.12	<1	<1	35	
KR 10785	2	10	5	<1	0.24	<1	<1	5	
KR 10786	2	10	2	<1	0.12	<1	<1	105	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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Signature: G. Dunn

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C168 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 29/03/83 GORDON. DEVONPORT TAS. 7310
Date Completed 08/04/83 N.S.W. 2072

Order No.: K 615, KP 2975 Sample Type: ROCK No. of Samples: 30

SAMPLE NO.		Cu	Pb	Zn	Fe	Ag	As	Au	W	Ba	Sn	ELEMENTS
		m	m	m	%	m	m	b	m	m	m	UNITS
		G001	G001	G001	G001	G001	XRF 1B	PM205	XRF 1A	XRF 1A	XRF 1A	METHODS
KR 10911	[illegible]	100	0.48	% 980	0.36	21	75	10	<10	550	<5	
KR 10912	[illegible]	30	0.44	% 700	0.37	>25 31	95	30	10	570	<5	
KR 10913	[illegible]	40	0.44	% 0.16	% 0.55	>25 28	60	20	<10	500	<5	
KR 10914	[illegible]	20	240	20	0.26	12	20	55	20	720	15	
KR 10915	[illegible]	15	370	20	0.44	21	110	120	10	770	15	
KR 10916	[illegible]	10	220	10	0.38	10	20	55	10	630	10	
KR 10917	[illegible]	15	460	10	0.43	16	30	65	10	360	5	
KR 10918	[illegible]	10	140	5	0.20	12	20	60	10	630	15	
KR 10919	[illegible]	10	140	15	0.43	13	20	40	<10	860	10	
KR 10920	[illegible]	10	70	20	0.62	7	15	30	10	0.11	% 5	
KR 10921	[illegible]	10	65	10	0.35	5	5	25	10	780	20	
KR 10922	[illegible]	5	40	10	0.26	5	15	55	20	810	10	
KR 10923	[illegible]	10	65	10	0.40	6	15	10	10	850	5	
KR 10924	[illegible]	20	0.16	% 840	1.50	>25 59	290	20	10	930	<5	
KR 10925	[illegible]	20	0.12	% 0.70	% 0.74	>25 40	30	5	<10	960	5	
KR 10926	[illegible]	20	>1.0	% >1.0	% 0.76	>25 128	95	40	<10	960	15	
KR 10927	[illegible]	10	0.12	% 580	0.45	>25 52	35	15	<10	0.10	% 5	
KR 10928	[illegible]	80	0.68	% 0.46	% 0.65	>25 99	520	200	<10	630	10	
KR 10929	[illegible]	100	0.28	% 0.11	% 2.94	>25 53	1.32	% 510	10	470	5	
KR 10930	[illegible]	640	>1.0	% 185	1.23	>25 155	0.28	% 820	10	380	15	
KR 10931	[illegible]	230	0.88	% 75	1.02	>25 105	780	130	<10	260	20	
KR 10932	[illegible]	195	>1.0	% 880	0.67	>25 165	465	1.0 m	<10	350	15	
KR 10933	[illegible]	55	0.78	% 0.26	% 0.45	22	515	90	<10	230	<5	
KR 10934	[illegible]	20	0.14	% 0.11	% 0.25	8	105	50	<10	110	<5	
KR 10935	[illegible]	60	0.18	% 760	0.73	13	40	65	10	230	<5	
KR 10936	[illegible]	35	0.18	% 380	0.33	2	30	70	40	510	<5	
KR 10937	[illegible]	10	100	20	0.21	2	5	35	30	540	<5	
KR 10938	[illegible]	5	160	860	0.39	10	15	15	10	710	<5	
KR 10939	[illegible]	2	45	190	0.36	15	5	10	20	0.11	% <5	
KR 10940	[illegible]	2	40	20	0.39	4	10	25	10	950	<5	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature: [illegible]

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P.O. BOX 66
EVERTON PARK QLD 4053
Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: C168R
Client: GEOPEKO LIMITED,
Address: P.O. BOX 217,
GORDON.
N.S.W. 2072

Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 598,
DEVONPORT TAS. 7310

Date Received 29/03/83
Date Completed 08/04/83

Order No.: K 615
Sample Type: SOILS
No. of Samples: 11

SAMPLE NO.	Pb	Zn	Ag
	%	%	m
	A101	A101	A101
KR10912			31
KR10913			28
KR10924			59
KR10925			40
KR10926	1.21	1.41	120
KR10927			52
KR10928			99
KR10929			53
KR10930	1.30		155
KR10931			105
KR10932	3.58		165

ELEMENTS
UNITS
METHODS

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature:

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TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: D081 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 618 Sample Type: ROCK No. of Samples: 86

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 10941	2	60	30	2	0.44	<3	350	<5	
KR 10942	<2	80	20	1	0.35	5	770	<5	
KR 10943	<2	20	15	1	0.52	<3	430	<5	
KR 10944	<2	20	10	1	0.52	<3	370	<5	
KR 10945	<2	10	15	1	0.56	5	720	<5	
KR 10946	2	10	10	1	0.54	<3	790	<5	
KR 10947	<2	10	10	<1	0.40	<3	0.11	% <5	
KR 10948	<2	10	5	<1	0.31	<3	720	<5	
KR 10949	10	120	30	1	0.40	<3	940	<5	
KR 10950	2	35	20	1	0.47	<3	840	<5	
KR 10951	10	70	55	1	1.01	10	740	<5	
KR 10952	10	55	60	1	1.30	<3	680	<5	
KR 10953	10	30	20	1	0.53	10	310	<5	
KR 10954	10	40	20	1	0.68	5	380	<5	
KR 10955	<2	25	20	1	0.57	10	280	<5	
KR 10956	<2	25	20	1	0.55	10	290	<5	
KR 10957	5	50	25	1	0.57	5	210	<5	
KR 10958	10	55	25	1	0.64	3	160	<5	
KR 10959	20	70	40	1	0.75	90	200	<5	
KR 10960	10	190	15	1	0.42	25	200	<5	
KR 10961	10	90	20	1	0.51	15	160	<5	
KR 10962	10	135	20	1	0.49	20	200	<5	
KR 10963	10	95	20	1	0.52	15	140	<5	
KR 10964	2	20	35	1	0.89	3	780	<5	
KR 10965	5	20	50	1	1.47	5	830	<5	
KR 10966	5	20	45	1	1.43	5	880	<5	
KR 10967	5	20	40	1	1.25	5	830	<5	
KR 10968	10	20	40	1	1.62	5	780	<5	
KR 10969	2	20	20	<1	0.30	5	600	<5	
KR 10970	2	15	20	<1	0.66	10	730	<5	

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

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LABORATORY REPORT

Batch No.: D081 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 618 Sample Type: ROCK No. of Samples: 86

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 10971	10	15	20	1	1.14	5	720	<5	
KR 10972	10	15	20	<1	0.51	10	650	<5	
KR 10973	10	20	30	<1	0.79	10	720	<5	
KR 10974	2	20	20	<1	0.62	5	770	<5	
KR 10975	10	115	70	1	1.47	10	0.11	% <5	
KR 10976	10	15	40	<1	0.94	5	990	<5	
KR 10977	<2	15	30	<1	0.72	10	960	5	
KR 10978	15	90	160	1	2.80	10	0.14	% 10	
KR 10979	10	20	80	<1	1.40	15	900	<5	
KR 10980	10	75	95	1	2.08	45	910	<5	
KR 10981	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10982	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10983	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10984	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10985	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10986	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10987	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10988	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10989	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10990	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10991	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10992	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10993	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10994	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10995	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10996	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10997	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 10998	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 13001	<2	10	50	1	0.65	5	600	<5	
KR 13002	2	20	15	1	0.31	5	790	<5	

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LABORATORY REPORT

Batch No.: D081 Client: GEOPEKO LIMITED, Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 18/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 22/04/83 N.S.W. 2072

Order No.: K 618 Sample Type: ROCK No. of Samples: 86

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 13003	5	20	10	1	0.35	5	450	<5	
KR 13004	<2	10	10	<1	0.31	5	470	<5	
KR 13005	2	15	25	1	0.39	5	690	<5	
KR 13006	2	10	20	<1	0.32	5	700	<5	
KR 13007	<2	10	10	1	0.36	5	980	<5	
KR 13008	<2	10	5	<1	0.24	5	970	<5	
KR 13009	<2	10	10	<1	0.37	5	850	<5	
KR 13010	<2	10	10	1	0.42	5	950	<5	
KR 13051	<2	20	35	1	0.59	5	660	5	
KR 13052	<2	100	60	1	0.78	5	0.12	% <5	
KR 13053	<2	170	70	1	1.03	5	0.19	% <5	
KR 13054	<2	260	70	1	1.01	3	0.16	% <5	
KR 13055	<2	300	40	1	0.61	5	0.16	% <5	
KR 13056	<2	240	40	1	0.72	5	0.13	% <5	
KR 13057	<2	820	25	3	0.47	<3	0.13	% <5	
KR 13058	<2	0.12	% 25	3	0.44	3	0.11	% <5	
KR 13059	5	720	20	20	0.39	<3	0.12	% <5	
KR 13060	5	780	20	14	0.35	<3	0.11	% <5	
KR 13061	2	140	30	10	0.49	5	970	<5	
KR 13062	2	125	20	15	0.20	10	0.14	% <5	
KR 13063	10	90	75	2	0.46	3	830	<5	
KR 13064	10	70	130	2	0.36	5	910	5	
KR 13065	<2	20	60	1	0.86	3	500	<5	
KR 13066	<2	20	70	1	0.96	3	560	<5	
KR 13067	<2	50	15	1	0.28	3	640	<5	
KR 13068	<2	35	15	2	0.31	10	530	<5	

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LABORATORY REPORT

Batch No.: D136 Client: GEOPEKO LIMITED. Area Contact: DR. ROSS LARGE.
Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/05/83 N.S.W. 2072

Order No.: K 620 Sample Type: ROCK No. of Samples: 115

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 10905	40	0.44	% 0.14	% 20	0.22	10	530	70	
KR 10906	40	0.52	% 0.10	% 24	0.36	15	620	125	
KR 10907	25	0.52	% 0.11	% 15	0.31	30	390	75	
KR 10908	10	0.36	% 480	10	0.27	3	920	35	
KR 10909	10	0.28	% 760	14	0.28	15	0.12	% 15	
KR 10910	40	0.36	% 0.11	% 12	0.43	20	730	80	
KR 10981	10	60	30	1	0.23	10	760	<5	
KR 10982	<2	20	10	1	0.13	5	750	<5	
KR 10983	5	50	60	1	0.92	60	860	<5	
KR 10984	10	30	70	1	0.98	5	890	<5	
KR 10985	20	190	150	1	2.38	20	0.11	% <5	
KR 10986	<2	40	110	1	2.00	<3	860	<5	
KR 10987	80	50	100	2	2.10	75	0.11	% <5	
KR 10988	10	30	100	1	2.20	<3	0.10	% <5	
KR 10989	2	20	60	1	1.24	<3	910	<5	
KR 10990	15	30	140	1	1.72	5	0.11	% <5	
KR 10991	10	10	20	1	0.49	<3	690	<5	
KR 10992	10	20	50	1	0.58	<3	610	<5	
KR 10993	10	10	30	1	0.75	<3	570	<5	
KR 10994	2	10	20	1	0.72	<3	590	<5	
KR 10995	10	20	90	1	1.50	<3	970	<5	
KR 10996	10	30	60	1	1.28	<3	820	<5	
KR 10997	10	50	110	1	2.12	<3	0.11	% <5	
KR 10998	30	40	70	1	1.32	<3	750	<5	
KR 13011	20	150	50	1	0.30	3	640	<5	
KR 13012	10	40	30	1	0.25	3	490	<5	
KR 13013	<2	5	10	1	0.20	<3	510	<5	
KR 13014	<2	<5	10	1	0.23	<3	370	<5	
KR 13015	<2	20	2	1	0.14	5	0.16	% <5	
KR 13016	<2	5	2	1	0.15	3	0.13	% <5	

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Address: P.O. BOX 217, Address: P.O. BOX 598,
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/05/83 N.S.W. 2072

Order No.: K 620 Sample Type: ROCK No. of Samples: 115

SAMPLE NO.	Cu m G001	Pb m G001	Zn m G001	Ag m G001	Fe % G001	Au b PM205	Ba m XRF 1A	As m XRF 1B	ELEMENTS UNITS METHODS
KR 13017	2	10	2	<1	0.20	<3	30	<5	
KR 13018	<2	10	2	<1	0.24	<3	130	<5	
KR 13019	<2	10	2	1	0.20	280	10	<5	
KR 13020	2	10	2	1	0.25	55	190	<5	
KR 13021	2	170	80	1	0.15	<3	840	<5	
KR 13022	2	860	310	1	0.22	<3	800	10	
KR 13023	5	250	130	1	0.27	<3	0.10	% 5	
KR 13024	2	0.24	% 840	2	0.29	<3	950	15	
KR 13025	15	0.96	% 0.34	% 24	1.82	<3	0.13	% 490	
KR 13026	30	440	100	10	4.13	<3	0.11	% 0.17 %	
KR 13027	10	0.15	% 0.32	% 7	1.03	5	0.15	% 250	
KR 13028	<2	20	30	1	0.26	3	0.13	% 10	
KR 13029	2	20	10	1	0.21	3	0.11	% 5	
KR 13030	5	10	2	1	0.15	5	0.13	% <5	
KR 13031	2	10	2	1	0.50	<3	0.14	% <5	
KR 13032	2	10	10	1	0.84	<3	0.17	% <5	
KR 13033	2	10	10	1	0.72	3	0.13	% <5	
KR 13034	2	10	10	<1	0.86	<3	0.13	% <5	
KR 13035	2	30	10	1	0.84	<3	0.14	% <5	
KR 13036	2	20	2	1	0.58	3	0.14	% <5	
KR 13037	2	20	10	<1	0.72	<3	0.13	% <5	
KR 13038	2	40	10	<1	0.48	3	0.12	% <5	
KR 13039	2	30	10	1	0.84	<3	0.12	% <5	
KR 13040	2	<5	10	1	0.80	<3	970	<5	
KR 13041	2	10	10	1	0.60	<3	460	<5	
KR 13042	2	10	10	1	0.94	<3	0.11	% <5	
KR 13043	2	10	10	1	1.06	<3	0.11	% <5	
KR 13044	2	220	10	1	0.84	3	0.12	% <5	
KR 13045	2	50	2	1	0.88	<3	0.13	% <5	
KR 13069	2	30	30	2	1.22	<3	800	<5	

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Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/05/83 N.S.W. 2072

Order No.: K 620 Sample Type: ROCK No. of Samples: 115

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 13070	2	20	40	2	1.04	<3	870	<5	
KR 13071	2	30	40	1	1.30	<3	0.11 %	<5	
KR 13072	2	50	80	1	1.26	<3	880	<5	
KR 13073	30	40	50	1	1.22	3	0.16 %	<5	
KR 13074	2	40	140	2	1.28	<3	0.17 %	<5	
KR 13075	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 13076	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	
KR 13077	2	40	20	1	0.86	<3	0.13 %	<5	
KR 13078	2	50	10	2	0.48	<3	0.11 %	<5	
KR 13079	2	80	2	2	0.35	<3	940	<5	
KR 13080	2	30	2	2	0.52	5	0.10 %	<5	
KR 13081	2	30	10	1	0.84	<3	730	<5	
KR 13082	2	30	10	1	0.66	<3	740	<5	
KR 13083	2	40	10	1	0.82	3	610	<5	
KR 13084	2	20	10	1	0.80	<3	540	<5	
KR 13085	2	60	10	1	0.70	<3	760	<5	
KR 13086	2	20	10	1	0.64	<3	420	<5	
KR 13087	2	10	2	1	0.36	<3	810	<5	
KR 13088	2	10	2	1	0.32	<3	780	<5	
KR 13089	2	50	10	1	0.35	<3	630	<5	
KR 13090	2	80	10	1	0.49	3	770	<5	
KR 13091	2	20	10	1	0.48	3	760	<5	
KR 13092	2	20	10	1	0.45	<3	760	<5	
KR 13093	2	20	10	1	0.46	<3	480	<5	
KR 13094	2	20	10	1	0.48	<3	430	<5	
KR 13095	2	20	10	1	0.32	3	350	<5	
KR 13096	2	400	10	2	0.32	5	330	<5	
KR 13097	2	30	10	1	0.30	3	570	<5	
KR 13098	2	30	10	1	0.36	5	490	<5	
KR 13099	2	70	60	1	0.50	3	710	<5	

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Address: P.O. BOX 217. Address: P.O. BOX 598.
Date Received 27/04/83 GORDON. DEVONPORT TAS. 7310
Date Completed 04/05/83 N.S.W. 2072

Order No.: K 620 Sample Type: ROCK No. of Samples: 115

SAMPLE NO.	Cu	Pb	Zn	Ag	Fe	Au	Ba	As	ELEMENTS
	m	m	m	m	%	b	m	m	UNITS
	G001	G001	G001	G001	G001	PM205	XRF 1A	XRF 1B	METHODS
KR 13100	2	80	60	1	0.60	10	720	<5	
KR 13101	2	10	10	1	0.20	3	30	<5	
KR 13102	2	10	2	1	0.20	5	10	<5	
KR 13103	2	10	10	1	0.46	<3	590	<5	
KR 13104	2	20	2	1	0.36	<3	570	<5	
KR 13105	2	10	2	1	0.26	3	300	<5	
KR 13106	2	10	10	1	0.40	3	320	5	
KR 13110	20	30	40	1	2.30	<3	0.21	% 10	
KR 13111	30	50	70	2	3.36	<3	770	15	
KR 13112	100	40	110	2	6.20	<3	290	100	
KR 13113	2	30	10	1	0.61	<3	0.13	% <5	
KR 13114	2	40	30	1	0.58	<3	990	5	
KR 13115	140	210	0.13	% 4	1.68	290	490	55	
KR 13116	70	0.40	% 360	2	1.10	100	920	45	
KR 13117	2	30	10	2	0.19	90	450	<5	
KR 13118	2	20	2	2	0.16	120	500	<5	
KR 13119	50	30	30	2	2.12	5	0.10	% 5	
KR 13120	40	50	70	1	2.38	<3	980	10	
KR 13121	10	40	50	2	3.95	<3	880	5	
KR 13122	2	40	50	1	0.76	3	480	5	
KR 13123	10	40	50	1	0.86	<3	740	<5	
KR 13124	20	110	120	1	2.55	5	520	<5	
KR 13125	2	20	10	1	1.77	10	500	<5	
KR 13126	2	110	20	1	0.47	<3	340	<5	
KR 13127	30	640	60	2	0.50	<3	410	<5	

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APPENDIX V

LEAD ISOTOPE ANALYSES

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LEAD ISOTOPIC ANALYSIS FOR ELLIOTT BAY AND EAST MACKINTOSH

Sample	208/206	207/206	206/204	207/204	208/204	Pb(ppm)	
ELLIOT BAY VOYAGER 24	GROUP 2		(BATCH A)				
KR 7464	2.0782	0.8477	18.409	15.605	38.257	780	
KR 7465	2.0841	0.8506	18.359	15.616	38.262	415	
KR 7466	2.0887	0.8541	18.300	15.631	38.223	1,650	2
KR 7467	2.0790	0.8480	18.414	15.615	38.283	700	
KR 7468	2.0786	0.8478	18.414	15.611	38.275	725	
KR 7469	2.0872	0.8538	18.286	15.613	38.165	1,150	
			$\bar{x}$ 18.364				
			s 0.059				
ELLIOT BAY VOYAGER 19	GROUP 1		(BATCH B)				
KR 7277	2.0928	0.8590	18.163	15.602	38.010	1,750	
KR 7278	2.0950	0.8615	18.093	15.587	37.904	6,000	
KR 7279	2.0974	0.8621	18.104	15.608	37.972	16,000	
KR 7280	2.0956	0.8614	18.098	15.589	37.925	11,500	1
KR 7281	2.0976	0.8619	18.091	15.592	37.947	4,500	
KR 7282	2.0981	0.8627	18.087	15.603	37.948	50,000	
KR 7283	2.0962	0.8617	18.089	15.588	37.917	3,100	
			$\bar{x}$ 18.104				
			s .027				
ELLIOT BAY VOYAGER 2	GROUP 3		(BATCH C)				
KR 5810	2.0938	0.8587	18.167	15.600	38.038	29,600	
KR 5811	2.0937	0.8584	18.160	15.588	38.022	24,000	
KR 5812	2.0955	0.8594	18.186	15.629	38.109	17,600	
KR 5813	2.0942	0.8591	18.176	15.615	38.063	20,000	4
KR 5814	2.0950	0.8592	18.180	15.621	38.087	20,800	
KR 5815	2.0918	0.8579	18.185	15.600	38.040	8,000	
			$\bar{x}$ 18.176				
			s 0.010				
ELLIOT BAY VOYAGER 31	GROUP 4		(BATCH D)				
KR 7435	2.0764	0.8454	18.490	15.632	38.392	55,000	
KR 7436	2.0754	0.8454	18.477	15.620	38.348	50,000	
KR 7437	2.0756	0.8454	18.476	15.619	38.348	18,000	5
KR 7438	2.0782	0.8471	18.453	15.632	38.350	12,000	
KR 7439	2.0805	0.8476	18.466	15.652	38.419	10,000	
			$\bar{x}$ 18.492				
			s				
ELLIOT BAY VOYAGER 24	GROUP 6		(BATCH F)				
TS 10407	2.0930	0.8535	18.290	15.610	38.281	40	
TS 10408	2.0825	0.8515	18.331	15.609	38.173	200	
TS 10409	2.0820	0.8527	18.292	15.598	38.084	160	3
TS 10410	2.0850	0.8520	18.328	15.616	38.213	345	
			$\bar{x}$ 18.310				
			s 0.027				
REF QUE RIVER							
	2.0808	0.8517	18.331	15.613	38.143		
	2.0836	0.8521	18.359	18.294 $\bar{x}$ 15.644	38.253		
	2.0833	0.8540	18.270	0.036 s 15.603	38.062		
	2.0884	0.8548	18.310	15.651	38.239		
	2.0842	0.8541	18.260	15.596	38.057		
	2.0866	0.8547	18.273	15.618	38.128		
	2.0827	0.8538	18.265	15.595	38.041		
	2.0857	0.8537	18.286	15.611	38.139		
	2.0747	0.8424	18.550	15.627	38.486		
	2.0765	0.8437	18.528	$\bar{x}$ 18.573 15.632	38.473		
	2.0727	0.8414	18.578	s 0.046 15.632	38.507		
	2.0755	0.8430	18.635	15.709	38.677		

478291

Lead isotopic ratios and lead concentrations for samples from Elliott Bay

Sample	208/206	207/206	206/204	207/204	208/204	Pb(ppm)
ELLIOTT BAY VOYAGER 19B						
KR 7542	2.0992	0.8631	18.081	15.605	37.956	
KR 7543	2.0987	0.8628	18.093	15.610	37.971	
KR 7544	2.0978	0.8631	18.066	15.593	37.900	
KR 7545	2.0967	0.8611	18.142	15.622	38.039	
KR 7546	2.0961	0.8613	18.120	15.607	37.981	
KR 7548	2.0963	0.8613	18.121	15.608	37.987	
KR 7549	2.0963	0.8619	18.097	15.597	37.937	
ELLIOTT BAY VOYAGER 29 S						
TS 15240	2.0848	0.8517	18.355	15.633	38.265	255
TS 15242	2.0880	0.8538	18.307	15.631	38.225	530
TS 15243 A	2.0894	0.8560	18.240	15.614	38.112	1,650
TS 15243 B	2.0890	0.8560	18.234	15.607	38.091	1,650
TS 15250	2.0906	0.8557	18.271	15.635	38.199	1,750
TS 16614	2.0899	0.8557	18.266	15.630	38.174	1,050
TS 16615	2.0883	0.8553	18.273	15.629	38.160	1,150
TS 16637	2.0881	0.8547	18.267	15.613	38.143	1,500
ELLIOTT BAY VOYAGER 29 R						
KR 11951	2.0885	0.8549	18.263	15.613	38.142	7,750
KR 11952	2.0874	0.8556	18.231	15.599	38.055	62,000
KR 11953 A	2.0536	0.8031	19.524	15.680	40.093	50
KR 11953 B	2.0534	0.8025	19.544	15.685	40.131	50
KR 11954	2.0881	0.8555	18.246	15.609	38.099	8,150
KR 11955 A	2.0763	0.8453	18.488	15.629	38.385	2,250
KR 11955 B	2.0770	0.8454	18.492	15.634	38.409	2,250
KR 11956	2.0881	0.8550	18.270	15.620	38.149	3,700
ELLIOTT BAY VOYAGER 30						
TS 16709	2.0846	0.8540	18.264	15.598	38.073	1,000
TS 16714	2.0887	0.8555	18.247	15.611	38.112	920
TS 16715	2.0877	0.8547	18.263	15.609	38.127	5,200
TS 16774 A	2.0571	0.8183	19.131	15.656	39.355	1,700
TS 16774 B	2.0401	0.8154	19.210	15.664	39.190	1,700
KR 11957	2.0653	0.8375	18.673	15.638	38.565	
KR 11958	2.0677	0.8383	18.673	15.654	38.610	
ELLIOTT BAY VOYAGER 33						
TS 16163	2.0775	0.8459	18.468	15.623	38.367	1,000
TS 16164	2.0727	0.8436	18.504	15.611	38.353	2,500
TS 16166	2.0734	0.8439	18.506	15.617	38.370	1,250
TS 16167	2.0765	0.8449	18.506	15.635	38.428	570
TS 16288	2.0745	0.8441	18.501	15.616	38.380	445
TS 16293	2.0752	0.8444	18.508	15.629	38.407	16,500
TS 16294	2.0767	0.8445	18.499	15.623	38.418	285
ELLIOTT BAY VOYAGER 9						
TS 15256	2.0892	0.8569	18.195	15.592	38.013	3,000
TS 15257	2.0894	0.8561	18.221	15.599	38.071	725
TS 15258	2.0867	0.8546	18.242	15.589	38.064	295
TS 15260	2.0849	0.8523	18.310	15.606	38.175	470
TS 15261	2.0856	0.8526	18.309	15.611	38.185	535
TS 15264	2.0834	0.8509	18.341	15.605	38.212	285
TS 15265	2.0893	0.8559	18.253	15.622	38.135	1,000
ELLIOTT BAY VOYAGER 34						
TS 17682 B	2.0862	0.8536	18.248	15.577	38.067	1,700
TS 17684	2.0900	0.8562	18.243	15.621	38.129	3,050
TS 17686	2.0888	0.8557	18.240	15.607	38.100	795
TS 17687	2.0923	0.8560	18.250	15.622	38.184	520
TS 17688 A	2.0877	0.8558	18.223	15.595	38.045	2,000
TS 17688 B	2.0907	0.8566	18.222	15.608	38.096	2,000
TS 17690	2.0885	0.8552	18.260	15.615	38.135	725
TS 17693 A	2.0885	0.8561	18.225	15.601	38.063	3,950
TS 17693 B	2.0875	0.8560	18.208	15.587	38.010	3,950

ISOTOPIC ANALYSES FROM ELLIOTT BAY.

Sample	208/206	207/206	206/204	207/204	208/204	Pb (ppm)
VOYAGER 19 VOLCANIC ROCK						
V19-1 KR8898	2.0235	0.7752	20.269	15.713	41.015	20
V19-1 KR8974	2.0892	0.8562	18.240	15.617	38.106	6,150
V19-1 KR9022	2.0892	0.8516	18.338	15.617	38.311	410
V19-3 KR9444	2.0673	0.8226	19.007	15.636	39.294	20
V19-3KR10462	2.0731	0.8389	18.607	15.609	38.574	30
V19-4KR10006	2.0916	0.8561	18.210	15.589	38.087	510
V19-4KR10025	1.9795	0.7078	22.375	15.836	44.292	20
VOYAGER 19 SOUTHERN Pb-Zn ANOMALY						
TS 15059	2.0897	0.8518	18.327	15.611	38.298	90
TS 15060	2.0875	0.8548	18.261	15.610	38.119	1,500
TS 15061	2.0871	0.8548	18.255	15.603	38.098	1,500
TS 15062	2.0871	0.8549	18.243	15.596	38.074	890
TS 15063	2.0906	0.8532	18.265	15.583	38.183	890
TS 15064	2.0872	0.8531	18.289	15.601	38.173	200
TS 15089	2.0868	0.8519	18.326	15.612	38.242	175
VOYAGER 19 WESTERN Pb-Zn ANOMALY						
TS 9702	2.1031	0.8500	18.340	15.590	38.571	55
TS 9703	2.0881	0.8562	18.211	15.591	38.025	135
TS 9704	2.0887	0.8549	18.242	15.596	38.101	305
TS 9705	2.0838	0.8517	18.320	15.604	38.175	1,500
TS 10506	2.0904	0.8521	18.336	15.623	38.329	40
VOYAGER 29 WESTERN Pb-Zn ANOMALY						
TS 15336	2.0857	0.8524	18.310	15.606	38.188	310
TS 15367	2.0834	0.8509	18.344	15.609	38.219	175
TS 16513	2.0880	0.8535	18.303	15.622	38.215	250
TS 16515	2.0872	0.8548	18.256	15.605	38.104	1,200
TS 16516	2.0809	0.8446	18.482	15.610	38.459	80
TS 16517	2.0852	0.8528	18.303	15.609	38.166	565
VOYAGER 30 BARREN GRANITE						
TS 16875	2.0473	0.8042	19.486	15.671	39.894	25
TS 16877	1.8252	0.7064	22.406	15.828	40.895	30
TS 16878	2.0547	0.8288	18.869	15.639	38.770	90
TS 16879	2.0152	0.8173	19.159	15.659	38.609	95
TS 16880	1.9667	0.7833	20.059	15.712	39.450	30
VOYAGER 3 MINERALIZED TUFFS						
KR 12701	2.0872	0.8544	18.258	15.600	38.109	1,250
KR 12702	2.0874	0.8541	18.277	15.611	38.150	1,625
KR 12703	2.0845	0.8524	18.310	15.608	38.167	415
KR 12704	2.0830	0.8516	18.326	15.607	38.174	475
KR 12705	2.0873	0.8540	18.278	15.609	38.151	470
KR 12706	2.0875	0.8534	18.285	15.604	38.171	120
VOYAGER 3 BARREN VOLCANICS						
KR 12707	2.0764	0.8427	18.521	15.607	38.456	40
KR 12708	2.0725	0.8382	18.622	15.609	38.594	45
KR 12709	2.0781	0.8471	18.417	15.602	38.272	60
KR 12710	2.0721	0.8426	18.517	15.602	38.369	70
KR 12711	2.0812	0.8420	18.525	15.598	38.555	30
KR 12712	2.0819	0.8516	18.272	15.559	38.039	30
REFERENCE POINTS						
HERCULES	2.0842	0.8538	18.276	15.604	38.091	
QUEEN HILL	2.0740	0.8438	18.519	15.626	38.408	

ISOTOPIC ANALYSES FROM ELLIOTT BAY.

Sample	208/206	207/206	206/204	207/204	208/204	Pb (ppm)
VOYAGER 20 SOIL						
TS 18025a	2.0935	0.8578	18.195	15.607	38.090	22,500
TS 18025b	2.0920	0.8576	18.186	15.597	38.043	22,500
TS 18165	2.0817	0.8458	18.456	15.610	38.419	135
TS 18166	2.0919	0.8570	18.204	15.602	38.081	505
TS 18168	2.0919	0.8574	18.189	15.595	38.049	1,150
TS 18170	2.0917	0.8570	18.204	15.601	38.077	935
TS 18173	2.0873	0.8511	18.365	15.630	38.334	85
VOYAGER 16 SOIL						
TS 9559	2.0842	0.8513	18.348	15.620	38.240	425
TS 9560	2.0796	0.8447	18.493	15.621	38.459	45
TS 9561	2.0808	0.8475	18.438	15.626	38.366	1,950
TS 9562	2.0858	0.8530	18.296	15.606	38.162	220
TS 9563	2.0831	0.8502	18.371	15.619	38.268	295
TS 9564	2.0809	0.8466	18.431	15.603	38.352	15
VOYAGER 29 WESTERN CHARGEABILITY ANOMALY						
KR 13021	2.0895	0.8555	18.227	15.594	38.087	170
KR 13022	2.0890	0.8561	18.230	15.606	38.082	860
KR 13023	2.0896	0.8557	18.234	15.603	38.101	250
KR 13024	2.0888	0.8565	18.211	15.597	38.039	2,400
KR 13025	2.0898	0.8567	18.207	15.599	38.049	9,600
KR 13026	2.0881	0.8563	18.200	15.585	38.003	440
KR 13027	2.0894	0.8567	18.209	15.599	38.046	1,500
VOYAGER 33 1420ON ANOMALY						
KR 13057	2.0898	0.8567	18.205	15.597	38.046	820
KR 13058	2.0893	0.8566	18.207	15.596	38.040	1,200
KR 13059	2.0894	0.8566	18.204	15.593	38.034	720
KR 13060	2.0905	0.8564	18.219	15.603	38.087	750
KR 13061	2.0913	0.8548	18.254	15.604	38.175	140
KR 13062	2.0912	0.8545	18.245	15.591	38.153	125
VOYAGER 34 NORTHERN SOIL ANOMALY						
TS 21545	2.0886	0.8563	18.221	15.603	38.057	1,300
TS 21622	2.0899	0.8556	18.238	15.604	38.117	460
TS 21623	2.0907	0.8561	18.237	15.614	38.130	450
TS 21624	2.0850	0.8523	18.313	15.607	38.183	30
TS 21655	2.0896	0.8571	18.194	15.594	38.018	4,000
TS 21786	2.0870	0.8549	18.249	15.601	38.086	580
VOYAGER 12 DDH3						
KR 6508	2.0898	0.8567	18.208	15.600	38.050	3,200
KR 6513	2.0889	0.8554	18.247	15.607	38.116	760
KR 6553	2.0843	0.8504	18.369	15.621	38.286	500
KR 6559	2.0808	0.8479	18.422	15.620	38.332	1,200
KR 6584	2.0848	0.8517	18.327	15.609	38.207	560
KR 6587	2.0857	0.8531	18.291	15.605	38.150	4,000

478294

D of M | A.O. | C.G. | E.O. | D.S.M.E.
Registrar
Received Answered 22 DEC 1983
DEPT. OF MINES
REF. No. 12,142/83

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LIMITED

EXPLORATION LICENCE 27/76

ELLIOTT BAY, TASMANIA

ANNUAL REPORT

1982-83 FIELD SEASON

PLANS 1 - 29

W. Herrmann
November, 1983

OPEN FILE

Superficial residual quartz rubble

Qa Alluvium

Tg Unconsolidated Tertiary Gravel

18 O Ordovician "Owen" conglomerate / quartzite

CAMBRIAN

TYNDAL GROUP CORRELATES

3 Grey - black shale / siltstone

3a Coarse rhyolitic epiclastics & sandstone

DUNDAS GROUP?

29 Greywacke, shale

MAINWARING GROUP

36 Andesitic - basaltic lava, breccia, tuff, tuffaceous shale

46 Dolomitic shale, dolomite

WESTERN VOLCANO - SEDIMENTARY SEQUENCE

36 Tuffaceous greywacke, sst, conglomerate Rhyolitic epiclastics

39 Argillaceous phyllite, siltstone, black slate

27 "Pander's Tuffs" Rhyolitic crystal tuff, minor sediment

WART HILL ACID PYROCLASTICS

48 Rhyolitic qtz phyric lava

30 Sericitic quartz crystal tuff lithic tuff, rhyolitic agglomerate

44 Chloritic quartz feldspar crystal lithic tuff

47 Variable highly chloritic (altered?) pyroclastics & f.g. lavas

46 Chloritic c.g. quartz phyric lava

47 Fine grained aphyric dacite lava

60 Quartz pebble conglomerate, micaceous sandstone, siltstone

85 Pyritic grey - black slate, siltstone

19 STONY CRK PORPHYRITIC MICROGRANITE

WANDERER RIVER TUFF

38 Pink hematitic rhyolitic crystal / lithic tuff, lava

HUDSON RIVER PYROCLASTICS

40 Chloritic qtz feldspar crystal / lithic tuff, rhyolitic qtz biotite phyric lava

58 Shale, greywacke, fine tuffaceous sediment

ELLIOTT POINT PORPHYRY

22 Coe. grained qtz feldspar - biotite porphyry probable sub-volcanic intrusive

CAMBRIAN GRANITES

19 Undifferentiated Granite

85 PRE ℄ ARTHUR GROUP - Undifferentiated qtzt & meta-seds

39 Undifferentiated Acid Volcanics.

5 cm

DATE: OCT' 1980
UPDATE JUN 83
GEOLOGIST: R.R.L. W.H.
DRAWN: J. P. M.
CHECKED:

GEOPEKO
A DIVISION OF PEKO - WALLSEND OPERATIONS LTD 478295

1000 750 500 250 0 1000 2000 3000
SCALE: 1:42 000

TS 27/76-6I

E.L. 27/76 ELLIOTT BAY, TASMANIA

INTERPRETATION GEOLOGY 974

COMBINATION OF FACT GEOLOGY AND PHOTO INTERPRETATION

83-2076

Plan 1

MT OSMUND
368m
TRIG 634

Massive Sulphide Lenses

Porphyritic Microgranite

"dacite lava"

pebbly conglomerate (siliceous)

grey-blk. arg. sh/slst

tuff slst/sst

tuff slst/sst

cong/ tuff sst

blk. sh/slst

blk. sh/slst

chl. qfxt

ser qxt

qpl

chl. qfx-lt

ser lqxt

chl. lithic tuff

micaceous slst.

micaceous sst.

ser qxt

undifferentiated tuffs

py. shale

tuffaceous sst.

py blk. sh.

chl. aggl.

chl. qf xlt

tuff-congl. sst, slst, shale.

reworked tuffs and pebbly congl.

foliated siliceous congl.

qfxll

tuff-lava?

cg. qfx-lt.

ser qx-lt.

qtzite congl qtz. breccia

qtz. breccia

chl. qp

qx-lt

qtzite siliceous congl.

siliceous congl.

qx-lt

ser qfxll

grey-blk argillaceous shales and siltstones

blk. shale

pebbly tuff-congl.

py t-sst

reworked conglomerate tuff. sst.

blk. sh. / slst.

mg. chl. qfxt

mg. ser. qxt

qfp. lava

mg. ser. qx. lr

fmg. ser qfx. lr

qbi p lava

qbi pl

ser qxt

silic. aggl.

qf pl.

qbi pl.

qbi pl.

ser qxt

ser. qxt

blk. shales / siltstones

interbedded ser qtz. tuffs

ser. qxt

undifferentiated tuffs

ser lqxt

tg qfxt (interbedded)

qfxt

qfxt

qfxt

gpl

V19-1

V19-2

V19-3

V19-4

V19-5

V24-1

V9-1

V9-2

V9-3

1250N

1125ON

Superficial residual quartz rubble

Qa Alluvium

Tg Unconsolidated Tertiary Gravel

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CAMBRIAN

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39 UNDIFFERENTIATED ACID VOLCANICS

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CAMBRIAN GRANITES

19 Undifferentiated Granite

66 PRE C ARTHUR GROUP - Undifferentiated qtzt & meta-seds

TOPOGRAPHY

Creek or river

500 Topographic contour

NOTE: CONTOUR INTERVALS ARE 50 feet IMPERIAL.

