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RENISON LIMITED

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ANNUAL REPORT

TRIAL HARBOUR S.P.L. 129

1975-76

**MICROFILMED**

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**RENISON LIMITED**1. INTRODUCTION

Activities on S.P.L. 129 during the year were largely confined to Area D. Three further lines (27E, 22E and 21E) were recut and pegged: Ground magnetic and soil sampling surveys were completed and geological mapping also undertaken.

The work has continued to outline two zones of interest striking right through the area: The magnetite/pyrrhotite zone intersected by d.d.h. T.H.1. and the "fault" zone initially defined on line 24E at 00.

Expenditure during 1975-76 was \$ and total expenditure since 1973 has reached \$ . The responsibility for operations on S.P.L. 129 was transferred from the Mt. Lyell Mining & Railway Co. Ltd. to Renison Ltd. in May 1976.

The exploration programme planned for 1976-77 consists of:

- 1) Further detailed investigations in Area D, including diamond drilling.
- 2) Reconnaissance exploration of the Eastern margin of the Heemskirk Granite.

The expenditure for 1976-77 is estimated at \$47,000.

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2. LAND TENURE

The current holding in S.P.L. 129 is 50% Renison Ltd. - 50% Mt. Lyell Mining & Railway Co. Ltd. and the licence is held in the name of the Mt. Lyell Mining & Railway Co. Ltd.

Within the S.P.L. are several small mine leases currently held by other companies or individuals (Fig. 2). When the licence area was originally pegged in 1973 a large area near Tenth Legion was reserved for iron ore (Mining Act 1929, Statutory Rules 1973, No. 183); this was an amendment to an earlier reserve for all minerals. The reserve was lifted in October 1975 and five mine leases (50m75, 51m75, 52m75, 53m75 and 54m75), totalling 145 ha, were pegged, in the name of Industrial and Mining Investigations Pty. Ltd., for iron ore only: Other minerals are covered by S.P.L. 129. Should development of these mine leases go ahead, some conflict could arise if investigations, in this area, to be commenced during 1976-77, outline tin bearing magnetite/pyrrhotite zones as in Area D and at Mt. Lindsay and St. Dizier (anomalous tin values occur in the Tenth Legion magnetite). Also of possible interest are mine leases 4m73 and 90m72 totalling approximately 32 ha, held by F.J. Griffiths and D.C. Dunkley over Kelvin and Mayne's workings immediately West of Area D.

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Other mine leases are: a small lease of five (?) sluice heads held over part of Coleman's Creek held by B.R. and K.J. Cooney and R.P. O'Connor, presumably for alluvial tin. S.A. Clark and G.B. Francesconi hold approximately 5 ha in M.L. 64m73 over the Kynance workings, M.L.s 10m70 and 1m73 totalling approximately 25 ha are held by S.A. Clark over the Swansea Mine, M.L. 49m75 of 16 ha, which crosses the Northern boundary, is held by J.D. Clark over the Spray Mine and M.L. 123m47 of approximately 145 ha, mainly outside the S.P.L., is held by the E.Z. Co. of A'Asia Ltd. over the Comstock Workings. The majority of these areas are not of any immediate concern.

3. AREA D3.1. Geology (Fig. 4)

Mapping undertaken during the year has largely confirmed and extended the previous mapping described in Annual Report 1974-75. In Area D the Heemskirk Granite has been intruded directly into the Lower Cambrian, Crimson Creek Formation, which consists of argillaceous sediments with fine grained greywackes and some carbonate horizons, minor tuffs and small basic/ultra basic bodies: the latter possibly to the McIvor Hill Gabbro and/or the Trial Harbour Serpentinite. These rocks are extensively altered and metasomatised, the main mineralisation

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intersected in d.d.h. T.H.1 appears to be associated with a metasomatised serpentinite, although altered carbonates also occur (Appendix 1). Silicification and hornfels are widely developed and quartz, tourmaline, tremolite-actinolite, magnetite, disseminated sulphides including pyrrhotite, pyrite and arsenopyrite occur over a wide area.

The North-South fault suggested, in the 1974-75 annual report, between lines 24E and 23E continues to be outlined by the geochemistry and ground magnetics although it has not yet been confirmed by mapping. The East-West "fault", across the Southern part of the area, consists of a zone of altered sediments including "cherts" and breccia : Tourmaline and quartz veins are strongly developed and sulphides, mainly pyrrhotite and pyrite occur. Gossanous zones have been noted near lines 24E and 26E and some small workings also occur West of line 24E. This "fault" zone has a strong I.P., magnetic and geochemical expression.

Preliminary mapping on lines 22E and 21E has revealed quartzites on the Southern section of line 21E. The very limited structural information obtained, to date, from the Crimson Creek rocks (mainly from d.d.h. T.H.1) suggests a steep North dip and the quartzites on line 21E have tentatively been assigned to the Pre-Cambrian Oonah Formation. If this is confirmed the Silurian (?) quartzites on the Southern ends of lines 26E and 27E will also have to be re-examined.

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Detailed mapping will be required on both lines 21E/22E and 26E/27E, with particular regard to the possibility of fossil evidence, in order to establish the structure in the area: If the quartzites on line 21E are Pre-Cambrian and Crimson Creek rocks occur to the South as shown on Fig. 3, then Area D could be the nose of an anticline.

3.2. Geochemistry

The geochemical soil sampling programme, commenced in 1974-75, was continued during the year and all the grid lines have been sampled at 100' (30.5m) intervals. The 'C' horizon was sampled wherever possible and the -85# fraction analysed for : tin and arsenic by X.R.F. and copper, lead and zinc by A.A.S. The results are presented as 1:2000 contour plans (Figs. 5 ) and as part of the composite line profiles (Figs. 7 ). The geochemical values are also included as Appendix 2.

The replacement magnetite/pyrrhotite zone intersected in d.d.h. T.H.1 is well outlined by tin, arsenic and copper anomalies, some anomalous lead and zinc values also occur. The contour maps (Figs. 5 ) for all these elements suggest the possibility of a North-South fault in the vicinity of line 23E. In the Southern part of the area strong tin, copper, lead and zinc anomalies are associated with the

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East-West "fault" zone : Anomalous arsenic values also occur.

Over the granite, geochemical values, with the exception of tin, are very low and these tin anomalies are not considered to be significant. The copper, lead and zinc results are also very low over the Pre-Cambrian (?) quartzites on the Southern end of line 21E : However, lead and zinc values over the Crimson Creek rocks appear to increase Southwards, away from the immediate vicinity of the granite. The long narrow tin anomaly immediately South of the granite contact is over a swamp zone, has little support from other elements and is again considered to be of little significance.

### 3.3. Magnetics

A ground magnetic survey has been completed over all the lines with a Geometrics G816 proton magnetometer. Readings were taken at 50' (15m) intervals and the results are displayed as stacked profiles (Fig. 6b), as a 1:2000 contour plan (Fig. 6a), for comparison with the geochemical data, as well as in the composite line profiles (Figs. 7 ). The magnetic data is included as Appendix 3.

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In strong contrast to the granite all the Crimson Creek rocks appear to be magnetically active : The high magnetic zone on line 21E, between 1N and 13N appears to be, at least in part, stratigraphic in origin. The magnetic anomaly in the centre of the area, tested on line 25E by d.d.h. T.H.1 has been further outlined North and South, but again, like the geochemistry, it appears to be offset by a fault in the vicinity of line 23E.

In the Southern part of the area a narrow anomaly is evident along the East-West fault zone : The shape of the anomaly, particularly on line 27E, but also on line 22E suggests a possible steep Northerly dip. In the vicinity of lines 24E/23E, the anomaly is much broader, with a reversed polarity on line 23E and is adjacent to the proposed intersection of the North-South and East-West faults (Fig. 4).

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4. OTHER AREAS4.1. Area A

Some minor track cutting was undertaken in this area which is at the Western end of the old E.Z. grid, along the Northern contact of the Trial Harbour serpentinite (Newnham 1974). The base line from 4W to 4E and lines 00 and 1W, from the base line to the granite contact, totalling approximately 15000' (4500m.) were cleared and repegged.

4.2. South Comstock Area

Original recovery of the flight lines for the test Input survey, flown in April 1975 (Annual Report 1974-75) indicated a substantial anomaly in the South Comstock Area. Two traverse lines 500m. apart totalling 2600m. were cut and pegged (Fig. 8) to test the area on the ground. Geochemical soil samples and ground magnetic (proton) readings were taken at 25m. intervals along the lines.

A small magnetic anomaly (200  $\gamma$ ) was outlined on the Western line, South of the Stonehenge workings, over the "Tenth Legion" fault. A geochemical lead anomaly (250 p.p.m. on a background of 20 p.p.m.) was outlined in a similar position, on the Eastern line, adjacent to some old workings (contamination?).

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Further examination of the flight line recoveries resulted in the anomaly being relocated further North and no further investigations were undertaken in the area. The magnetic and geochemical data is included as Appendix 4.

5. CONCLUSIONS AND RECOMMENDATIONS

The geological mapping, geochemical soil sampling and ground magnetics have continued to outline effectively the anomalous zones within Area D.

Further geological mapping is required within and adjacent to Area D in order to clarify the structure (Section 3.1) : The possibility exists that Areas A, B, C and D (Newnham 1974) are one semi-continuous zone, possibly equivalent to the Renison Mine Sequence (Newnham, Sept. 1975).

A comparison between Area D and the Mt. Lindsay area suggests some similarities:

1. The granite/"sediment" contact in the Mt. Lindsay Mine area dips beneath the "sediments" which have a sub-vertical dip. The limited structural information in Area D suggests a similar situation.

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2. Petrological investigations (Fander-Appendix 1) reveal similar mineralogies and textures to Mt. Lindsay, St. Dizier and Renison. Cassiterite which occurs in the mineralised horizon appears to have been introduced at a late stage.
  
3. D.d.h. Mt. Lindsay 38, which intersected significant amounts of cassiterite in a low temperature "skarn" assemblage of quartz, magnetite and carbonate, was drilled further away from the granite outcrop than previous holes suggesting that temperature zoning effects are sub parallel to the granite contact. The mineralisation intersected in d.d.h. T.H.1 appears to be associated with a higher temperature "skarn" assemblage, similar to that intersected in the Main Ore zone and earlier No. 2 intersections at Mt. Lindsay.; a similar position in Area D to d.d.h. M.L.38 would be line 27E or further East.

It is proposed to cut and repeg lines 28E and 29E in order to define by: detailed geological mapping, ground magnetics and soil geochemistry the Eastward extension of the zone, intersected by d.d.h. T.H.1, with a view to further testing by diamond drilling. The East-West "fault" zone is also striking into the area and the two zones could intersect.

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The programme recommended for 1976-77 involves.

Area D

Extension of lines 26E and 27E Northwards to the granite contact. Recutting and pegging lines 28E and 29E. Detailed geological mapping, geochemical soil sampling and ground magnetics as outlined above.

Detailed I.P. survey in selected areas to accurately outline the anomalous zones.

Two diamond drill holes :

- 1) To test for the Eastward extension of the magnetite/pyrrhotite zone intersected in d.d.h. T.H.1.
- 2) To test the East-West "fault" zone probably on line 24E.

Eastern Margin of the Heemskirk Granite

Delineation of a zone of metasomatic replacement within the metamorphic aureole to the South of the granite suggests the possibility of a similar zone around the Eastern margin and exploration of this area was previously recommended in Annual Report 1974-75. No known work has been undertaken in the area and exploration to be undertaken in 1976-77 is designed to look for altered and metasomatised zones, particularly in the Western margins of the McIvor Hill Gabbro.

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An East-West grid consisting initially of 11 lines, 400m. apart, totalling approximately 11,600m. will be surveyed with ground magnetics, deep soil geochemistry, geological mapping and reconnaissance I.P. Any anomalous zones discovered will require more detailed work on a closer spaced grid with intermediate lines to give a grid line spacing of 200m.

6. BUDGET

To undertake the 1976-77 work programme, outlined in Section 5, a budget of \$47,000 has been proposed and is outlined in Table 1.

Should the Mt. Lyell Mining and Railway Co. Ltd. decide not to contribute to the programme, the budget would be reduced to \$25,500 and involve:

- a) One diamond drill hole.
- b) No I.P. on the Eastern grid.

The budget is outlined in Table 2.

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TABLE 1

PROPOSED BUDGET 1976-77(Renison Ltd. & Mt. Lyell Mining  
& Railway Co. Ltd. contributing)

PERIODS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
SALARIES	1000	500	1000	1000	1000		500		500	1000	500	1000	8000
D. DRILLING				10000	20000								30000
BULLDOZER				500									500
T. CUTTING				2000									2000
I. P.							4000						4000
CONSULTANT				100			200				200		500
VEHICLES		100		100	100		100			100			500
CONSUMABLES			200	500	500		200					100	1500
TOTALS	1000	600	1200	14200	21600		5000		500	1100	700	1100	47000

TABLE 2

PROPOSED BUDGET 1976-77 (Renison Ltd. contributing only)

PERIODS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
SALARIES	500		500	1000	1000		500			1000		500	5000
D.DRILLING					15000								15000
BULLDOZING				250									250
T.CUTTING				2000									2000
I.P.							1500						1500
CONSULTANT				50			100				100		250
VEHICLES		100		100	100		100			100			500
CONSUMABLES			200	200	300		200					100	1000
TOTALS	500	100	700	3600	16400		2400			1100	100	600	25500



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APPENDIX 1

PETROGRAPHIC DESCRIPTIONS

H.W. FANDER

(REPORT CMS 76/6/2)

REPORT CMS 76/6/2TRIAL HARBOUR JOINT VENTURE SAMPLESHand SpecimensTH 27E 8N (TS 18926)

This is a sheared, metasomatised pebbly grit, thought to be tuffaceous. Metasomatism was extensive and many details are lost due to replacement by phlogopite or actinolite.