GN MN 13°00'

Interpreted By: W.H

Drawn By: R.Tog

Date: Oct '83

Approved By: W.H.

Revision By: Date:

Revision By: Date:

Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DEVONPORT BASE

Scale 1:10 000

200 0 200 400 600 800

metres

DRAWING NO. 2

SHEET NO.

E.L.27/76 ELLIOTT BAY, TASMANIA

TOPOGRAPHY

GEOLOGY

83-2076

975

377 000E
378 000E
379 000E
380 000E
381 000E
382 000E
383 000E
5 254 000 N
5 253 000 N
5 252 000 N
5 251 000 N
5 250 000 N
5 249 000 N
5 248 000 N
5 247 000 N
5 246 000 N
5 245 000 N
9 300E
11 500E
11 300E
10 000E
14 600 N
14 400N
14 200 N
13 800 N
13 600N
13 200 N
13 000 N
12 800 N
12 600N
12 400N
12 200 N
12 000 N
11 800 N
11 600N
11 400N
11 200N
11 000N
10 800N
10 600N
10 400N
10 200N
10 000 N
9 800 N
9 600N
9 400N
9 200N
9 000N
8 800N
8 600N
8 400 N
8 200 N
8 000 N
7 800 N
7 600 N
7 400 N
7 200 N
7 000 N
11250N
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000

5 cm

GN MN
13°00'

GROUND MAGNETICS
900 Magnetic contour
CONTOUR INTERVAL 200nT
m m Lines surveyed

Interpreted By: W.H
Drawn By: R.Tog
Date: Oct 83
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
DEVONPORT BASE
Scale 1:10 000
200 0 200 400 600 800
metres
DRAWING NO. 3
SHEET NO.

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076 GROUND MAGNETICS 976

478297

377 000E
378 000E
379 000E
380 000E
381 000E
382 000E
383 000E

5 254 000 N
5 253 000 N
5 252 000 N
5 251 000 N
5 250 000 N
5 249 000 N
5 248 000 N
5 247 000 N
5 246 000 N
5 245 000 N

9 300E
11 500E
11 300E
10 000E
10 000E

14 600N
14 400N
14 200N
13 800N
13 600N
13 200N
13 000N
12 800N
12 600N
12 400N
12 200N
12 000N
11 800N
11 600N
11 400N
11 200N
11 000N
10 800N
10 600N
10 400N
10 200N
10 000N
9 800N
9 600N
9 400N
9 200N
9 000N
8 800N
8 600N
11250N
8 400N
8 200N
8 000N
7 800N
7 600N
7 400N
7 200N
7 000N

478298

GEOCHEMISTRY

LINE WIDTH

0·25mm	———	Base line
0·35mm	———	25m sample interval
0·35mm	— — — —	100m sample interval
0·70mm	———	2 or 5m sample interval
0·70mm	— — — —	10 or 12·5m sample interval

CONTOURS AT 200ppm, 400ppm & 800ppm.

GN MN
13°00'

5 cm

Interpreted By: W.H
Drawn By: R.Tog
Date: Oct 83
Approved By: M.J.K.
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DEVONPORT BASE

Scale 1:10 000

200 0 200 400 600 800

metres

DRAWING NO. 4

SHEET NO.

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076 Lead GEOCHEMISTRY

977

377 000E | 378 000E | 379 000E | 380 000E | 381 000E | 382 000E | 383 000E

5 254 000 N

9 300E

11 500E

14 600N
14 400N
14 200N
13 800N
13 600N
13 200N
13 000N
12 800N
12 600N
12 400N
12 200N
12 000N
11 800N
11 600N
11 400N
11 200N
11 000N
10 800N
10 600N
10 400N
10 200N
10 000N
9 800N
9 600N
9 400N
9 200N
9 000N
8 800N
8 600N
8 400N
8 200N
8 000N
7 800N
7 600N
7 400N
7 200N
7 000N

11 300E

11250N

5 253 000 N
5 252 000 N
5 251 000 N
5 250 000 N
5 249 000 N
5 248 000 N
5 247 000 N
5 246 000 N
5 245 000 N

10 000E

GEOCHEMISTRY

LINE WIDTH

0·25mm	———	Base line
0·35mm	———	25m sample interval
0·35mm	— — —	100m sample interval
0·70mm	———	2 or 5m sample interval
0·70mm	— — —	10 or 12·5m sample interval

CONTOURS AT 200ppm, 400ppm & 800ppm.

GN MN 13°00'

5 cm

Interpreted By: W.H
Drawn By: R.Tog
Date: Oct 83
Approved By: W.H.
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DEVONPORT BASE

Scale 1:10 000

200 0 200 400 600 800 metres

DRAWING NO. 5

SHEET NO.

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076 Zinc GEOCHEMISTRY 978

478299

9 300E

11 500E

14 600N

14 400N

14 200N

13 800N

13 600N

13 200N

13 000N

12 800N

12 600N

12 400N

12 200N

12 000N

11 800N

11 600N

11 400N

11 200N

11 000N

10 800N

10 600N

10 400N

10 200N

10 000N

9 800N

9 600N

9 400N

9 200N

9 000N

8 800N

8 600N

11250N

8 400N

8 200N

8 000N

7 800N

7 600N

7 400N

7 200N

7 000N

10 000E

10 000E

478300

5 cm

Interpreted By:	J.S
Drawn By:	R.Tog
Date:	Oct. 83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:10 000

200 0 200 400 600 800

metres

DRAWING NO. 6

SHEET NO.

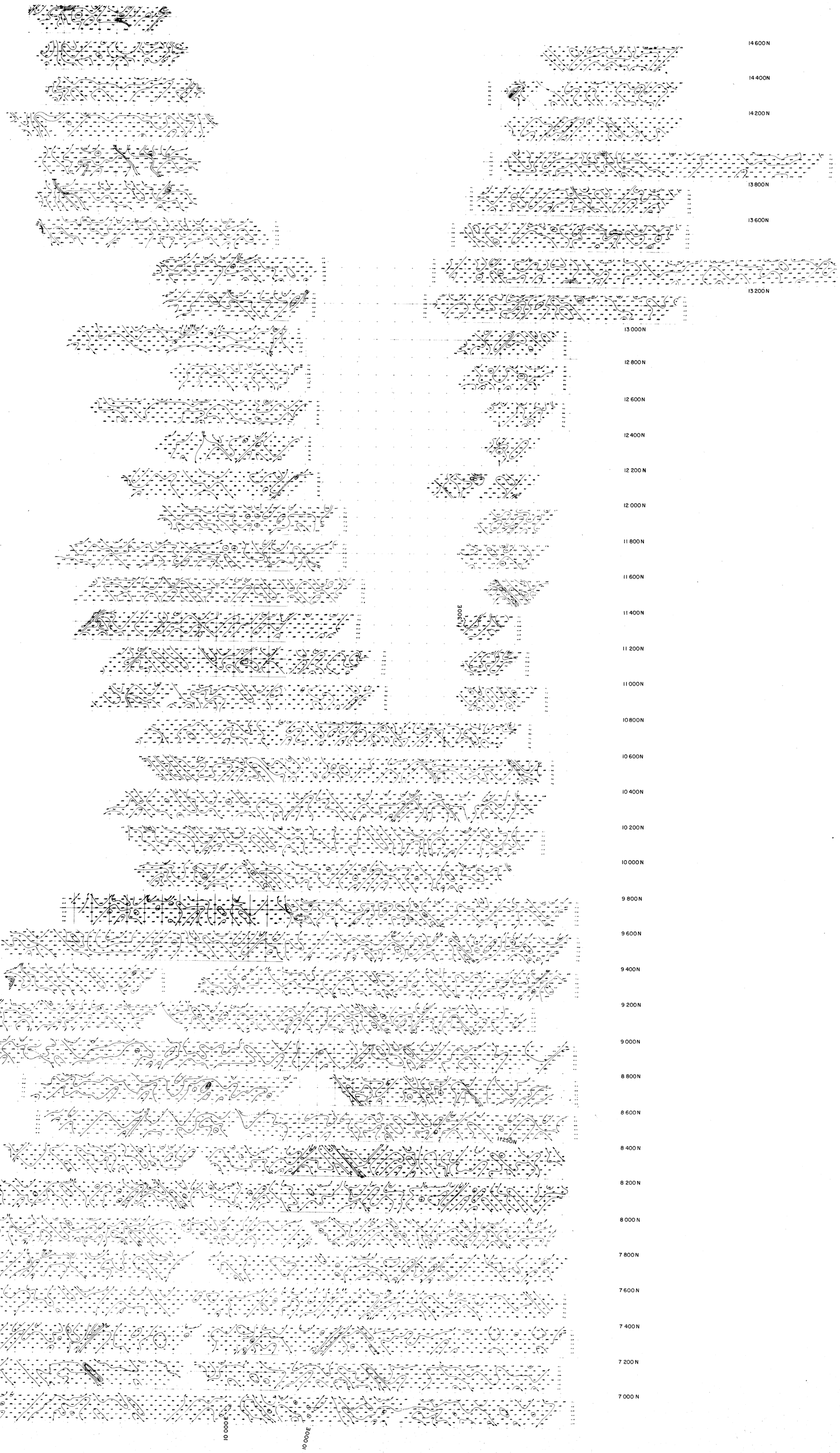
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

I.P. PSEUDOSECTIONS

CHARGEABILITY

979



478301

5 cm

Interpreted By:	J.S
Drawn By:	R.Tog
Date:	Oct. 83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:10 000

200 0 200 400 600 800

metres

DRAWING NO. 7

SHEET NO.

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076 I.P. PSEUDOSECTIONS

RESISTIVITY

980

374 000 E | 375 000 E | 376 000 E | 377 000 E | 378 000 E | 379 000 E | 380 000 E | 381 000 E | 382 000 E

5 250 000 N
5 249 000 N
5 248 000 N
5 247 000 N
5 246 000 N
5 245 000 N

EL. 27/76 BOUNDARY

DEC. 1980 Samples

Granite

Zone of anomalous Sn (>100ppm)
W (>100ppm)
Au (>500ppb)

Au ppb
Sn ppm
W ppm

5 cm

GN MN
13°00

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

SCALE: 1:10,000

No. KT27/76-9

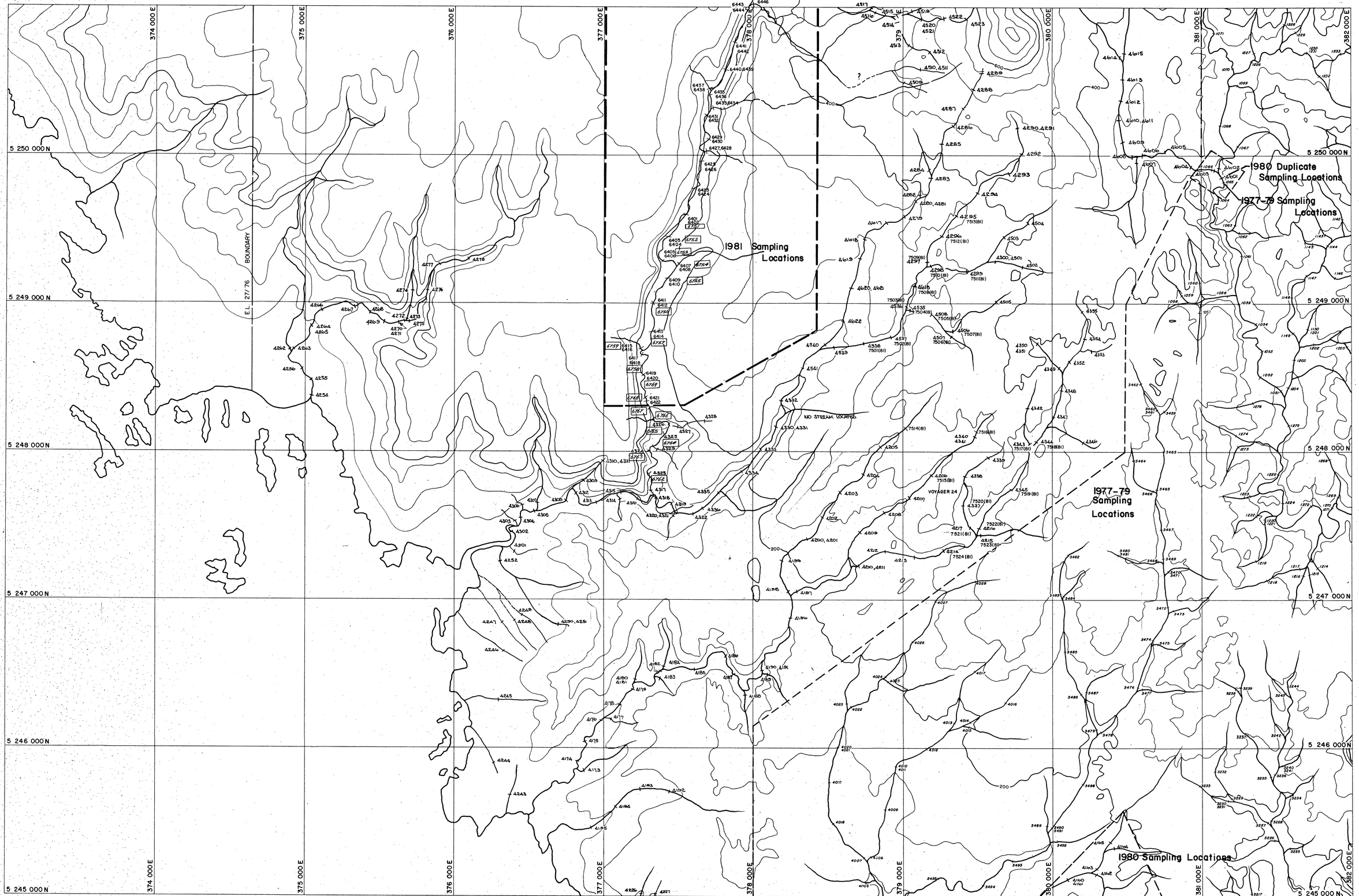
DATE: 10/5/82
GEOLOGIST: R.J.P.
DRAWN: R.J.Tog.
CHECKED: [illegible]

E.L. 27/76 83-2076 Vol 2
ELLIOTT BAY, TASMANIA
PANNED CONCENTRATE DRAINAGE
RESULTS, Au, Sn & W Plan 8

KT27/76-1	KT27/76-2
KT27/76-3	KT27/76-4
KT27/76-5	KT27/76-6
KT27/76-7	KT27/76-8

478302

921



LEGEND:

1977–1979 Sampling

— 4019 Drainage sample No. KD 4019

— 4020 / 4021 Drainage sample No. KD 4020 / Duplicate drainage sample No KD 4021

1980 Sampling

— 4329 DRAINAGE SAMPLE No KD 4329

— 4270 DRAINAGE SAMPLE No KD 4270

— 4271 DUPLICATE DRAINAGE SAMPLE No KD 4271

6767 1983 DRAINAGE LOCATION UPDATE

5 cm

GEOPEKO

SCALE: 1: 10,000

No. KT27/76-5C

DATE: Feb 1978 & AUG. 1979

GEOLOGIST: C.D.S.

DRAWN: L.G. & J.P.M.

CHECKED:

83-2076

E.L. 27/76

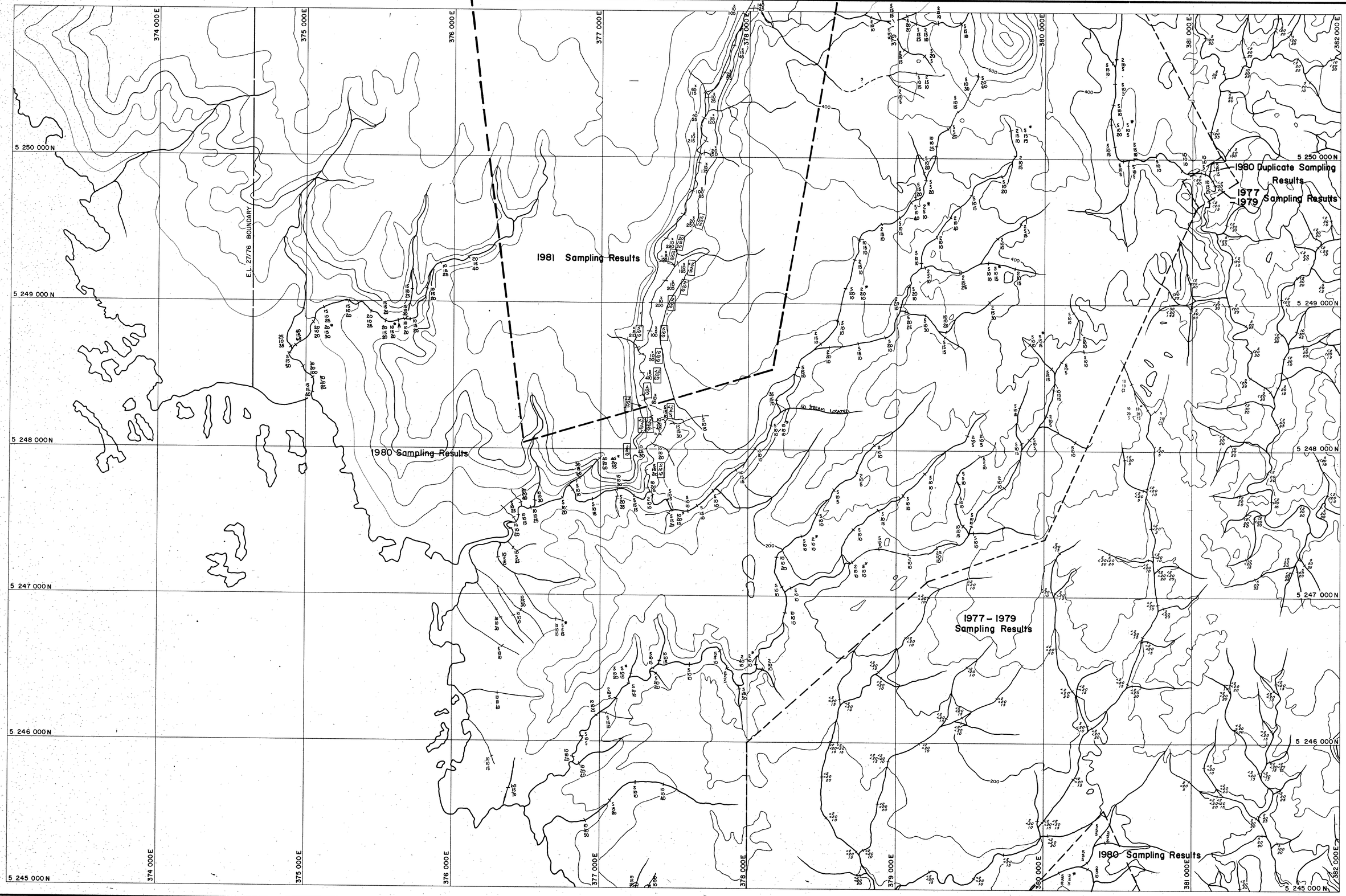
ELLIOTT BAY, TASMANIA

DRAINAGE SAMPLE LOCATION MAP

Plan 9 982

KT27/76-1	KT27/76-2
KT27/76-3	KT27/76-4
KT27/76-5	KT27/76-6
KT27/76-7	KT27/76-8

478303



LEGEND: 1977 - 1979 Sampling

2 Cu ppm
60 Pb ppm
80 Zn ppm

ANALYTICAL METHODS: Cu, Pb and Zn by A.A.S. following conc. HCL leach and HCL / HNO3 leach in latter stages for 1 hour of 0·25g sample.
A.C.S. Laboratories Pty. LTD.

1980 Sampling

10 Cu ppm
10 Pb ppm
60 Zn ppm

A. A. S. Analyses at A.L.S. Brisbane.

Anomalous Values - Drainage Samples
(colour marked from sample location upstream to next location)

Copper > 5 ppm (1977-79 Sampling)
> 10 ppm (1980 Sampling)
Lead > 30 ppm (all Sampling)
Zinc > 35 ppm (all Sampling)

5 cm

GEOPEKO 478304

SCALE: 1:10,000

No. KT27/76-5 B

KT27/76-1	KT27/76-2
KT27/76-3	KT27/76-4
KT27/76-5	KT27/76-6
KT27/76-7	KT27/76-8

DATE: July 1978 Aug 1979
GEOLOGIST: C.D.S.
DRAWN: J.P.M.
CHECKED: C.D.S.

83-2076 215

Plan 10 983

E.L. 27/76
ELLIOTT BAY, TASMANIA
DRAINAGE GEOCHEMICAL RESULTS
COPPER, LEAD and ZINC

-80 %

8 500mE | 8 600mE | 8 700mE | 8 800mE | 8 900mE | 9 000mE | 378 000mE A.M.G. | 9 100mE | 9 200mE | 9 300mE | 9 400mE | 9 500mE | 9 600mE | 9 700mE | 9 800mE | 9 900mE | 10 000mE | 10 100mE

15 400mN | 15 300mN | 15 200mN | 15 100mN | 15 000mN | 14 900mN | 14 800mN | 14 700mN | 5 253 000mN.A.M.G. | 14 600mN | 14 500mN | 14 400mN | 14 300mN | 14 200mN | 14 100mN | 14 000mN | 13 900mN | 13 800mN | 13 700mN | 13 600mN | 13 500mN | 13 400mN | 13 300mN | 13 200mN

COPPER CREEK | PLEASANT CREEK | RAIN FOREST | EUCALYPT + BAUERA | EUCALYPT + TEA TREE | Trench | Pits | KR9623 | KR9625 | KR9626 | KR9627 PIT | KR9628 PIT | KR9629 | KR9630 | KR9631 | KR9632 | KR9633 | KR9634 | KR9635 | KR9636 | KR8674

LEGEND:

VOLCANIC ROCKS

lt	lithic tuff
xt	crystal tuff
vt	vitric tuff
xlt	crystal lithic tuff
agg	agglomerate rounded clasts 32mm.
fr	fragmental angular clasts 32mm.
ut	undifferentiated tuffs
t	tuff
qp	quartz porphyry
qfp	quartz feldspar porphyry
qfbp	quartz feldspar biotite porphyry
l	as a suffix denotes lava
lap	lapilli

PREFIXES (no prefix indicates acid composition)

a	acid
i	intermediate
rhy	rhyolite or rhyolitic
dac	dacite or dacitic
and	andesite or andesitic
b	basalt or basaltic
bs	basic

SEDIMENTARY ROCKS

sh	shale
sl	siltstone
blksh	blackshale
sst	sandstone
qtz	quartzite
gwk	greywacke
ct	chert
lmst	limestone
dol	dolomite
bx	breccia
congl	conglomerate
vs	volcaniclastic sediment

METAMORPHIC ROCKS

phy	phyllite
sch	schist
gns	gneiss
hfs	hornsfels
mb	marble

INTRUSIVE ROCKS

gr	granite
gd	granodiorite
ad	adamellite
dl	dolerite
lp/lamp	lamprophyre
bd	basic dyke
ap	aplite
pg	pegmatite
qv	quartz veins

STRUCTURAL AND TEXTURAL

p	porphyritic
clvd	strongly cleaved
shd	sheared
ox	oxidized
vns	veined
lam	laminated
bx	brecciated
sch	schistose
vug	vugular (vughy,vug)
oren	crenulated

MINERALOGICAL PREFIXES
(only use if diagnostic)

sil	siliceous
chl	chloritic
ser	sericitic
cal	calcareous
Fe	ferruginous
py	pyritic
hem,hm	hematitic
goss	gossanous
lim	limonitic
arg	argillic
feld	feldspathic
ep	epidote

GRAIN SIZE

fg	fine grained	0 — 3mm fragments
mg	medium grained	3 — 10mm fragments
cg	coarse grained	10 — 32 mm fragments
agg	agglomerate or volc breccia.	> 32

AGE DESIGNATION PREFIXES

Q	Quaternary
T	Tertiary
J	Jurassic
TR	Triassic
P	Permian
D	Devonian
S	Silurian
O	Ordovician
€	Cambrian
Pre€	Precambrian

STRUCTURAL

- outcrop
- float
- bedding
- strike/dip of flow layering in volcanic rocks
- " " " schistosity (metamorphic foliation)
- fault
- interpretive contact
- jointing
- cleavage
- fold axis
- vertical cleavage

5 cm

GN MN 13° 00'

SCALE: 1:2500
Updated: May 83
DATE: May '82
GEOL: J.M.P.
DRAWN: M.vdS.
CHECKED:

GEOPEKO 478305
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD — DEVONPORT

FILE No | TS 27/76-V33-2 | PLAN No | //

83-2076 E.L. 27/76 ELLIOTT BAY TASMANIA
VOYAGER 33
GEOLOGICAL PLAN

984

10200 E 10300 E 10400 E 10500 E 10600 E 10700 E 10800 E 10900 E 11000 E 11100 E 11200 E 11300 E 11400 E 11500 E 11600 E 11700 E 11800 E 11900 E 12000 E 12100 E 12200 E 12300 E 12400 E 12500 E

15 600N 15 500N 15 400N 15 300N 15 200N 15 100N 15 000N 14 900N 14 800N 14 700N 14 600N 14 500N 14 400N 14 300N 14 200N 14 100N

381 000 E A.M.G.

5253 000 N A.M.G.

5253000N A.M.G.

Moores Valley

Bauera Banksia ± Low Eucalypt scrub

Low Banksia Scrub

Low Swampy Button Grass, Heath + Banksia

Eucalypt thicket

Eucalypt

Low scrub

reworked qzt

wealth mg qfelt

wealth qzt/gpl

very chl mg qzt

mg chl qfelt

mg ser qzt

Fe stain wealth qpl or qzt

mg ser qfelt

fg xt or tuff

Ogpl

T conq flat lying PreCamb q pebbles up to 40cm + Silica cement

Tg

Tgl

5 cm

GN MN 13°00'

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

VOLCANIC ROCKS

- lt — lithic tuff
- xt — crystal tuff
- vt — vitric tuff
- clt — crystal lithic tuff
- agg — agglomerate rounded clasts. 32 mm
- fr — fragmental angular clasts. 32 mm
- ut — undifferentiated tuffs
- t — tuff

- qp — quartz porphyry
- qfp — quartz feldspar porphyry
- qfbp — quartz feldspar biotite porphyry
- ds — welfite dacites lava
- top — topalli

PREFIXES (for prefix indicates acid composition)

- a — acid
- i — intermediate
- rhy — rhyolite or rhyolitic
- dac — dacite or dacitic
- and — andesite or andesitic
- b — basalt or basaltic
- ba — basic

SEDIMENTARY ROCKS

- sh — shale
- sl — siltstone
- blksh — blackshale
- sst — sandstone
- qzt — quartzite
- gwk — greywacke
- cl — clay
- lmst — limestone
- dol — dolomite
- bx — breccia
- congl — conglomerate
- vs — volcaniclastic sediment

METAMORPHIC ROCKS

- phy — phyllite
- sch — schist
- gne — gneiss
- hfs — hornfels
- mb — marble

INTRUSIVE ROCKS

- gr — granite
- grd — granodiorite
- ad — adamellite
- di — dolerite
- lp/lamp. — lamprophyre
- bd — basic dyke
- ap — aplite
- pg — pegmatite
- qv — quartz veins

STRUCTURAL AND TEXTURAL

- p — porphyritic
- cleaved — cleaved
- sh — sheared
- ox — oxidized
- vns — veined
- lam — laminated
- bx — brecciated
- sch — schistose
- vug — vugular (rugby, vug)
- cren — crenulated

MINERALOGICAL PREFIXES (only use if diagnostic)

- ch — chloritic
- si — siliceous
- ser — sericitic
- calc — calcareous
- fe — ferruginous
- ba — barytic
- plag, fsp — plagioclastic
- goes — goethitic
- lim — limonitic
- org — organic
- feld — feldspathic
- ep — epidote
- bi — biotite
- py — pyritic
- qtz — quartzitic
- gl — glassy
- sp — sphalerite
- cp — chalcopyrite

GRAIN SIZE

- fg — fine grained 0 — 3mm fragments
- mg — medium grained 3 — 10mm fragments
- cg — coarse grained 10 — 32mm fragments
- agg — agglomerate or vein breccia > 32

AGE DESIGNATION PREFIXES

- Q — Quaternary
- T — Tertiary
- J — Jurassic
- TR — Triassic
- P — Permian
- D — Devonian
- S — Silurian
- O — Ordovician
- € — Cambrian
- PreC — Precambrian

STRUCTURAL

- outcrop
- float
- bedding
- strike/dip of flow layering in volcanic rocks
- " " " "schistosity (metamorphic foliation)
- fault
- intergrative contact
- jointing
- cleavage
- fold axis
- vertical cleavage

- Superficial residual quartz rubble
- Qa Alluvium
- Tg Unconsolidated Tertiary Gravel
- O Ordovician "Owen" conglomerate/quartzite

CAMBRIAN

TYNDAL GROUP CORRELATES

- Cz Grey - black shale/siltstone
- Cs Coarse rhyolitic epiclastics & sandstone

DUNDAS GROUP

- Ds Greywacke, shale

MAINWARING GROUP

- Sm Andesitic - basaltic lava, breccia, tuff, tuffaceous shale
- Dm Dolomitic shale, dolomite

WESTERN VOLCANO - SEDIMENTARY SEQUENCE

- Sv Tuffaceous greywacke, sst, conglomerate
- Dv Rhyolitic epiclastics
- Argillaceous phyllite, siltstone, black slate
- Pz "Pender's Tuffs" Rhyolitic crystal tuff, minor sediment

WART HILL ACID PYROCLASTICS

- Rhyolitic qtz. phyric lava
- Sericitic quartz crystal tuff, lithic tuff, rhyolitic agglomerate
- Chloritic quartz feldspar crystal lithic tuff
- Variable highly chloritic (altered?) pyroclastics & fg lavas
- Chloritic e.g. quartz phyric lava
- Fine grained phyric dacite lava
- Quartz pebble conglomerate, micaceous sandstone, siltstone
- Pyritic grey - black slate, siltstone

STONY CRK PORPHYRITIC MICROGRANITE

Interpreted By:	J.P.
Drawn By:	R.Tog
Date:	June 83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO 478306

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO: 12

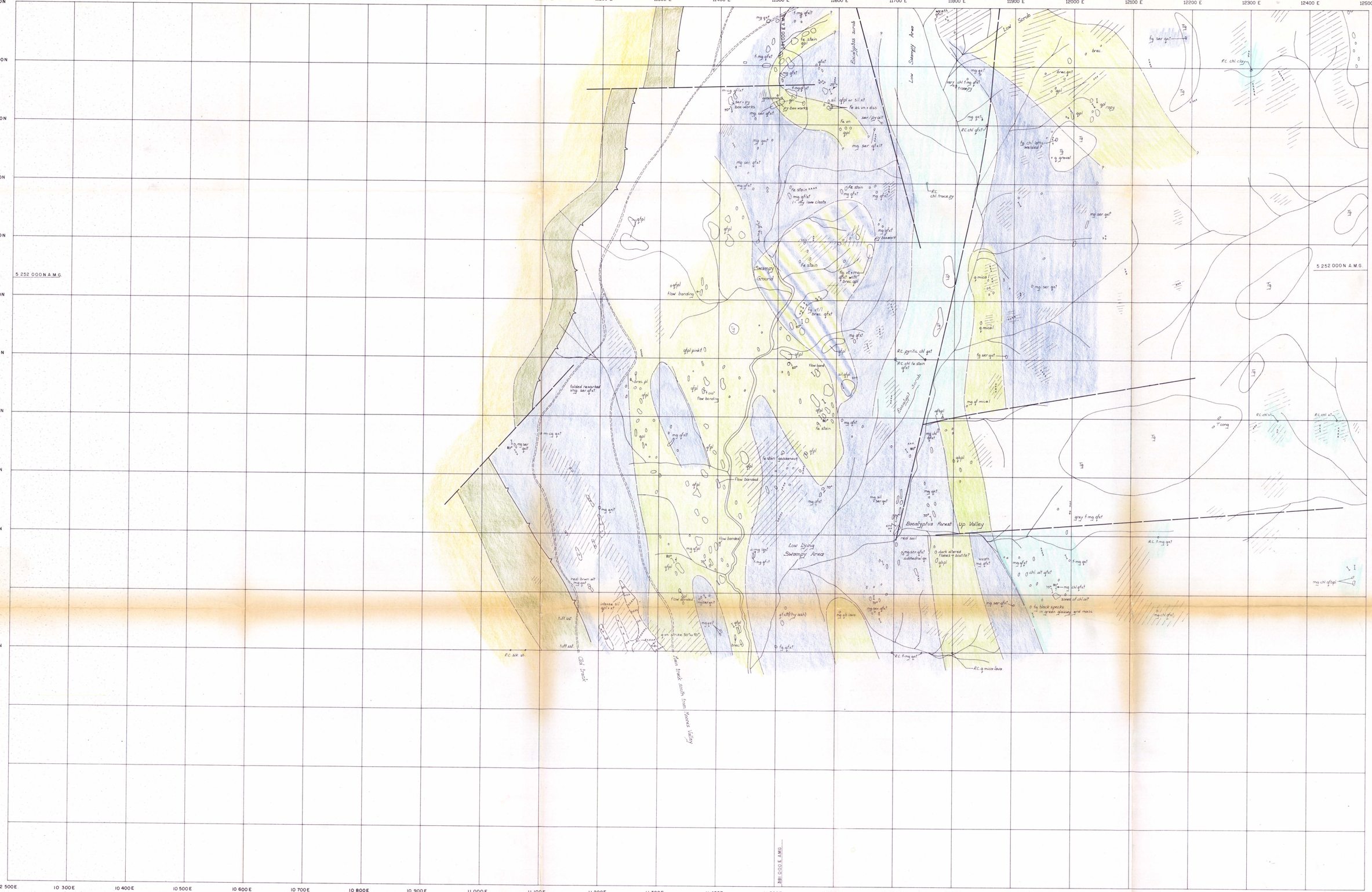
SHEET NO. 3SE2-G

E.L. 27/76 ELLIOTT BAY, TASMANIA

DETAIL GEOLOGY

83-2076

985


10200 E
10300 E
10400 E
10500 E
10600 E
10700 E
10800 E
10900 E
11000 E
11100 E
11200 E
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11500 E
11600 E
11700 E
11800 E
11900 E
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12100 E
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12400 E
12500 E
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14 000N
13 900N
13 800N
13 700N
13 600N
13 500N
13 400N
13 300N
13 200N
13 100N
13 000N
12 900N
12 800N
12 700N
12 600N
5 252 000N A.M.G.
380 000E A.M.G.
Eucalyptus scrub
Swampy Area
Low
Scrub
Swampy Ground
Low Lying Swampy Area
Eucalyptus Forest up Valley
Old track
New track south from Hooker Valley
R.C. bar sh
R.C. chl fracture py
R.C. pyritic chl gxt
R.C. chl fe stain qfst
R.C. chl clay
R.C. chl xt
R.C. f-mg gxt
R.C. g mica lava
flow banding
flow banded
flow bands
folded reworked vng. ser qfst
gossanous
fe stain
Fe stain
qfpl pinkd
qfpl
gpl
mg qfst
mg ser qfst
mg ser gxt
fg ser gxt
fg chl latic welded ?
+ g gravel
g mica
T cong
grey f-mg qfst
mg chl qfpl
mg chl qfst
zones of chl alt
0 fg black specks in green glassy grd mass
Fe stain ****
mg qfst 1-mg lava clasts
mg qfst py basalt
fg xt + mg qfst with 1 brec. qpl
fg xt/l brec. qfst
mg qfst 1-mg lava clasts
mg gf mica
mg chl qfst
mg sil f ser qxt
mg ser qfst sulphide? py
mg sil qfpl
mg qfst
f-mg qfst
f mg qfst
mg qxt
f mg gfst
mg gxt
mg ser gxt
mg ser qfst
mg sil lava
mg ch lava
mg ch qfst
mg ch qfpl
mg ch gfpl
mg ch gfst
mg ser gxt
mg ser qfst
mg ser gxt
mg ser qfst
mg ser qfst
mg ser qfst

8000 E 8100 E 8200 E 8300 E 8400 E 8500 E 8600 E 8700 E 8800 E 8900 E 9000 E 9100 E 9200 E 9300 E 9400 E 9500 E 9600 E 9700 E 9800 E 9900 E 10000 E 10100 E 10200 E 10300 E

9 600 N 9 500 N 9 400 N 9 300 N 9 200 N 9 100 N 9 000 N 8 900 N 8 800 N 8 700 N 8 600 N 8 500 N 8 400 N 8 300 N 8 200 N 8 100 N

379 000 E A.M.G.

5 247 000 N A.M.G.

RIDGE SLOPE

low relief area thin button grass cover

low relief area with thin soil / vegetation.

roof pendants of fg chl qxt

roof pendants in granite

Tertiary Gravel

Forest

scree

VOLCANIC ROCKS

- lt lithic tuff
- xt crystal tuff
- vt vitric tuff
- xlt crystal lithic tuff
- agg agglomerate rounded clasts 32 mm
- br fragmental angular clasts 32 mm
- ut undifferentiated tuffs
- f tuff
- qp quartz porphyry
- qfp quartz feldspar porphyry
- xfbp quartz feldspar biotite porphyry
- ss in suffix denotes lava
- top tephlii

PREFIXES (as prefix indicates acid composition)

- basic
- i intermediary
- rhy rhyolite or rhyolitic
- dac dacite or dacitic
- and andesite or andesitic
- b basalt or basaltic
- ba basic

SEDIMENTARY ROCKS

- sh shale
- si siltstone
- blksh blackshale
- sst sandstone
- qtz quartzite
- gwk greywacke
- ch chert
- ls limestone
- dol dolomite
- bx breccia
- congl conglomerate
- va volcaniclastic sediment

METAMORPHIC ROCKS

- phy phyllite
- sch schist
- gns gneiss
- hfs hornfels
- mb marble

INTRUSIVE ROCKS

- gr granite
- gd granodiorite
- do dolerite
- ad adamellite
- sp/lamp lamprophyre
- bd basic dyke
- op opline
- pg pegmatite
- qv quartz veins

STRUCTURAL AND TEXTURAL

- p porphyritic
- chid strongly altered
- shd sheared
- mt metamict
- rcrs recrystallised
- l laminated
- br brecciated
- sch schistose
- vug vuggular (vughy, vug)
- crsh crenulated

MINERALOGICAL PREFIXES

(only use if diagnostic)

- sil siliceous
- ser sericitic
- carb carbonate
- calc calcareous
- fer ferruginous
- py pyritic
- ep epidotic
- fsd feldspathic
- ep epidote
- bt biotite

GRAIN SIZE

- fg fine grained 0 — 3 mm fragments
- mg medium grained 3 — 10 mm fragments
- cg coarse grained 10 — 32 mm fragments
- agg agglomerate or vole breccia > 32

AGE DESIGNATION PREFIXES

- Q Quaternary
- T Tertiary
- J Jurassic
- TR Triassic
- P Permian
- D Devonian
- S Silurian
- O Ordovician
- C Cambrian
- PreC Precambrian

STRUCTURAL

- outcrop
- scree
- bedding
- strike/dip of flow layering in volcanic rocks "schistosity (metamorphic foliation)
- fault
- intrusive contact
- jointing
- cleavage
- fold axis
- vertical cleavage

- Superficial residual quartz rubble
- Qa Alluvium
- Tg Unconsolidated Tertiary Gravel
- Ordovician "Owen" conglomerate / quartzite

CAMBRIAN

TYNDAL GROUP CORRELATES :

- Grey - black shale/ siltstone
- Coarse rhyolitic epiclastics & sandstone

DUNDAS GROUP

- Greywacke, shale
- Siltstone - mudstone, lava, breccia, tuff, tuffaceous shale
- Dolomitic shale, dolomite

MAINWARING GROUP

WESTERN VOLCANO - SEDIMENTARY SEQUENCE

- Tuffaceous greywacke, sst, conglomerate; Rhyolitic epiclastics
- Argillaceous phyllite, siltstone, black slate
- "Pandee's Tuffs" Rhyolitic crystal tuff, minor sediment

WART HILL ACID PYROCLASTICS

- Rhyolitic qtz. phyric lava
- Sericitic quartz crystal tuff (ashy tuff), rhyolitic agglomerate
- Chloritic quartz feldspar crystal lithic tuff
- Variable highly chloritic (altered?) pyroclastics e.g. lavas
- Chloritic c.g. quartz phyric lava
- Fine grained phyric dacite lava
- Quartz pebble conglomerate, micaceous sandstone, siltstone
- Pyritic grey - black shale, siltstone

STUBBY CRK. PORPHYRITIC MICROGRANITE

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

Interpreted By:	P.A.W.
Drawn By:	P.R.S
Date:	26/5/83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO 478308

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 14

SHEET NO. 5 SEI G

E.L. 27/76 ELLIOTT BAY, TASMANIA

DETAIL GEOLOGY

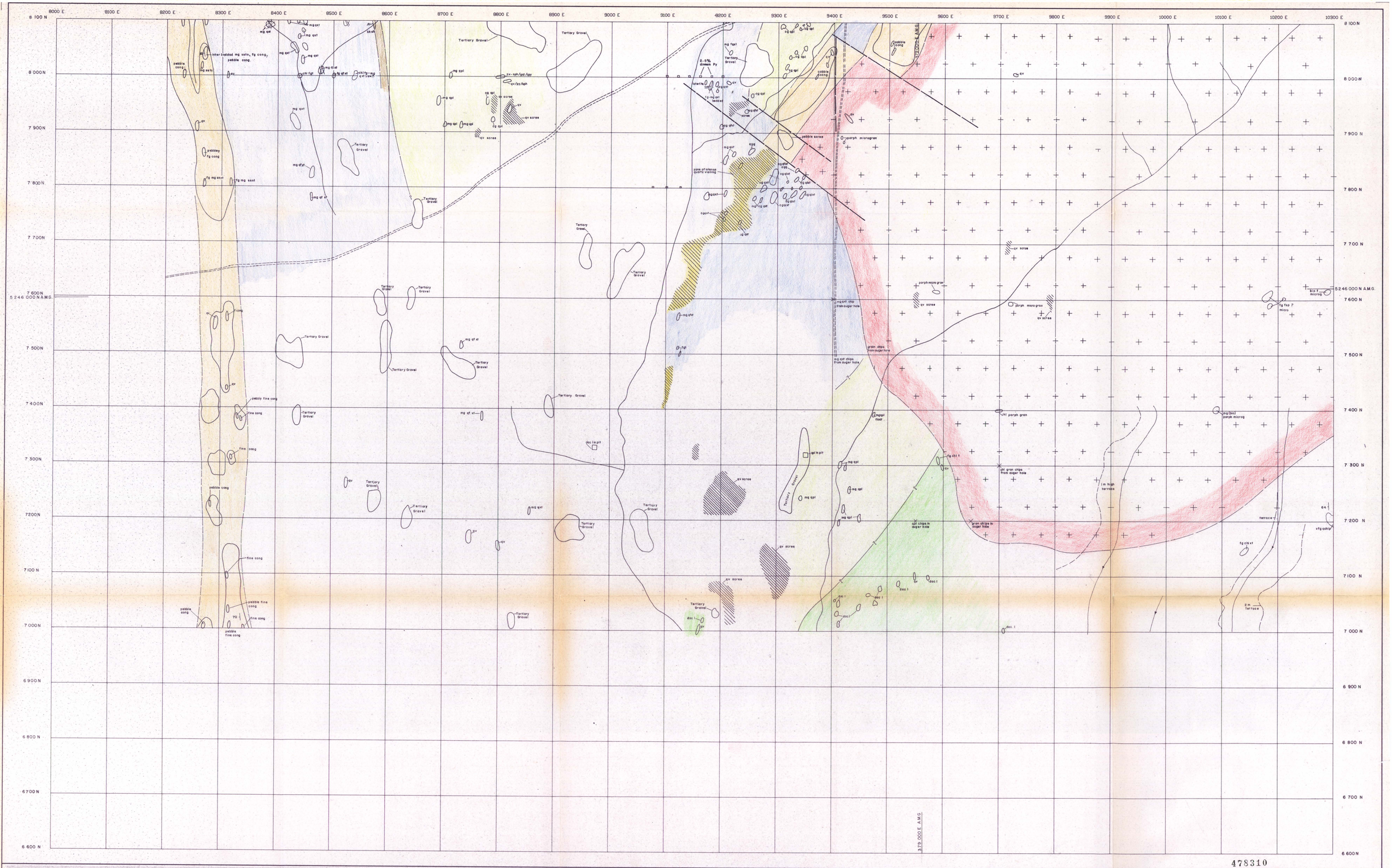
83-2076

987

10200 E 10300 E 10400 E 10500 E 10600 E 10700 E 10800 E 10900 E 11000 E 11100 E 11200 E 11300 E 11400 E 11500 E 11600 E 11700 E 11800 E 11900 E 12000 E 12100 E 12200 E 12300 E 12400 E 12500 E

9600 N 9500 N 9400 N 9300 N 9200 N 9100 N 9000 N 8900 N 8800 N 8700 N 5 247 000N A.M.G 8600 N 8500 N 8400 N 8300 N 8200 N 8100 N

qtz vein ridge
(ser) silts ??
fg qxt
qtz bx
qtz conql.
fg. qfxt
bio doc-I
qtz vst
apilogranite dykes ?
fgxt
fg qtzite
moss qtz bx
no microg
moss milky qv
mg qxt (ser)
no outcrop
flat button grass covered surface
chl vfg lava
mg qfxt
fg(ser) qxt
gy rhy ?
rhy-dac
10100 E (MOSSES 6 BASE LINE)
11900N
qchl p ?
qchl pl
qchl p
Fe st lxt
Fe st mg lxt
DDH V9-3
q chl p tuff grd. and black shales in drill hole.
volc bx bands in lxt
Fe rich cg lxt
lxt rhy bands
extensive Fe staining lxt/tuffs
11700N
moss spity rhyo-dac lava
flow bd rhy
rhy, mag. clasts
blue-gy rhy-dac lava.
11600N
fgxt
Fe st tuff-lam.
qchl xt ?
chl rich qxt pl ?
11500N
DDH V9-2
No exposures low marshy area.
q scree
qchl lxt
chl veins in lxt
Fe st qlxt
11400N
Fe st lxt
chl xt
chl lxt
chl/fe st lxt
hdsng fgxt
11300N
lithic crystal tuffs and volcanic breccia's
Fe st lxt
fg lxt
qchl xt ?
chl qp
fg qpl
fgxt
qfpl
11200N
mg Fe st lxt
qchl p
qchl pl
qchl xt
mg rhy lxt
mag clusts in and
lxt
fg chl xt
11100N
qchl p
qchl pl
qchl p
qchl p
qchl p



478310

VOLCANIC ROCKS

lt	lithic tuff
xt	crystal tuff
vt	vitric tuff
ilt	crystal lithic tuff
agg	agglomerate (rounded clasts 32 mm
fc	fragmental angular clasts 32 mm
ut	undifferentiated tuffs
t	tuff
qp	quartz porphyry
qfp	quartz feldspar porphyry
qfbp	quartz feldspar biotite porphyry
p	as in suffix denotes lava
lap	lapilli

PREFIXES (no prefix indicates acid composition)

a	acid
i	intermediate
rhy	rhyolite or rhyolitic
dac	dacite or dacitic
and	andesite or andesitic
b	basalt or basaltic
ba	basic

SEDIMENTARY ROCKS

sh	shale
sl	siltstone
blksh	blackshale
sst	sandstone
qtz	quartzite
gwk	greywacke
cf	chert
lmst	limestone
doc	dolomite
ss	breccia
congl	conglomerate
vs	volcaniclastic sediment

METAMORPHIC ROCKS

phy	phyllite
sch	schist
gns	gneiss
hfs	hornfels
mb	marble

INTRUSIVE ROCKS

gr	granite
gd	granodiorite
ad	adamellite
dl	dolerite
lp/lpmp	lamprophyre
bd	basic dyke
ap	aplite
pg	pegmatite
qv	quartz veins

STRUCTURAL AND TEXTURAL

p	porphyritic
ctvd	strongly sheared
shd	sheared
ss	oxidized
vns	veined
lam	laminated
bx	brecciated
sch	schistose
vug	vugular (vugly, vug)
cren	crenulated

MINERALOGICAL PREFIXES

(only use if diagnostic)

sil	siliceous	py	pyrite
chl	chloritic	po	pyrrhotite
ser	sericitic	gl	galena
cal	calcareous	sp	sphalerite
fs	ferruginous	cp	chalcopyrite
py	pyritic		
hem, hm	hematitic		
gnss	gossanous		
lim	limonitic		
mg	mgitic		
feld	feldspathic		
ep	epidote		
bi	biotite		

GRAIN SIZE

fg	fine grained	0 – 3 mm fragments
mg	medium grained	3 – 10 mm fragments
cg	coarse grained	10 – 32 mm fragments
agg	agglomerate or volc breccia	> 32

AGE DESIGNATION PREFIXES

Q	Quaternary
T	Tertiary
J	Jurassic
TR	Triassic
P	Permian
D	Devonian
S	Silurian
O	Ordovician
E	Cambrian
Pre-E	Precambrian

STRUCTURAL

	outcrop
	float
	bedding
	strike/dip of flow layering in volcanic rocks
	"schistosity (metamorphic foliation)
	fault
	interpretive contact
	joining
	cleavage
	fold axis
	vertical cleavage

Superficial residual quartz rubble

Qa Alluvium

Tg Unconsolidated Tertiary Gravel

18 O Ordovician "Owen" conglomerate/quartzite

CAMBRIAN

TYNDAL GROUP CORRELATES

3 Grey-black shale/siltstone

51 Coarse rhyolitic epiclastics & sandstone

DUNDAS GROUP ?

26 Greywacke, shale

MAINWARING GROUP

45 Andesitic - basaltic lava, breccia, tuff, tuffaceous shale

46 Dolomitic shale, dolomite

WESTERN VOLCANO - SEDIMENTARY SEQUENCE

Tuffaceous greywacke, sst, conglomerate
Rhyolitic epiclastics

69 Argillaceous phyllite, siltstone, black slate

27 "Pender's Tuffs"
Rhyolitic crystal tuff, minor sediment

WART HILL ACID PYROCLASTICS

48 Rhyolitic qtz. phyric lava

Sericitic quartz crystal tuff
lithic tuff, rhyolitic agglomerate

44 Chloritic quartz feldspar crystal lithic tuff

41 Variable highly chloritic (altered?) pyroclastics & f.g. lavas

46 Chloritic c.g. quartz phyric lava

47 Fine grained phyric dacite lava

60 Quartz pebble conglomerate, micaceous sandstone, siltstone

45 Pyritic grey - black slate, siltstone

19 STONY CRK PORPHYRITIC MICROGRANITE

KT 27/76-3 (1:10000)

1	2	1	2
NW		NE	
3	4	3	4
1	2	1	2
SW		SE	
3	4	3	4

KT 27/76-5 (1:10000)

1	2	1	2
NW		NE	
3	4	3	4
1	2	1	2
SW		SE	
3	4	3	4

WART HILL SERIES

5 cm

GN MN

13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 16

SHEET NO. 5 SE3 G

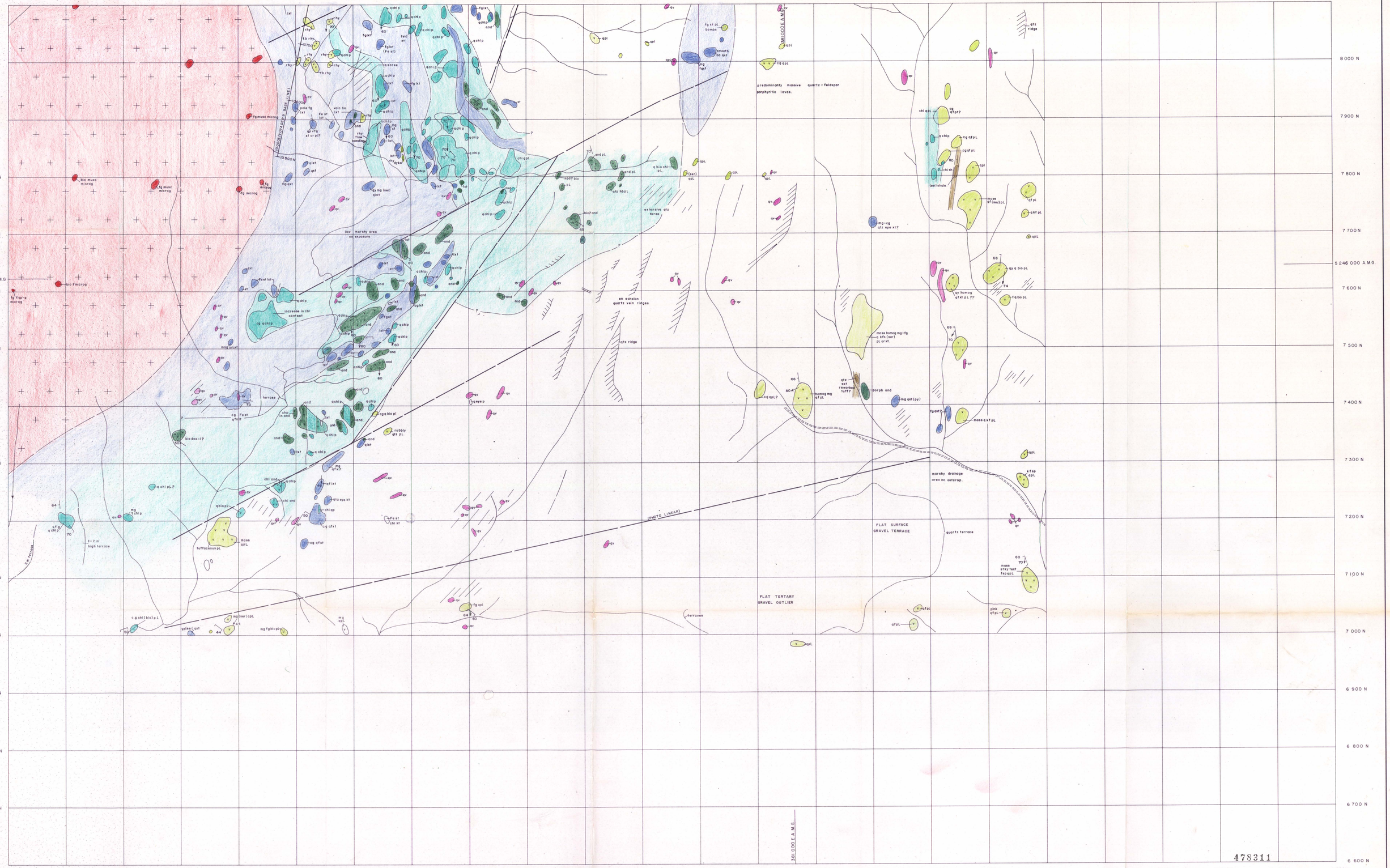
Interpreted By: R.J.P.
Drawn By: P.R.S. M.v.d.S.
Date: 2/6/1983
Approved By: W.F.
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L. 27/76 ELLIOTT BAY, TASMANIA

83-2076

DETAIL GEOLOGY

989



VOLCANIC ROCKS

- l(t) — lithic tuff
- xl — crystal tuff
- v(t) — vitric tuff
- xlt — crystal lithic tuff
- rbx — agglomerate (rounded clasts 32 mm, fr — fragmental, angular clasts 32 mm
- t — undifferentiated Tertiary
- ( ) — tuff
- qp — quartz porphyry
- qfp — quartz, feldspar porphyry
- qfsp — quartz feldspar biotite porphyry
- l — qp or ap suffix denotes lava
- lap — lapilli

PREFIXES (no prefix indicates acid composition)

- a — acid
- i — intermediate
- rhy — rhyolite or rhyolitic
- dac — dacite or dacitic
- and — andesite or andesitic
- b — basalt or basaltic
- ba — basic

SEDIMENTARY ROCKS

- sh — shale
- si — siltstone
- ss — sandstone
- st — siltstone
- qtz — quartzite
- gwk — greywacke
- ch — chert
- lmst — limestone
- dol — dolomite
- bx — breccia
- congl — conglomerate
- vs — volcaniclastic sediment

METAMORPHIC ROCKS

- phy — phyllite
- sch — schist
- gne — gneiss
- hfs — hornfels
- mb — marble

INTRUSIVE ROCKS

- gr — granite
- gd — granodiorite
- od — dolomite
- dl — dolerite
- lp/lamp — lamprophyre
- bd — basic dyke
- op — aplite
- pg — pegmatite
- qv — quartz veins

STRUCTURAL AND TEXTURAL

- p — porphyritic
- cleid — strongly cleaved
- sbd — sheared
- ae — undulose
- vns — veined
- lam — laminated
- bx — brecciated
- brx — brecciated
- vug — vugular (vughy, vug)
- cran — granulated

MINERALOGICAL PREFIXES (only use if diagnostic)

- srl — siliceous
- ser — sericitic
- carl — sericitic
- calc — calcareous
- fe — ferruginous
- py — pyritic
- hem, hm — hematitic
- gyps — gypsiferous
- org — organic
- feld — feldspathic
- ep — epidote
- bi — biotite

GRAIN SIZE

- fg — fine grained (0 – 3 mm fragments)
- mg — medium grained (3 – 10 mm fragments)
- cg — coarse grained (10 – 32 mm fragments)
- agg — agglomerate or xstic breccia (>32)

AGE DESIGNATION PREFIXES

- Q — Quaternary
- T — Tertiary
- J — Jurassic
- TR — Triassic
- P — Permian
- D — Devonian
- S — Silurian
- O — Ordovician
- C — Cambrian
- PreC — Precambrian

STRUCTURAL

- anticline
- fault
- bedding
- strike and dip of fine layering in volcanic rocks "schistosity (metamorphic foliation)"
- fault
- interpretive contact
- jointing
- cleavage
- fold axis
- vertical stereotype

- Superficial residual quartz rubble
- Qa Alluvium
- Tg Unconsolidated Tertiary Gravel
- 18 O Ordovician "Owen" conglomerate/quartzite

CAMBRIAN

TYNDAL GROUP CORRELATES

- 3 Grey - black shale/siltstone
- 5t Coarse rhyolitic epiclastics & sandstone

DUNDAS GROUP?

- 58 Greywacke, shale

MAINWARING GROUP

- 42 Andesitic - basaltic lava, breccia, tuff, tuffaceous shale
- 44 Dolomitic shale, dolomite

WESTERN VOLCANO - SEDIMENTARY SEQUENCE

- 50 Tuffaceous greywacke, ss!, conglomerate
- 61 Argillaceous rhyolite, siltstone, black slate
- 27 "Pandora Tuffs" Rhyolitic crystal tuff, minor sediment

WART HILL ACID PYROCLASTICS

- 49 Rhyolitic qtz. phyric lava
- 50 Sericitic quartz crystal tuff, lithic tuff, rhyolitic agglomerate
- 44 Chloritic, quartz feldspar crystal lithic tuff
- 45 Variably highly sericitic (altered?) pyroclastics & e.g. lavas
- 46 Chloritic e.g. quartz phyric lava
- 47 Fine grained phyric dacite lava
- 60 Quartz pebble conglomerate, micaceous sandstone, siltstone
- 65 Pyritic grey - black slate, siltstone
- 19 STONY CRK. PORPHYRITIC MICRODRANITE

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

NW NE SW SE

5 cm

GN MN 13°00'

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

Interpreted By: P.A.W.	
Drawn By: M.v.d.S.	
Date: Jun 83	
Approved By:	Date:
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

DRAWING NO. 17

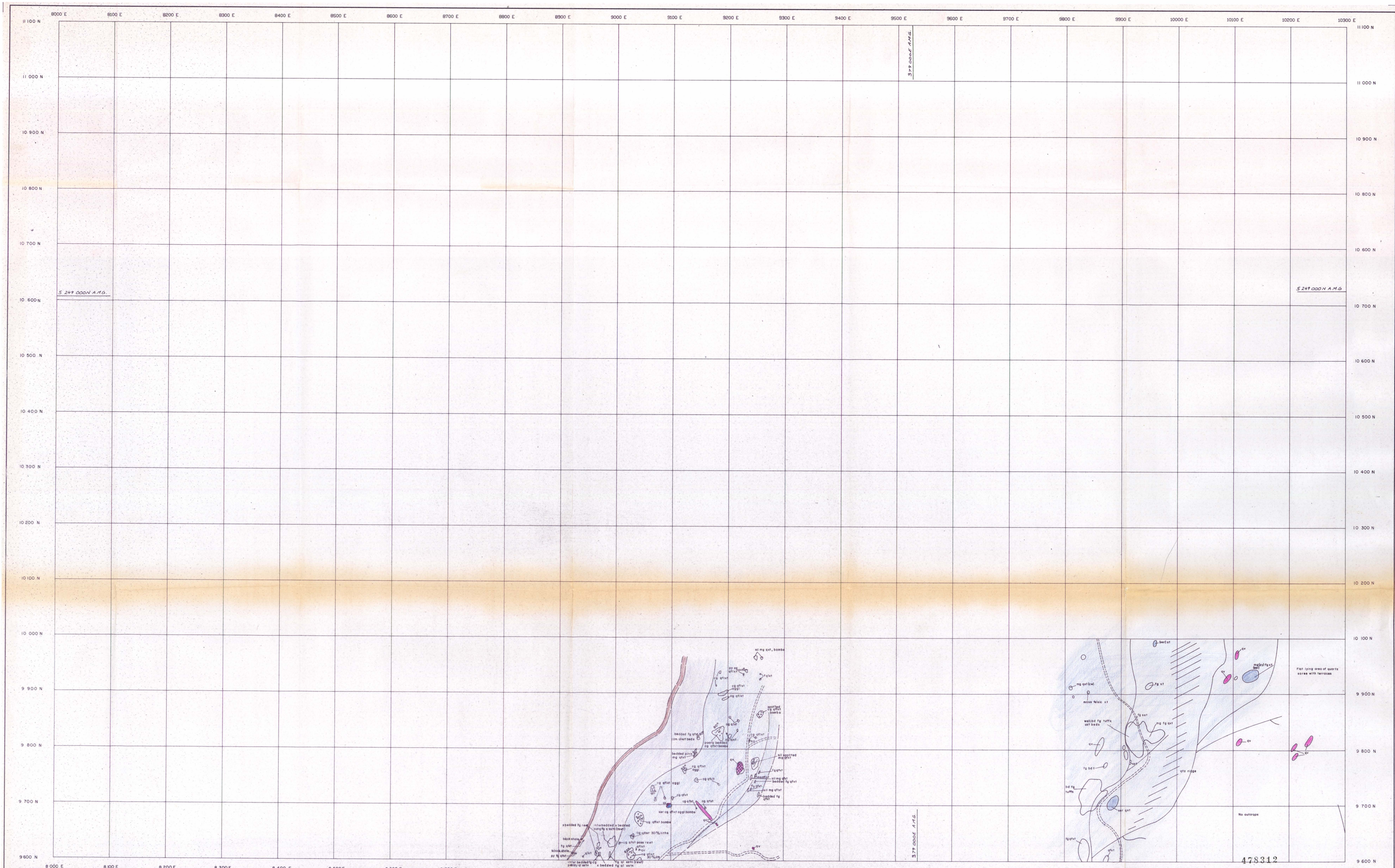
SHEET NO. 5 SE4-G

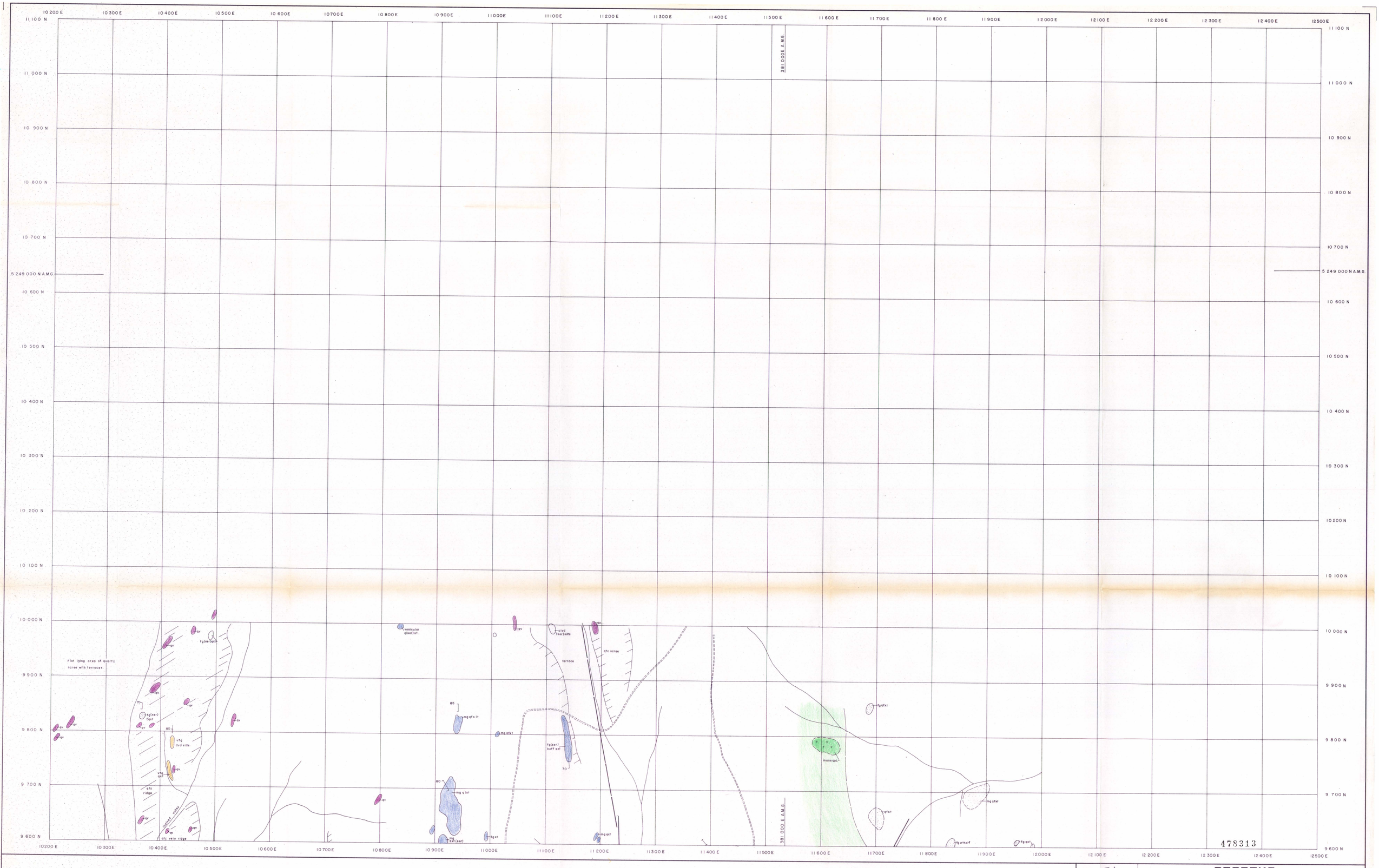
E.L. 27/76 ELLIOTT BAY, TASMANIA

83-2076

DETAIL GEOLOGY

990


8000 E
8100 E
8200 E
8300 E
8400 E
8500 E
8600 E
8700 E
8800 E
8900 E
9000 E
9100 E
9200 E
9300 E
9400 E
9500 E
9600 E
9700 E
9800 E
9900 E
10000 E
10100 E
10200 E
10300 E
11 100 N
11 000 N
10 900 N
10 800 N
10 700 N
10 600 N
10 500 N
10 400 N
10 300 N
10 200 N
10 100 N
10 000 N
9 900 N
9 800 N
9 700 N
9 600 N
5 249 000N A.M.G.
379 000E A.M.G.
bedded fg qtft
bedded fg qtft cm chert beds
poorly bedded cg qtft bombs
spotted fg qtft bombs
bedded pink mg qtft
sil spotted mg qtft
sil mg qtft
bedded fg qtft
cg qtft
cg qtft ggl
ser cg qtft ggl bombs
cg qtft bombs
cg qtft ggl
cg qtft poss rewt
fg qtft
fg qtft
fg qtft



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN

13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 19

SHEET NO. 5 NE 4

Interpreted By: P.A.W.

Drawn By: M. vdS.

Date: Jun 83

Approved By: [signature]

Revision By: Date:

Revision By: Date:

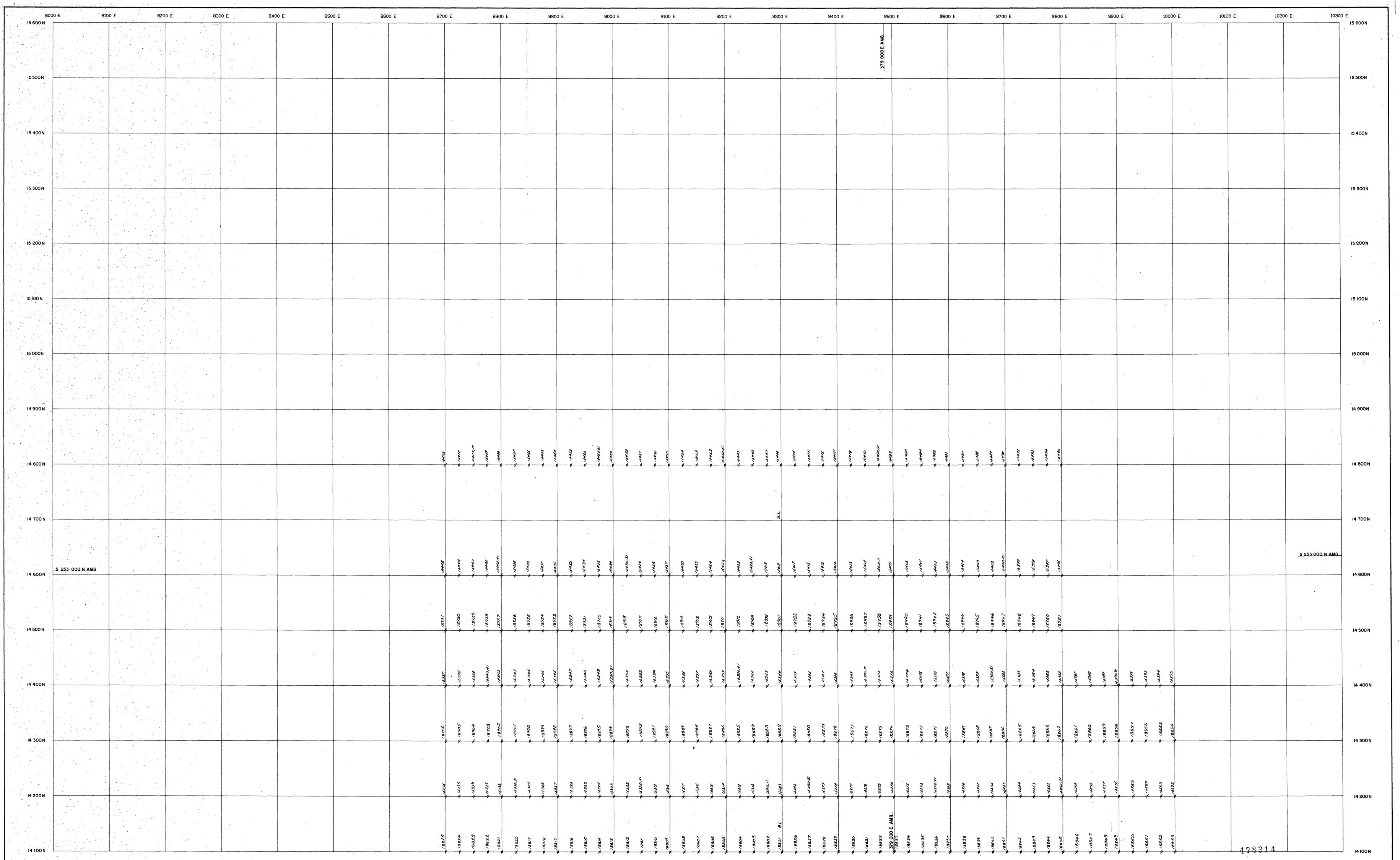
Revision By: Date:

E.L. 27/76 ELLIOTT BAY, TASMANIA

83-2076

DETAIL GEOLOGY

992



o Grid position
ø Mate auger hole
B.L. Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
7 — sample position
.25 — Fe sample, %
0.5 — Ag sample, ppm
35 / 20 / 23 / 0.5 — Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No.					
19-33		100-199	19-10		800-1599
19-46		200-399	19-14		1600)
19-6		400-799			

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 20

SHEET NO. 3SE1-

Interpreted By:	J.P.
Drawn By:	R.T.
Date:	Mar 83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

83-2076

E.L.27/76 ELLIOTT BAY, TASMANIA
C HORIZON SOIL
SAMPLE LOCATION

993

10200 E 10300 E 10400 E 10500 E 10600 E 10700 E 10800 E 10900 E 11000 E 11100 E 11200 E 11300 E 11400 E 11500 E 11600 E 11700 E 11800 E 11900 E 12000 E 12100 E 12200 E 12300 E 12400 E 12500 E

15 600 N
15 500 N
15 400 N
15 300 N
15 200 N
15 100 N
15 000 N
14 900 N
14 800 N
14 700 N
14 600 N
14 500 N
14 400 N
14 300 N
14 200 N
14 100 N

10 200 E 10 300 E 10 400 E 10 500 E 10 600 E 10 700 E 10 800 E 10 900 E 11000 E 11100 E 11 200 E 11 300 E 11 400 E 11 500 E 11 600 E 11 700 E 11 800 E 11 900 E 12 000 E 12 100 E 12 200 E 12 300 E 12 400 E 12 500 E

478315

• Power auger hole

Sample prefex-TS.