The rock consists of grit- and pebble-sized lithic fragments set in a sand-sized matrix with a fine cement. Metasomatism was fairly selective, with matted fibrous actinolite replacing some lithic fragments and fine Ti-phlogopite extensively developed in the matrix/cement and elsewhere. The lithic fragments are (or were) chert, quartzite, shale-siltstone, and fine-grained (?extrusive) intermediate igneous rocks (probably in the dacite-trachyte-andesite range). Much of the sand-sized quartz is thought to have been derived from phenocrysts (ie. from a lava or porphyritic intrusive). The cement now consists of fine quartz, leucoxene and metasomatic phlogopite; it may have been fine tuffaceous material.

The rock was evidently bedded; shearing has been superimposed on this primary fabric, occurring after lithification but preceding metasomatism.

In view of the strong likelihood of a partly pyroclastic origin, this rock could be placed in the Crimson Creek sequence.

TH 27E9N (TS 18927)

A sheared, metasomatised conglomerate of polymictic derivation but probably lithologically related to 27E 8N. As before, metasomatism was selective. The development of diopside with actinolite, rather than phlogopite, suggests a higher-grade of metasomatism, ie. higher temperatures, and infers a closer proximity to the source.

The pebbles, and grit-sized grains, represent a variety of lithic fragments including cherts, quartzites, siltstones and altered medium/fine-grained intermediate igneous rocks. Diopside has developed sporadically, pale actinolite is more widespread. Small patches of sulphide (?pyrrhotite) and tourmaline (schorl) occur.

The matrix/cement is clastic quartz and fine, possibly tuffaceous material, obscured by metasomatism and shearing which occurred before metasomatism.

The presence of sulphides and tourmaline indicates a mineralising phase

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distinct from the contact metasomatism.

TH 1 (TS 18928) (Timber track approx. 80m. N. of 27E200N.)

This is a metasomatised lithic-crystal-tuff, quite probably ignimbritic though the critical details have been obscured by extensive development of phlogopite.

Much of the rock is very fine-grained, with embedded coarser fragments of trachyte-microsyenite, feldspars (K-feldspar and andesine-labradorite), quartz, and cognate xenoliths of tuff (with different texture/grainsize to the host rock). The fine-grained material constituting much of the rock is now mostly fine phlogopite, with abundant leucoxene. In fact leucoxene is very conspicuous in all three hand specimens and is regarded as a primary constituent (whitish streaks in hand specimens).

Apart from the widespread development of titaniferous phlogopite, small patches of fibrous actinolite are present, and sulphides (?pyrrhotite only) occur in crosscutting veinlets and irregular masses; the sulphides are clearly younger than the main metasomatism.

All three rocks could be classified as Crimson Creek formation material, if this fits in with the general lithology.

D.D.H. TH1 (Eight drill core Samples)

31m (TS & PS 18929)

This is a chlorite rock, with disseminated sulphides and other opaques. The major constituent is very pale green magnesian chlorite with confused fabric and virtually no relict textures, and there are small, irregular patches of amorphous silica. Some areas consist of coarse, intergrown chlorite flakes, others are matted fine flakes. Although there is some vague banding, sedimentary fabrics and clastic features are absent.

The opaque minerals are irregular patches of ilmenite, scattered pyrite pseudomorphs after pyrrhotite, and occasional patches of sphalerite with minute chalcopryrite inclusions. There are more massive veins with the same sulphide assemblage.

Although the rock is thoroughly chloritised, it is believed to have been a medium- to fine-grained igneous rock rather than a sediment; some relict network textures seen in polished section(!) suggest that the original rock was ultramafic.

32.75m

A fairly coarsely-crystalline calc-silicate rock, composed dominantly of

interlocking diopside crystals, incipiently replaced by actinolite needles. Occasional darker green patches consist of exceptionally coarse, zoned tourmaline.

There are no relict features or minerals, and the origin of the rock is not known. It is thoroughly pyrometasomatised and may well have been of calcareous/dolomitic lithology.

#### 68m

A partly metasomatised serpentinite. The original rock was a fine/medium-grained dunite or peridotite, very probably layered. Some olivine has been preserved, and classical serpentine fabrics have developed, consisting of antigorite aggregates with networks of opaques. Superimposed on this is a metasomatic phase, resulting in the replacive development of pale green phlogopite and patches of finely granular diopside; there are veins of phlogopite, tremolite and pyrrhotite.

The polished section shows primary and secondary magnetite, introduced pyrrhotite, traces of chalcopyrite, and ilvaite (a contact-metamorphic CaFe silicate). Some of the pyrrhotite may well be pre-metasomatic (i.e. part of the serpentinite phase); it contains very occasional small pentlandite inclusions, and may be nickeliferous. An Ni assay may be worthwhile.

#### 71.5m

A finely-crystalline calc-silicate rock composed dominantly of finely granular diopside with numerous small grains of sphene and occasional vesuvianite crystals. There are patches of intergrown diopside and fine carbonate, and the original rock is thought to have been calcareous/dolomitic. There is some relict layering or bedding, and this suggests a sedimentary origin, although this interpretation is tentative.

#### 73m

A thoroughly metasomatised fine sediment. The original rock was probably in the nature of a siltstone, and now consists of very fine quartz and Ti-phlogopite. Faint relict bedding is detectable. Various veinlets traverse the rock; they are composed of pyrrhotite (partly pyritised) with apatite, tourmaline and minor tremolite. The pervasive phlogopitisation is very similar to that at Renison.

#### 118m

An interesting and complex rock, thought to be a metasomatised, mineralised

serpentinite not dissimilar to the intersection at 31m in many respects. There are some aspects comparable with Mt. Lindsay also.

Large flakes of antigorite are fairly common, though extensively replaced by alter minerals, and are believed to represent the serpentinite even though no serpentine fabric has been preserved. The antigorite is partly replaced by aggregates of ultrafine talc. Abundant magnetite was introduced; this shows "atoll" textures very similar to that at Mt. Lindsay (ML 38) and St. Dizier Creek. The magnetite was accompanied by carbonate and sulphides (notably sphalerite). A careful search revealed fine, irregular (5 - 80 $\mu$ ) cloudy grains of ?cassiterite randomly distributed in the antigorite; because of its poorly-developed habit and cloudiness, identification is not certain and an assay is essential (this should show about 0.2 - 0.3% Sn). The ?cassiterite was probably introduced at a late stage but its paragenesis is not certain.

The polished section shows that the opaque mineral assemblage consists of granular-subhedral magnetite, associated fresh pyrrhotite, and minor chalcopyrite, sphalerite and galena. The assemblage is metasomatic-hydrothermal. The cassiterite is apparently fairly closely associated with this assemblage.

#### 139m

A metasomatic rock, composed almost entirely of diopside and pale green phlogopite. Both minerals are rather haphazardly distributed and occur as fine- and medium-grained crystalline aggregates and intergrowths. Some banding (?relict bedding) is seen in places, suggesting a sedimentary derivation.

There are more coarsely crystalline veins and patches consisting of pyrrhotite, with minor associated chalcopyrite and ilmenite, and coarse diopside as well as some apatite.

The original rock may have been in the nature of a dolomite, completely metasomatised to an Mg-Ca silicate assemblage.

#### 282m

This is a fine-grained greisen, composed mainly of quartz, topaz and fluorite. These minerals are finely intergrown; they are thought to represent a greisenised quartzose sediment.

In addition to the microgranular quartz, topaz and fluorite, there are sporadic patches of carbonate and acicular crystals of dravite tourmaline. Ultrafine semi-opaque rutile crystals are abundant throughout, probably representing recrystallised leucoxene in the original sediment.

Sporadically distributed, irregularly shaped crystals of cassiterite are present, ranging in size from  $20\mu$  to  $200\mu$ , generally  $> 50\mu$ .

Traces of fine xenotime occur, constituting a link with the adamellite (see report CMS 75/5/23, 320m + 386m).

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APPENDIX 2

AREA D

GEOCHEMICAL SOIL SAMPLING DATA

TRIAL HARBOUR S.P.L. 129

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AREA D

## GEOCHEMICAL SOIL SAMPLES

LINE NO. 20E

-85#

LOCAL ON	Sn	As	Cu	Pb	Zn	Ni
20E 3000N	50	10	<5	<5	<5	<5
2900N	140	<5	<5	<5	<5	5
2800N	160	<5	<5	<5	<5	<5
2700N	180	<5	<5	5	<5	5
2600N	140	<5	<5	<5	<5	<5
2500N	90	<5	5	<5	<5	5
2400N	35	20	<5	5	<5	<5
2300N	70	20	<5	<5	<5	<5
2200N	300	25	5	<5	<5	<5
2100N	460	10	<5	<5	<5	5
20E 2000N	300	15	15	<5	<5	<5
1900N	550	10	20	<5	<5	<5
1800N	220	15	20	<5	<5	5
1700N	180	15	20	<5	<5	5
1600N	80	5	15	<5	<5	<5
1500N	50	5	15	<5	10	<5
1400N	120	15	40	10	<5	<5
1300N			125	5	80	120
1200N			70	10	35	70
1100N			55	20	30	85
20E 1000N			120	15	125	640

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AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO 21E

-85#

LOCATION	Sr	As	Cu	Pb	Zn	Ni
21E 3000N	180	5	<5	<5	15	5
2900N	70	10	20	<5	5	<5
2800N	40	20	<5	5	5	<5
2700N	70	10	20	15	10	5
2600N	180	5	<5	10	5	10
2500N	240	10	<5	10	5	5
2400N	280	15	<5	10	<5	5
2300N	260	5	<5	10	<5	<5
2200N	180	10	<5	20	5	10
2100N	140	15	<5	10	5	10
21E 2000N	45	35	<5	65	10	10
1900N	90	10	<5	5	5	5
1800N	45	25	<5	5	5	5
1700N	140	10	5	10	<5	5
1600N	80	10	5	10	<5	5
1500N	120	30	10	10	<5	<5
1400N	80	45	50	5	10	55
1300N	90	25	30	30	10	20
1200N	140	20	100	40	10	40
1100N	50	100	100	115	70	50
21E 1000N	90	850	75	25	25	90
900N	140	100	65	30	20	65
800N	140	220	120	40	110	65
700N	60	180	85	30	45	95
600N	80	100	40	25	40	50
500N	70	10	40	25	45	180
400N	60	5	30	60	190	160
300N	50	10	50	20	35	110
200N	45	30	40	25	15	65
100N	50	15	20	20	10	30
21E 000	30	60	65	25	90	105
100S	15	15	5	5	15	5
200S	15	35	5	20	5	<5

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TRIAL HARBOUR S.P.L. 129  
AREA D

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GEOCHEMICAL SOIL SAMPLES

LOCATION	Sn	As	Cu	Pb	Zn	Ni	
21E 300S	15	10	<5	<5	10	<5	
400S	80	15	25	25	20	5	
500S	30	20	15	25	10	5	
600S	15	35	10	25	10	<5	
700S	15	5	<5	20	10	<5	
800S	15	10	<5	10	10	<5	
900S	20	15	<5	20	10	<5	
21E 1000S	20	15	<5	20	5	<5	
1100S	40	15	5	20	5	<5	
1200S	5	20	15	10	15	5	
1300S	20	25	5	10	10	<5	
1400S	<5	30	5	10	10	5	
1500S	30	15	5	10	10	5	

128

451029

TRIAL HARBOUR S.P.L. 129

REINSON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO	LOCATION	Sn	As	Cu	Pb	Zn	Ni
22E	300N	80	10	<5	5	25	5
	290N	60	25	<5	15	<5	<5
	280N	100	10	<5	10	<5	<5
	270N	80	15	5	10	<5	<5
	260N	60	<5	<5	20	<5	<5
	250N	80	10	5	5	<5	<5
	240N	140	<5	5	<5	<5	<5
	230N	240	"	5	5	<5	5
	220N	140	"	5	5	<5	5
	210N	480	10	5	5	<5	5
22E	200N	220	5	5	5	<5	<5
	190N	200	45	30	20	15	5
	180N	50	20	10	10	135	110
	170N	80	40	55	10	115	95
	160N	100	<5	80	10	165	110
	150N	80	"	60	10	50	190
	140N	100	"	30	10	30	60
	130N	120	40	205	30	20	30
	120N	100	30	30	25	15	30
	110N	140	5	45	40	25	25
22E	1000N	60	25	30	20	160	20
	900N	40	<5	135	20	30	35
	800N	60	10	235	25	20	35
	700N	40	80	75	20	25	45
	600N	45	50	75	25	15	30
	500N	15	120	220	25	35	65
	400N	30	70	45	20	10	15
	300N	20	30	190	20	50	50
	200N	70	70	25	20	10	15
	100N	20	140	25	20	5	15
22E	000	70	100	10	40	<5	5
	100S	25	20	120	20	25	25
	200S	10	35	70	20	50	50
	300S	15	25	110	60	85	85
	400S	45	30	15	10	20	20

-85H

P.P.2.