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

NW NE SW SE

WART HILL SERIES

5 cm

GN MN 13°00'

Interpreted By: W.H.
Drawn By: M.vdS.
Date: Jul 83
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 21
SHEET NO. 3SE2

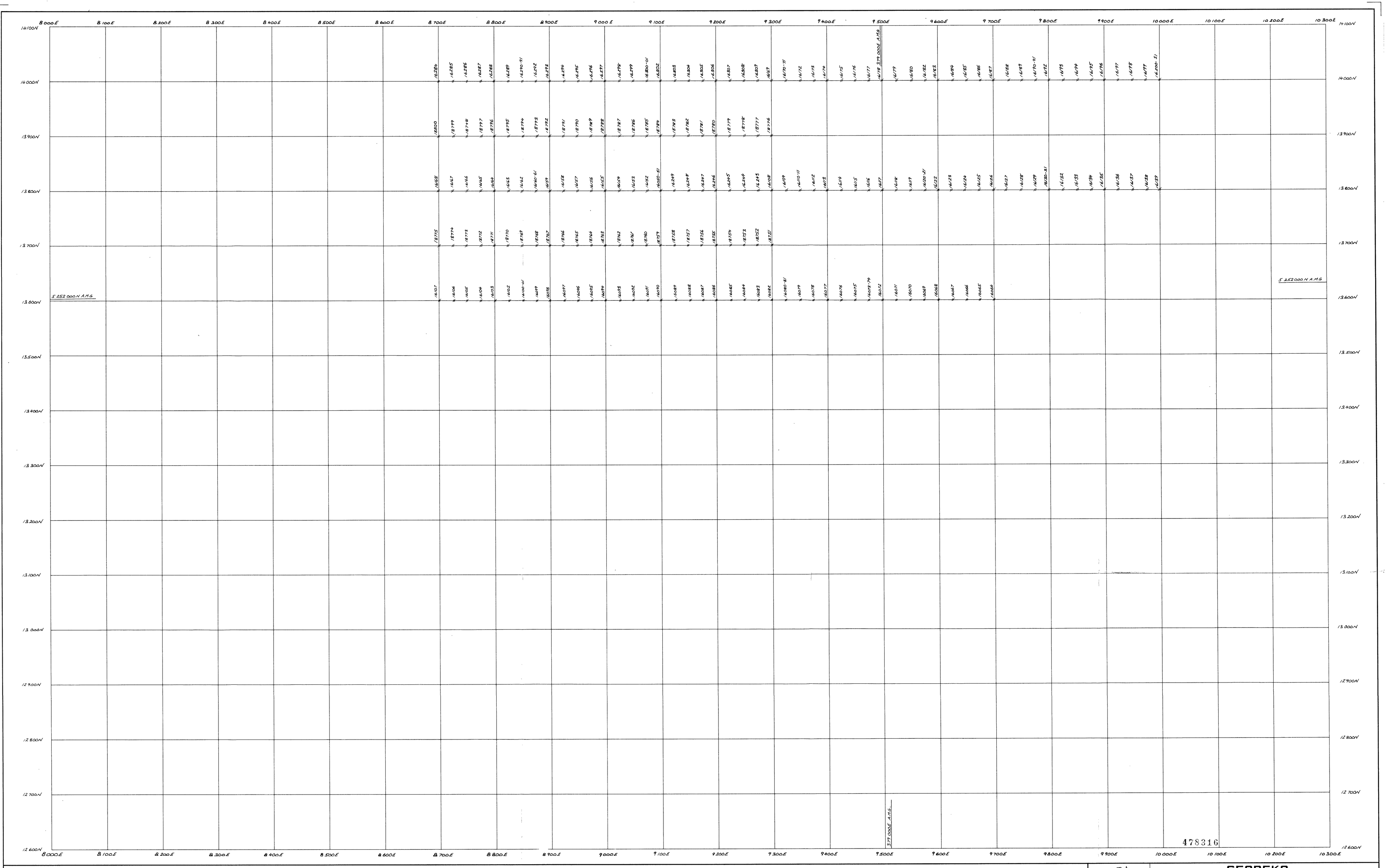
E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

C HORIZON

SOIL SAMPLE LOCATIONS

984



o Grid position
ø Mate auger hole
• Power Auger (Jacro)
BL Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Period No					
19-33		100-199	19-10		800-1599
19-46		200-399	19-14		1600
19-6		400-799			

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 22

SHEET NO. 35E3-

Interpreted By: J.P.
Drawn By: R. Tog
Date: Mar. 83
Approved By: W.F.
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L. 27/76 Elliott Bay Tasmania

83-2076

Soil Sample Locations

995

10200 E 10300 E 10400 E 10500 E 10600 E 10700 E 10800 E 10900 E 11000 E 11100 E 11200 E 11300 E 11400 E 11500 E 11600 E 11700 E 11800 E 11900 E 12000 E 12100 E 12200 E 12300 E 12400 E 12500 E

14 100 N 14 000 N 13 900N 13 800N 13 700N 13 600N 13 500N 13 400N 13 300N 13 200N 13 100N 13 000N 12 900N 12 800N 12 700N 12 600N

5 252 000 N A.M.G.

351 000 E A.M.G.

478317

10 200 E 10 300 E 10 400 E 10 500 E 10 600 E 10 700 E 10 800 E 10 900 E 11 000E 11 100 E 11 200 E 11 300 E 11 400 E 11 500 E 11 600 E 11 700 E 11 800 E 11 900 E 12 000 E 12 100 E 12 200 E 12 300 E 12 400 E 12 500 E

• Power auger hole

Number Prefix – TS

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
NW			NE
3	4	3	4
1	2	1	2
SW			SE
3	4	3	4

WART HILL SERIES

5 cm

GN MN 18°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 23

SHEET NO. 3SE4-

Interpreted By: W.H

Drawn By: MvdS

Date: Jul 83

Approved By:

Revision By: Date:

Revision By: Date:

Revision By: Date:

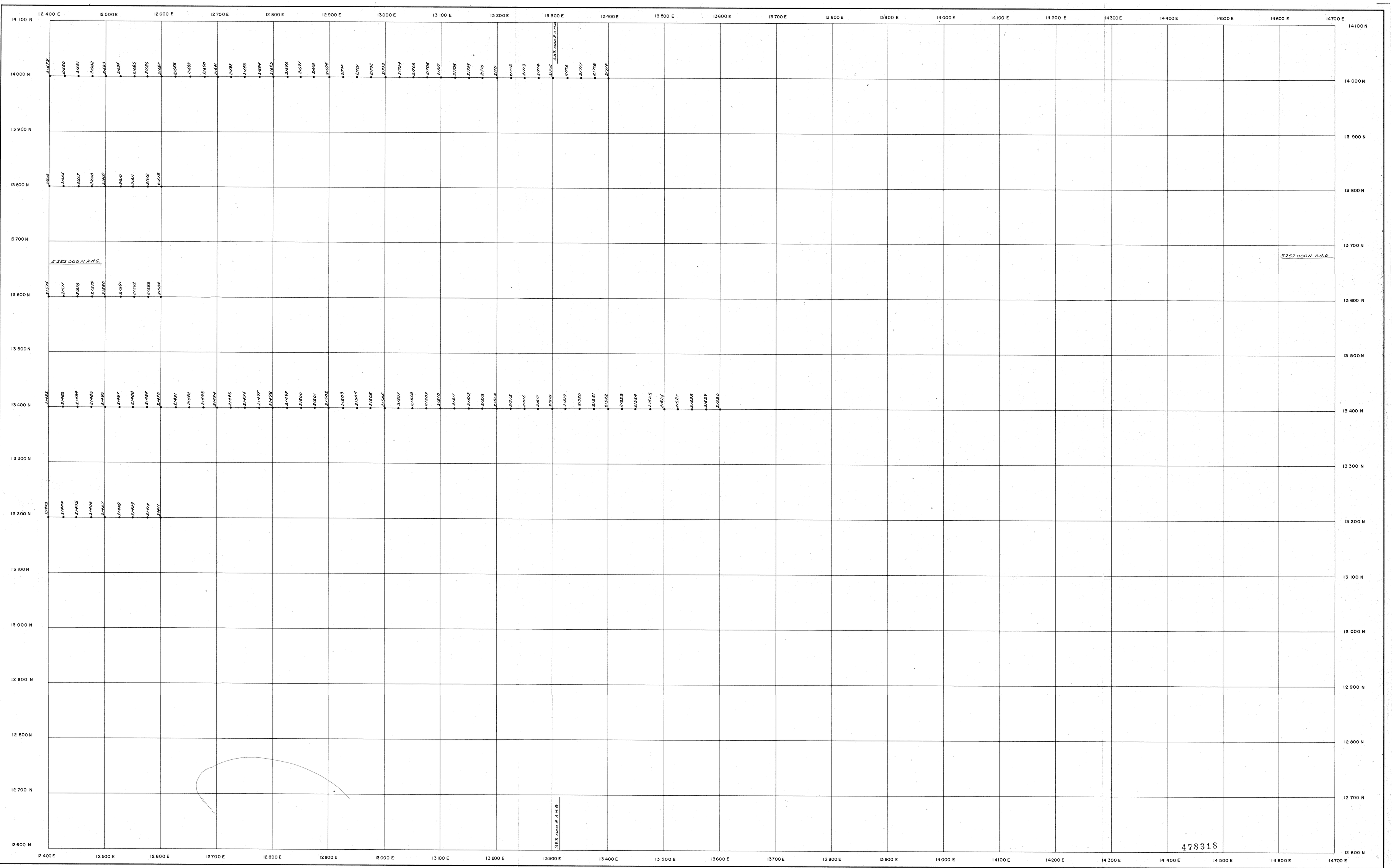
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C HORIZON SOILS

SAMPLE LOCATION

993



• Power auger hole

Sample Prefix — TS

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

Interpreted By:	
Drawn By:	M.vdS
Date:	Jul. '83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 24

SHEET NO. 4 SW 3

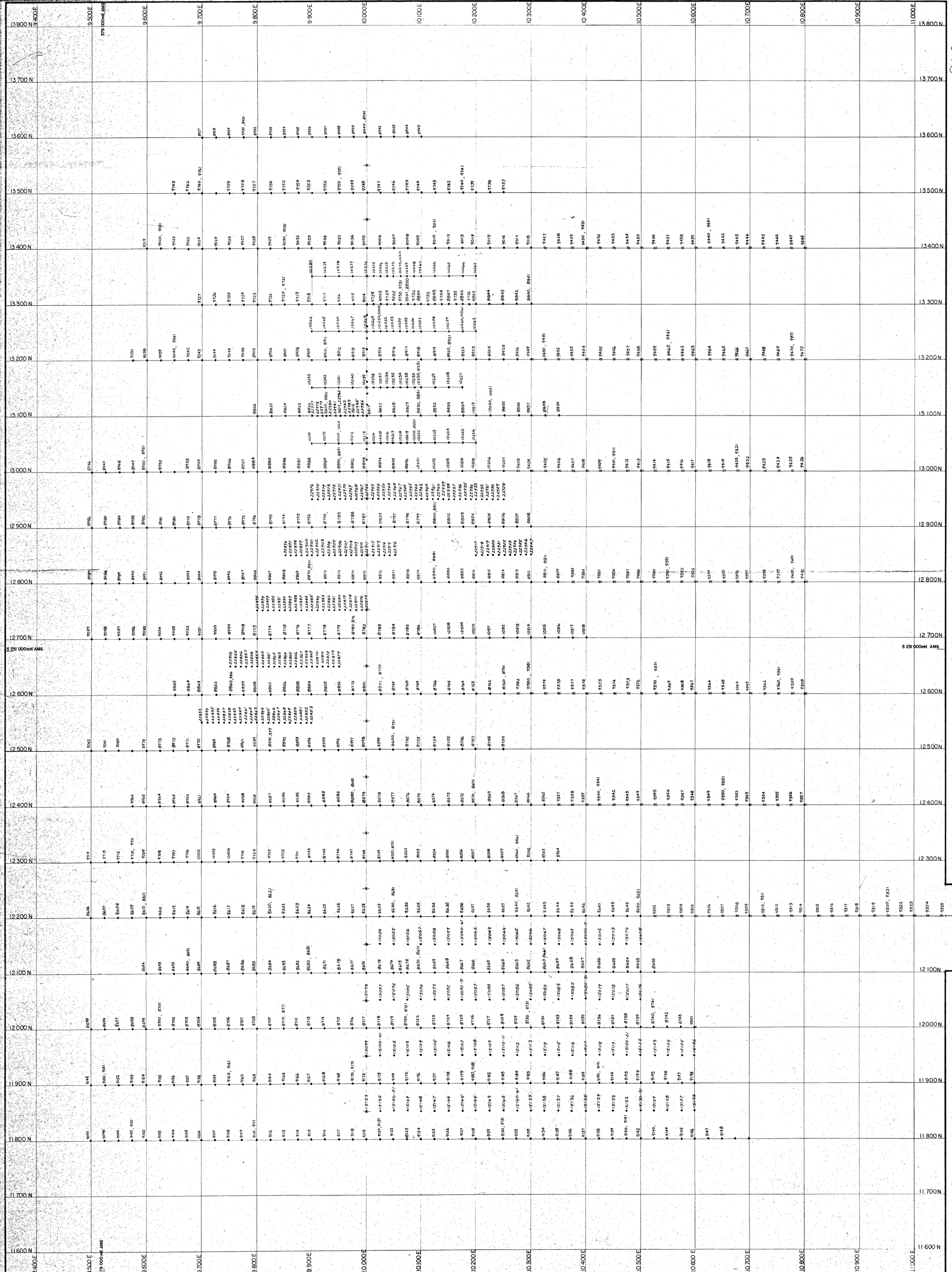
E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

C HORIZON

SOIL SAMPLE LOCATIONS

997



998

LEGEND:

- ✕ ..... Grid Position
- ● ..... Power Auger Hole
- ○ ..... Hand Auger Hole

5 cm

GN MN

DATE: FEB 1981
Update: June 83

GEOLOGIST W.H.

DRAWN: R.T, B.S

CHECKED

478319

GEOPEKO
DEVONPORT BASE, TASMANIA

SCALE: 1:2 500

No T.S27/76-V19-6

E.L.27/76 ELLIOTT BAY, TASMANIA

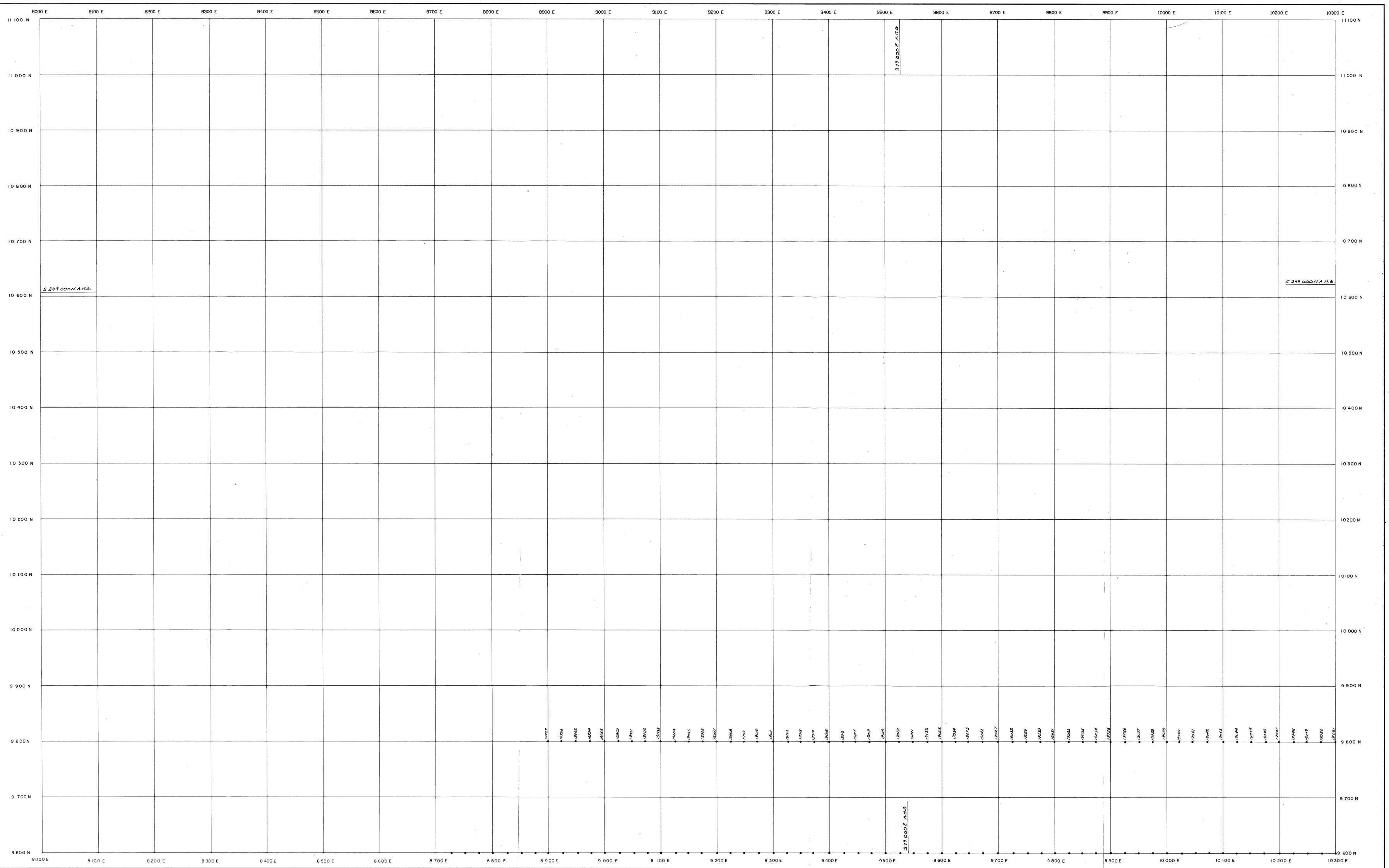
83-2076

VOYAGER 19

SOIL SAMPLE LOCATION

998

Plan 25



Sample position

30	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	%
1	Ag	ppm
15	Au	ppb
20	Sn	ppm
30	W	ppm
10	As	ppm

X Sample below level of detection
NS No sample
— No analytical result.

o Grid position
Mate auger hole
Power auger (Jacro)
B.L. Base line

CONTOUR INTERVAL ppm

Pencil No			
19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600>
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN

13°00'

478320 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 26

SHEET NO. 5 NE 3–

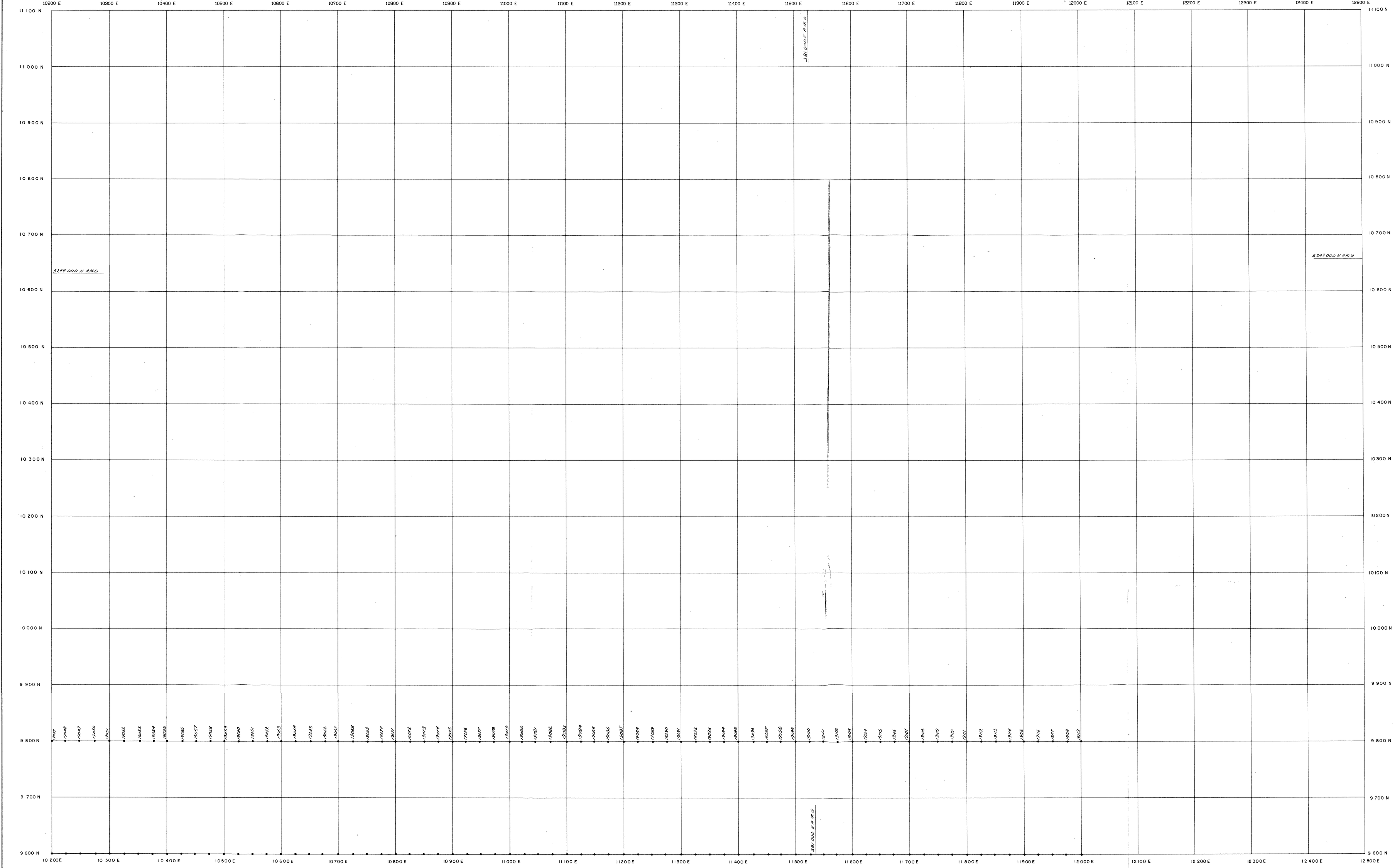
Interpreted By:
Drawn By: M.v.d.S.
Date: SEPT 83
Approved By: WR
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

SAMPLE LOCATIONS

993



Sample position

30	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	%
1	Ag	ppm
15	Au	ppb
20	Sn	ppm
30	W	ppm
10	As	ppm

X Sample below level of detection
NS No sample
— No a

o Grid position
ø Mate auger hole
• Power Auger (Jacro)
BL Base Line

CONTOUR INTERVAL ppm

Panel No			
19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600)
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN

13°00'

Interpreted By:
Drawn By: MvdS
Date: SEPT 83
Approved By: W.H.
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

478324 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 27

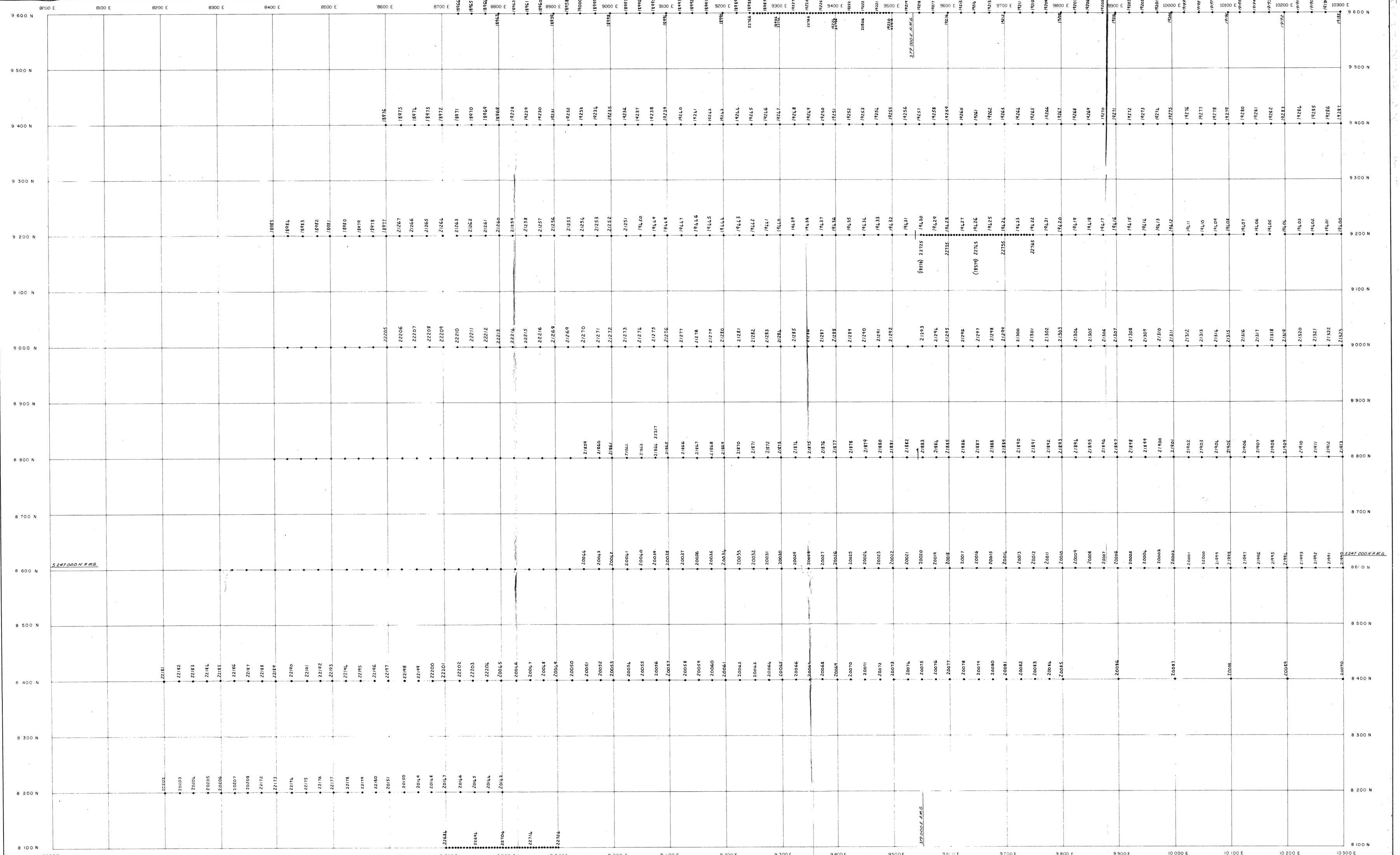
SHEET NO. 5 NE 4

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

SAMPLE LOCATIONS

1000



Interpreted By	
Drawn By	M.vd.S.
Date	SEPT 83
Approved By	MR
Revision By:	Date:
Revision By	Date:
Revision By:	Date:

478322 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

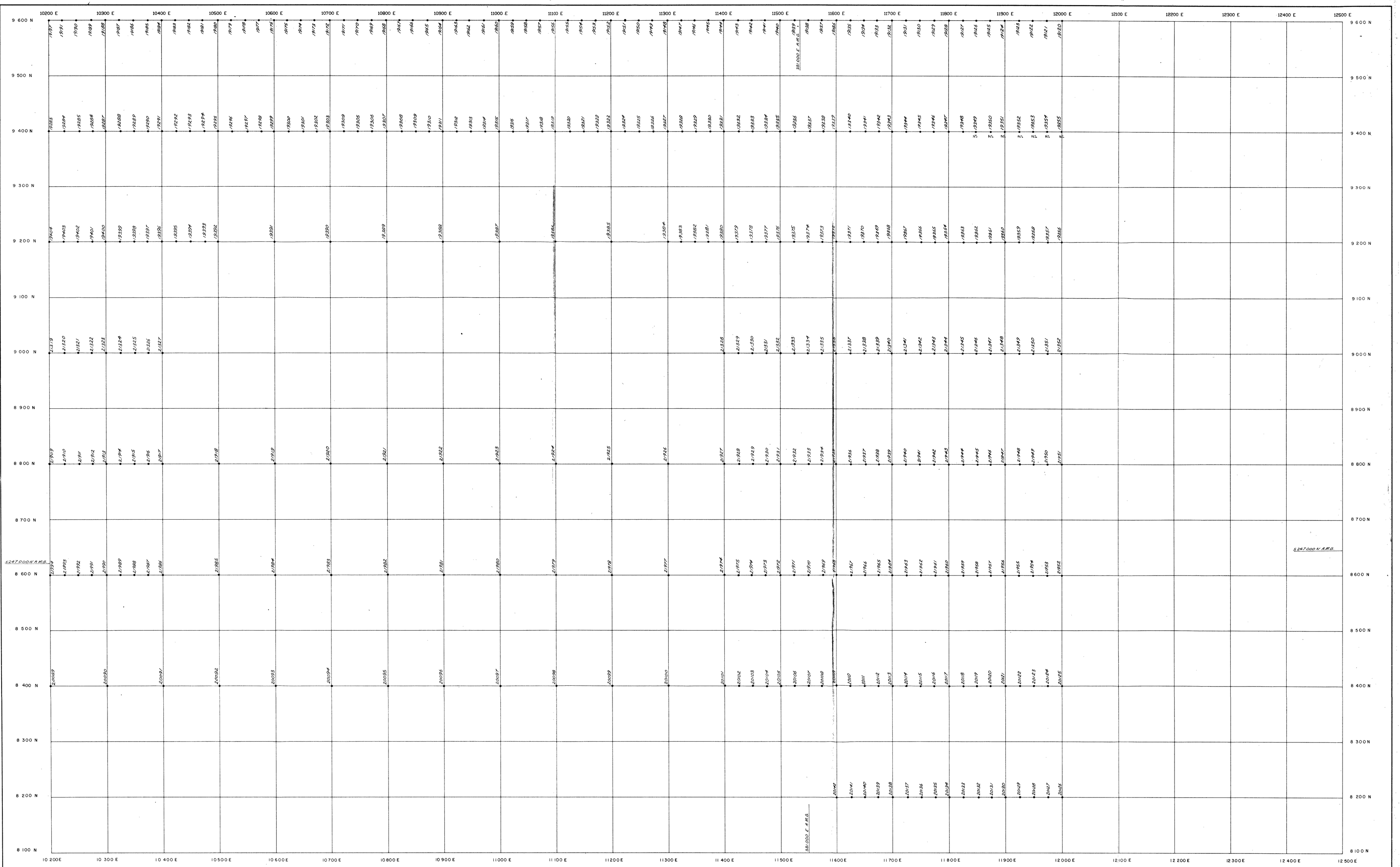
DRAWING NO 28

SHEET NO 8 SEI-

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076 SAMPLE LOCATIONS

1001



o Grid position
ø Mote auger hole
• Power Auger (Jacro)
BL Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No			
19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

Interpreted By:
Drawn By: M. udS
Date: Sept 83.
Approved By: MA.
Revision By: Date:
Revision By: Date:
Revision By: Date:

478323

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 29

SHEET NO. 5SE2-

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

SAMPLE LOCATIONS

1002

478324

D of M | A.G. | C.G. | E.G. | B.G.M.E
Received 27 DEC 1983
Answered
12,142/83

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LIMITED

EXPLORATION LICENCE 27/76

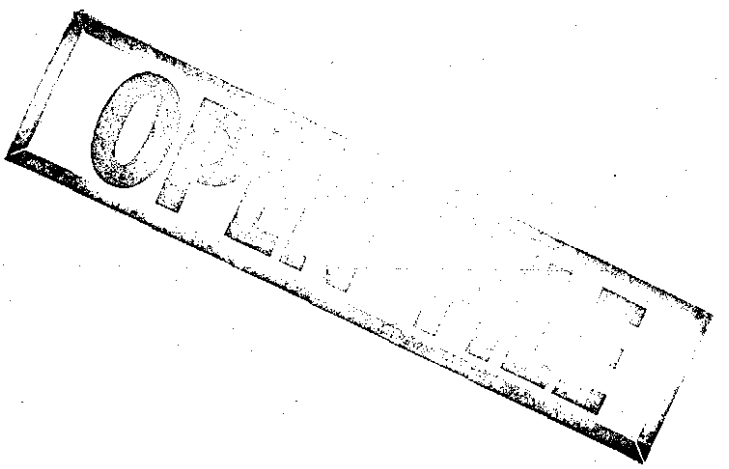
ELLIOTT BAY, TASMANIA

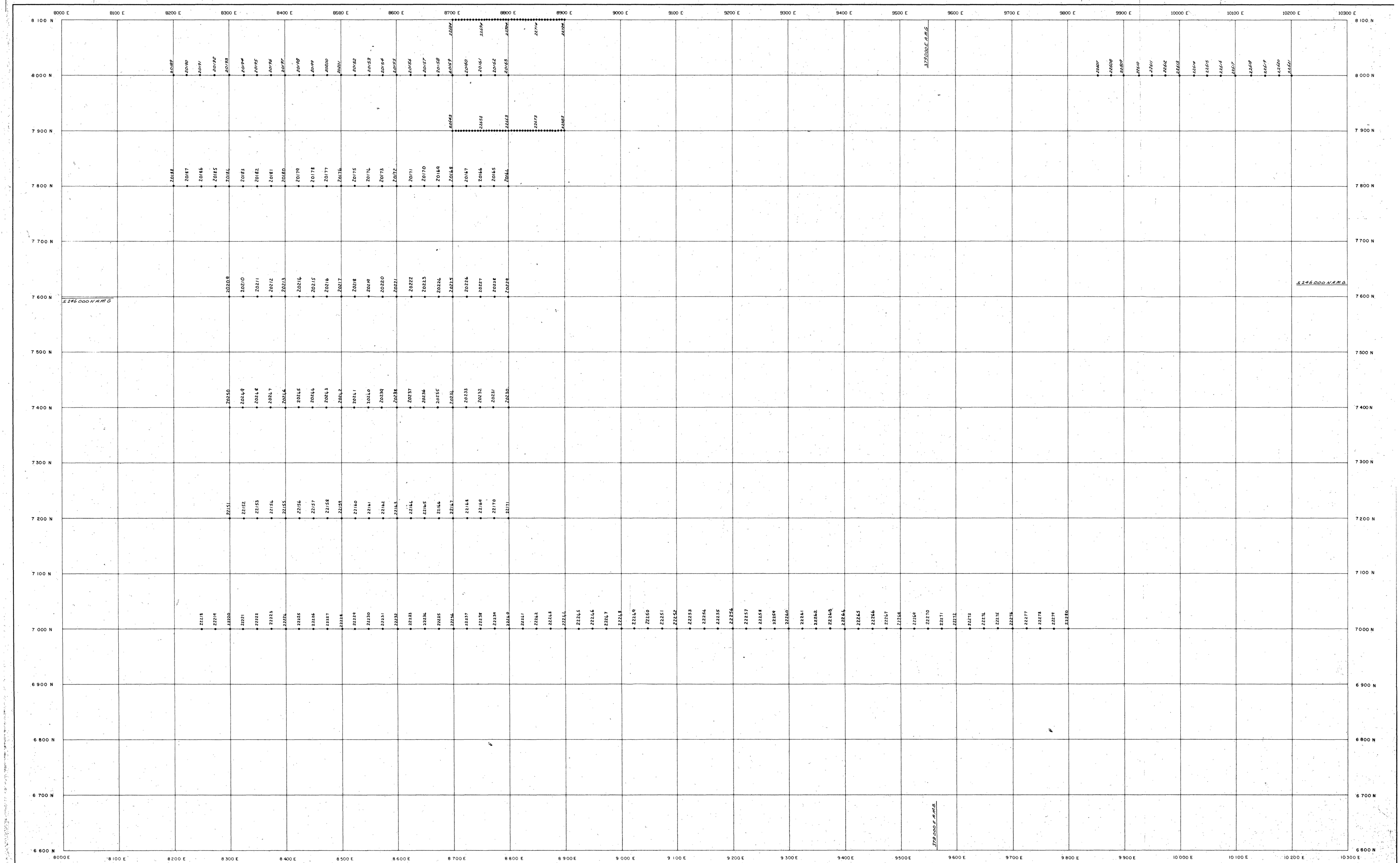
ANNUAL REPORT

1982-83 FIELD SEASON

PLANS 30 - 56

W. Herrmann
November, 1983





Grid position
Mote auger hole
Power auger (Jacro)
B.L. Base line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
— sample position
0.5 — Fe sample, %
5 — Ag sample, ppm
35, 20, 25, 0.5 — Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm
Pencil No.

19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600>
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478325

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 30

SHEET NO. 5 SE 3-

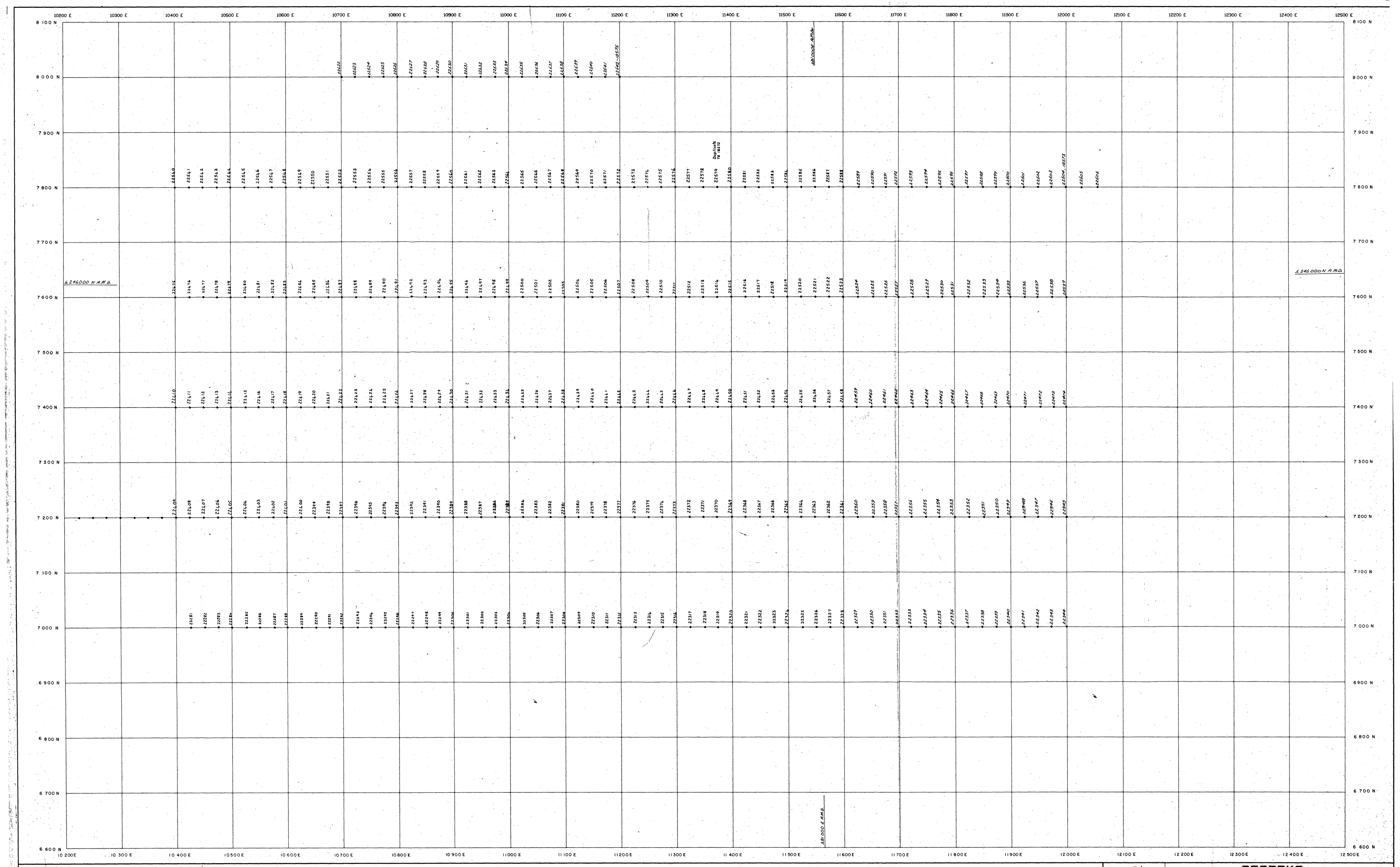
Interpreted By:
Drawn By: MvdS.
Date: Sept 83
Approved By: WJ
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076.

SAMPLE LOCATIONS

1003



o Grid position
Mots auger hole
• Power Auger (Jacra)
BL Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
0 — sample position
0.5 — Fe sample, %
0.5 — Ag sample, ppm
5 / 35 / 25 / 0.5 — Duplicate samples –
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No			
19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478326 **GEOPEKO**
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 31
SHEET NO. 5 SE 4-

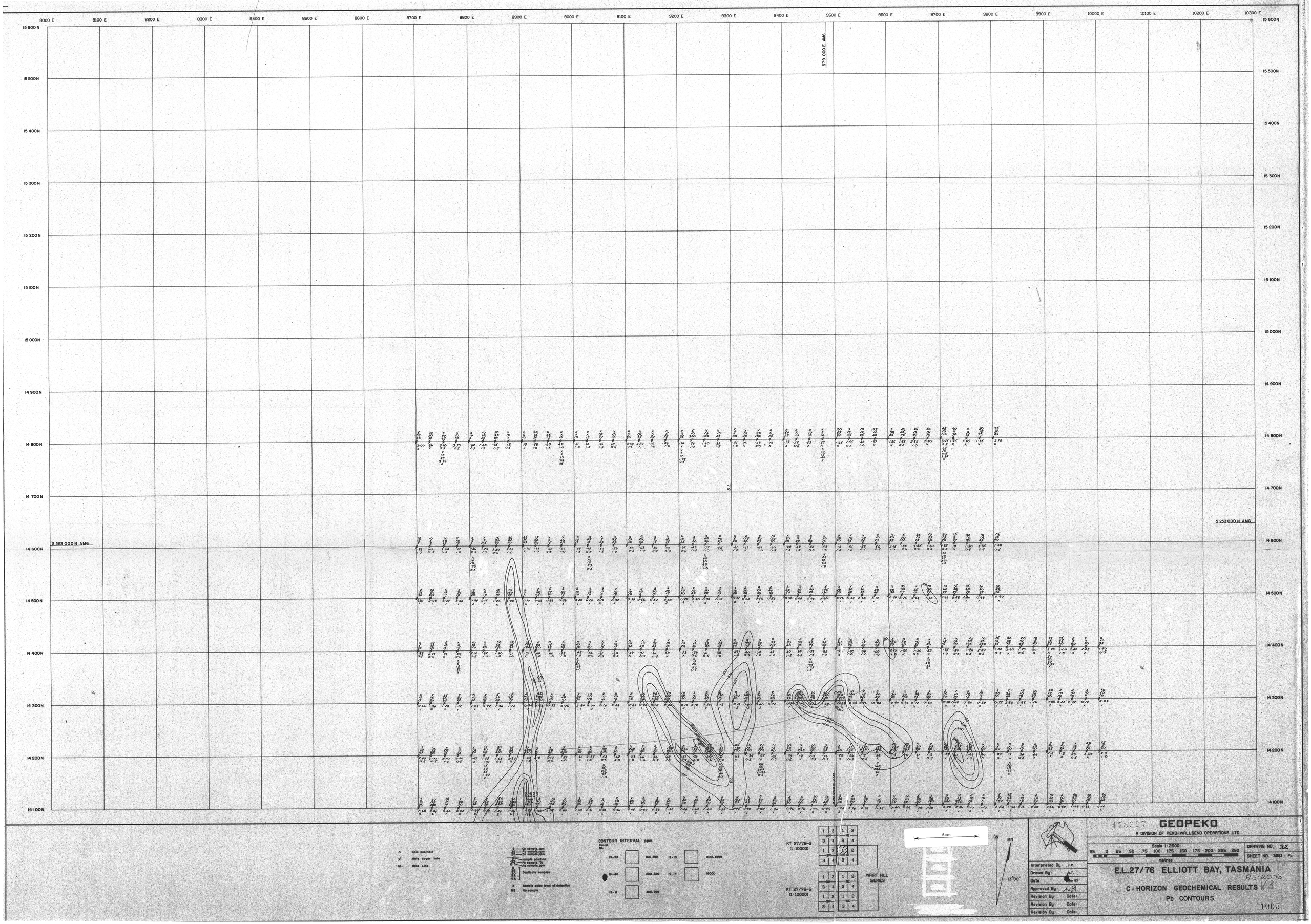
Interpreted By:
Drawn By: M.v.d.S
Date: SEPT. 83
Approved By: [signature]
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

SAMPLE LOCATIONS

1004



GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 32

SHEET NO. 3SE1 - Pb

Interpreted By:	J.P.
Drawn By:	R.T.
Date:	[illegible] 83
Approved By:	W.A.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

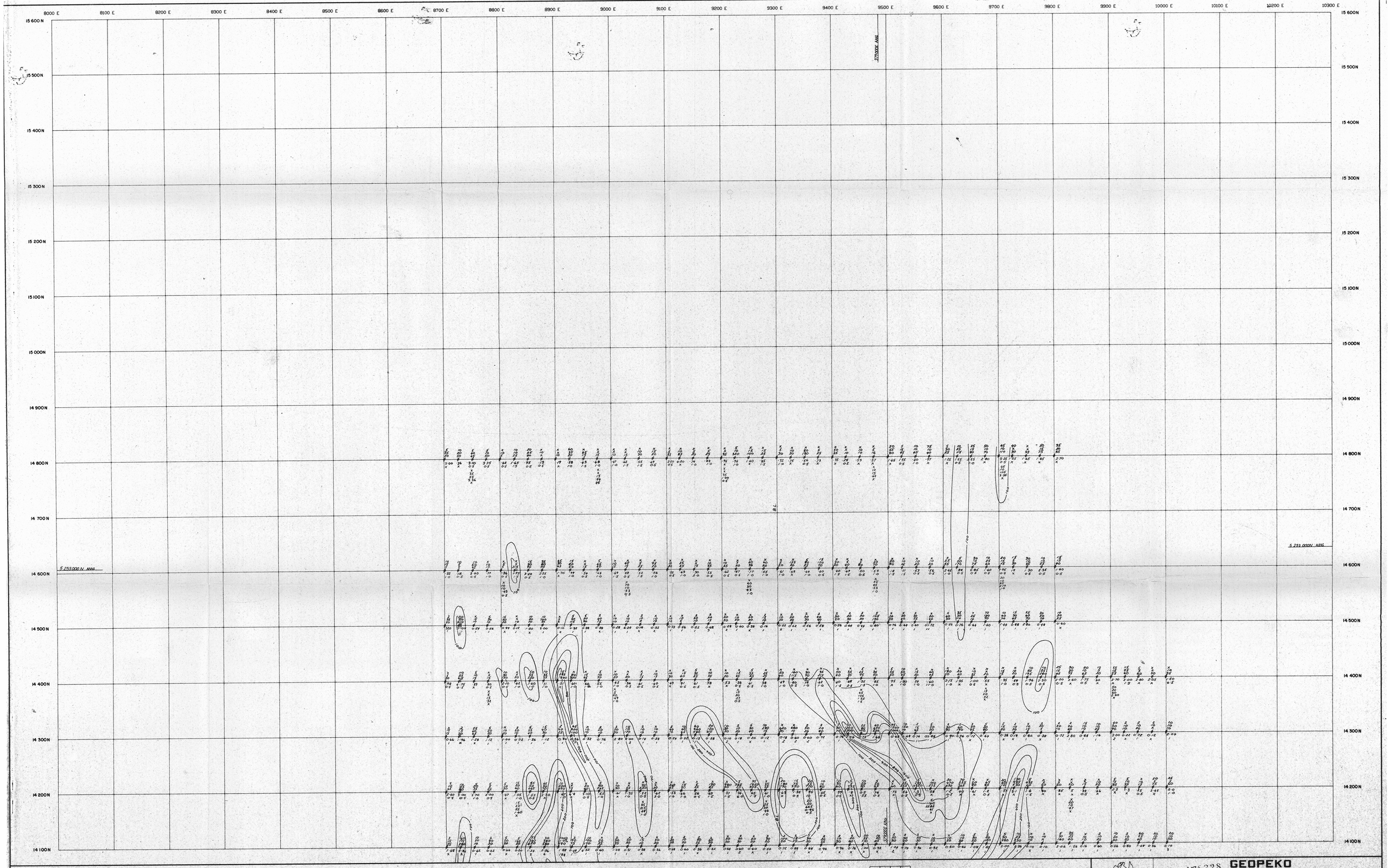
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Pb CONTOURS

1005



o Grid position
p Mole auger hole
B.L. Base Line

S — Cu sample, ppm
Pb sample, ppm
Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
S 35 20 25 Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm
Pencil No.

19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600)
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WARRT HILL SEERIES

5 cm

GN MN

13°00'

478328 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 33

SHEET NO. 3SE1-Zn

Interpreted By:	J.P.
Drawn By:	R.T.
Date:	Mar 83
Approved By:	W.R.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

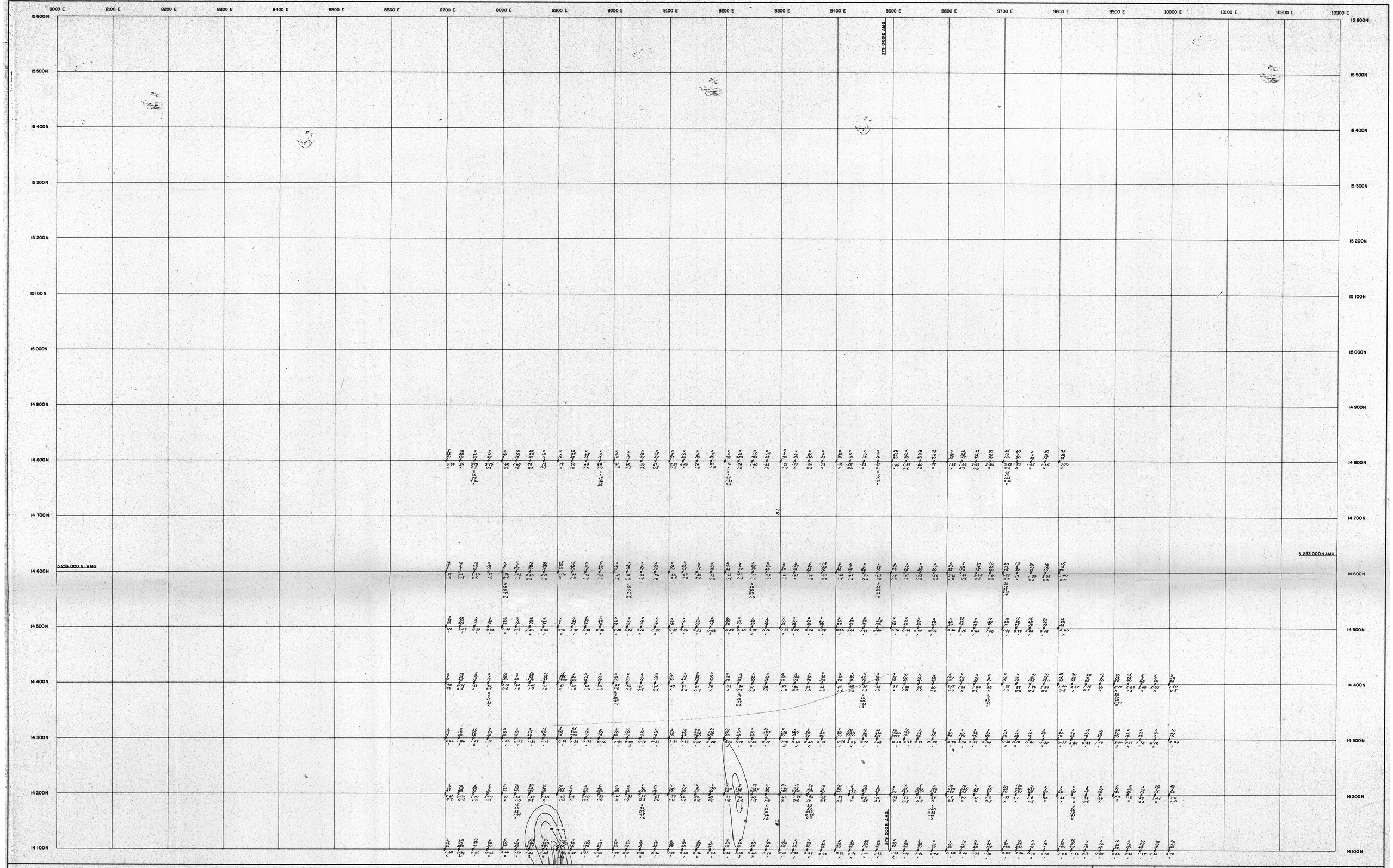
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Zn CONTOURS

1006



o Grid position
ø Mole auger hole
B.L. Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
— sample position
25 — Fe sample, %
0·5 — Ag sample, ppm
5 / 35 / 20 / 0·5 — Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No.			
19-33	2-4	19-10	16-32
19-46	4-8	19-14	32 >
19-6	8-16		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478329

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 34

SHEET NO. 3SE1-Ag

Interpreted By:	J.P.
Drawn By:	R.T.
Date:	Mar 83
Approved By:	W.H.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Ag CONTOURS

1007

10200 E 10300 E 10400 E 10500 E 10600 E 10700 E 10800 E 10900 E 11000 E 11100 E 11200 E 11300 E 11400 E 11500 E 11600 E 11700 E 11800 E 11900 E 12000 E 12100 E 12200 E 12300 E 12400 E 12500 E

15 600 N
15 500 N
15 400 N
15 300 N
15 200 N
15 100 N
15 000 N
14 900 N
14 800 N
14 700 N
14 600 N
14 500 N
14 400 N
14 300 N
14 200 N
14 100 N

10 200 E 10 300 E 10 400 E 10 500 E 10 600 E 10 700 E 10 800 E 10 900 E 11 000 E 11 100 E 11 200 E 11 300 E 11 400 E 11 500 E 11 600 E 11 700 E 11 800 E 11 900 E 12 000 E 12 100 E 12 200 E 12 300 E 12 400 E 12 500 E

● Power auger hole
B.L Base Line

Cu sample, ppm
Pb sample, ppm
Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level

CONTOUR INTERVAL ppm

Petrol No			
19–53	100–200	19–10	800–1600
19–46	200–400	19–14	1600 +
19–6	400–800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
NW		NE	
3	4	3	4
1	2	1	2
SW		SE	
3	4	3	4

WART HILL SERIES

5 cm

GN MN 13°00'

Interpreted By: W.H.
Drawn By: M.vdS.
Date: Jun 83
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

478330 **GEOPEKO**
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

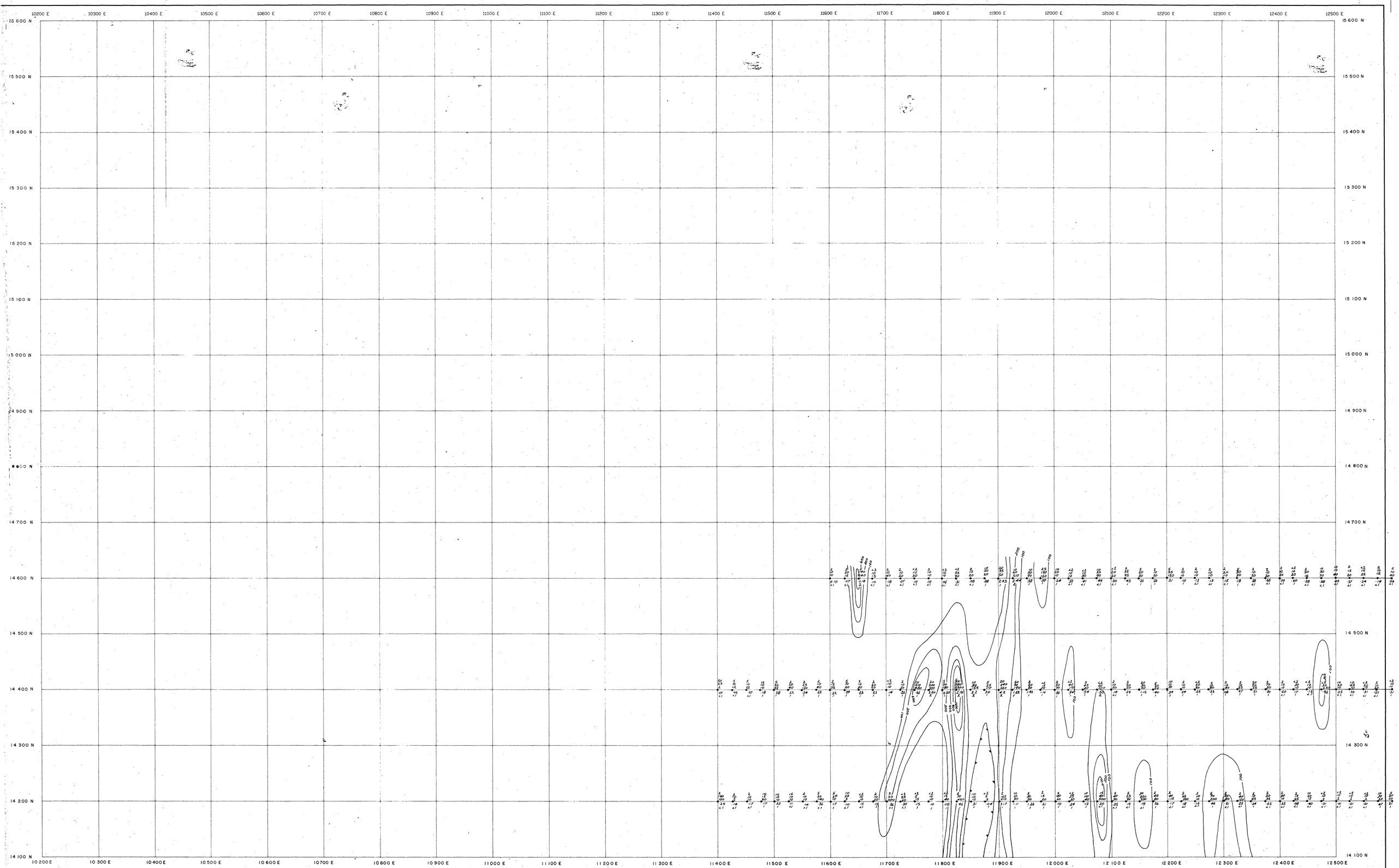
DRAWING NO. 35
SHEET NO. 3SE2-Pb

E.L.27/76 ELLIOTT BAY, TASMANIA

82-2076

C HORIZON GEOCHEMICAL RESULTS

Pb Contours 1008



Power auger hole

B.L. Base Line

Cu sample, ppm
Pb sample, ppm
Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level

CONTOUR INTERVAL ppm

Pencil No		Pencil No	
19-33	100-200	19-10	800-1600
19-46	200-400	19-14	1600 +
19-6	400-800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
NW		NE	
3	4	3	4
1	2	1	2
SW		SE	
3	4	3	4

WYART HILL SERIES

5 cm

GN MN 13°00'

GEOPEKO 478331
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 36
SHEET NO. 3SE2-Zn

Interpreted By: W.H.
Drawn By: M.vdS.
Date: Jun 83
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

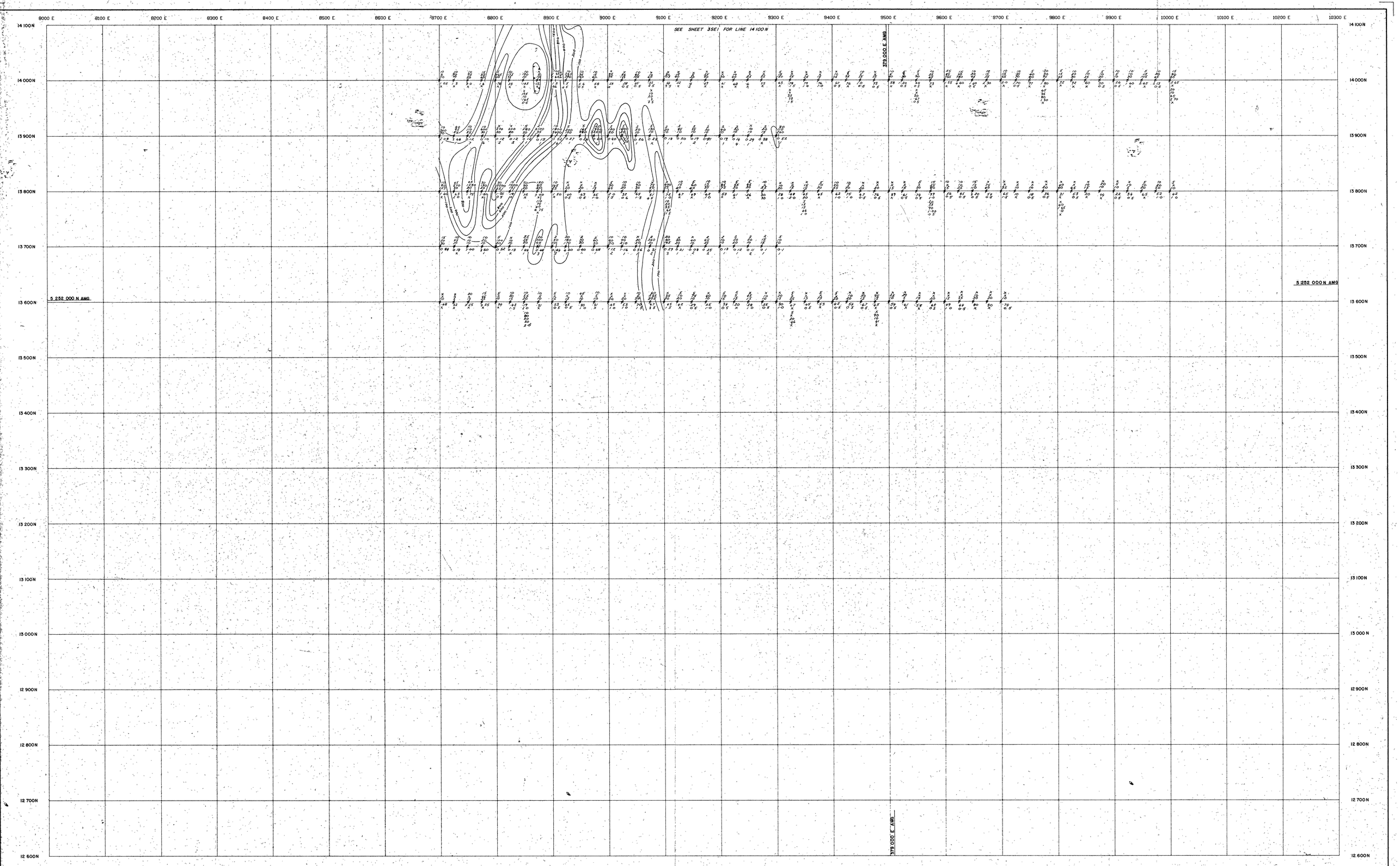
E.L.27/76 ELLIOTT BAY, TASMANIA

C HORIZON GEOCHEMICAL RESULTS

Zn Contours

83-2076

1003



o Grid position
Mate auger hole
B.L. Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm
Pencil No

19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600>
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478332 **GEOPEKO**
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

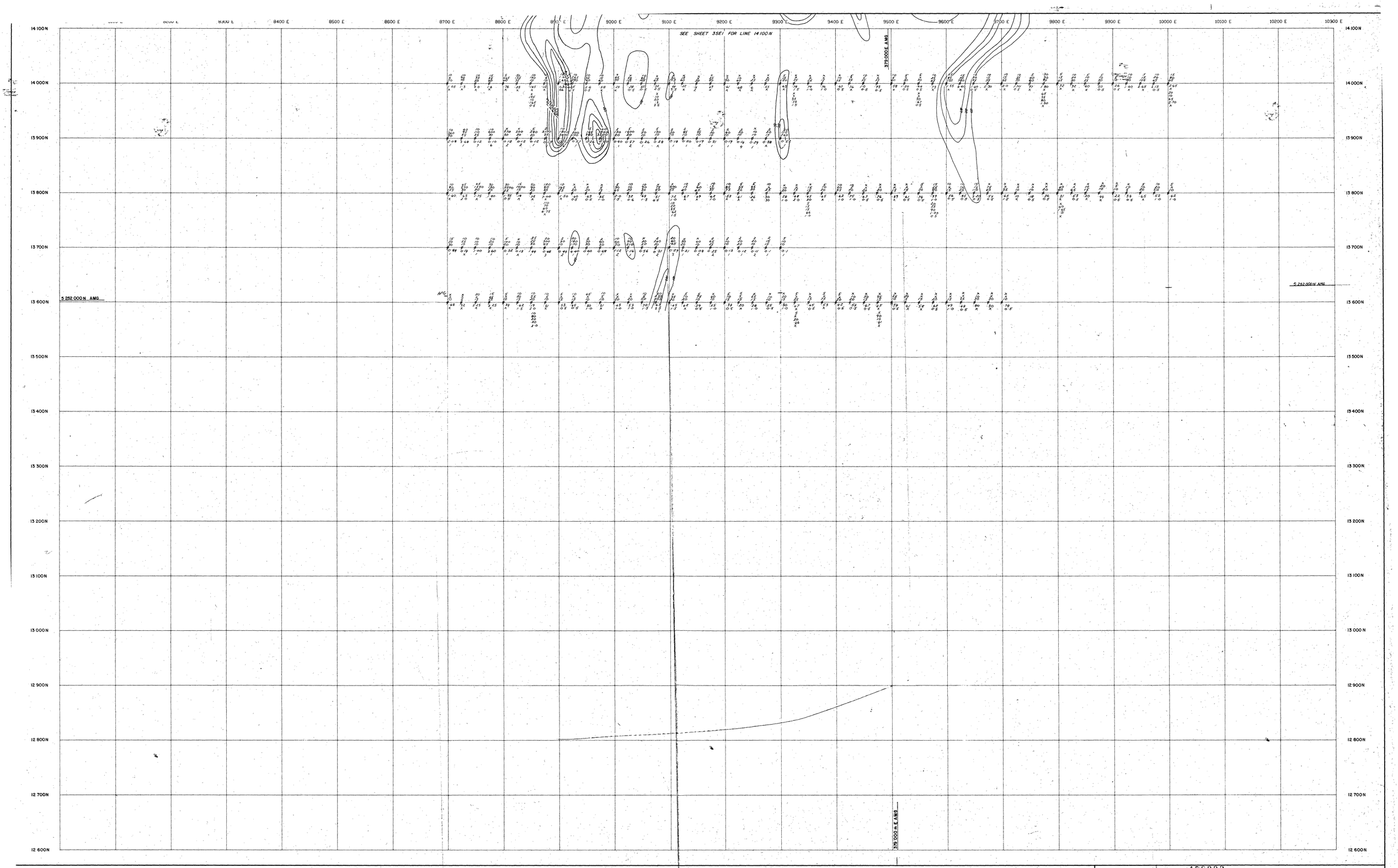
DRAWING NO 37
SHEET NO. 3SE3- Pb

Interpreted By:	J.P.
Drawn By:	R.T.
Date:	Mar 83
Approved By:	W.F.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076
V.3
1010

C.-HORIZON GEOCHEMICAL RESULTS
Pb CONTOURS



o Grid position
Note auger hole
B.L. Base Line

5 — Cu sample, ppm
25 — Pb sample, ppm
25 — Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples

X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No.			
19-33	100-199	19-10	800-1599
19-46	200-399	19-14	1600
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478333 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 38

SHEET NO. 3SE3-Zn

Interpreted By:	J.P.
Drawn By:	P.R.S.
Date:	Mar 83
Approved By:	W.H.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

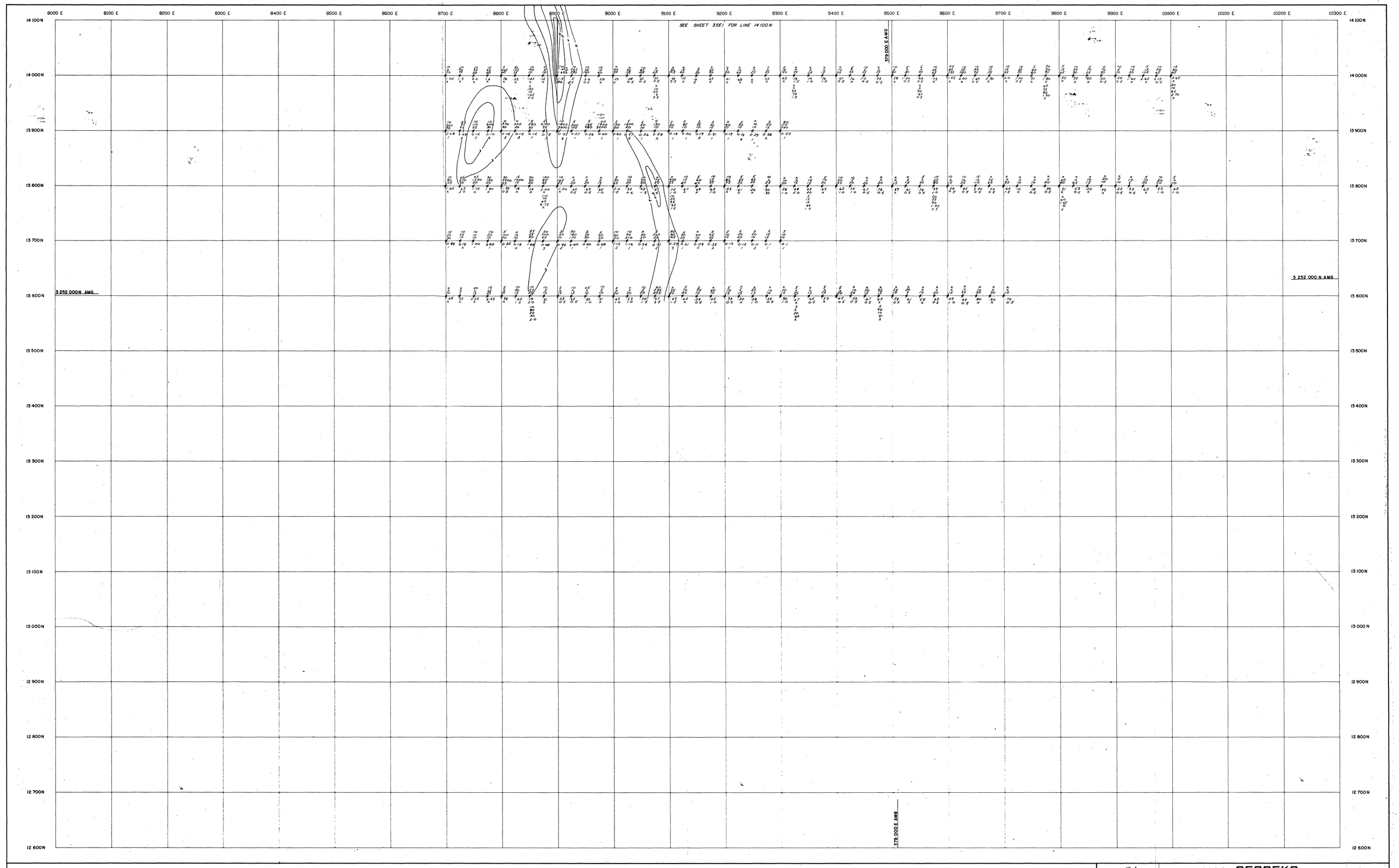
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Zn CONTOURS

1011



o Grid position
ø Mate auger hole
B.L. Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
— sample position
0·5 — Fe sample, %
— Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm
Pencil No.