TRIAL HARBOUR S.P.L. 129

RENISON LIMITED

AREA D

## GEOCHEMICAL SOIL SAMPLES

LINE NO 22E

-85#

P.P.S.

LOCATION	Sn	As	Cu	Pb	Zn	Ni
22E 500S	15	35	50	10	25	25
600S	15	25	10	10	10	10
700S	20	30	25	15	35	35
800S	10	25	40	35	80	80
900S	420	25	15	5	15	25
22E 1000S	45	60	10	20	5	20
1100S	35	70	70	10	25	80
1200S	25	40	15	15	15	35
1300S	20	20	80	20	135	110
1400S	20	30	80	20	95	85
1500S	65	35	25	20	35	35

Trial Harbour S.P.A.129  
Area D

FENNISON LIMITED

ORGANIC CHEMICAL SOIL SAMPLES

LABOR NO. 23E

- 85#

LOCATION	SR	AS	CU	FB	Zn
23E 2200N	65	10	5	10	15
2100N	95	60	30	15	20
23E 2000N	165	10	15	15	45
1900N	125	25	20	15	25
1800N	55	75	20	15	80
1700N	70	50	60	20	30
1600N	125	125	75	20	30
1500N	10	10	70	20	55
1400N	15	50	185	25	65
1300N	<5	35	60	30	65
1200N	20	45	125	30	75
1100N	15	50	105	20	50
23E 1000N	15	10	60	20	30
900N	<5	<5	50	25	35
800N	5	"	"	20	35
700N	10	"	115	20	210
600N	"	15	165	"	260
500N	20	<5	95	25	40
400N	25	"	105	30	65
300N	5	"	80	30	"
200N	"	"	65	"	45
100N	"	"	45	40	55
23E 000	45	10	55	45	50
1005	40	30	35	50	45
2005	5	<5	5	45	30
3005	20	"	15	40	700
4005	"	"	25	35	455
5005	5	"	45	35	290
6005	20	5	65	70	190
7005	"	<5	60	40	145
8005	40	10	50	"	110
9005	30	20	65	"	130
23E 10005	25	<5	60	160	125

031

TRIAC HARBOUR S.P.L. 129

RENISOL LIMITED

AREA D

GEO-CHEMICAL SOIL SAMPLES

HOLE NO. 24E

- 85#

P.S.P.R.

DEPTH (CM)	Sn	As	Cu	Pb	Zn
24E 3000N	80	<5	10	<5	40
2900N	95	10	15	10	40
2800N	200	<5	5	<5	30
2700N	85	25	15	10	40
2600N	75	125	"	20	45
2500N	80	20	"	15	50
2400N	100	25	20	"	55
2300N	65	170	30	10	50
2200N	30	150	100	25	65
2100N	5	40	270	10	115
24E 2000N	5	<5	30	5	45
1900N	10	10	40	15	"
1800N	40	20	100	30	120
1700N	5	25	300	25	220
1600N	5	55	420	15	145
1500N	50	120	425	10	140
1400N	160	45	35	40	90
1300N	295	50	10	10	40
1200N	180	40	20	"	60
1100N	90	50	25	20	50
24E 1000N	70	50	40	20	45
900N	50	125	65	20	25
800N	30	40	45	25	470
700N	50	35	40	15	50
600N	<5	20	"	"	20
500N	<5	5	60	20	35
400N	10	15	40	"	30
300N	<5	<5	20	"	40
200N	20	40	30	"	"
100N	10	25	35	60	75

032

TRIAL HARBOUR S.P.L. 129

REINSON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO. 24E

-85#

LOCATION	Se	As	Cu	Pb	Zn
24E 000	25	45	15	20	60
100S	185	15	75	40	70
200S	5	75	40	20	110
300S	20	75	45	20	65
400S	10	50	30	20	40
500S	"	40	60	15	50
600S	45	50	100	30	95
700S	15	40	45	20	40

033

451034

TRIAL HARBOUR S.P.L. 129

REMISON LIMITED

AREA D

GEO-CHEMICAL SOIL SAMPLES

SITE No. 25E

-85#

LOCATION	Sn	As	Cu	Pb	Zn		
25E 3000N	100	45	35	10	65		
2900N	75	45	25	"	"		
2800N	200	45	"	"	45		
2700N	65	45	10	15	55		
2600N	50	40	15	"	45		
2500N	60	30	"	20	65		
2400N	20	5	"	10	55		
2300N	10	45	70	20	65		
2200N	15	10	65	15	"		
2100N	35	45	95	10	115		
25E 2000N	50	5	150	45	80		
1900N	5	"	20	10	215		
1800N	"	10	140	"	135		
1700N	20	50	80	35	130		
1600N	300	200	65	"	55		
1500N	170	1500	100	25	60		
1400N	270	4500	95	35	75		
1300N	110	100	40	20	55		
1200N	75	200	55	20	60		
1100N	50	40	75	15	75		
25E 1000N	10	30	40	20	60		
900N	20	20	10	20	100		
800N	45	25	35	"	30		
700N	"	20	30	25	35		
600N	"	500	30	"	215		
500N	15	175	40	30	60		
400N	20	150	35	25	45		
300N	40	40	60	30	"		

034

451035

TRIAL HARBOUR S.P.L. 129

RENISON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO. 25E

-85#

P.P.P.

LOCATION	Sr	As	Cu	Pb	Zn		
25E 200N	35	225	95	60	325		
100N	50	175	80	30	85		
25E 000	5	30	50	20	170		
100S	10	75	35	75	70		
200S	45	25	"	35	"		
300S	5	125	40	30	"		
400S	35	50	"	"	85		

035

451036

TRIAL HARBOUR S.P.L. 129

REBISON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE No. 26E

-85#

LOCATION	Sn	As	Cu	Pb	Zn	Ni
26E 3000N	45	5	5	20	70	
2900N	5	10	10	15	40	
2800N	110	35	5	15	25	
2700N	175	45	15	30	40	
2600N	60	15	55	10	45	
2500N	20	25	40	20	"	
2400N	45	50	140	"	35	
2300N	"	10	20	15	35	
2200N	"	5	10	20	60	
2100N	10	"	15	15	50	
26E 2000N	35	50	"	"	30	
1900N	95	"	10	25	35	
1800N	20	35	30	15	30	
1700N	20	20	15	20	40	
1600N	60	5	85	30	75	
1500N	30	50	30	20	50	
1400N	20	75	35	25	40	
1300N	5	50	15	20	"	
1200N	45	30	25	10	30	
1100N	"	35	10	15	35	
26E 1000N	"	"	25	20	55	
900N	45	35	10	10	20	20
800N	10	20	5	5	10	45
700N	60	35	15	20	25	20
600N	45	80	105	45	80	60
500N	-	-	-	-	-	-
400N	40	100	70	10	40	30

036

451037

TRIAL HARBOUR S.P.L.129

REMISON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO. 26E

-85#

LOCATION	Sn	As	Cu	Pb	Zn	Ni
26E 300N	40	30	105	15	50	35
200N	25	30	100	20	130	45
100N	40	25	50	25	60	25
26E 000	60	30	65	55	"	30
100S	40	15	45	95	65	40
200S	30	30	25	40	35	20
300S	35	"	45	275	200	75
400S	30	10	<5	10	<5	5
500S	25	5	5	200	105	"
600S	"	10	<5	25	5	"
26E 700S	30	15	"	110	"	<5

037

451038

TRIAL HARBOUR S.P.L. 129

REMISE LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE NO. 27E

- 85 #

LOCATOR	Sn	As	Cd	Pb	Zn	Ni
27E 3000N	30	15	(10) 25	20 (20)	(5) 5	(70) 25
2950N	80	25	(5) 20	5 (25)	(20) 5	(60) 20
2900N	70	"	15	25	10	20
2850N	50	"	20	5	20	55
2800N	30	5	125	20	45	130
2750N	20	"	45	5	15	30
2700N	50	25	25	25	10	25
2650N	"	"	35	5	20	45
2600N	30	"	120	25	40	70
2550N	50	10	115	25	25	45
27E 2500N	30	"	130	"	20	40
2450N	35	30	35	"	25	55
2400N	60	15	90	20	20	40
2350N	90	30	25	"	30	75
2300N	80	25	"	"	25	30
2250N	30	25	15	"	35	50
2200N	50	5	60	25	30	85
2150N	40	15	15	"	30	50
2100N	70	25	10	20	50	70
2050N	60	30	15	"	25	35
27E 2000N	30	25	25	"	30	55
1900N	25	15	55	25	15	30
1800N	40	30	330	40	35	60
1700N	"	25	70	30	20	55
1600N	25	10	"	25	"	30
1500N	5	40	85	"	50	60
1400N	10	50	80	"	20	35
1300N	50	50	240	35	35	70

038

451039

TRIAL HARBOUR S.P.L. 129

REHISON LIMITED

AREA D

GEOCHEMICAL SOIL SAMPLES

LINE No. 27E

-85#

LOCATION	Sn	As	Cu	Pb	Zn		
27E 1200N	20	45	75	55	40		
1100N	45	40	90	"	40		
27E 1000N	50	20	40	30	35		
900N	90	40	"	35	40		
800N	20	20	30	20	45		
700N	30	20	"	25	135		
600N	50	30	70	40	60		
500N	40	40	100	45	65		
400N	60	30	65	60	95		
380N	35	50	85	45	100		
300N	120	45	95	60	105		
200N	20	"	75	70	55		
100N	45	45	80	"	25		
27E 000	35	30	25	60	100		
100S	25	10	20	20	90		

039

451040

**RENISON LIMITED**

APPENDIX 3

AREA D

GROUND MAGNETIC (PROTON) DATA

040

451041

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 16.4.76

LOCATION: TRIAL HARBOUR S.P.L. 129 LINE NO. 21E

AREA D

(measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
21E 2100N	62369	21E 150N	63092				
2000N	62364	100N	61334				
1900N	62349	050N	61827				
1800N	62330	21E 000	61913				
1700N	62314	050S	61803				
1600N	62276	100S	61814				
21E 1500N	62262	150S	61906				
1450N	62290	200S	61973				
1400N	62364	250S	61998				
1350N	62528	300S	62033				
1300N	63083	350S	62071				
1250N	63585	400S	62087				
1200N	65779	450S	62090				
1150N	64797	21E 500S	62088				
1100N	63552	550S	62070				
1050N	63016	600S	62107				
21E 1000N	63239	650S	62124				
950N	62942	700S	62151				
900N	63578	750S	62181				
850N	63668	800S	62249				
800N	62834	850S	62368				
750N	62900	900S	62517				
700N	63365	950S	62875				
650N	64186	21E 1000S	63754				
600N	64455	1050S	65100				
550N	63854	1100S	63328				
21E 500N	63593	1150S	63052				
450N	63697	1200S	62161				
400N	64433	1250S	62050				
350N	65139	1300S	62115				
300N	65392	1350S	62160				
250N	65278	1400S	62206				
200N	65398	1450S	62243				
		21E 1500S	62289				

041

451042

RENISON LIMITED

PROTON MAGNETOMETER FIELD READINGS

DATE: 16.4.76

LOCATION: TRIAL HARBOUR S.P.L. 129 LINE NO. 22E

AREA D

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
22E 3000N	62423	22E 1200N	62578	22E 600S	62124		
2950N	62414	1150N	62577	650S	64340		
2900N	62412	1100N	62470	700S	65439		
2850N	62401	1050N	62645	750S	63500		
2800N		22E 1000N	62666	800S	60,000		
2750N	62397	950N	63365	850S	59500		
2700N	62395	900N	65890	900S	59800		
2650N		850N	63120	950S	61812		
2600N	62387	800N	61817	22E 1000S	60829		
		750N	61968	1050S	61215		
		700N	62968	1100S	61701		
		650N	62782	1150S	61761		
22E 2500N	62378	600N	61577	1200S	61816		
2400N	62365	550N	60670	1250S	61936		
2300N	62353	22E 500N	61635	1300S	62022		
2200N	62338	450N	61975	1350S	62113		
2100N	62328	400N	61998	1400S	62135		
		350N	61960	1450S	62123		
		300N	61972	22E 1500S	62259		
		250N	62038				
22E 2000N	62335	200N	62163				
1900N	62444	150N	62231				
1800N	62907	100N	62412				
1750N	63706	050N	62540				
1700N	63267	22E 000	62815				
1650N	63755	050S	62910				
1600N	63921	100S	62909				
1550N	63976	150S	62802				
22E 1500N	64061	200S	62863				
1450N	64081	250S	62842				
1400N	63441	300S	62726				
1350N	62491	350S	62696				
1300N	62405	400S	62701				
1250N	62505	450S	62599				
		22E 500S	62511				
		550S	62252				