19-33	2-4	19-10	16-32
19-46	4-8	19-14	32>
19-6	8-16		

KT 27/76-3 (1:10000)
KT 27/76-5 (1:10000)
WART HILL SERIES

5 cm

GN MN 13°00'

478334 **GEOPEKO**
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 39
SHEET NO. 3SE3-Ag

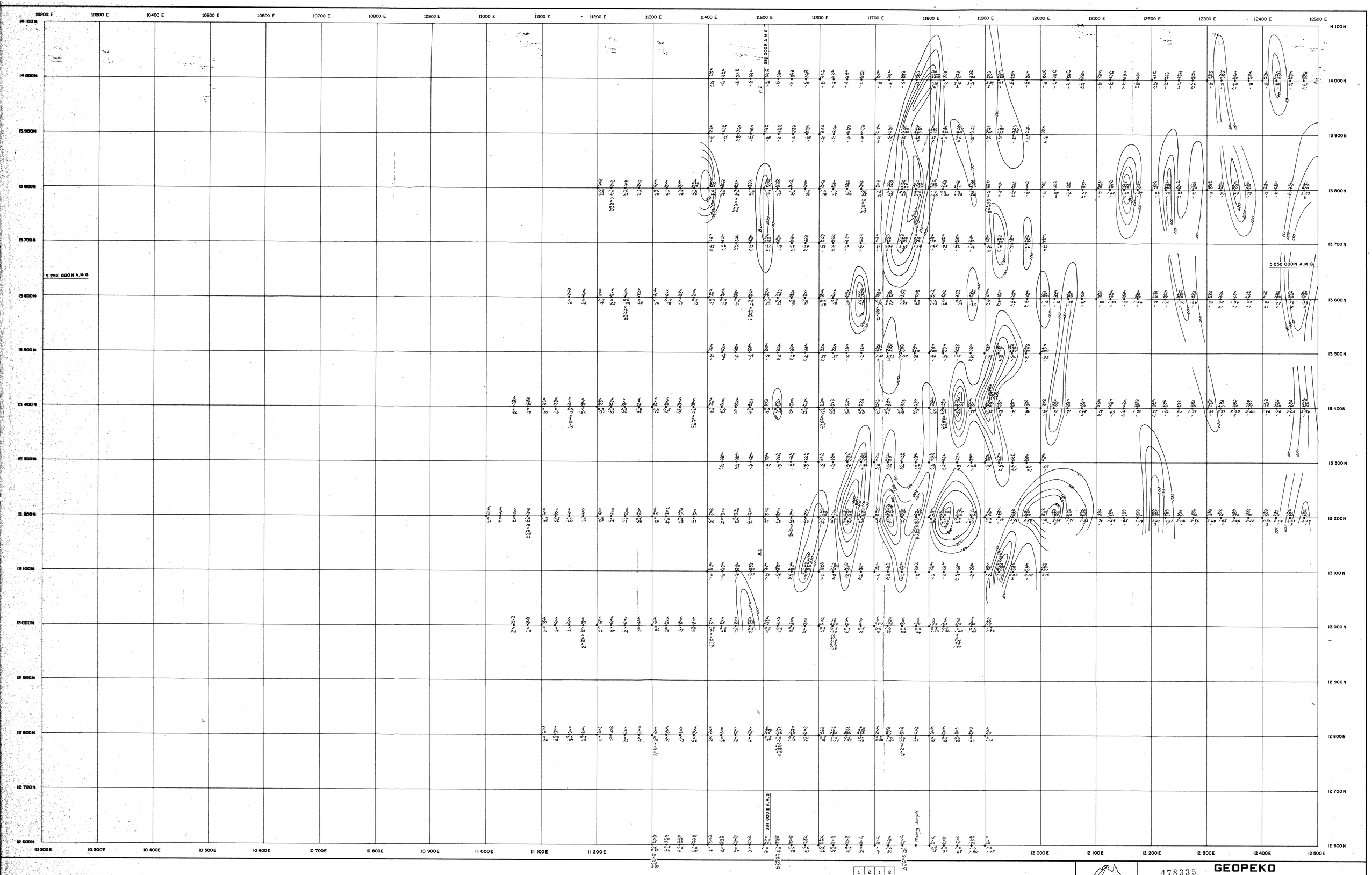
Interpreted By:	J.P.
Drawn By:	P.R.S.
Date:	Mar 83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS
Ag CONTOURS

1012



Power auger hole

B.L. Base Line

Cu sample, ppm
Pb sample, ppm
Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples

X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No.			
19-33	100-200	19-10	800-1600
19-46	200-400	19-14	1600 +
19-6	400-800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN

13°00'

478335

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 40

SHEET NO. 3SE4-Pb

Interpreted By:	W.H
Drawn By:	R.Tag PRS
Date:	June 83
Approved By:	N.H.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

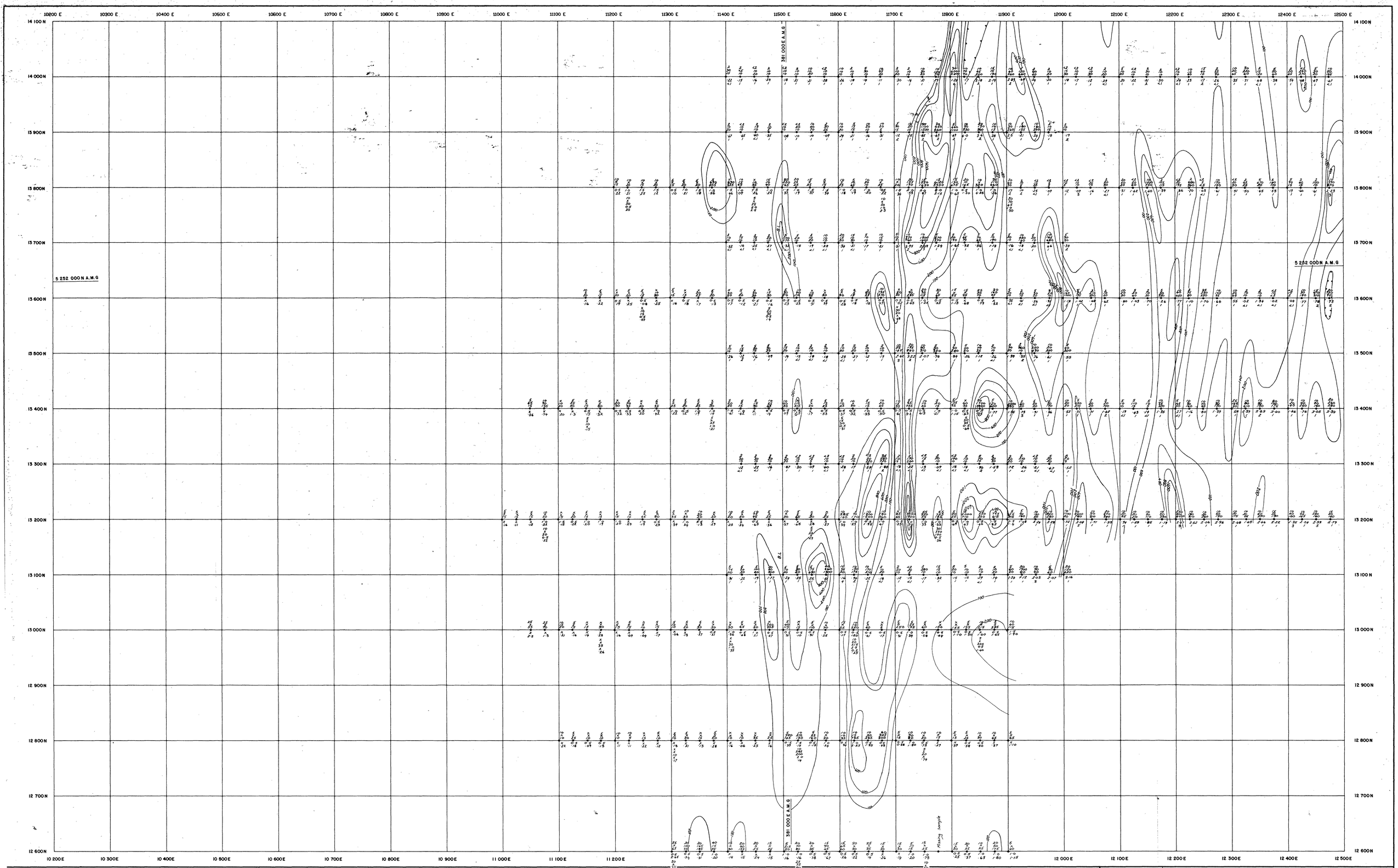
E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Pb CONTOURS

1013



• Power auger hole

B.L. Base Line

5 — Cu sample, ppm
35 — Pb sample, ppm
25 — Zn sample, ppm
— sample position
-22 — Fe sample, %
0·5 — Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL %

Pencil No.			
19-33	100-200	19-10	800-1600
19-46	200-400	19-14	1600 +
19-6	400-800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN

13°00'

478336 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 41

SHEET NO. 3SE4-Zn

Interpreted By:	W.H
Drawn By:	R.Tag PRS.
Date:	June 83
Approved By:	W.H.
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEMICAL RESULTS

Zn CONTOURS

1014

12 400 E 12 500E 12 600 E 12 700 E 12 800 E 12 900 E 13 000 E 13 100 E 13 200E 13 300 E 13 400 E 13 500 E 13 600 E 13 700 E 13 800E 13 900 E 14 000E 14 100 E 14 200 E 14 300E 14 400 E 14 500 E 14 600 E 14 700 E

14 100 N
14 000 N
13 900 N
13 800 N
13 700 N
13 600 N
13 500 N
13 400 N
13 300 N
13 200 N
13 100 N
13 000 N
12 900 N
12 800 N
12 700 N
12 600 N

5 252 000N A.M.G.

383 000E A.M.G.

Power auger hole
B.L. Base Line

Cu sample,ppm
Pb sample,ppm
Zn sample,ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples
X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm

Pencil No.		Pencil No.	
19-33	100 – 200	19-10	800 – 1600
19-46	200 – 400	19-14	1600 +
19-6	400 – 800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

NW NE SW SE

WARATAH SERIES

5 cm

GN MN 13°00'

Interpreted By:
Drawn By: PRS
Date: 1983
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

478337 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

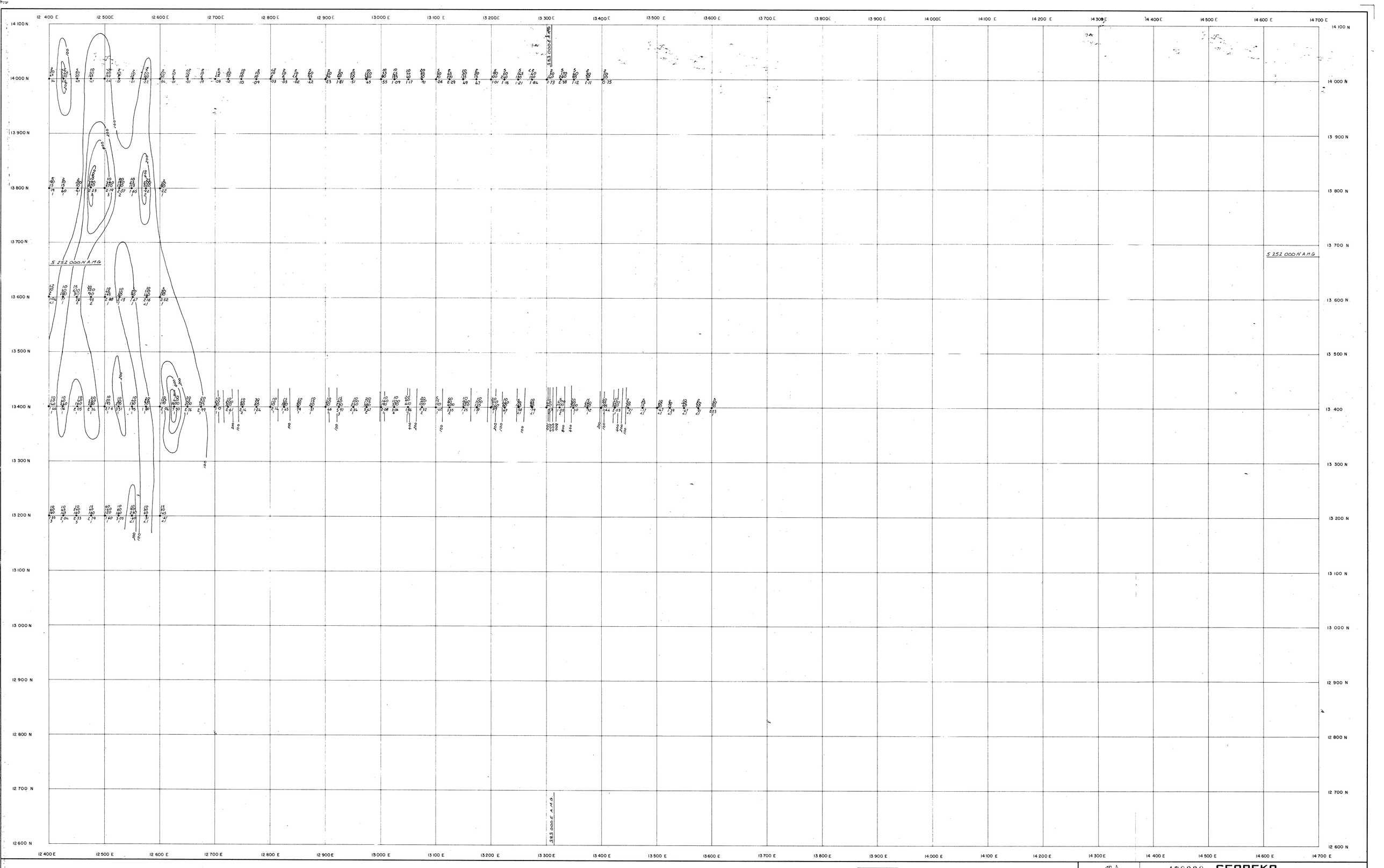
Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 42
SHEET NO. 4 SW 3

E.L.27/76 ELLIOTT BAY TASMANIA
83-2076

C-HORIZON GEOCHEM RESULTS

Pb Contours 1015



Power auger hole

B.L. Base Line

Cu sample, ppm
Pb sample, ppm
Zn sample, ppm
sample position
Fe sample, %
Ag sample, ppm
Duplicate samples

X Sample below level of detection
NS No sample

CONTOUR INTERVAL ppm
Pencil No.

19-33	100-200	19-10	800-1600
19-46	200-400	19-14	1600+
19-6	400-800		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

GN MN 13°00'

478338 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 43

SHEET NO. 4 SW 3 -Zn

Interpreted By:	
Drawn By:	PRS
Date:	June '83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

Zn Contours

1016

9400E 9500E 379 000mE AMG 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E 10400E 10500E 10600E 10700E 10800E 10900E 11000E

13800N 13700N 13600N 13500N 13400N 13300N 13200N 13100N 13000N 12900N 12800N 12700N 12600N 12500N 12400N 12300N 12200N 12100N 12000N 11900N 11800N 11700N 11600N

5 251 000mN AMG

LEGEND:

- ..... Grid Position
- ..... Power Auger Hole (Jacro)
- ..... Hand Auger Hole
- ..... Power Hand Auger. (Mate)

Cu — 45
Pb — 55
Zn — 160
Original Sample

Sample Position

Cu — x
Pb — 55
Zn — 140
Duplicate Sample

NOTE: All values in ppm

CONTOUR INTERVAL
Pencil No:
100 ppm
200 ppm
400 ppm
800 ppm
1600 ppm

5 cm

GN MN
13°00'

UPDATED MAY 1983
DATE: FEB 1981
UPDATED MAY 1982
GEOLOGIST: W.R.
DRAWN: R. TOGNONI M.vdS.
CHECKED:

GEOPEKO
DEVONPORT BASE, TASMANIA
478339

SCALE: 1:2 500

No. T.S 27/76-V19-11

E.L. 27/76 ELLIOTT BAY, TASMANIA
VOYAGER 19
83-2076
V3
1017
C-HORIZON GEOCHEMISTRY RESULTS
LEAD CONTOURS

PLAN 44

9400E 9500E 379 000mE AMG 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E 10400E 10500E 10600E 10700E 10800E 10900E 11000E

13800N 13700N 13600N 13500N 13400N 13300N 13200N 13100N 13000N 12900N 12800N 12700N 12600N 12500N 12400N 12300N 12200N 12100N 12000N 11900N 11800N 11700N 11600N

5 251 000mN AMG

379 000mE AMG

LEGEND:

- ..... Grid Position
- ..... Power Auger Hole (Jacro)
- ..... Hand Auger Hole
- ..... Power Hand Auger. (Mate)

Cu — x
Pb — 55
Zn — 160
Original Sample

Sample Position

Cu — x
Pb — 55
Zn — 140
Duplicate Sample

NOTE: All values in ppm

CONTOUR INTERVAL

100 ppm
200
400
800
1600

5 cm

GN MN
13°00'

UPDATED MAY 1983
DATE: FEB 1981
UPDATED MAY 1982

GEOLOGIST: W.H.

DRAWN: R. TOGNONI

CHECKED:

GEOPEKO
DEVONPORT BASE, TASMANIA

478340

SCALE: 1:2 500

No. T.S 27/76-V19-7

E.L. 27/76 ELLIOTT BAY, TASMANIA 83-2076

VOYAGER 19 V3 1018

C-HORIZON GEOCHEMISTRY RESULTS

Cu, Pb, Zn Results

PLAN 45

8000 E 8100 E 8200 E 8300 E 8400 E 8500 E 8600 E 8700 E 8800 E 8900 E 9000 E 9100 E 9200 E 9300 E 9400 E 9500 E 9600 E 9700 E 9800 E 9900 E 10000 E 10100 E 10200 E 10300 E

11 100 N 11 000 N 10 900 N 10 800 N 10 700 N 10 600 N 10 500 N 10 400 N 10 300 N 10 200 N 10 100 N 10 000 N 9 900 N 9 800 N 9 700 N 9 600 N

5 249 000 N A.M.G.

379 000 E A.M.G.

Sample position

50	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	pc
1	Ag	ppm
15	As	ppb
20	Sb	ppm
30	Bi	ppm
0	Au	ppm

X Sample below level of detection
NS No sample
— No analytical result.

o Grid position
Note auger hole
Power auger (Jacro)
B.L. Base line

CONTOUR INTERVAL ppm

Pencil No.				
19-33	100-199	19-12	800-1599	
19-46	200-399	19-14	1600>	
19-6	400-799			

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

GN MN 13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 46

SHEET NO. 8 N.E.S.—

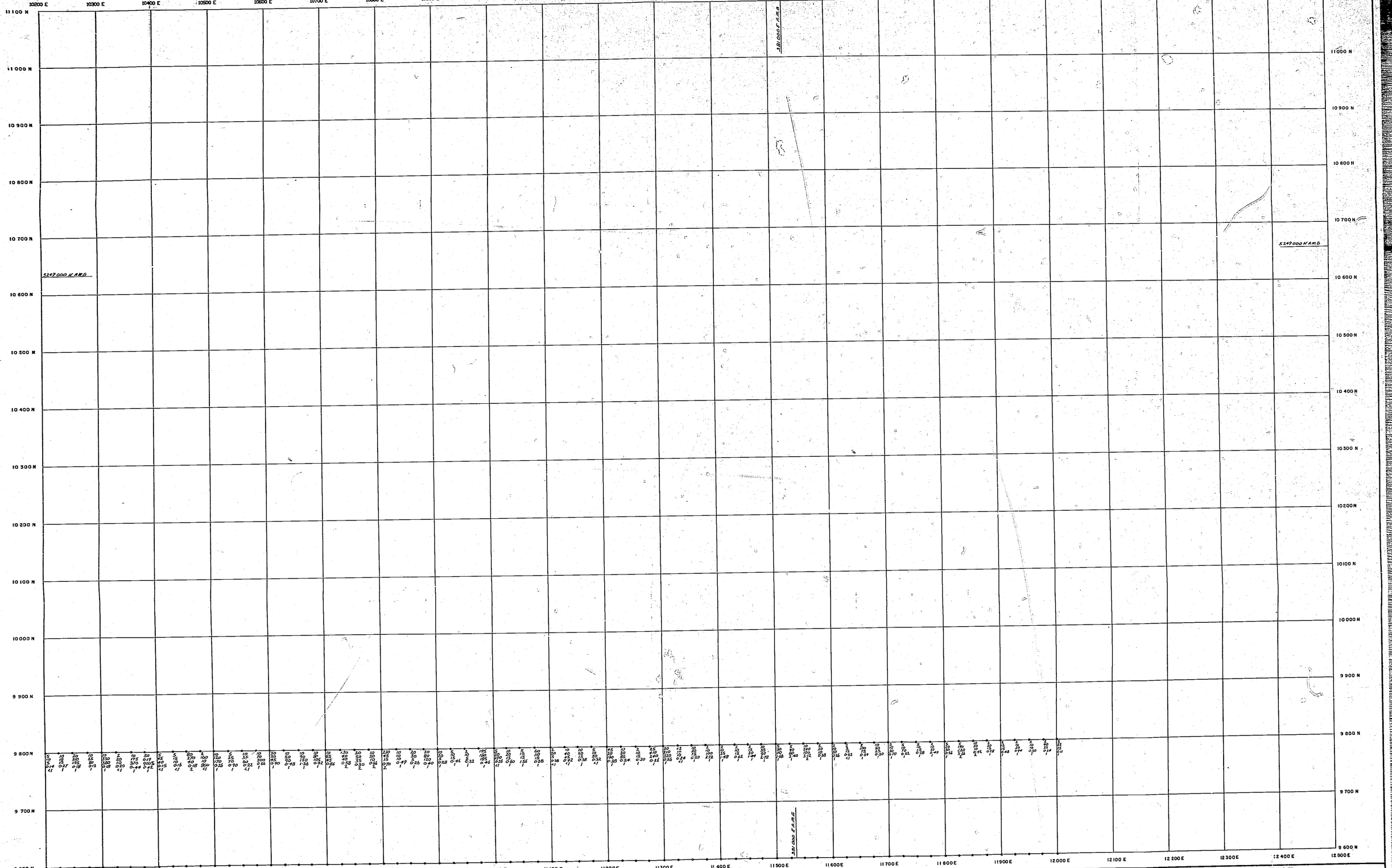
Interpreted By:
Drawn By: M.H.S.
Date: SEPT 83
Approved By: A.J.H.
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L. 27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1019



Grid position
Mate auger hole
Power Auger (Jacks)
B.L. Base Line

Sample position

30	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	%
1	Ag	ppm
15	Au	ppb
20	Sn	ppm
30	W	ppm
10	As	ppm

X Sample below level of detection
NS No sample
— Xsa

CONTOUR INTERVAL ppm

Pencil No.			
19-33	100-199	19-10	800-1000
19-46	200-399	19-14	1600
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

GN MN 13°00'

Interpreted By:
Drawn By: M.v.d.S
Date: Sept 83
Approved By: M.H.
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 47

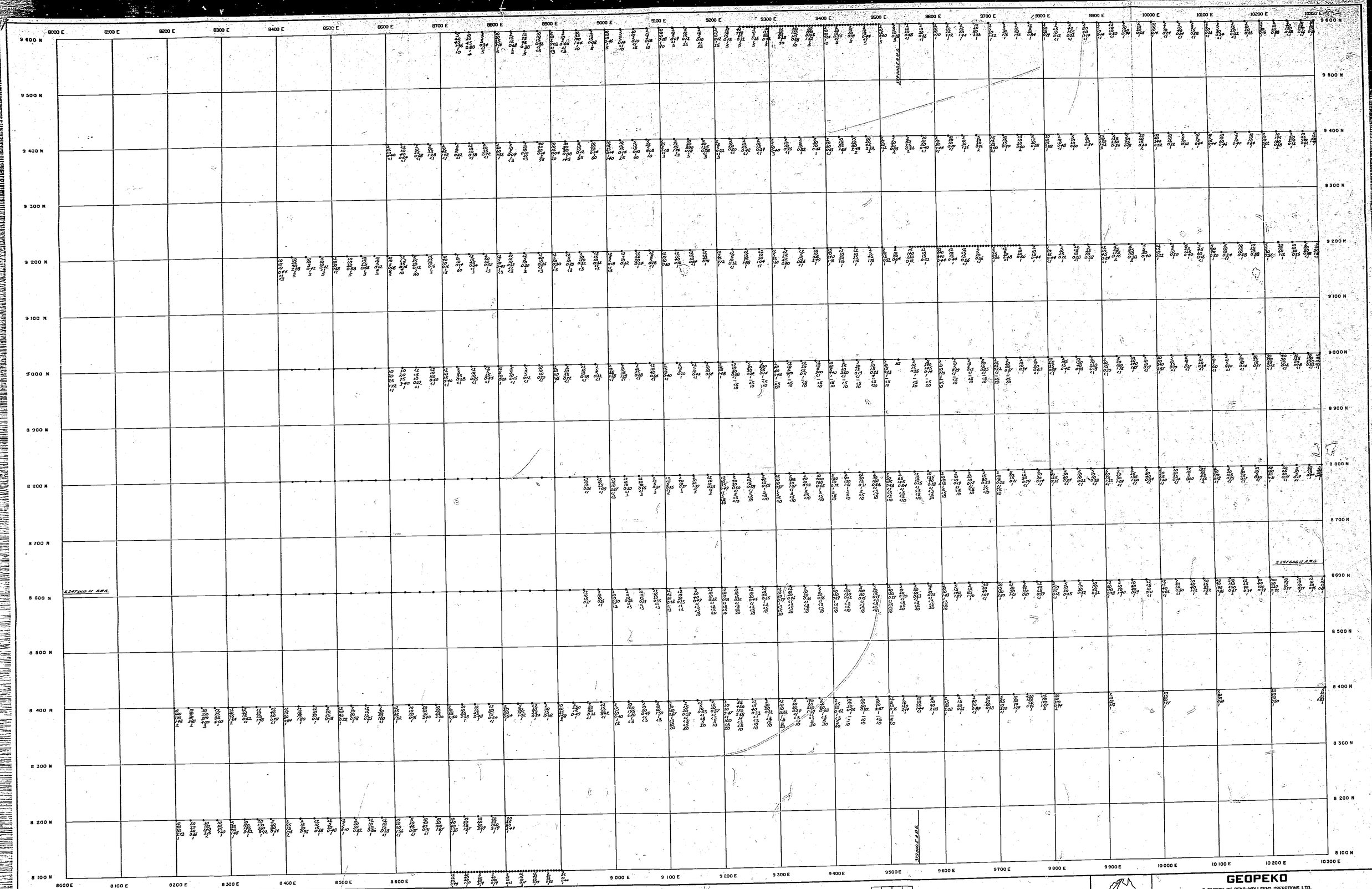
SHEET NO. 5 NE 4 Geochem

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1020



o Grid position
Mole auger hole
o Power auger (Jacro)
B.L. Base line

Sample position

30	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	%
1	Ag	ppm
15	As	ppb
20	Sb	ppm
30	W	ppm
10	As	ppm

X Sample below level of detection
NS No sample
— No analytical result.

CONTOUR INTERVAL ppm

Pencil No.			
19-33	100-199	19-10	800-1000
19-46	200-399	19-14	1600>
19-8	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

GN MN 13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 48

SHEET NO. 5 SE1 — Geochem

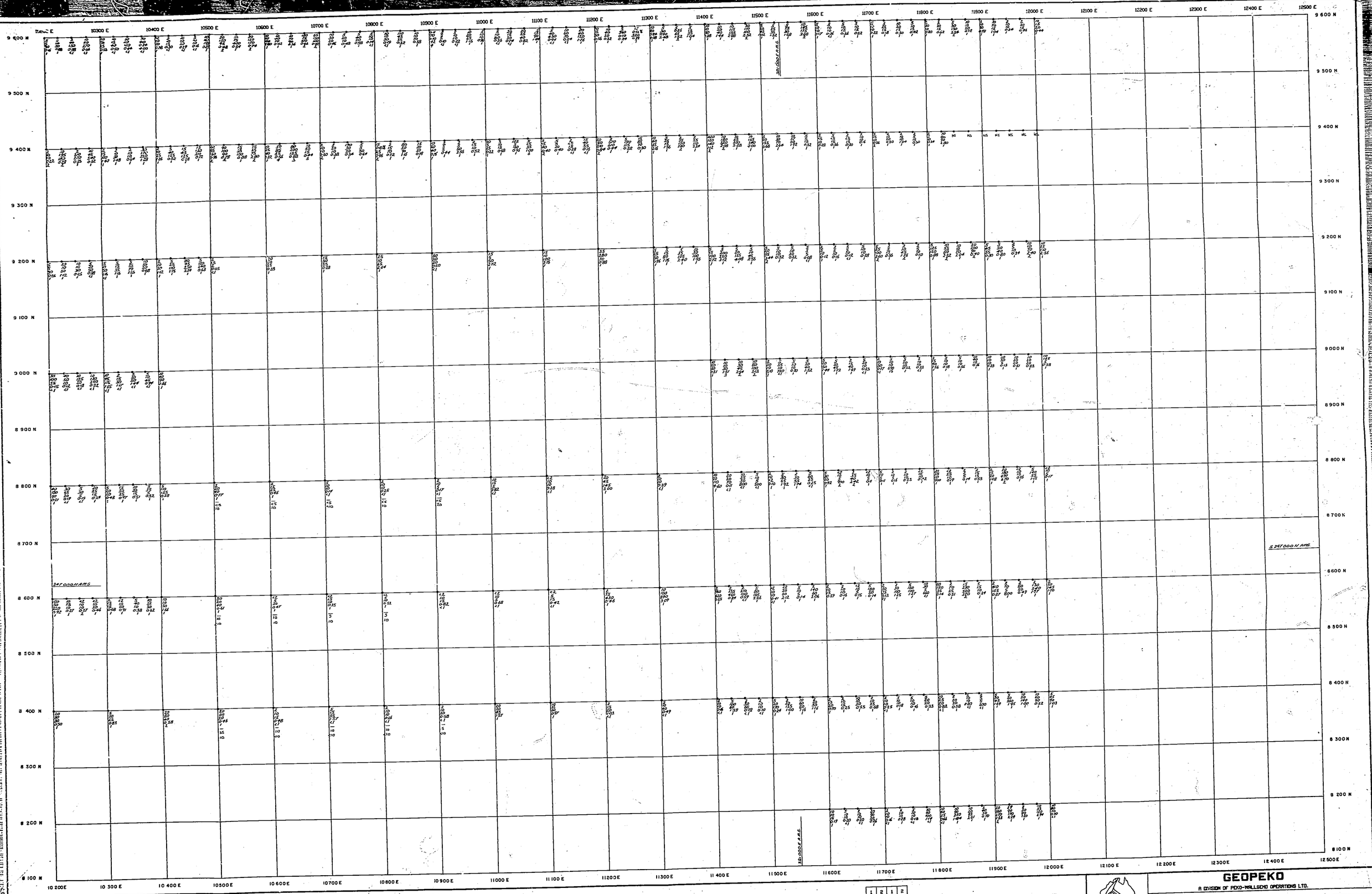
Interpreted By:
Drawn By: M.v.d.S.
Date: Sept 83.
Approved By: [signature]
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1021



Sample position

o	Grid position	30	Cu ppm
∅	Mete auger hole	145	Pb ppm
●	Power Auger (Jacro)	X30	Zn ppm
		0·40	Fe %
		1	Ag ppm
		15	As ppb
		20	Sb ppm
		30	W ppm
		10	As ppm

X Sample below level of detection
NS No sample
— No analytical result.

CONTOUR INTERVAL ppm

Pendi No.					
19-33		100-199	19-10		800-1599
19-46		200-399	19-14		1600
19-6		400-799			

KT 27/76-3 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

KT 27/76-5 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

WART HILL SERIES

GN MN 13°00'

Interpreted By:
Drawn By: M.v.S.
Date: SEPT 83.
Approved By: [illegible]
Revision By: Date:
Revision By: Date:
Revision By: Date:

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

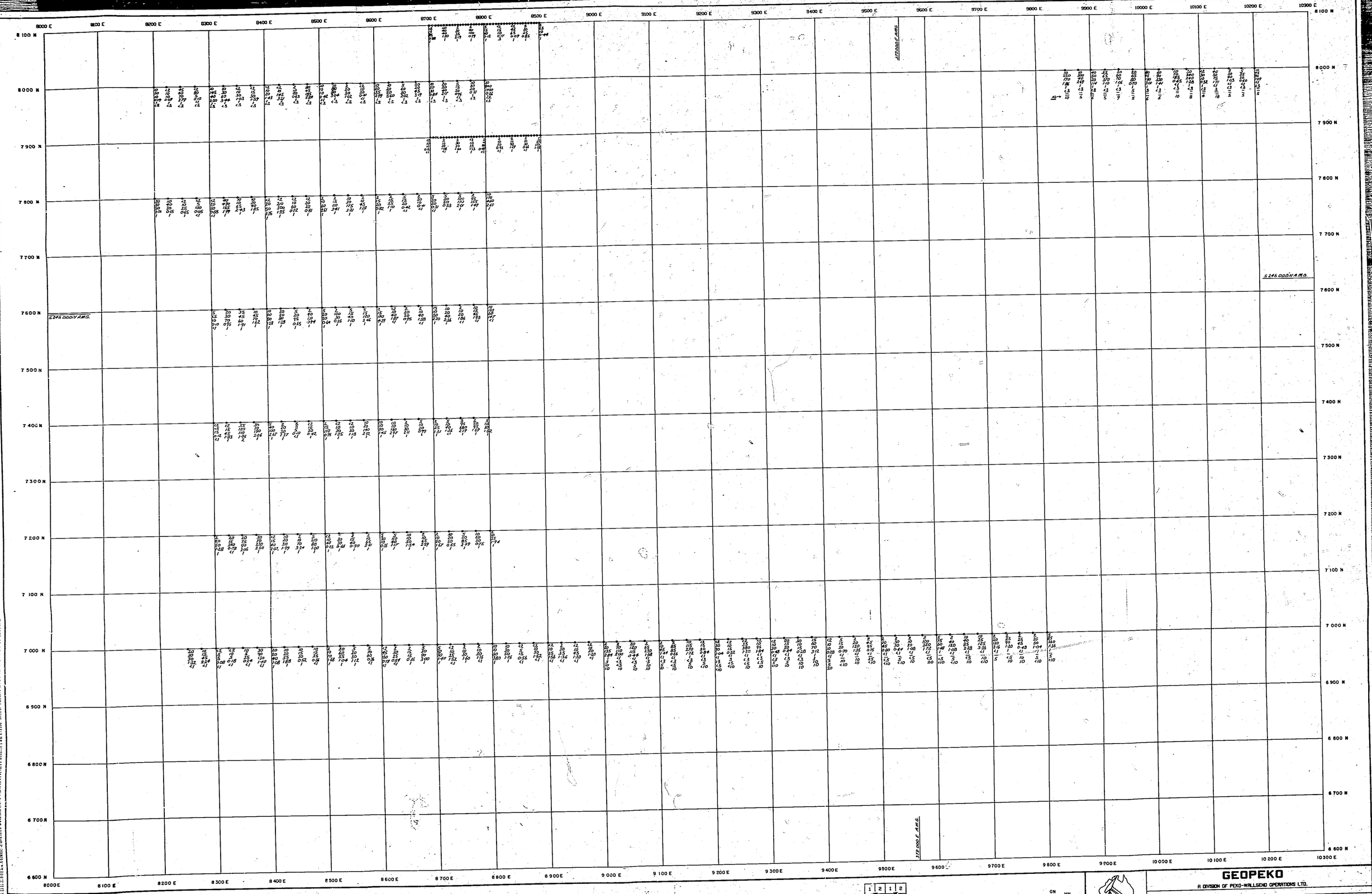
DRAWING NO. 49
SHEET NO. 5 of 8

EL.27/76 ELLIOTT BAY TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1022



o Grid position
Hole auger hole
Power auger (Joins)
P.L. Base line

Sample position

30	Cu	ppm
145	Pb	ppm
230	Zn	ppm
0·60	Fe	%
1	Ag	ppm
15	As	ppb
20	Sn	ppm
30	W	ppm
10	As	ppm

X Sample below level of detection
NS No sample
— No analytical result

CONTOUR INTERVAL ppm
Pencil No.

19-33	100-199	19-10	800-1999
19-46	200-399	19-14	1600>
19-6	400-799		

KT 27/76-3 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

KT 27/76-5 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

WART HILL SERIES

GN MN
13°00'

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO. 50
SHEET NO. 8 OF 8 - Geochem

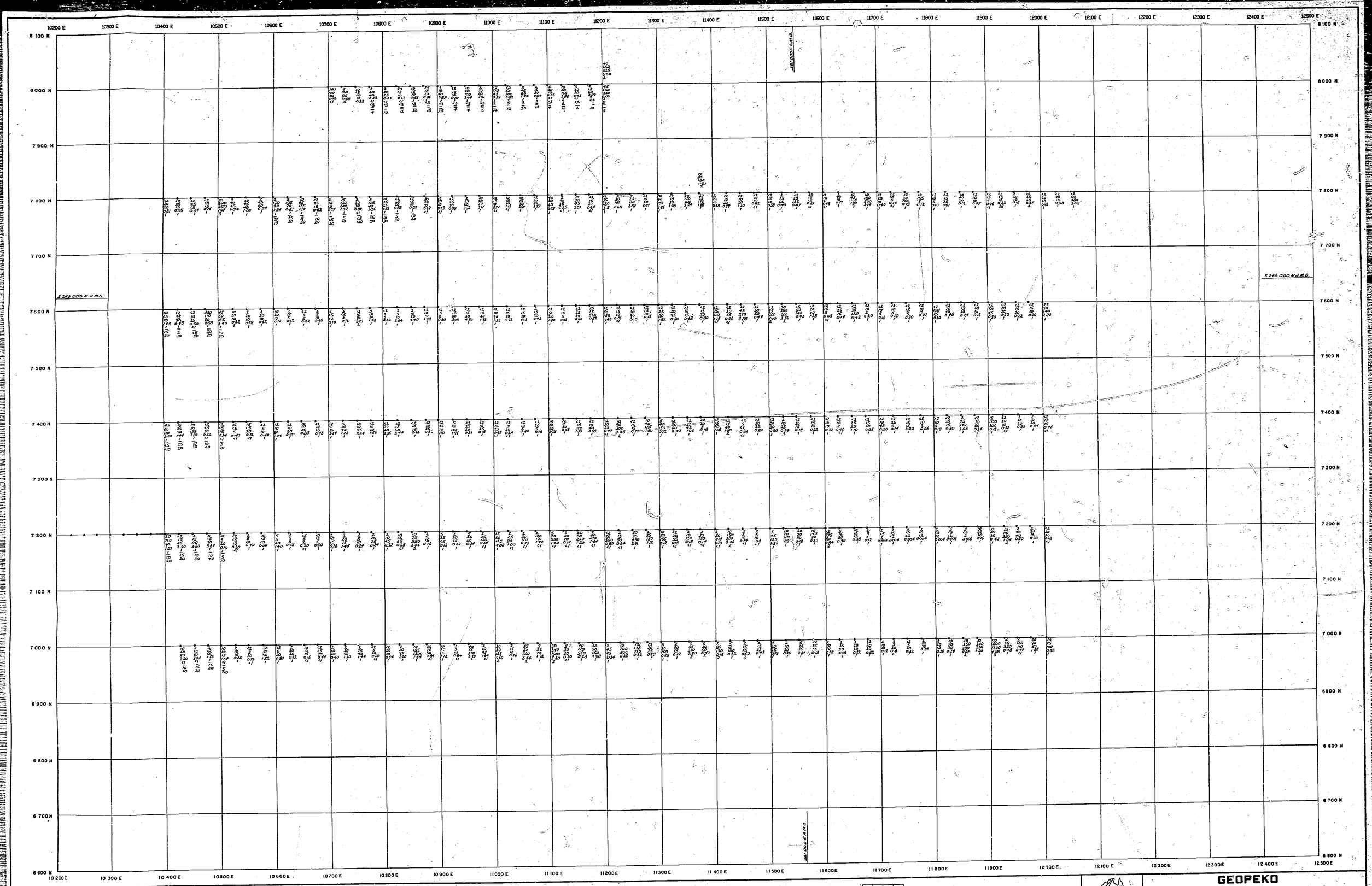
Interpreted By:
Drawn By: M.V.S.
Date: SEPT 83
Approved By: W.A.
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1023



Sample position

o	Grid position	30	Cu ppm
ø	Mote auger hole	145	Pb ppm
■	Power Auger (Jacro)	230	Zn ppm
B.L.	Base Line	0-60	Fe %
		1	Ag ppm
		15	Au ppb
		20	Sn ppm
		30	W ppm
		10	Au ppm

X Sample below level of detection
NS No sample
— No analytical result.