042

451043

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 5.3.75

LOCATION: TRIAL HARBOUR S.P.L. 129

LINE NO. 23E

AREA D

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
23E 3000N	62415	23E 1300N	62920	23E 400S	62834		
2950N	62411	1250N	62551	450S	62898		
2900N	62413	1200N	62485	500S	63055		
2850N	62434	1150N	62437	550S	62907		
2800N	62424	1100N	62471	600S	62837		
2750N	62405	1050N	62606	650S	62636		
2700N	62383	23E 1000N	62882	700S	62488		
2650N	62375	950N	62857	750S	62387		
2600N	62365	900N	63230	800S	62007		
2550N	62358	850N	63812	850S	61757		
23E 2500N	62334	800N	64438	900S	61517		
2450N	62293	750N	64736	950S	61636		
2400N	62242	700N	64529	23E 1000S	61780		
2350N	62227	650N	63219				
2300N	62238	600N	63032				
2250N	62329	550N	62599				
2200N	62419	23E 500N	62638				
2150N	62513	450N	62668				
2100N	62529	400N	62453				
2050N	62571	350N	63058				
23E 2000N	62616	300N	62475				
1950N	62585	250N	62193				
1900N	63337	200N	62340				
1850N	62731	150N	62113				
1800N	62497	100N	61751				
1750N	62459	050N	61428				
1700N	62066	23E 000	58405				
1650N	62453	050S	58907				
1600N	62608	100S	61286				
1550N	62492	150S	61829				
23E 1500N	62674	200S	62086				
1450N	62838	250S	62409				
1400N	62708	300S	62526				
1350N	62824	350S	62659				

043

451044

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 5. 3. 75

LOCATION: TRIAL HARBOUR. S.P.L. 129 LINE NO. 24E

AREA D

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
24E 3000N	62 375	24E 1300N	65523	24E 500S	61706		
2950N	62370	1250N	65526	550S	61638		
2900N	62363	1200N	63200	600S	61707		
2850N	62341	1150N	65523	700S	61857		
2800N	62307	1100N	65523	750S	61920		
2750N	62158	1050N	58867	800S	61960		
2700N	63757	24E 1000N	61262				
2650N	62038	950N	62322				
2600N	62377	900N	62779				
2550N	62523	850N	62830				
24E 2500N	62400	800N	62812				
2450N	62271	750N	63821				
2400N	62369	700N	63023				
2350N	62463	650N	62042				
2300N	62615	600N	64647				
2250N	62799	550N	62535				
2200N	63004	24E 500N	61646				
2150N	63476	450N	62106				
2100N	63605	400N	62980				
2050N	63890	350N	64441				
24E 2000N	63821	300N	64785				
1950N	63543	250N	65845				
1900N	61713	200N	66961				
1850N	58019	150N	67458				
1800N	62273	100N	65972				
1750N	59313	050N	62821				
1700N	59935	24E 000	64275				
1650N	60331	050S	65524				
1600N	62409	100S	61616				
1550N	63954	150S	62400				
24E 1500N	64772	200S	58986				
1450N	63583	250S	60608				
1400N	63346	300S	61183				
1350N	63517	350S	61383				
		400S	61648				
		450S	62218				

044

451045

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 6.3.75

LOCATION: TRIAL HARBOUR S.P.L.129

LINE NO. 25E

AREA D

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
25E 3000N	62185	25E 1200N	59827				
2450N	62171	1150N	61787				
2900N	62149	1100N	62094				
2850N	62152	1050N	61903				
2800N	62302	25E 1000N	62762				
2750N	62818	950N	63722				
2700N	62444	900N	63752				
2650N	62482	850N	63516				
2600N	62778	800N	62616				
2550N	62487	750N	62489				
25E 2500N	62528	700N	62447				
2450N	62775	650N	62292				
2400N	62445	600N	62272				
2350N	61859	550N	61757				
2300N	61360	25E 500N	61531				
2250N	61672	450N	61997				
2200N	62000	400N	62083				
2150N	65525	350N	62235				
2100N	65523	300N	62300				
2050N	65525	250N	62408				
25E 2000N	65523	200N	61927				
1950N	65523	150N	61663				
1900N	65523	100N	62016				
1850N	65523	050N	62156				
1800N	65523	25E 000	62136				
1750N	65523	050S	62109				
1700N	65523	100S	62122				
1650N	60500	150S	62171				
1600N	62194	200S	61930				
1550N	65530	250S	62233				
25E 1500N	67938	300S	62285				
1450N	66382	350S	62292				
1400N	65730	25E 400S	62394				
1350N	65520						
1300N	67053						
1250N	61280						

045

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 5.3.75  
+  
13.5.76

LOCATION: TRIAL HARBOUR S.P.L. 129

LINE NO. 26E

AREA D

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
26E 3000N	62788	26E 1300N	62600				
2950N	62024	1250N	63194				
2900N	59090	1200N	62946				
2850N	60053	1150N	63382				
2800N	61312	1100N	63300				
2750N	61241	1050N	62319				
2700N	61561	26E 1000N	62262				
2650N	61180	950N	62367				
2600N	61982	900N	62646				
2550N	62233	850N	62153				
26E 2500N	62315	800N	62550				
2450N	62421	750N	64561				
2400N	63044	700N	63451				
2350N	62458	650N	62578				
2300N	63445	600N	62458				
2250N	62810	550N	62254				
2200N	62972	26E 500N	62198				
2150N	63800	450N	62204				
2050N	64584	400N	62229				
26E 2000N	63394	350N	62256				
1950N	62527	300N	62281				
1900N	62642	250N	62331				
1850N	63974	200N	62279				
1800N	60440	150N	62279				
1750N	62565	100N	62248				
1700N	63273	050N	62218				
1650N	63359	26E 000	62208				
1600N	61359						
1550N	62062						
26E 1500N	62162						
1450N	62592						
1400N	62504						
1350N	62164						

046

451047

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 16. 4. 76

LOCATION: TRIAL HARBOUR, AREA D

LINE NO. 27E

(location measurements in feet)

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
27E 3000N	61824	27E 1200N	61856				
2950N	62110	1150N	61620				
2900N	63245	1100N	61580				
2850N	64158	1050N	61814				
2800N	62775	27E 1000N	62067				
2750N	62596	950N	63083				
2700N	62769	900N	65096				
2650N	62809	850N	55670				
2600N	62519	800N	62656				
2550N	62482	750N	62493				
27E 2500N	62692	700N	62918				
2450N	62361	650N	62600				
2400N	62219	600N	62289				
2350N		550N	62219				
2300N	62890	27E 500N	62234				
2250N	62678	450N	62249				
2200N		400N	62182				
2150N	63332	350N	62256				
2100N	63696	300N	62358				
2050N	65093	250N	62464				
27E 2000N	66350	200N	62636				
1950N	64287	150N	62686				
1900N	61490	100N	62646				
1850N	64457	050N	62582				
1800N	63202	27E 000	62577				
1750N	62541	050 S	62517				
1700N	62048	27E 100 S	62482				
1650N	60500						
1600N	62538						
1550N	62630						
27E 1500N	61081						
1450N	64496						
1400N	62320						
1350N	62563						
1300N	63381						
1250N	61244						

451048

RENISON LIMITED

APPENDIX 4

SOUTH COMSTOCK TRAM

GROUND MAGNETIC (PROTON) DATA

AND

GEOCHEMICAL SOIL SAMPLING DATA

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 19. 6. 75

LOCATION: TRIAL HARBOUR S. P.L. 129 LINE NO. WESTERN

24. 6. 75

S. COMSTOCK TEAM.

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
W. 700m.N	62875	W. 100m.S	62835				
675m.N	62875	125m.S	62836				
650m.N	62878	150m.S	62815				
625m.N	62881	175m.S	62801				
600m.N	62880	200m.S	62795				
575m.N	62877	225m.S	62772				
550m.N	62878	250m.S	62748				
525m.N	62885	275m.S	62727				
W. 500m.N	62880	W. 300m.S	62711				
475m.N	62884	325m.S	62706				
450m.N	62893	350m.S	62681				
425m.N	62909	375m.S	62674				
400m.N	62924	400m.S	62662				
375m.N	62936	425m.S	62648				
350m.N	62947	450m.S	62641				
325m.N	62964	475m.S	62637				
300m.N	62987	500m.S	62633				
275m.N	63015	525m.S	62631				
W. 250m.N	63036	550m.S	62632				
225m.N	63053	575m.S	62632				
200m.N	63064	W. 600m.S	62635				
175m.N	63046						
150m.N	63019						
125m.N	63041						
100m.N	62930						
075m.N	62871						
050m.N	62839						
025m.N	62822						
W. 000	62850						
025m.S	62843						
050m.S	62832						
075.S	62840						

050

451050

S. Comstock Trm. S.P.A. 129

RENISON LIMITED

## GEOCHEMICAL SOIL SAMPLES

LINE NO. WESTERN

- 85#

P. D. 5

LOCATION	Sn	As	Cu	Pb	Zn		
W. 700m.N	20		5	50	5		
675m.N	<20		10	145	15		
650m.N	"		5	180	10		
625m.N	"		5	260	"		
600m.N	20		5	190	5		
575m.N	<20		"	75	"		
550m.N	"		"	30	10		
525m.N	"		"	60	"		
W. 500m.N	"		10	70	65		
475m.N	40		"	75	30		
450m.N	<20		15	105	10		
425m.N	"		10	30	20		
400m.N	"		10	20	5		
375m.N	"		10	15	5		
350m.N	"	<20	"	20	"		
325m.N	"	"	15	10	5		
300m.N	"	"	"	15	10		
275m.N	"	"	10	20	15		
W. 250m.N	"	"	"	10	5		
225m.N	"	"	<5	15	<5		
200m.N	"	"	"	"	5		
175m.N	"	"	5	"	<5		
150m.N	"	"	<5	"	10		
125m.N	"	"	5	<5	5		
100m.N	20	"	"	"	<5		
075m.N	<20	"	10	"	"		

051

451051

TRIAL HARBOUR S.P.L.129

RENISON LIMITED

S. Comstock TRAM

GEOCHEMICAL SOIL SAMPLES

LINE NO. WESTERN

-85#

P. 2. 0

LOCATION	Sn	As	Cu	Pb	Zn		
W. 050m.N	40	20	10	10	15		
025m.N	<20	<20	"	20	10		
W. 050m.S	<20		10	100	15		
075m.S	"		5	10	<5		
100m.S	"		<5	15	5		
125m.S.	"		5	"	<5		
150m.S.	"		"	"	"		
175m.S.	"		"	"	10		

049

## RENISON LIMITED

## PROTON MAGNETOMETER FIELD READINGS

DATE: 19.6.75

LOCATION: TRIAL HARBOUR S.P.L. 129 LINE NO. EASTERN

24.6.75

S. COMSTOCK TRAM

Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading	Location	Corrected Reading
E. 800m.N	63045	E. 025m.N	62965				
775m.N	63046	E. 000	62964				
750m.N	63055	025m.S	62957				
725m.N	63055	050m.S	62947				
700m.N	63079	075m.S	62936				
675m.N	63095	100m.S	62923				
650m.N	63110	125m.S	62915				
625m.N	63122	150m.S	62900				
E. 600m.N	63131	175m.S	62890				
575m.N	63138	200m.S	62878				
550m.N	63144	225m.S	62865				
525m.N	63147	E. 250m.S	62850				
500m.N	63150	275m.S	62836				
475m.N	63154	300m.S	62832				
450m.N	63159	325m.S	62809				
425m.N	63161	350m.S	62797				
E. 400m.N	63160	375m.S	62785				
375m.N	63140	400m.S	62775				
350m.N	63125	425m.S	62766				
325m.N	63110	450m.S	62760				
300m.N	63093	475m.S	62756				
275m.N	63080	E. 500m.S	62755				
250m.N	63068						
225m.N	63058						
E. 200m.N	63046						
175m.N	63027						
150m.N	63008						
125m.N	62990						
100m.N	62977						
075m.N	62972						
050m.N	62968						

052

451053

TRIAL HARBOUR S.P.L. 129

RENISON LIMITED

S. COMSTOCK TRAM

GEOCHEMICAL SOIL SAMPLES

LINE NO. EASTERN

-85#

P.P. 129

LOCATION	Sn	As	Cu	Pb	Zn		
E. 800 m. N.	<20	<20	5	<5	15		
775 m. N.	20	"	"	"	"		
750 m. N.	"	"	"	565	"		
725 m. N.	<20	"	"	500	"		
700 m. N.	"	"	"	260	10		
675 m. N.	"	"	"	200	15		
650 m. N.	"	20	"	80	5		
625 m. N.	"	<20	"	5	10		
<del>W</del> E. 600 m. N.	30	"	"	"	20		
575 m. N.	<20	"	"	"	10		
550 m. N.	"	"	"	20	"		
525 m. N.	"	20	"	100	15		
500 m. N.	"	<20	"	20	10		
475 m. N.	20	"	"	40	"		
450 m. N.	"	20	"	<5	20		
425 m. N.	"	<20	10	"	15		
E. 400 m. N.	<20	20	5	60	20		
375 m. N.	20	"	<5	180	10		
350 m. N.	70	"	"	200	20		
325 m. N.	30	<20	5	80	15		
300 m. N.	20	20	"	220	"		
275 m. N.	"	"	<5	150	10		
250 m. N.	30	<20	5	115	15		
225 m. N.	<20	"	<5	120	10		
E 200 m. N.	"	20	"	250	"		
175 m. N.	"	<20	"	280	"		

053

451054

TRIAL HARBOUR S.P.L. 129

RENISOF LIMITED

S. COMSTOCK TRAM

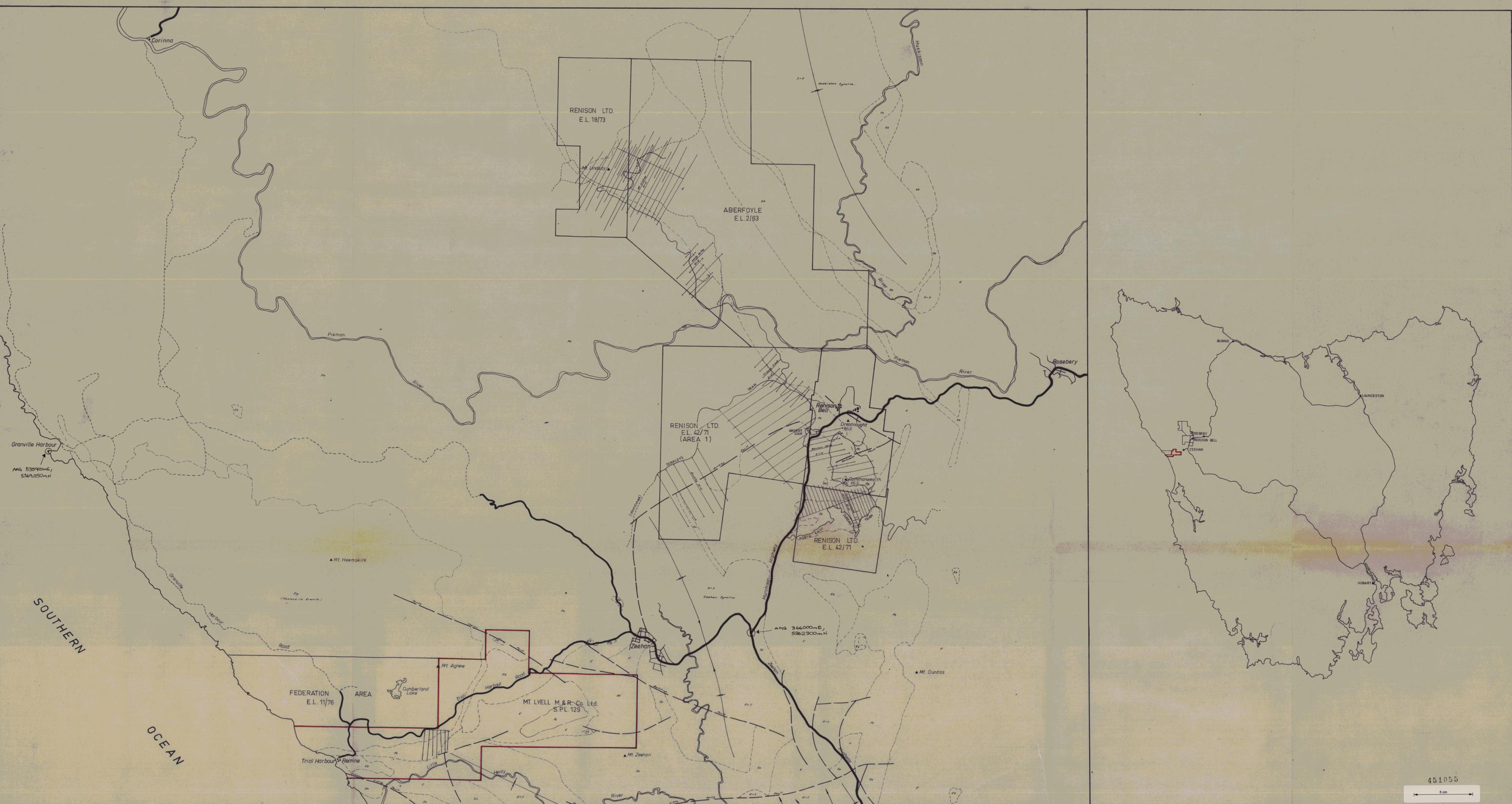
GEOCHEMICAL SOIL SAMPLES

LINE NO. EASTERN

-85#

P.P.M.

LOCATION	Sn	As	Cu	Pb	Zn		
<del>(E. 200m.)</del>							
E. 150m.N.	20	<20	<5	210	10		
125m.N.	70	"	"	50	10		
100m.N.	<20	20	5	45	"		
075m.N.	30	<20	<5	20	"		
050m.N.	"	"	"	"	"		
025m.N.	40	"	5	70	"		
E. 025m.S.	<20	<20	<5	100	5		
050m.S.	"	"	5	75	"		
075m.S.	"	"	10	120	"		
100m.S.	"	"	5	35	10		
125m.S.	"	"	"	25	15		
150m.S.	"	"	-	-	-		
175m.S.	"	"	5	15	10		
E. 200m.S.	"	"	<5	10	<5		
225m.S.	"	"	"	20	"		
250m.S.	"	"	"	10	5		
275m.S.	20	"	"	"	10		
300m.S.	40	"	"	"	<5		
325m.S.	<20	"	"	"	5		
350m.S.	"	"	"	5	<5		
375m.S.	"	"	"	10	"		
E 400m.S.	"	"	"	15	"		
425m.S.	"	"	"	10	5		
450m.S.	"	"	"	5	"		
475m.S.	"	"	"	"	"		
500m.S.	"	"	"	"	"		



1224

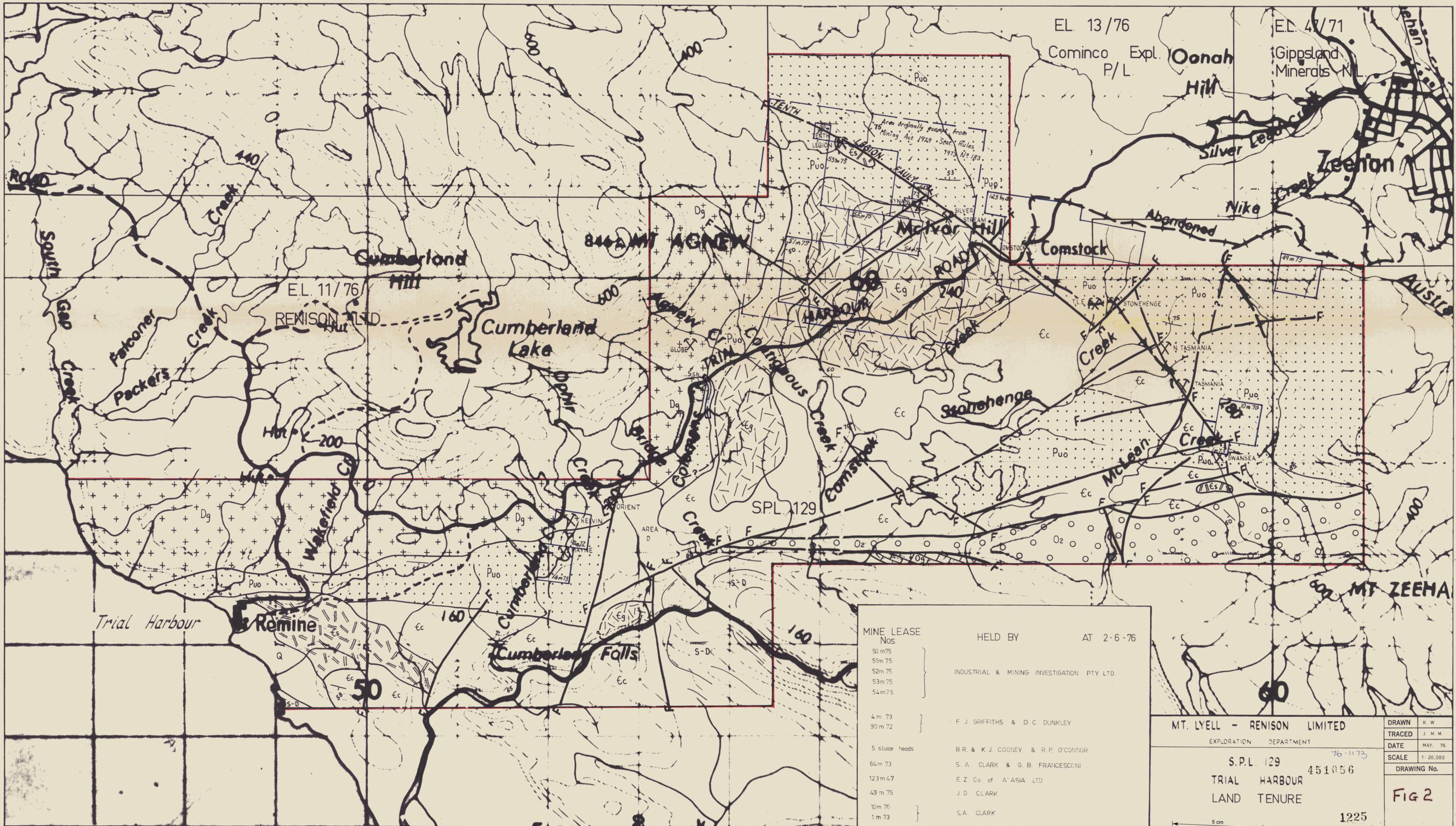
**KEY**


AMG REFERENCE POINTS ADDED

451055  
5cm

RENISON LIMITED  
76-1173  
**LOCALITY MAP**

GEOLOGIST :	SCALE-1:50,000 METRES
DRAUGHTSMAN :	MAP-1:100,000 METRES
DATE :	
REVISIONS :	DRAWING No. <b>Fig 1</b>

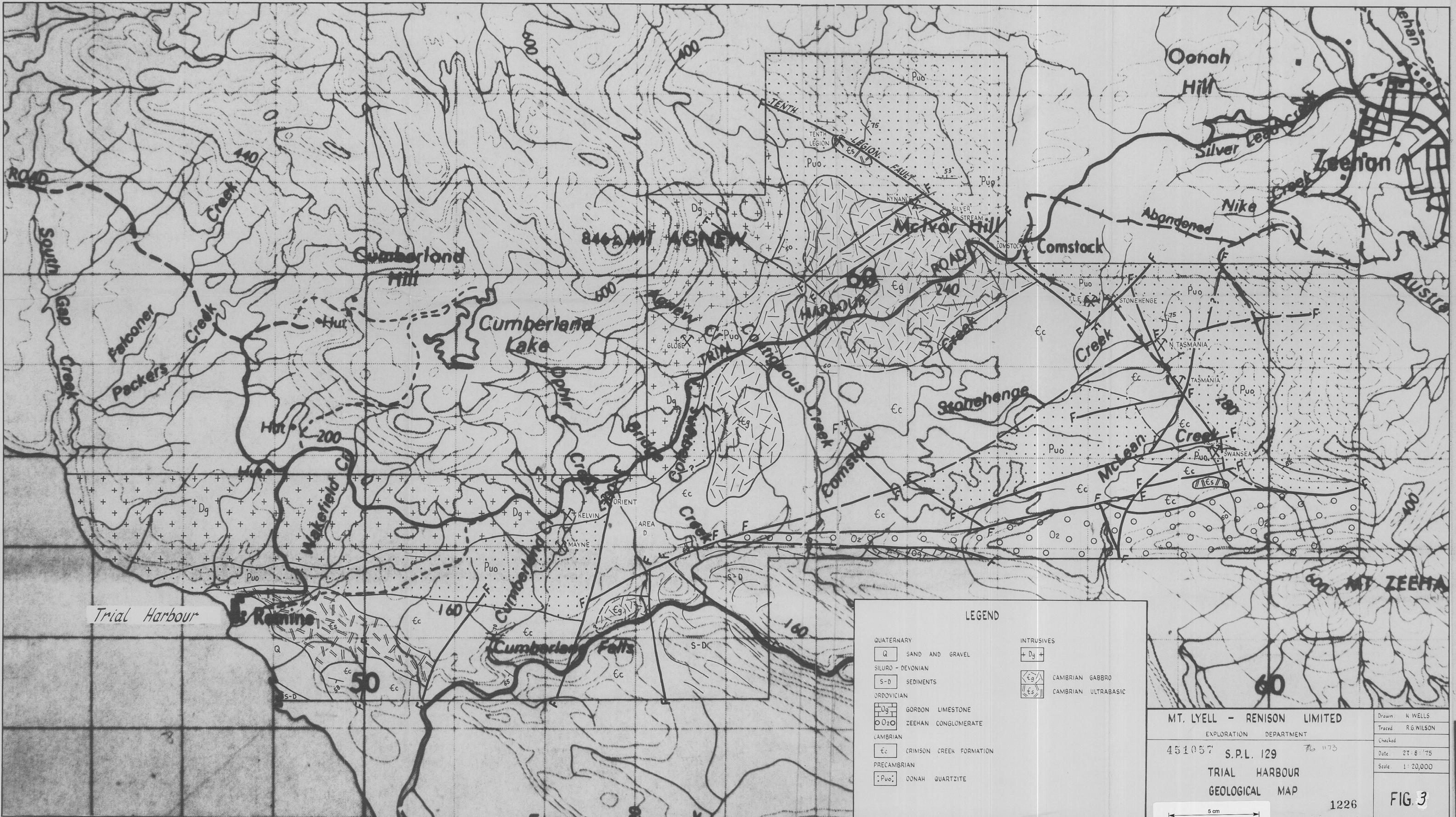


MINE LEASE Nos.	HELD BY	AT 2-6-76	
50 m75 51 m75 52 m75 53 m75 54 m75	INDUSTRIAL & MINING INVESTIGATION PTY LTD.		
4 m 73 90 m 72			F. J. GRIFFITHS & D. C. DUNKLEY
5 sluice heads			B. R. & K. J. COONEY & R. P. O'CONNOR
64 m 73			S. A. CLARK & G. B. FRANCESCOINI
123 m 47			E. Z. Co. of A'ASIA LTD
49 m 75	J. D. CLARK		
10 m 70	S. A. CLARK		
1 m 73			