CONTOUR INTERVAL ppm

Pencil No.			
19-33	100-190	19-10	800-1580
19-46	200-399	19-14	1600
19-6	400-799		

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

GN MN 13°00'

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 51

SHEET NO. 5 SE 4 - Geochem

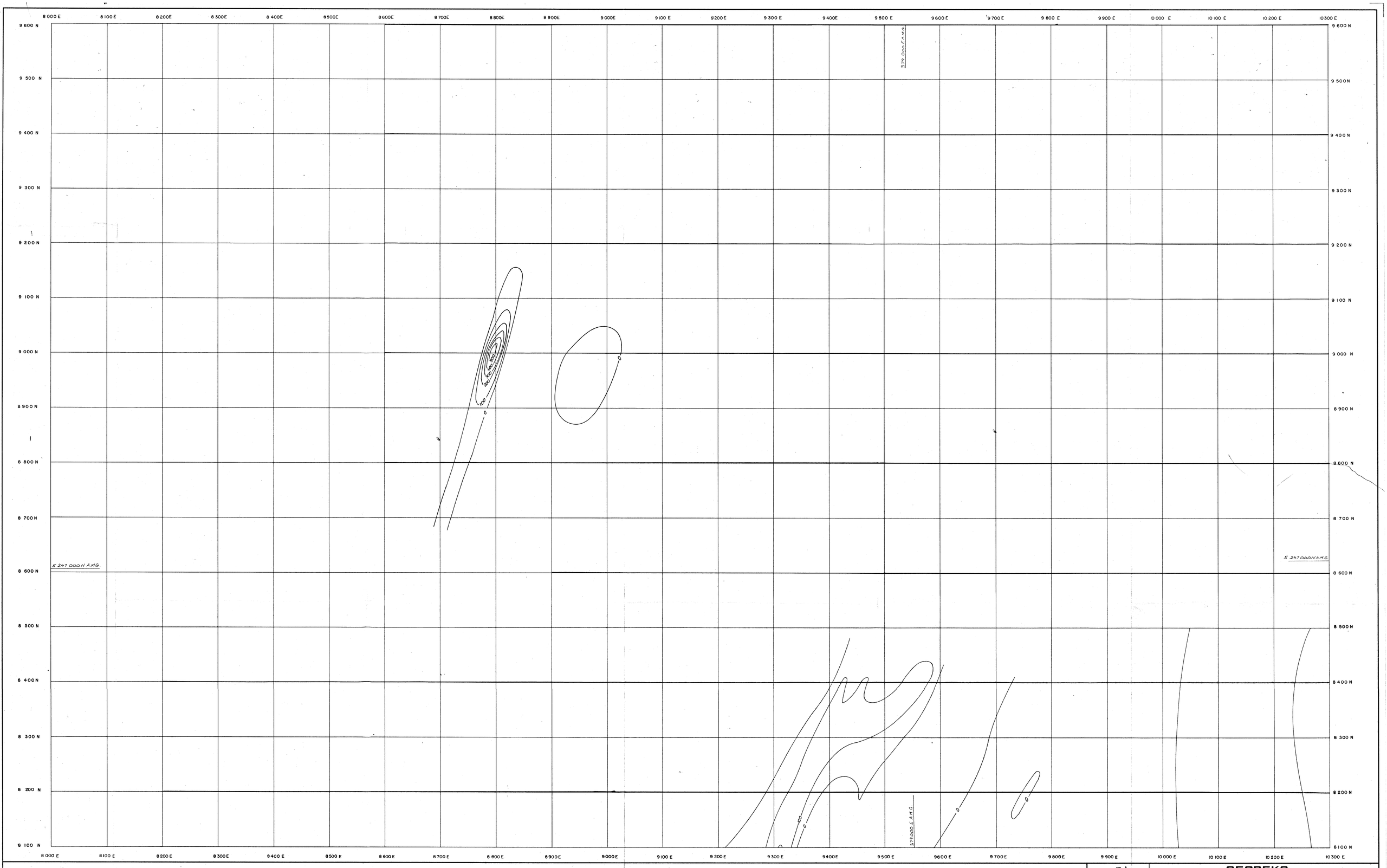
Interpreted By: [illegible]
Drawn By: MWS
Date: Sept 83
Approved By: [illegible]
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY TASMANIA

83-2076

C-HORIZON GEOCHEM RESULTS

1024



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

478345 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

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

metres

DRAWING NO. 52

SHEET NO. 5 SE 1 - Mag

Interpreted By: R.R.L.	
Drawn By: P.R.S.	
Date: 11-5-83	
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

83-2076

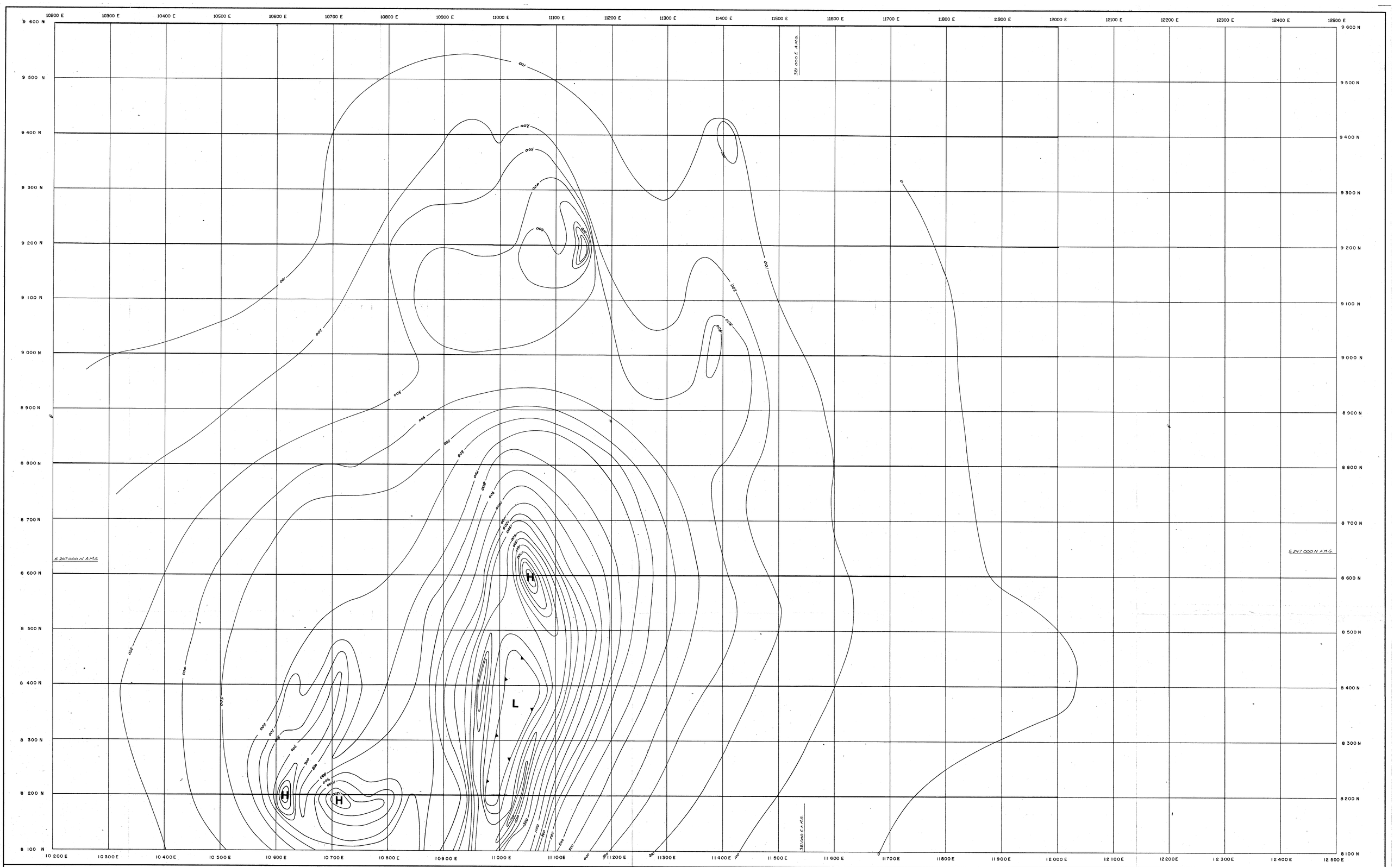
E.L.27/76 ELLIOTT BAY, TASMANIA

CONTOURS OF TOTAL MAGNETIC INTENSITY

CONTOUR INTERVAL 100nT

DATUM = 62 900 nT

1025



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

1	2	1	2
NW			NE
3	4	3	4
1	2	1	2
SW			SE
3	4	3	4

WART HILL SERIES

5 cm

Interpreted By:	P.R.L.
Drawn By:	P.R.S
Date:	11-5-83
Approved By:	
Revision By:	Date:
Revision By:	Date:
Revision By:	Date:

478346 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 53

SHEET NO. 5 SE 2 – Mag

E.L. 27/76 ELLIOTT BAY, TASMANIA

CONTOURS OF TOTAL MAGNETIC INTENSITY

83-2076

CONTOUR INTERVAL 100 nT

DATUM = 62 900 nT

1026

8000 E 8100 E 8200 E 8300 E 8400 E 8500 E 8600 E 8700 E 8800 E 8900 E 9000 E 9100 E 9200 E 9300 E 9400 E 9500 E 9600 E 9700 E 9800 E 9900 E 10000 E 10100 E 10200 E 10300 E

8 100 N
8 000 N
7 900 N
7 800 N
7 700 N
7 600 N
7 500 N
7 400 N
7 300 N
7 200 N
7 100 N
7 000 N
6 900 N
6 800 N
6 700 N
6600 N

S 246 000 N A.M.G.

E 246 000 N A.M.G.

379 000 E A.M.G.

H H L

Note. No drift corrections have been applied, error attributable to this estimated at <15nT.
Instrument :- G-816
Observer :- D. Webb, T. Cliff

KT 27/76-3 (1:10000)
KT 27/76-5 (1:10000)
WART HILL SERIES

5 cm

GEOPEKO
478347 A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500
25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 54
SHEET NO. 5SE3 - Mag

Interpreted By: R.R.L.
Drawn By: P.R.S.
Date: 11.5.83.
Approved By:
Revision By: Date:
Revision By: Date:
Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

CONTOURS OF TOTAL MAGNETIC INTENSITY

CONTOUR INTERVAL 100nT

DATUM = 62 900 n T

83-2076

1027



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

478348 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:2500

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO. 55

SHEET NO. 5 SE 4 - Mag

Interpreted By: R.R.L.

Drawn By: M.v.d.S.

Date: 11-5-83.

Approved By:

Revision By: Date:

Revision By: Date:

Revision By: Date:

E.L.27/76 ELLIOTT BAY, TASMANIA

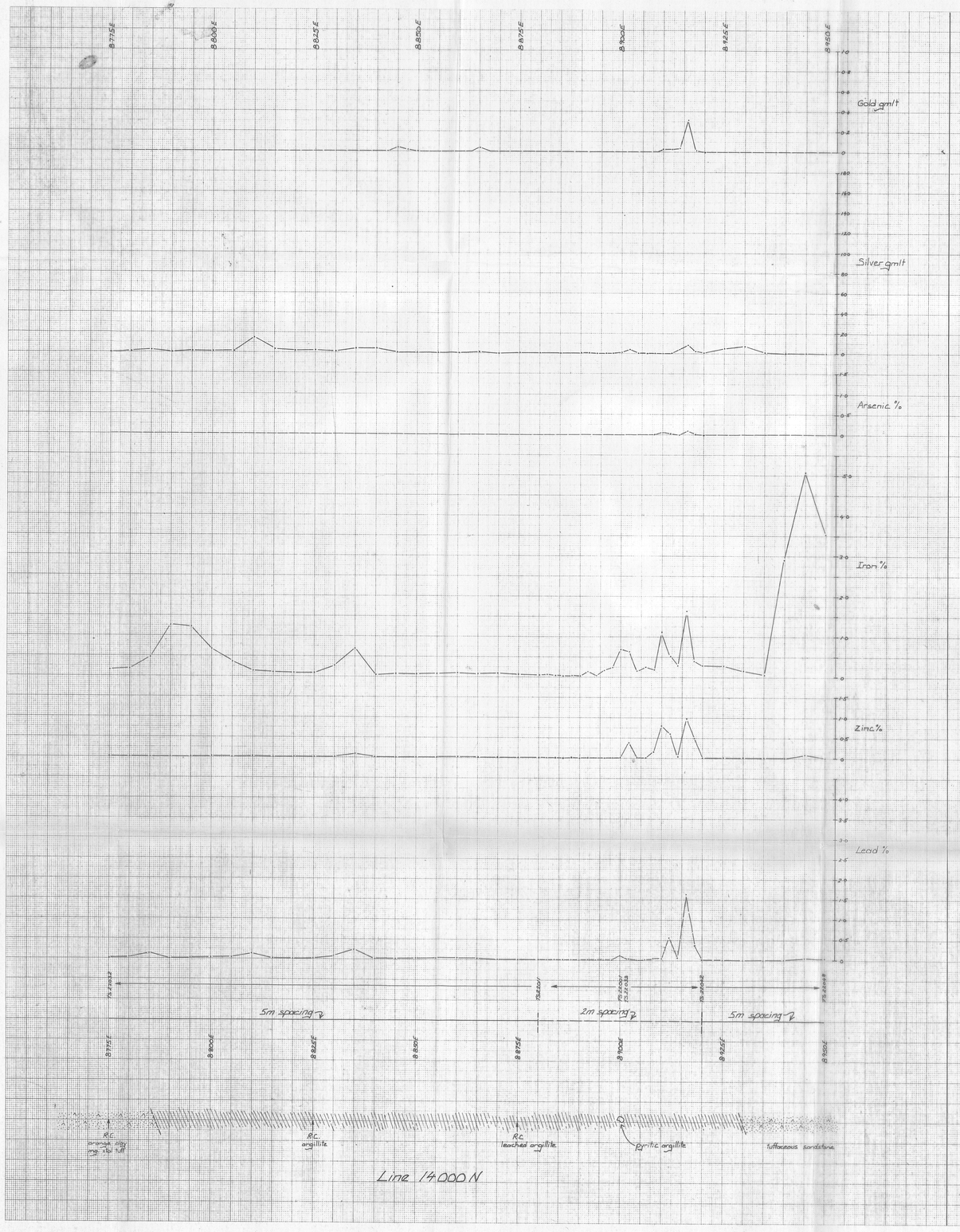
CONTOURS OF TOTAL MAGNETIC INTENSITY

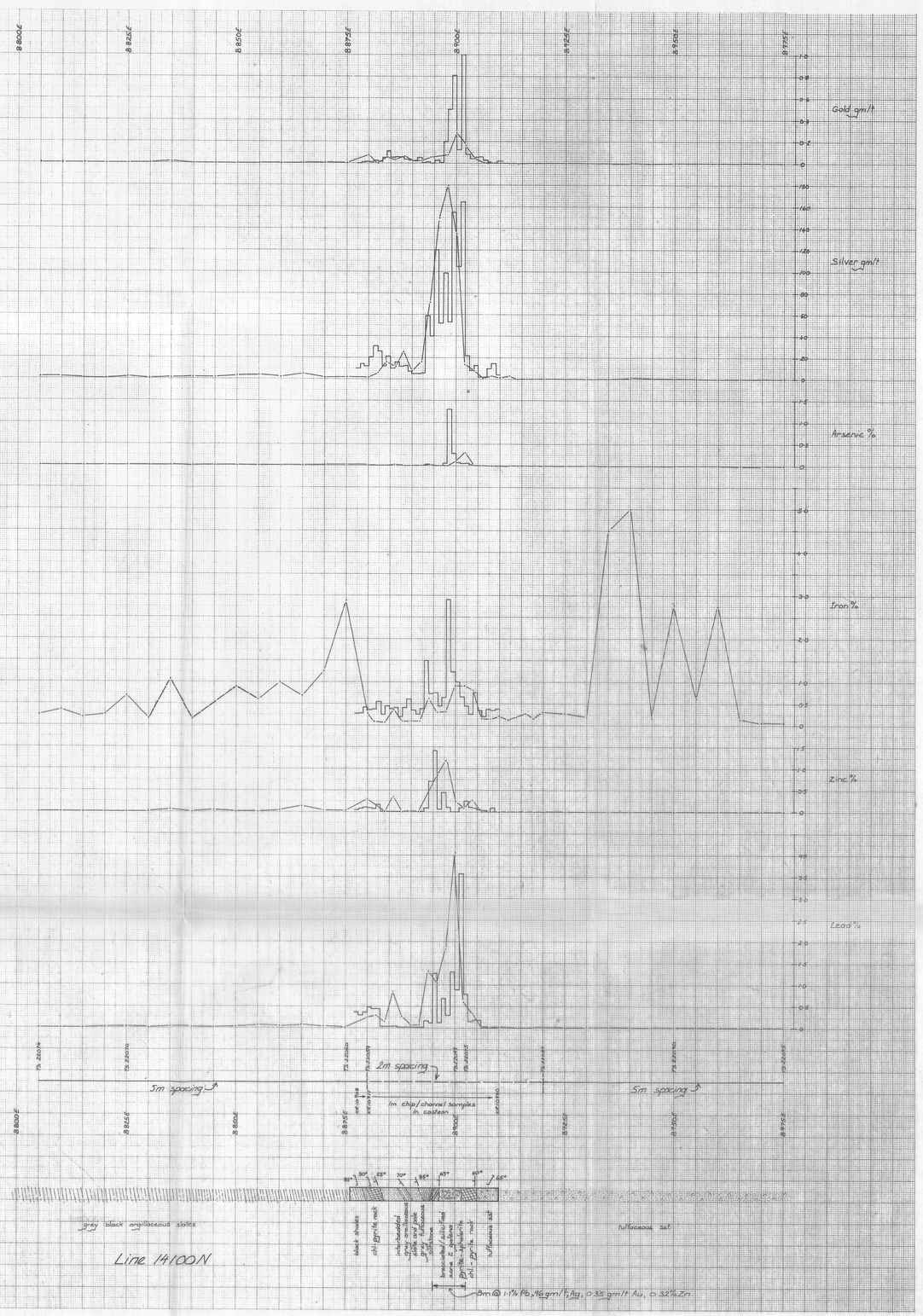
CONTOUR INTERVAL 100nT

DATUM = 62 900 nT

83-2076

1028





C-Horizon Geochem. Profile (Auger)

Rock Chip sample results profile (1 metre channel samples from trench)

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

PSEUDOSECTION SHEET DIVISION (1:2500)

5 cm

A

B

C

478349 **GEOPEKO**

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1:500

5 0 5 10 15 20 25

metres

DRAWING NO. 56

SHEET NO. 83-2076

Interpreted By: W.H.

Drawn By: R.Tag.

Date: Aug. 83

Approved By:

Revision By: Date:

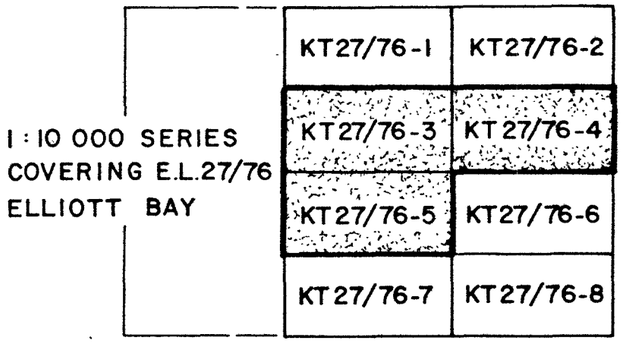
Revision By: Date:

Revision By: Date:

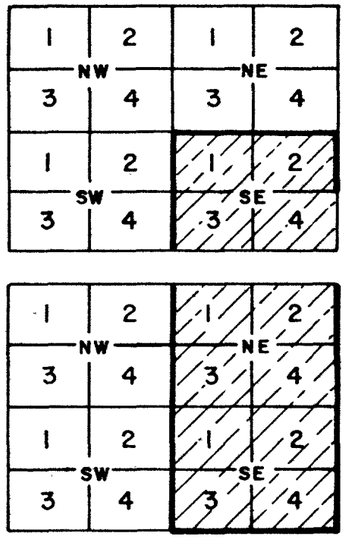
E.L. 27/76 Elliott Bay, Tasmania.

Voyager 33 14000N, 14100N 1023

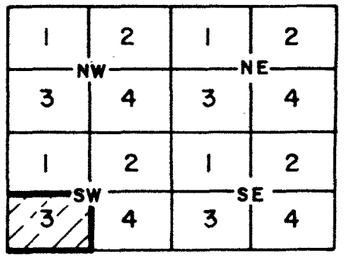
C-Horizon and Rock Geochemical Profiles



KT 27/76 -3
(1 : 10000)



KT 27/76 -5
(1 : 10000)



KT 27/76 -4
(1 : 10 000)

5 cm

A

B

C

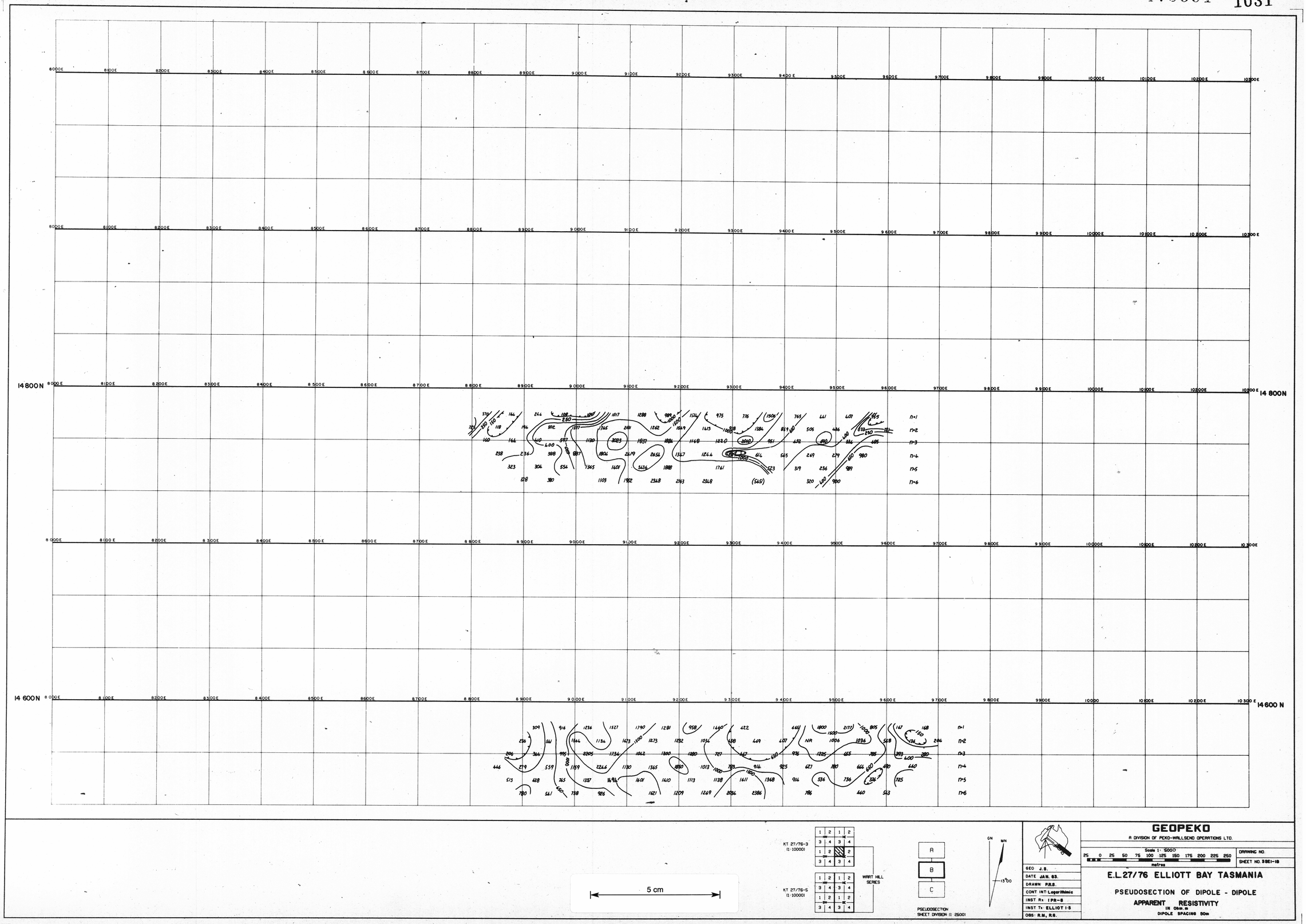
PSEUDOSECTION
SHEET DIVISION

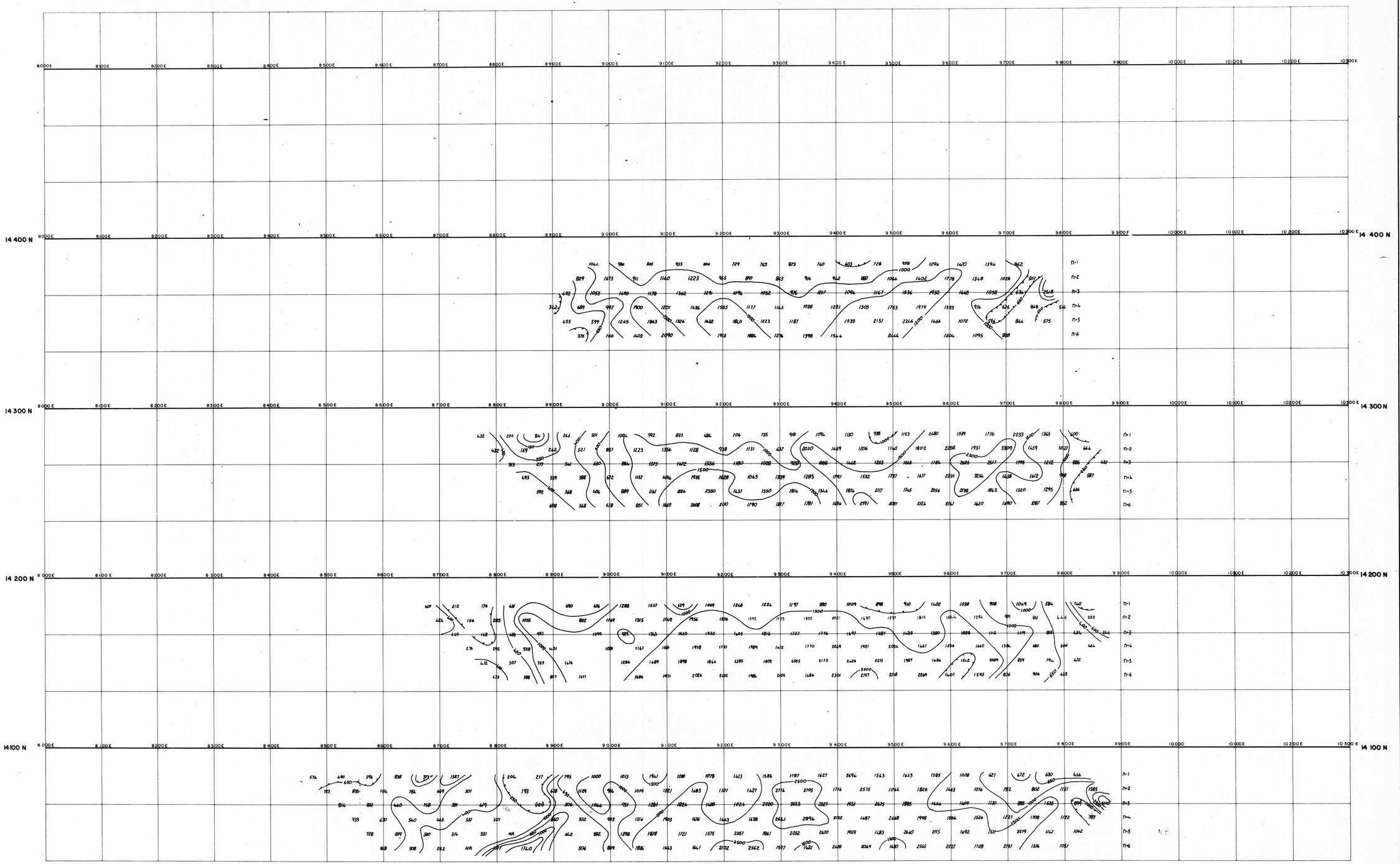
Prefix "KT" is only used in reference to the 1 : 10000 sheets - E.G; KT 27/76 - 5
For 1 : 5000 sheets, Prefix "TS" will be adopted - E.G; TS 27/76 - 5NE3

GEOPEKO

E.L. 27/76 ELLIOTT BAY, TAS.
WART HILL SERIES, 1 : 5 000
LOCATION DIAGRAM

Designed by R Tognoni


14800N
14600N
n=1
n=2
n=3
n=4
n=5
n=6
KT 27/76-3 (1:10000)
KT 27/76-5 (1:10000)
WART HILL SERIES
A
B
C
PSEUDOSECTION SHEET DIVISION (1:2500)
GN
MN
13°00
5 cm
GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres
DRAWING NO.
SHEET NO. 3SE1-1B
GEO J.S.
DATE JAN. 83.
DRAWN P.R.S.
CONT INT: Logarithmic
INST Rx: IPR-8
INST Tx: ELLIOT 1-5
OBS: R.M, R.G.
E.L.27/76 ELLIOTT BAY TASMANIA
PSEUDOSECTION OF DIPOLE - DIPOLE
APPARENT RESISTIVITY
IN Ohm.m
DIPOLE SPACING 50m



5 cm

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

PSEUDOSECTION SHEET DIVISION (1:25000)

GN MN 13°00

GEO J.S.
DATE Jan., Apr 1983
DRAWN P.R.S.
CONT INT Logarithmic
INST Rx IPR-8, IPR-11
INST Tx Phoenix IPT-1
OBS R.G.

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

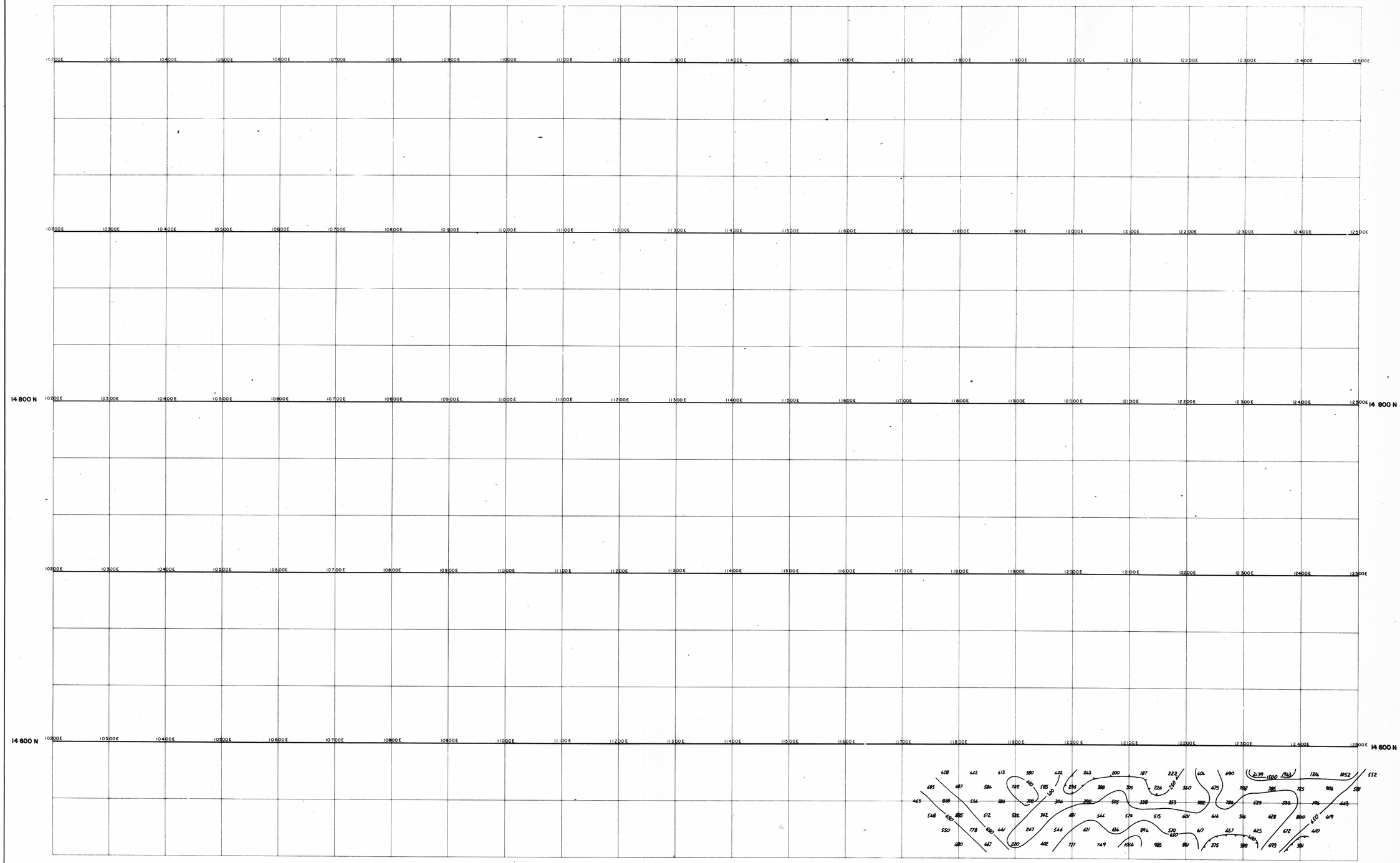
Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO.
SHEET NO. 3 SEI-1C

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY in ohm.m.

DIPOLE SPACING 50m



5 cm

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

A B C

PSEUDOSECTION SHEET DIVISION (1:2500)

GN MN 13°00'

GEO	J.S.
DATE	Mar. 83
DRAWN	P.R.S.
CONT INT	Logarithmic
INST Rx	IPR-11
INST Tx	Huntec 2.5 kW
OBS	R.G.

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1 : 5000

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

metres

DRAWING NO

SHEET NO 3 SE2-1B

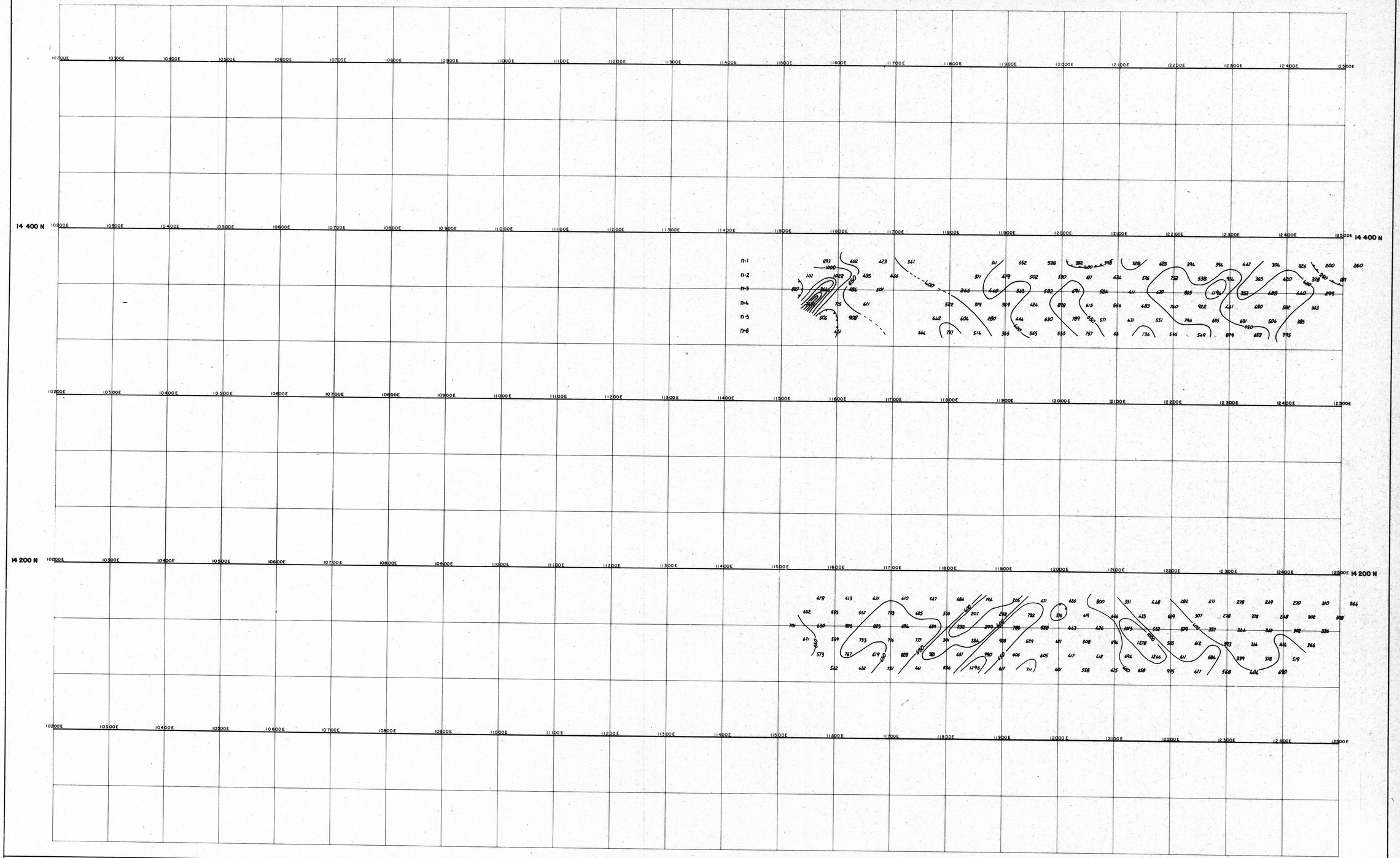
E.L.27/76 ELLIOTT BAY TASMANIA

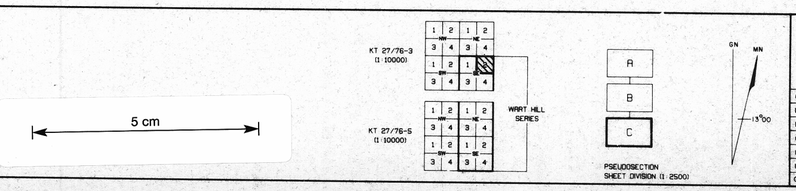
PSEUDOSECTION OF DIPOLE - DIPOLE

APPRARENT RESISTIVITY

in ohm-m

DIPOLE SPACING 50m





5 cm

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000

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

metres

DRAWING NO

SHEET NO.3SE 2-1C

GEO	J.S.
DATE	MAR 83
DRAWN	P.S.
CONT INT	Logarithmic
INST. Rx	1"R-11
INST. Tx	Huntec 2.6 kW
OBS	R.G.