MT. LYELL - RENISON LIMITED	
EXPLORATION	DEPARTMENT
S.P.L. 129	76-1173
TRIAL HARBOUR	451056
LAND TENURE	
1225	

DRAWN	K. W.
TRACED	J. M. M.
DATE	MAY. 76
SCALE	1:20,000
DRAWING No.	FIG 2

(BASED ON TAS MINES DEPT 1" = 1 MILE ZEEHAN SHEET)

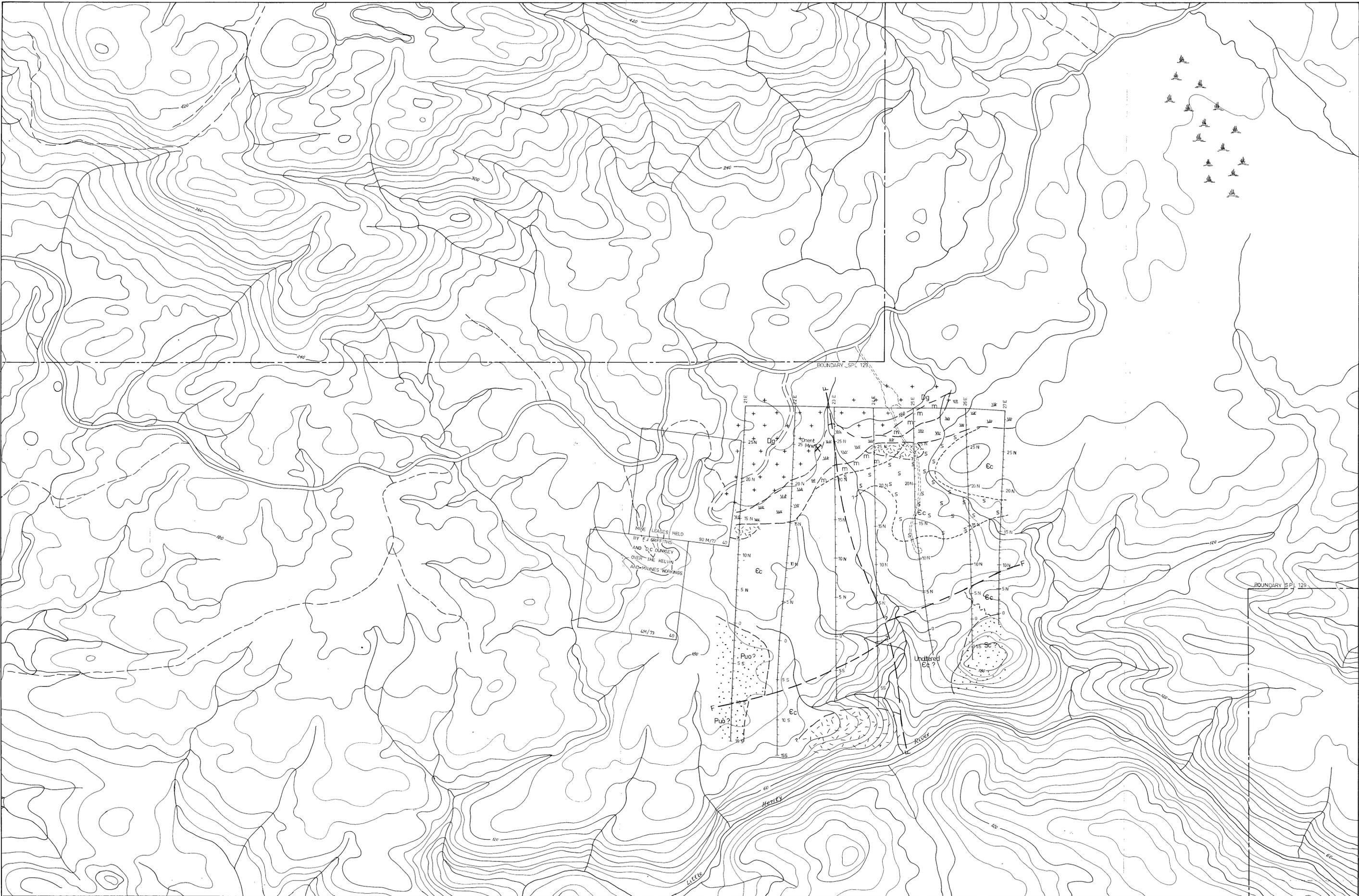


**LEGEND**

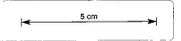
QUATERNARY	INTRUSIVES
Q SAND AND GRAVEL	+ D <sub>g</sub> +
SILURO - DEVONIAN	ε <sub>g</sub> / ε <sub>s</sub>
S-D SEDIMENTS	ε <sub>s</sub> / ε <sub>g</sub>
ORDOVICIAN	ε <sub>s</sub> / ε <sub>g</sub>
D <sub>g</sub> GORDON LIMESTONE	
O <sub>2</sub> ZEEHAN CONGLOMERATE	
LAMBRIAN	
ε <sub>c</sub> CRIMSON CREEK FORMATION	
PRECAMBRIAN	
P <sub>uo</sub> DONAH QUARTZITE	

<b>MT. LYELL - RENISON LIMITED</b>		Drawn H WELLS
EXPLORATION DEPARTMENT		Traced R.G WILSON
451057 S.P.L. 129	76 1173	Checked
<b>TRIAL HARBOUR GEOLOGICAL MAP</b>		Date. 27.8.75
1226		Scale 1:20,000
5 cm		<b>FIG 3</b>

(Based on Tas Mines Dept. 1" 1 mile Zeehan sheet)



MINE LEASES HELD  
BY F J GRIFFITHS  
AND D C DANLEY  
OVER THE KELVIN  
AND WAYNES WORKINGS



**INTRUSIVES**

**DEVONIAN**  
+ Dg + ADAMELLITE - HEEMSKIRK GRANITE

**CAMBRIAN**  
Gabbro / Microgabbro - McMur Hill Gabbro ?

**QUATERNARY**

W sw - SWAMP

**SILURIAN**  
- Sc ? - CROTTY QUARTZITE ?

**CAMBRIAN**

m m Metasomatised contact altered argillaceous rocks containing upto 50% quartz - tourmaline - benidite  
5 s Altered, partly hornfelsed, - stained argillaceous  
As above with disseminated sulphides, mainly pyrrhotite, pyrite and minor arsenopyrite.  
Unaltered argillaceous rocks

CRIMSON CREEK FORMATION (LOWER CAMBRIAN)

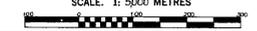
**PRECAMBRIAN**

Puo ? QUARTZITE - GONVAT FORMATION

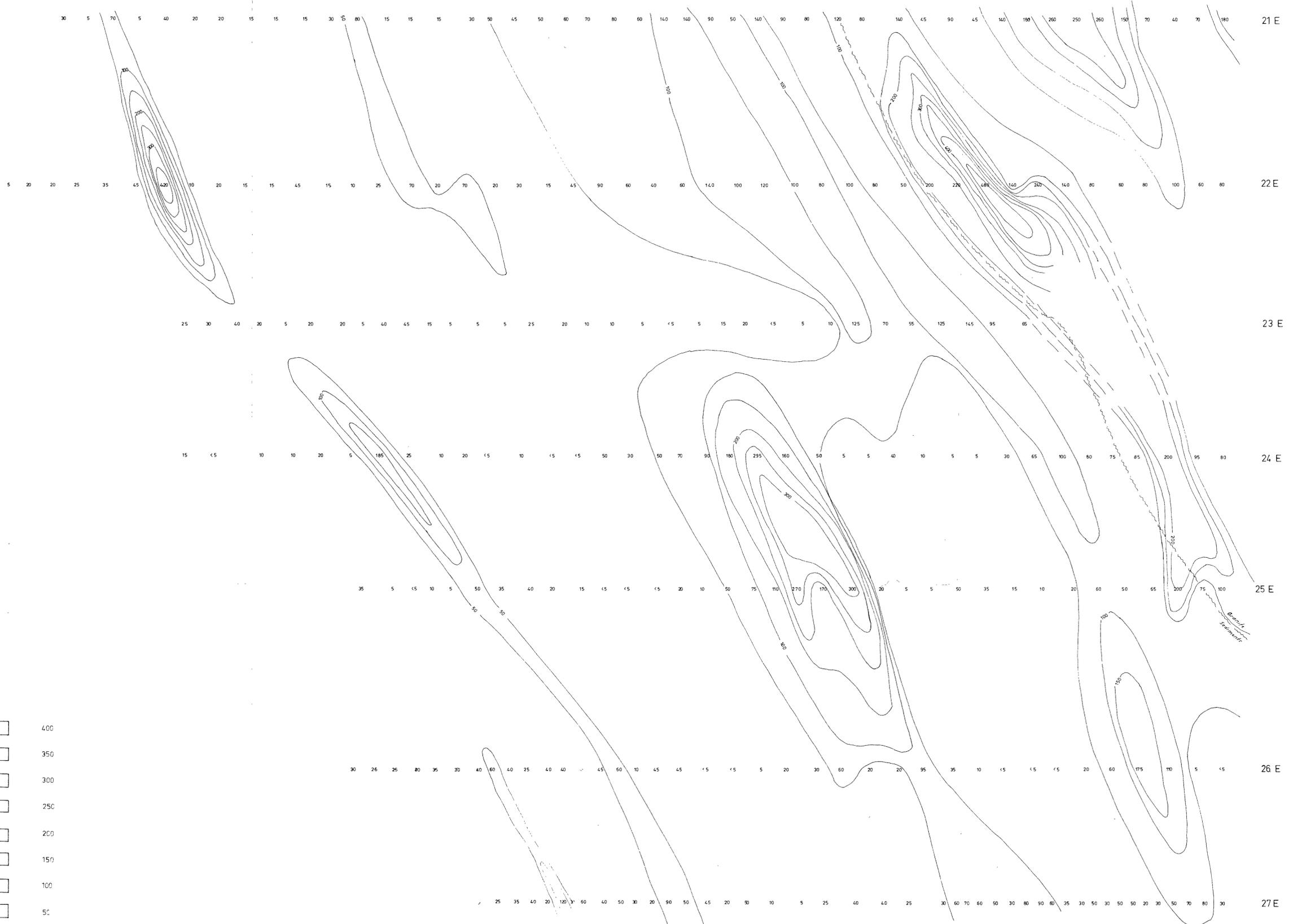
ZEEHAN C2/2	ZEEHAN D1/1
ZEEHAN S2/14	ZEEHAN D1/3

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

451058 RENISON LIMITED  
**ZEEHAN C2/4**  
TRIAL HARBOUR AREA S.P.L. 129  
**AREA 'D' GEOLOGY MAP**  
SCALE: 1:5000 METRES