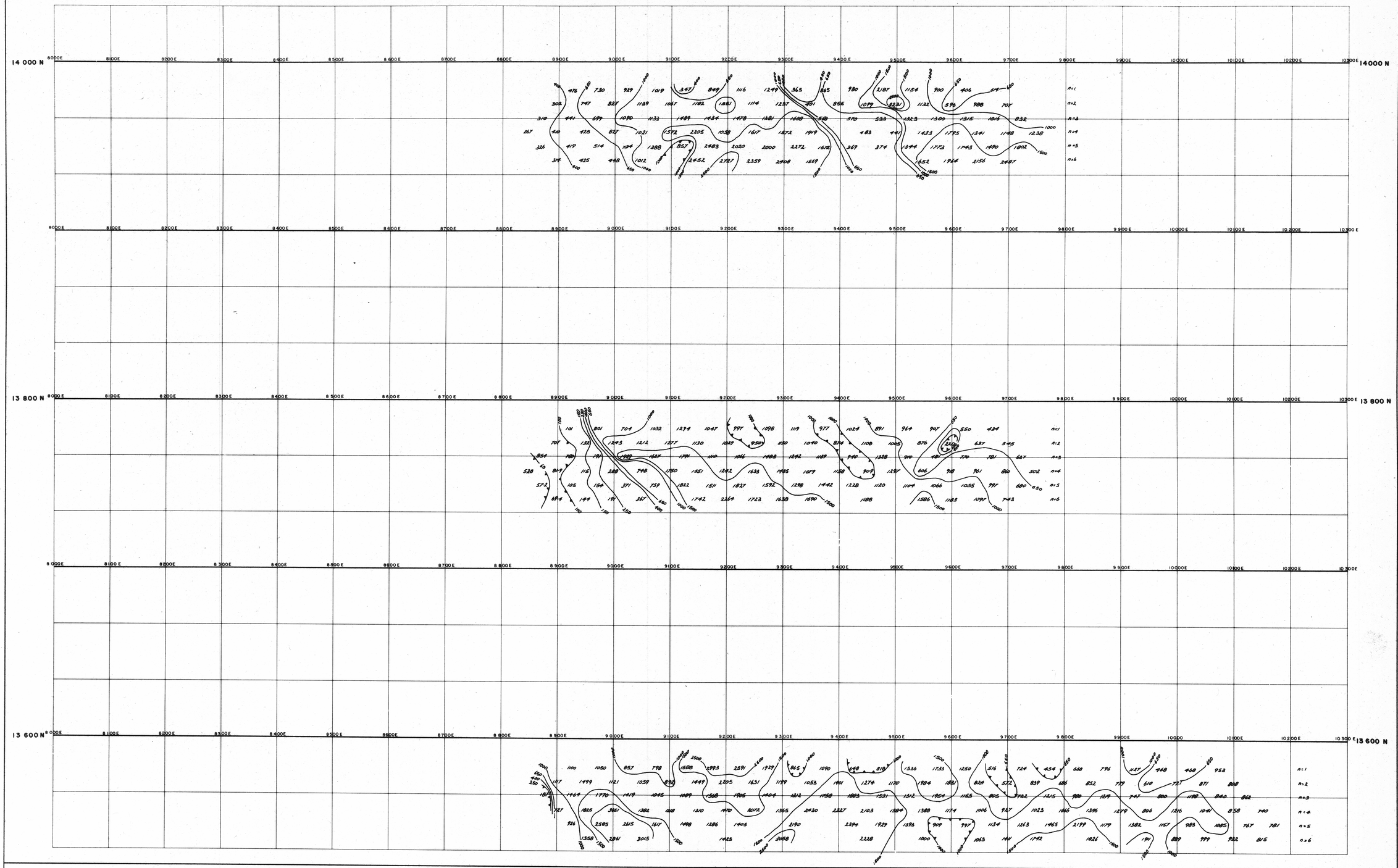
E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY

in Ohm.m

DIPOLE SPACING 50m



5 cm

KT 27/76-3 (1:100000)

KT 27/76-5 (1:100000)

WARRT HILL SERIES

PSEUDOSECTION SHEET DIVISION (1:25000)

A
B
C

GN MN 13°00

GEO J.S
DATE Feb 83
DRAWN M.vdS
CONT INT Logarithmic
INST Rx IPR-8
INST Tx Phoenix IPT-1
OBS R.G

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO.

SHEET NO. 3883-1A

E.L.27/76 ELLIOTT BAY TASMANIA

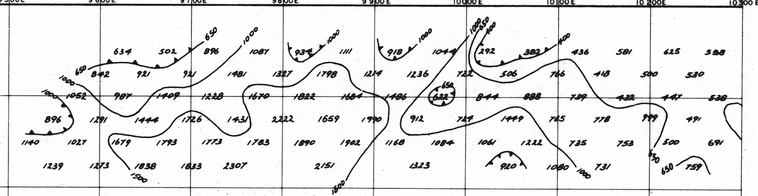
PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

In Ohm.m

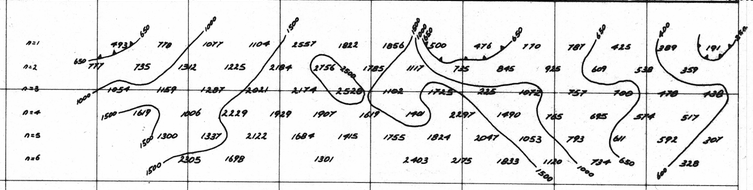
DIPOLE SPACING 50m

8000E 8100E 8200E 8300E 8400E 8500E 8600E 8700E 8800E 8900E 9000E 9100E 9200E 9300E 9400E 9500E 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E

13 400N



13 200N



5 cm

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

PSEUDOSECTION SHEET DIVISION (1:25001)

GN MN 13°00

GEO J.S
DATE Feb 83
DRAWN M.wdS
CONT INT Logarithmic
INST Rx IPR-08
INST Tx Phoenix IPT-1
OBS R.G

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO.
SHEET NO 3.9E3-18

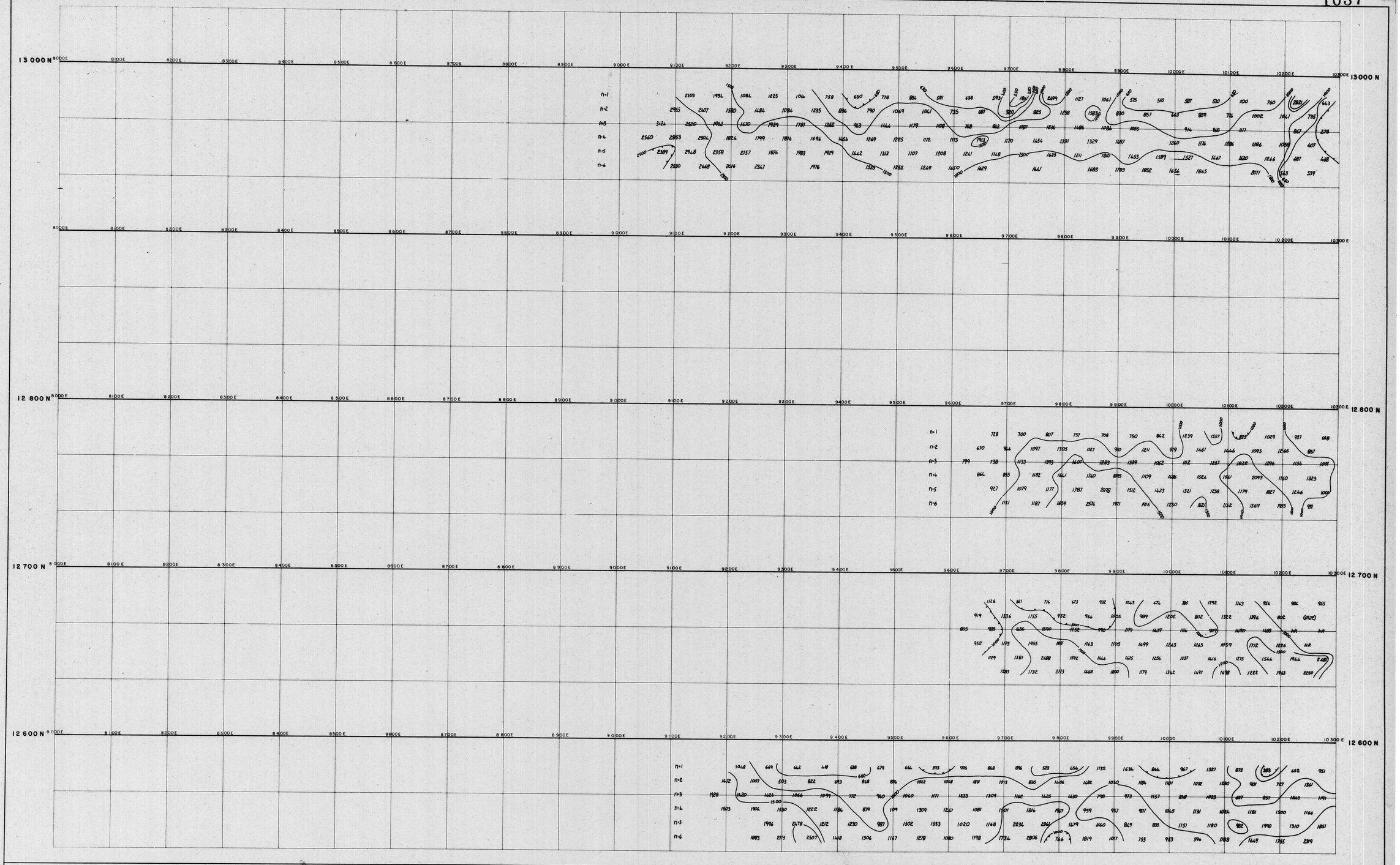
E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

in Ohm.m
DIPOLE SPACING 50m

478357

1037



5 cm

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WRAT HILL SERIES

A

B

C

PSEUDOSECTION SHEET DIVISION (1:2500)

GN MN

13°00

GEO	J.S.
DATE	Feb, Mar 83
DRAWN	P.S
CONT INT	Logarithmic
INST Rx	IPR 8, IPR 11
INST Tx	Huntec 2.5 kW Phoenix IPR-1
OBS	R.G, T.C.

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1 : 5000

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

metres

DRAWING NO

SHEET NO 3 SE3-1C

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

in Ohm.m

DIPOLE SPACING 50m

14 000 N

13 800 N

13 600 N

102 00E 103 00E 104 00E 105 00E 106 00E 107 00E 108 00E 109 00E 110 00E 111 00E 112 00E 113 00E 114 00E 115 00E 116 00E 117 00E 118 00E 119 00E 120 00E 121 00E 122 00E 123 00E 124 00E 125 00E

n=1 1532 1186 852 860 349 196 244 334 745 1214 1935 877 513 282 199 275 221 208

n=2 815 1470 1083 653 489 295 356 325 572 1481 894 1164 1050 649 372 341 308 221 249 217

n=3 599 945 1403 896 577 514 526 418 680 668 1192 615 1064 496 472 464 303 281 287 350

n=4 501 656 923 1127 549 299 688 570 707 580 630 894 616 791 633 609 441 365 276 394

n=5 561 755 767 609 455 549 659 979 747 533 465 862 469 365 786 583 509 406 393 409

n=6 288 645 514 520 883 505 1087 801 494 398 424 643 473 1052 728 654 564 603 399

n=1 591 569 680 722 857 539 542 328 370 394 1231 1017 1190 1259 865 719 569 357 289 272 289

n=2 294 552 647 886 821 604 626 326 419 587 837 1194 1484 808 1041 749 842 448 422 265 270 388 219

n=3 431 626 640 616 1013 640 632 378 632 688 476 889 1017 1332 892 915 808 597 572 341 466 348 387

n=4 747 582 744 717 478 396 328 459 867 587 708 445 985 1028 730 943 556 708 436 615 636 305

n=5 762 748 778 871 515 749 389 673 1058 731 854 640 470 1023 1244 777 621 712 579 772 630 830 513

n=6 772 1069 903 665 514 503 625 1058 879 845 759 469 485 877 1175 506 805 518 903 1033 669

n=1 515 648 536 603 628 835 818 233 267 484 556 581 807 739 705 463 655 513 558 310 394 392 324 386

n=2 774 391 602 690 630 771 670 483 495 409 378 823 686 582 1229 947 540 440 441 557 323 563 274 490

n=3 1345 626 701 799 788 575 467 485 709 645 399 548 916 503 1068 1417 1114 581 806 606 408 425 534 365

n=4 1068 647 451 912 984 677 449 668 841 689 603 597 623 925 1302 1545 754 1210 627 750 678 290 806 407

n=5 104 700 511 1106 850 530 753 748 839 953 635 1180 1083 1305 1038 1142 482 561 864 484 640 632

n=6 1134 814 623 932 678 807 829 771 489 946 442 703 1360 1144 856 1508 846 413 635 440 1130 408

5 cm

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

A
B
C

PSEUDOSECTION
SHEET DIVISION (1:2500)

GN MN 13°00

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

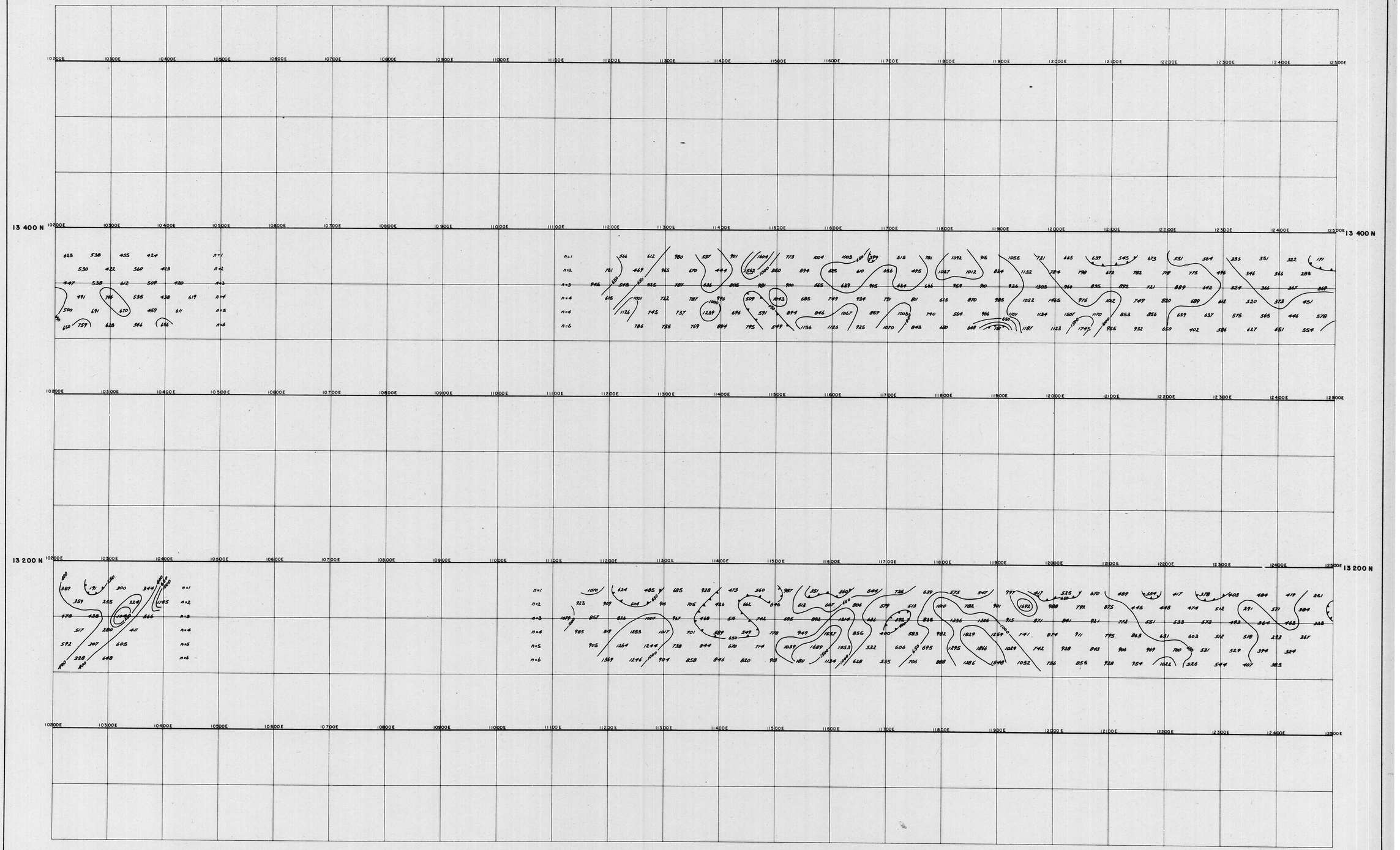
DRAWING NO.
SHEET NO. 3SE4-1A

GEO J.S.
DATE Mar 83
DRAWN M.v.d.S.
CONT. INT. Logarithmic
INST. Rx I.P.R-11
INST. Tx Huntec 2-5kW
OBS R.G.

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

IN Ohm.m.
DIPOLE SPACING 50m



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

PSEUDOSECTION SHEET DIVISION (1:25000)

GN MN 13°00

GEO J.S.
DATE Feb., Mar 83
DRAWN M.v.d.B.
CONT. INT. Logarithmic
INST. Rx: IPR-8, IPR-11
INST. Tx: Phoenix IPC-7
OBS R.G.

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO.
SHEET NO 3 SE4-1B

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

IN Ohm. m
DIPOLE SPACING 50m

13 000 N

12 800 N

12 700 N

12 600 N

102 00E 103 00E 104 00E 105 00E 106 00E 107 00E 108 00E 109 00E 110 00E 111 00E 112 00E 113 00E 114 00E 115 00E 116 00E 117 00E 118 00E 119 00E 120 00E 121 00E 122 00E 123 00E 124 00E 125 00E

n=1
n=2
n=3
n=4
n=5
n=6

KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

PSEUDOSECTION SHEET DIVISION (1:2500)

A
B
C

GN MN 13°00

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1 : 5000
25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO.
SHEET NO. 3864-1C

GEO: J.S.
DATE: Feb, Apr. 83
DRAWN: R.T.
CONT INT: Logarithmic.
INST Rx: IPR-8, IPR-11
INST Tx: Huntec 5 kW, Phoenix IPR-1
OBS: R.G., T.C.

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY

In Ohm.m
DIPOLE SPACING 50m

14 000 N

12 400E 12 500E 12 600E 12 700E 12 800E 12 900E 13 000E 13 100E 13 200E 13 300E 13 400E 13 500E 13 600E 13 700E 13 800E 13 900E 14 000E 14 100E 14 200E 14 300E 14 400E 14 500E 14 600E 14 700E

14000 N

258 208 286 421 345 341 435 432 498 370 275 250 238 196 197 193 199 589 504 305 n=1
400
227 283 339 320 414 413 390 461 600 390 377 335 298 260 359 490 650 582 n=2
247 250 310 284 368 521 392 438 518 525 441 458 398 360 367 577 464 600 n=3
394 380 257 343 482 504 498 498 427 438 410 474 432 452 516 653 406 n=4
373 409 310 305 463 456 641 585 424 349 532 396 501 567 590 555 527 n=5
700
399 331 377 413 444 577 464 504 361 484 486 431 560 716 643 445 n=6

12 400E 12 500E 12 600E 12 700E 12 800E 12 900E 13 000E 13 100E 13 200E 13 300E 13 400E 13 500E 13 600E 13 700E 13 800E 13 900E 14 000E 14 100E 14 200E 14 300E 14 400E 14 500E 14 600E 14 700E

13 800 N

272 239 318 n=1
388 319 n=2
363 337 n=3
303 n=4
513 n=5
n=6

12 400E 12 500E 12 600E 12 700E 12 800E 12 900E 13 000E 13 100E 13 200E 13 300E 13 400E 13 500E 13 600E 13 700E 13 800E 13 900E 14 000E 14 100E 14 200E 14 300E 14 400E 14 500E 14 600E 14 700E

13800 N

13 600 N

12 400E 12 500E 12 600E 12 700E 12 800E 12 900E 13 000E 13 100E 13 200E 13 300E 13 400E 13 500E 13 600E 13 700E 13 800E 13 900E 14 000E 14 100E 14 200E 14 300E 14 400E 14 500E 14 600E 14 700E

13600 N

324 356 157 n=1
490 356 n=2
650 524 363 n=3
407 n=4
632 n=5
n=6

5 cm

KT 27/76-3 (1 10000)

KT 27/76-3 Series Continued

KT 27/76-4 (1 10000)

PSEUDOSECTION SHEET DIVISION (1 25000)

A
B
C

GN MN 3°00'

GEO J.S.
DATE Mar 83
DRAWN MvdS
CONT INT Logarithmic
INST. Rx IPR11
INST. Tx Huntec 2·5kW
OBS R.G.

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1 : 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

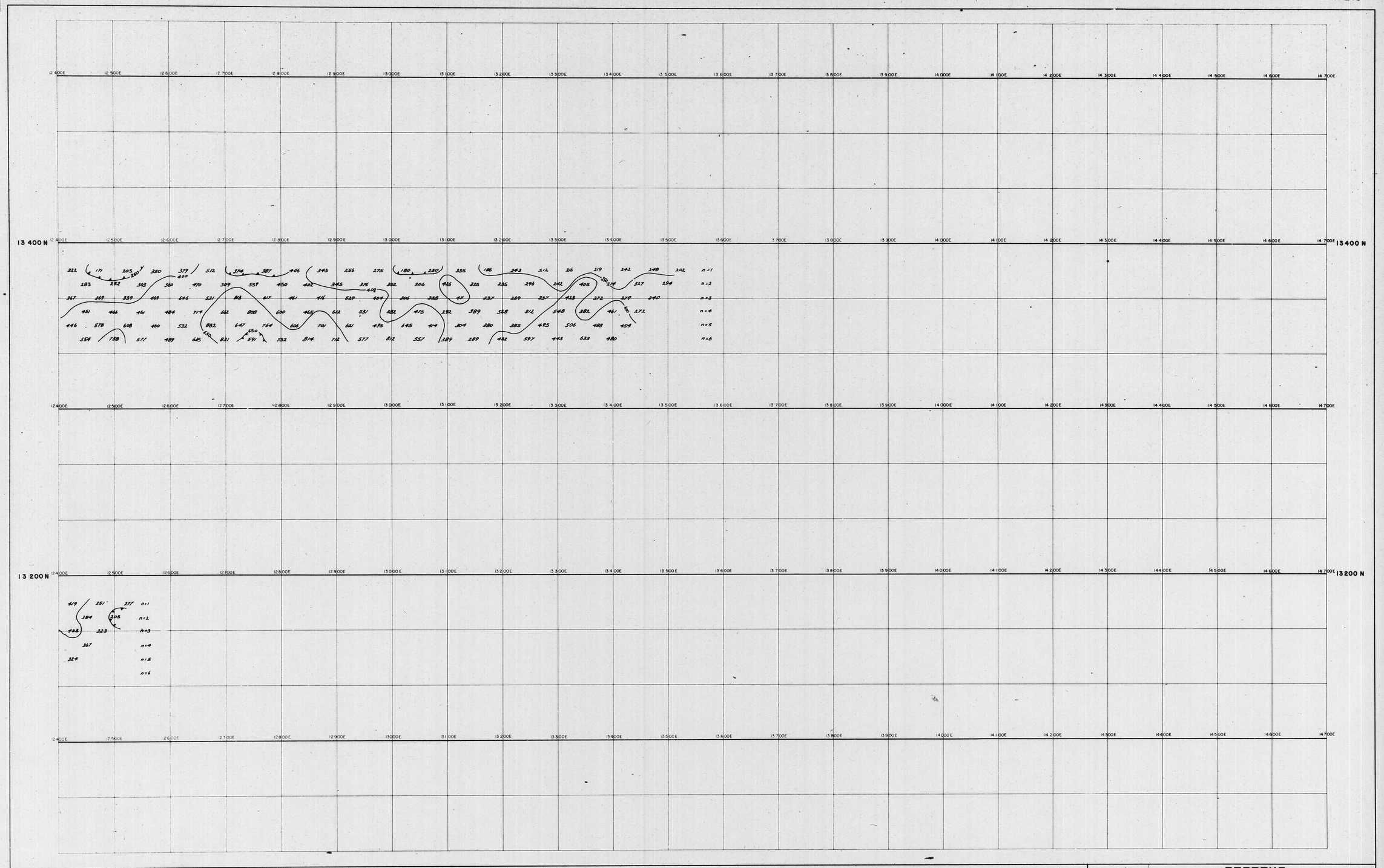
DRAWING NO.
SHEET NO 43W3-1A

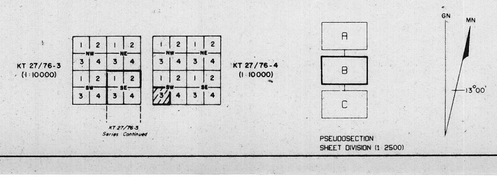
E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY

IN Ohm m
DIPOLE SPACING 50m





5 cm

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000

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

metres

DRAWING NO.

SHEET NO. 4SW3-1B

GEO: J.S.

DATE: Mar 83

DRAWN: M.vdS.

CONT. INT: Logarithmic

INST. Rx: IPR 11

INST. Tx: Huntec 2.5kW

OBS: R.G.

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY

1N Ohm.m

DIPOLE SPACING 50m

12 500 N

8000E 8100E 8200E 8300E 8400E 8500E 8600E 8700E 8800E 8900E 9000E 9100E 9200E 9300E 9400E 9500E 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E

12 500 N

n=1 445 484 496 181 720 805 1063 733 1395 446 463 489 759 588 427 571
n=2 680 437 1051 834 770 512 1817 1423 1708 814 701 1031 681 903 106 709
n=3 1013 754 1446 1195 810 840 1640 1417 2068 816 1014 928 1161 707 825 885
n=4 1074 1238 1244 1157 1201 1520 2155 1902 1099 1044 999 1209 685 1020
n=5 1746 1342 1188 1385 1339 1148 2277 1108 1368 1392 1063 911 1122 802
n=6 1809 1283 1352 1863 1252 1702 1829 1561 1182 1364 1087 871 1301

12 400 N

8000E 8100E 8200E 8300E 8400E 8500E 8600E 8700E 8800E 8900E 9000E 9100E 9200E 9300E 9400E 9500E 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E

12 400N

n=1 1459 1898 1612 1105 492 477 604 483 702 895 898
n=2 1920 1889 1582 1041 1012 398 760 980 820 752 1159 715 888
n=3 1804 2498 1302 1905 1044 708 594 741 765 788 1699 987 886 836
n=4 188 2389 1734 944 1089 701 1006 618 800 913 1320 1045 953 856
n=5 1588 1424 1103 726 1070 1107 649 941 1712 926 1199 929 1368
n=6 1377 1708 763 1115 1043 1097 748 1745 1808 893 1159 1524

12 200 N

8000E 8100E 8200E 8300E 8400E 8500E 8600E 8700E 8800E 8900E 9000E 9100E 9200E 9300E 9400E 9500E 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E

12 200 N

n=1 1033 925 1016 1015 1369 1874 713 664 487 456 524 809 106 863 961 1561 1278 948
n=2 1479 941 1007 1926 1391 1111 1131 958 800 707 624 821 748 911 1099 1235 861 1067
n=3 2862 911 1056 1377 1897 1829 1325 1884 954 678 817 938 788 914 1160 887 993 661
n=4 1972 1007 1467 1705 2089 1277 1469 1255 1048 782 1093 844 802 921 964 983 996 963
n=5 2044 1529 1429 1836 1612 1391 1301 1315 1288 1191 1169 980 823 911 911 1155 656 1490
n=6 2560 2991 1427 1716 1521 1765 1223 1277 1515 1160 1037 1336 944 893 993 690 1524

5 cm

KT 27/76-3 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

KT 27/76-5 (1:10000)

1	2	1	2
3	4	3	4
1	2	1	2
3	4	3	4

WART HILL SERIES

A
B
C

PSEUDOSECTION SHEET DIVISION (1:2500)

GN MN 13°00

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

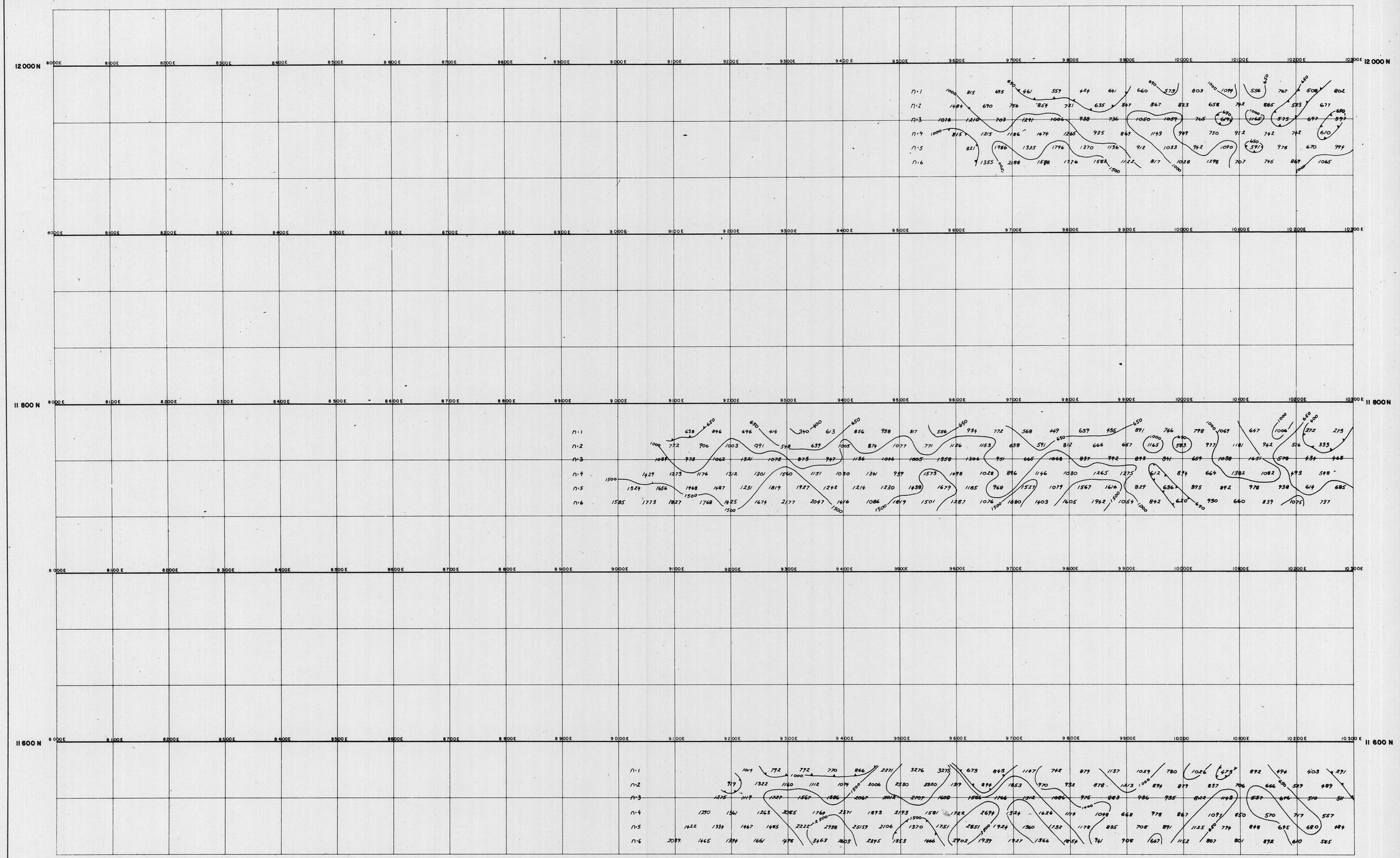
DRAWING NO.
SHEET NO. SHEET-1A

GEO J.S
DATE Mar 83
DRAWN P.S
CONT INT Logarithmic
INST Rx IPR-11
INST Tx Huntec 2·5 kW
OBS R.B, T.C, J.S

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY
in Ohm.m
DIPOLE SPACING 50m



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

PSEUDOSECTION SHEET DIVISION (1:2500)

GN MN 13°00

GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LTD

Scale 1: 5000

25 0 25 50 75 100 125 150 175 200 225 250 metres

DRAWING NO.

SHEET NO. SHEI-18

GEO J.S

DATE Mar 83

DRAWN R.T

CONT INT Logarithmic

INST Rx IPR-11

INST Tx Huntec 2·5 kW

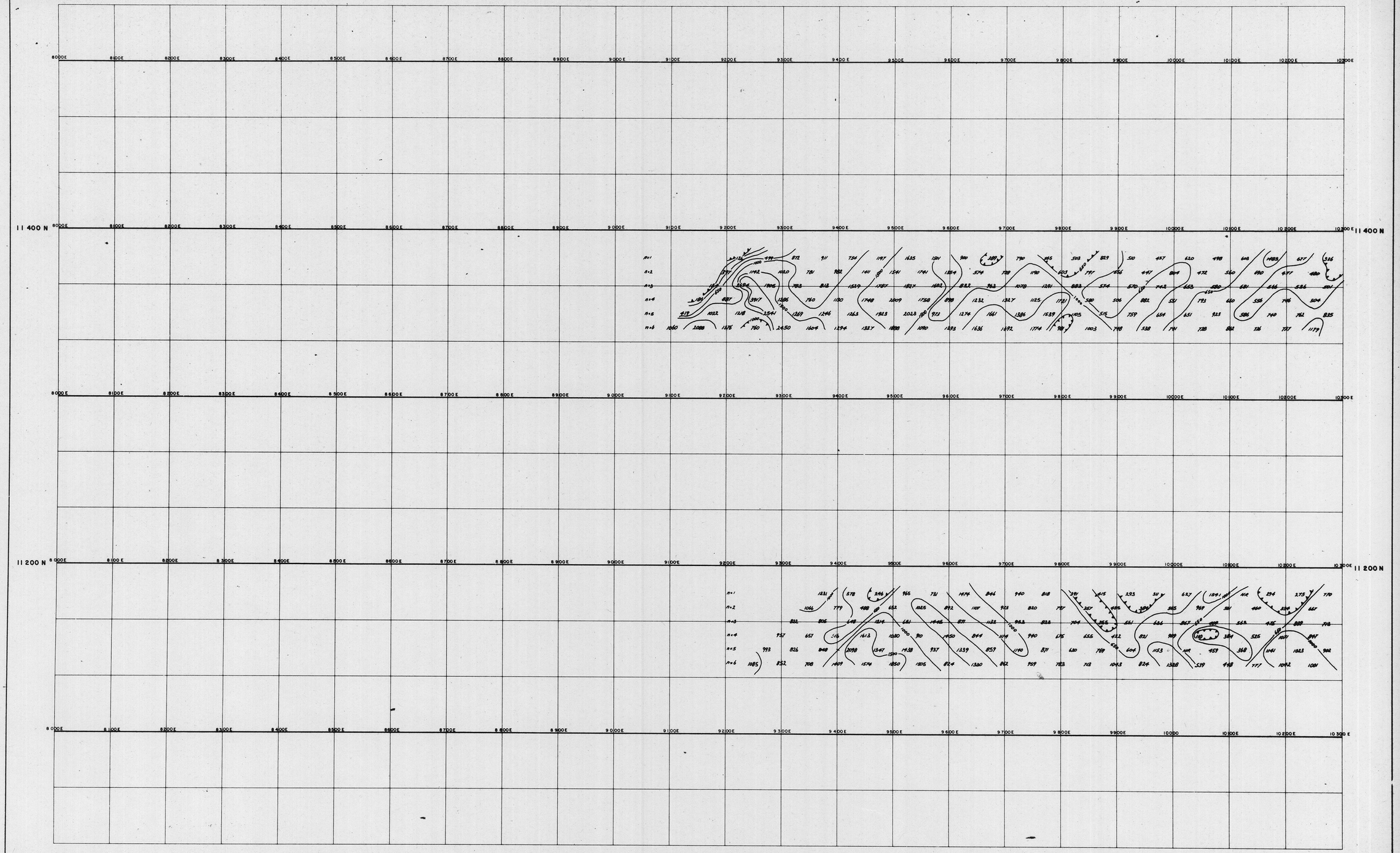
OBS D.W., R.G

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE

APPARENT RESISTIVITY in Ohm.m

DIPOLE SPACING 50m



KT 27/76-3 (1:10000)

KT 27/76-5 (1:10000)

WART HILL SERIES

5 cm

PSEUDOSECTION SHEET DIVISION (1:25001)

GN MN 13°00

GEO: J.S
DATE: Mar 83
DRAWN: MedB
CONT INT: Logarithmic
INST. Rx: IPR-11
INST. Tx: Huntec 2·5 kW
OBS: P.W., R.G

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

Scale 1: 5000
25 0 25 50 75 100 125 150 175 200 225 250
metres

DRAWING NO.
SHEET NO. SHEI-1C

E.L.27/76 ELLIOTT BAY TASMANIA

PSEUDOSECTION OF DIPOLE - DIPOLE APPARENT RESISTIVITY

In Ohm.m
DIPOLE SPACING 50m