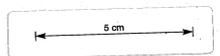
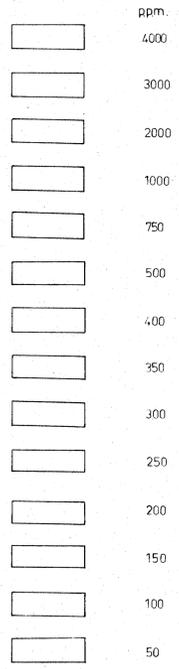
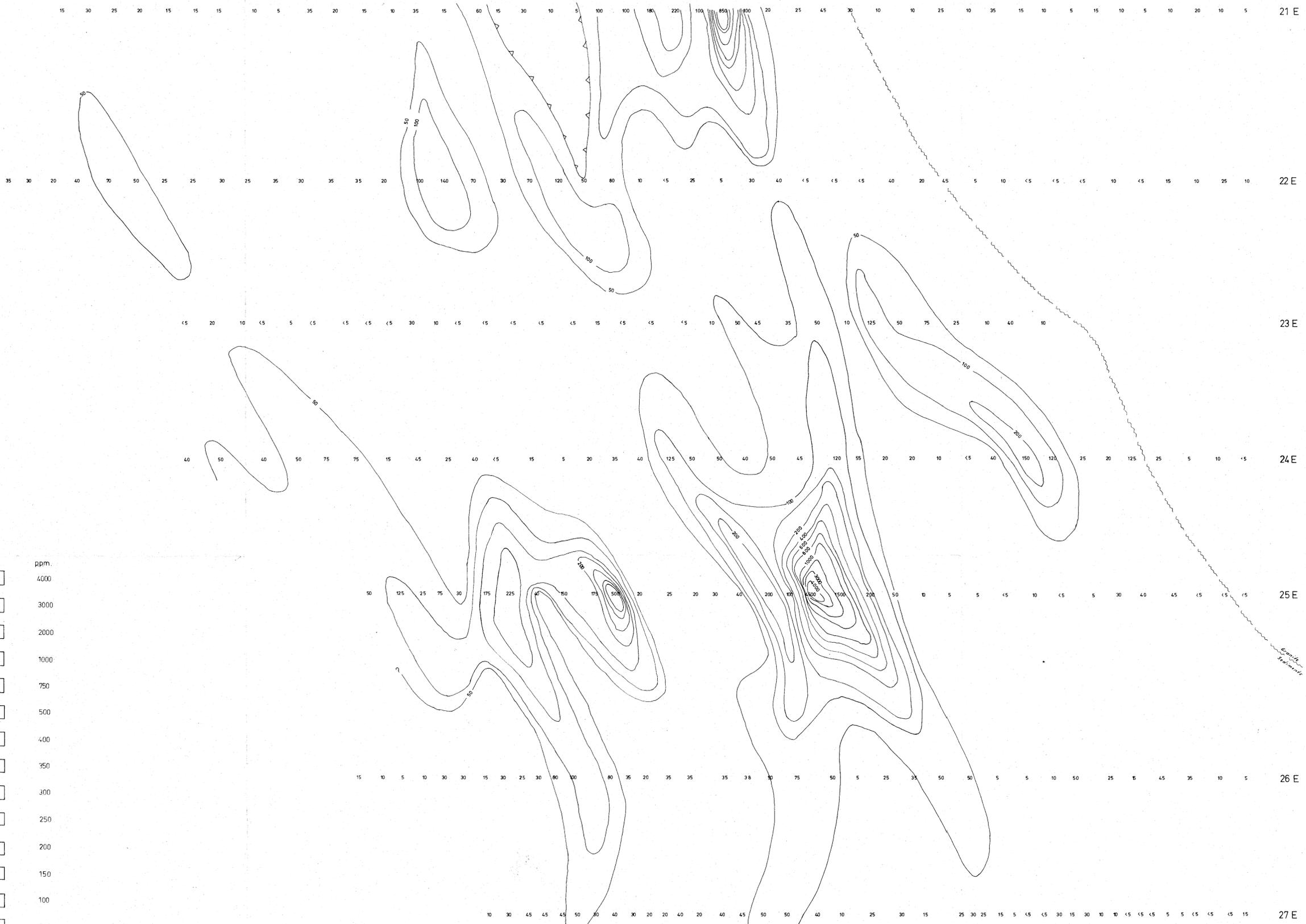


DRAWN	K W
TRACED	J M
DATE	MAY '76
SCALE	1:5000
DRAWING No.	Fig 4



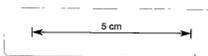
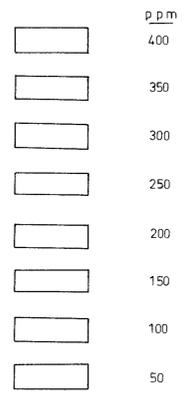
451059

RENISON LIMITED	
TRIAL HARBOUR - S.P.L. 129	
SOIL GEOCHEMISTRY	
TIN ppm.	
GEOLOGIST: J. WELLS	SCALE: 1:2000 METRES
DRAUGHTSMAN: M. THREWS	DATE: MAY 1977
REVISIONS: 76-1173	DRAWING No: 1228 Fig 5a



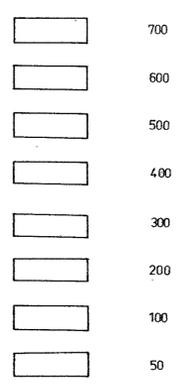
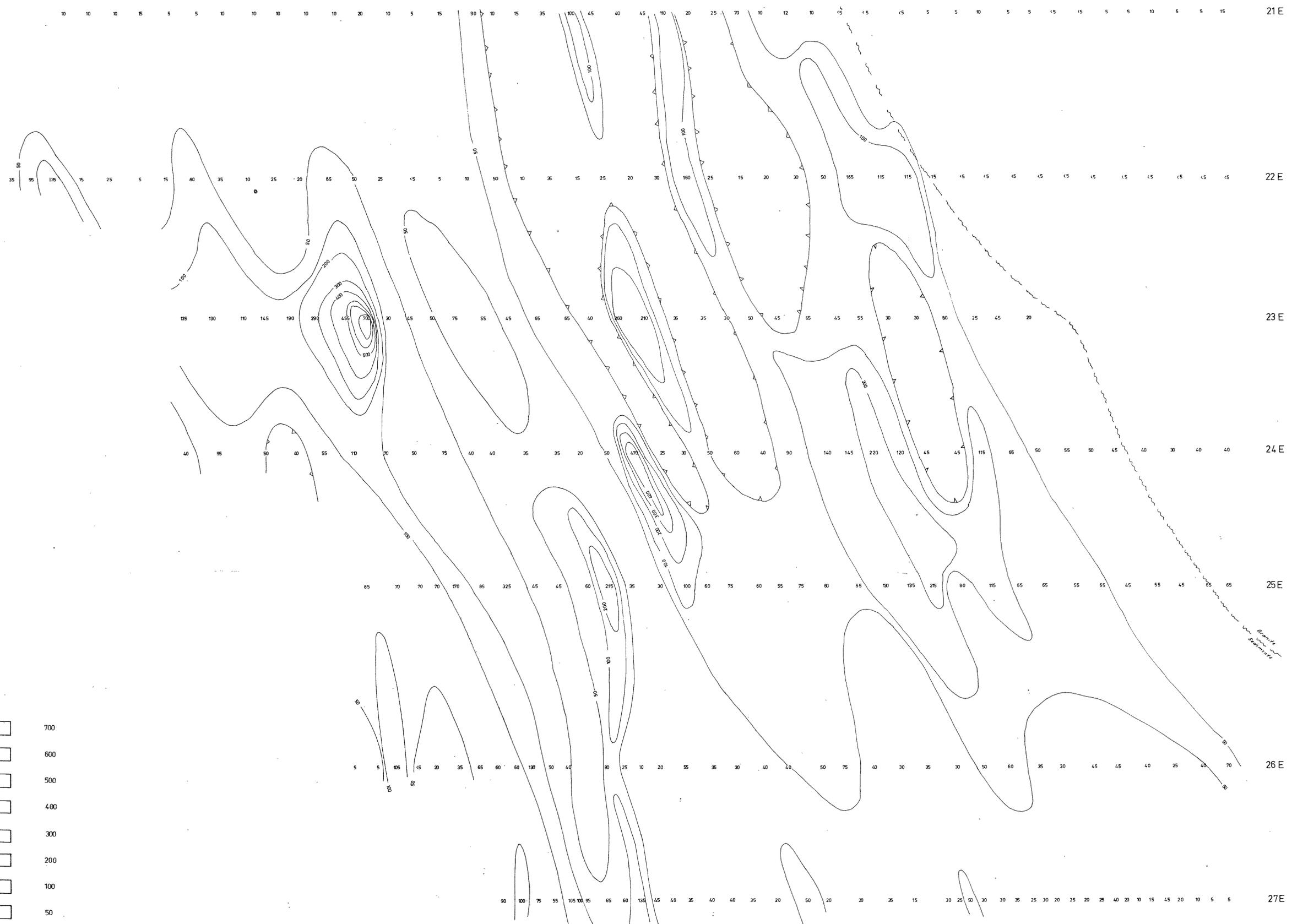
451060

RENISON LIMITED	
TRIAL HARBOUR - S.P.L. 129	
SOIL GEOCHEMISTRY	
ARSENIC p.p.m.	
GEOLOGIST : K. WELLS	SCALE 1:2000 METRES
DRAUGHTSMAN : J. MATTHEWS	0 40 80
DATE : MAY, 1976	
REVISIONS	DRAWING No.
76-1173 1229	Fig 5b.



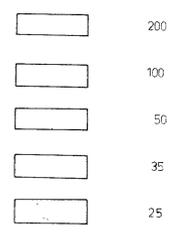
451061

RENISON LIMITED	
TRIAL HARBOUR - S.P.L. 129	
SOIL GEOCHEMISTRY	
COPPER ppm.	
GEOLOGIST : K WELLS	SCALE: 1:2000 METRES
DRAUGHTSMAN : J MATTHEWS	0 40 80
DATE : MAY, 1976	
REVISIONS :	1230 DRAWING No.
76-1173	Fig 5c



451052

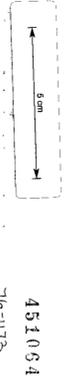
RENISON LIMITED	
TRIAL HARBOUR - S.P.L. 129	
SOIL GEOCHEMISTRY	
ZINC ppm.	
GEOLOGIST : K WELLS	SCALE: 1:2000 METRES
DRAUGHTSMAN : J MATTHEWS	40 0 40 80
DATE : MAY, 1976	
REVISIONS : 76-1173 1231	DRAWING No. Fig 5d



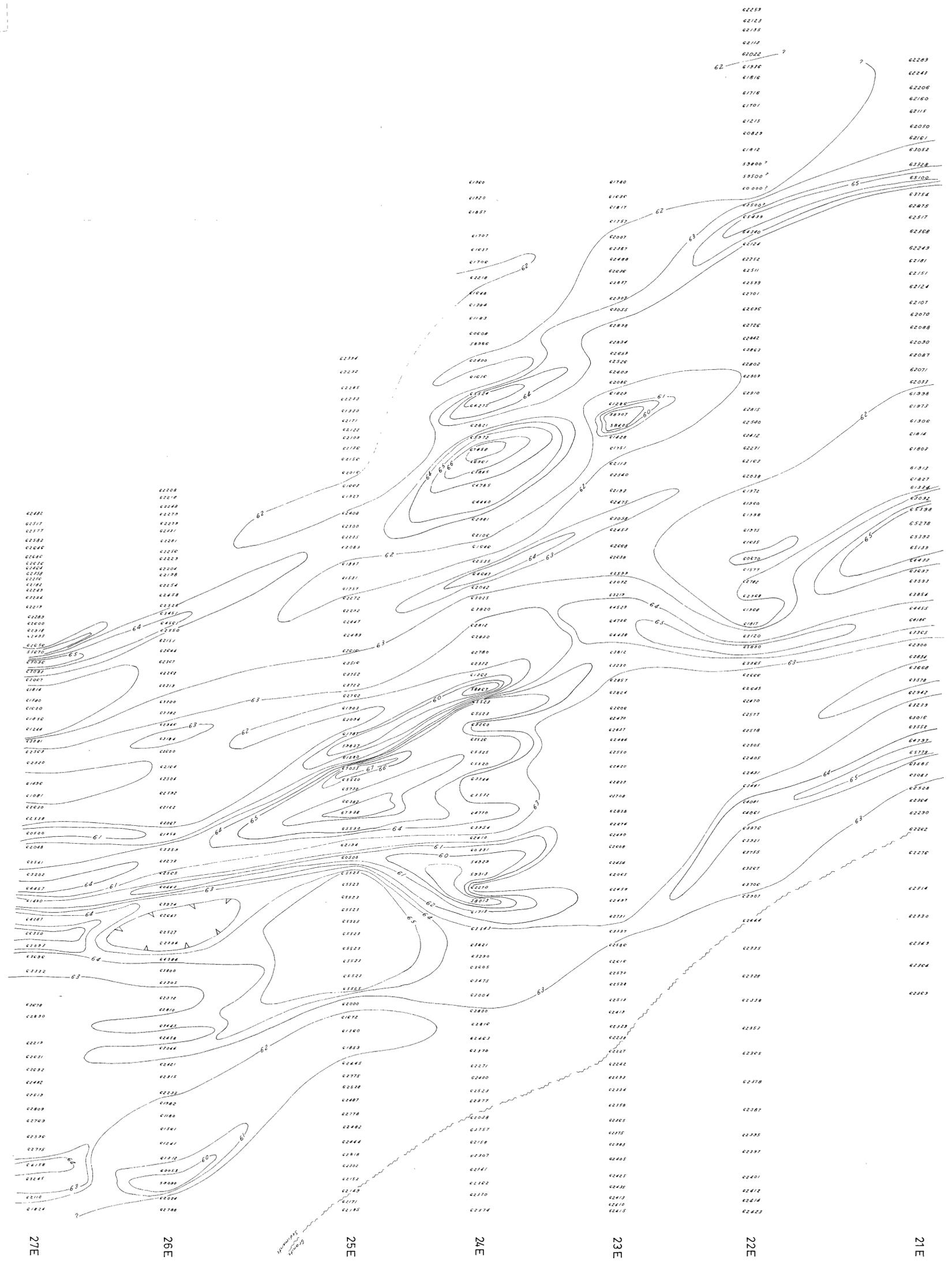
451063

RENISON LIMITED	
TRIAL HARBOUR - S.P.L 129	
SOIL GEOCHEMISTRY	
LEAD ppm	
GEOLOGIST K. WELLS	SCALE: 1:2000 METRES
DRAUGHTSMAN M. MATTHEWS	40 0 40 80
DATE MAY '86	
REVISIONS 76-1173 1232	DRAWING No Fig 5e

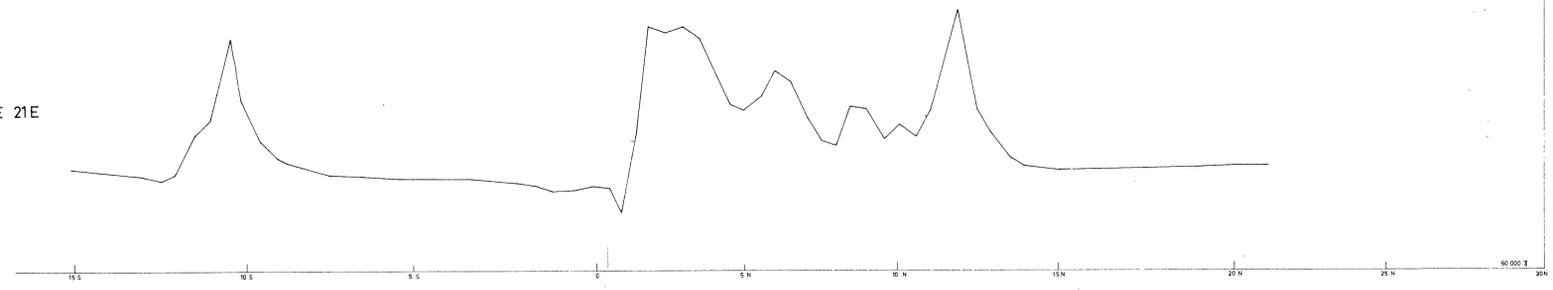
RENISON LIMITED  
 TRIAL HARBOUR - S.P.L.129  
 GROUND MAGNETICS  
 1000 FT CONTOURS  
 GEOLOGIST : K. W. H. /  
 DRAUGHTSMAN : F. Carlson /  
 DATE : June '76 /  
 REVISIONS : /  
 1233 /  
 DRAWING NO. /  
 Fig. 64 /



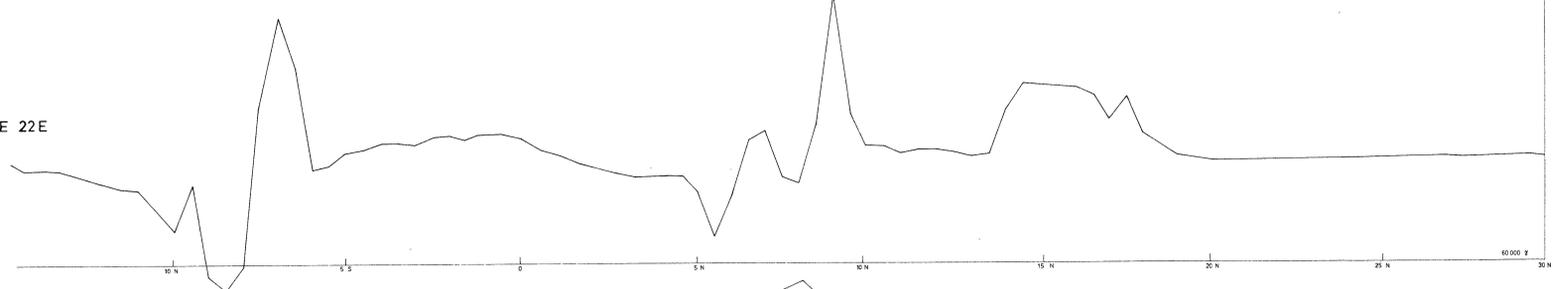
451054  
T6-1173



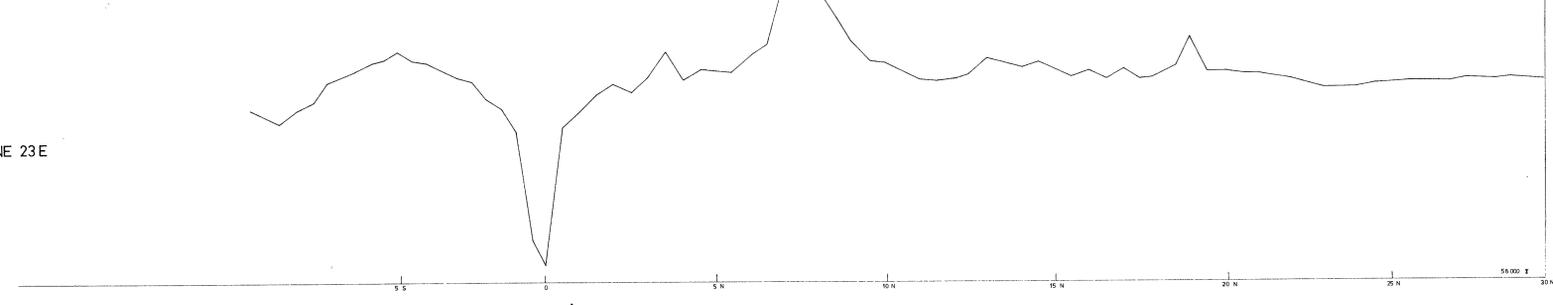
LINE 21E



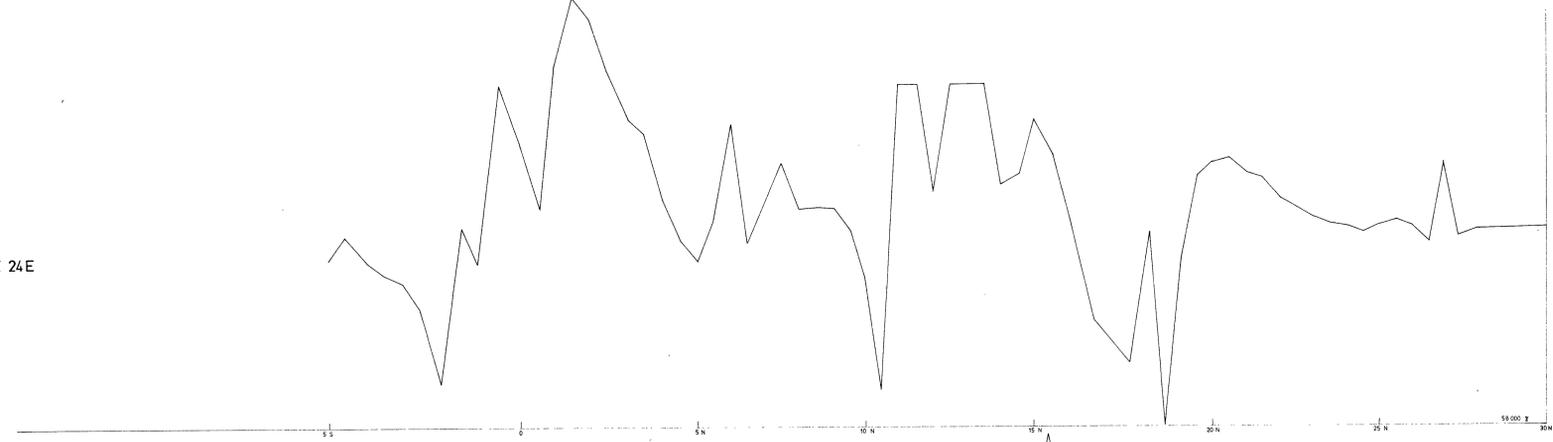
LINE 22E



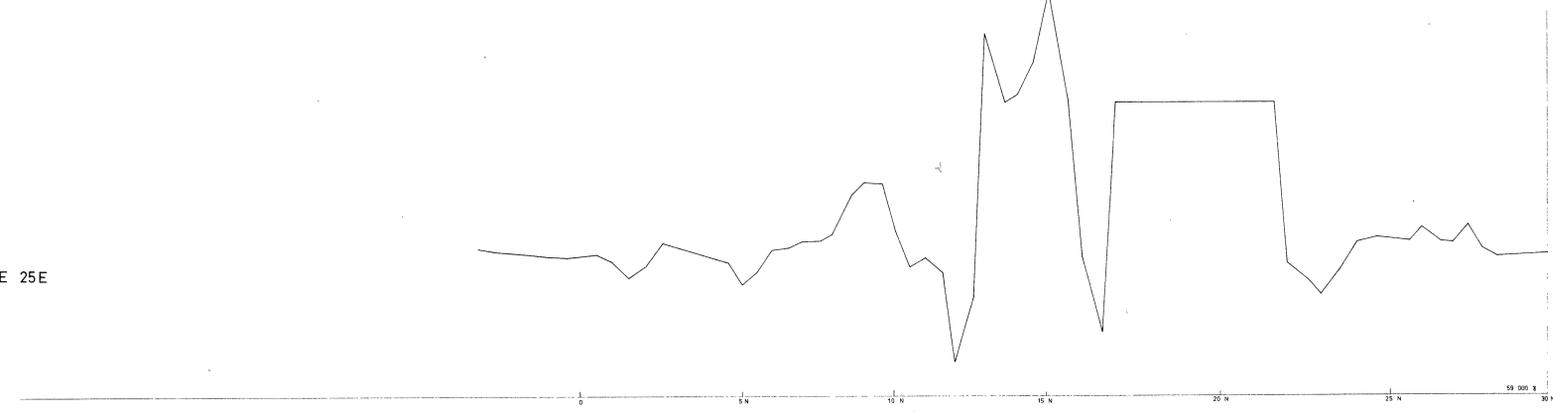
LINE 23E



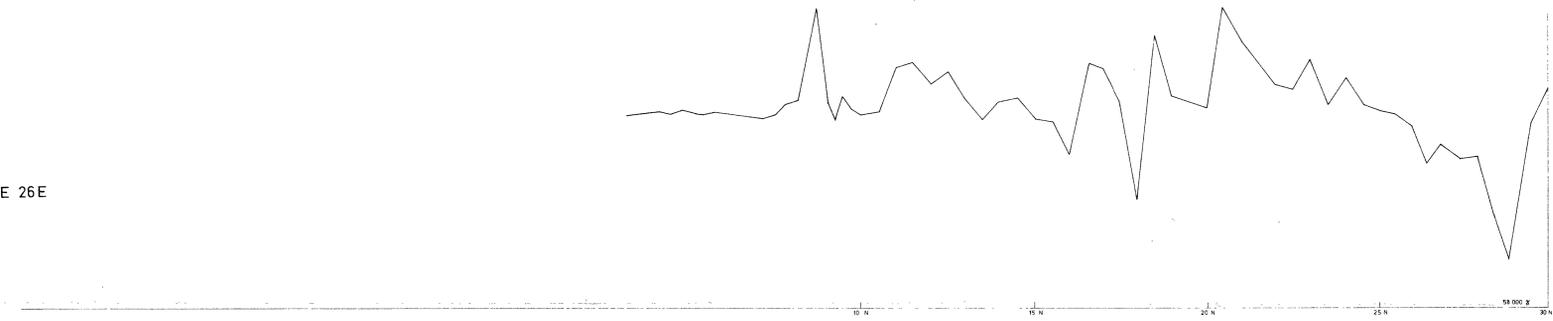
LINE 24E



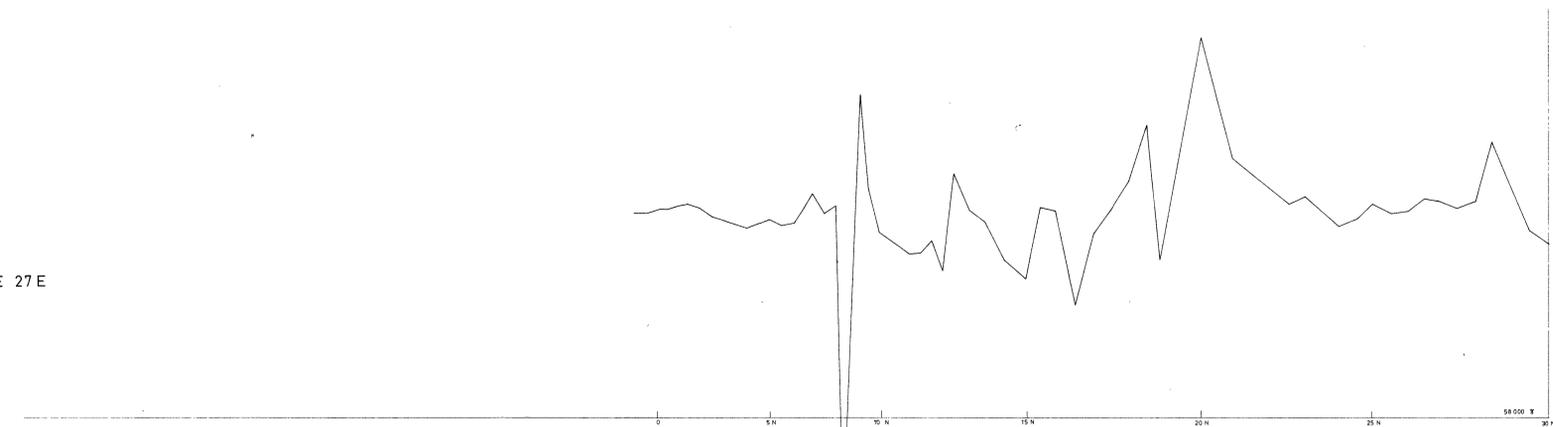
LINE 25E



LINE 26E



LINE 27E



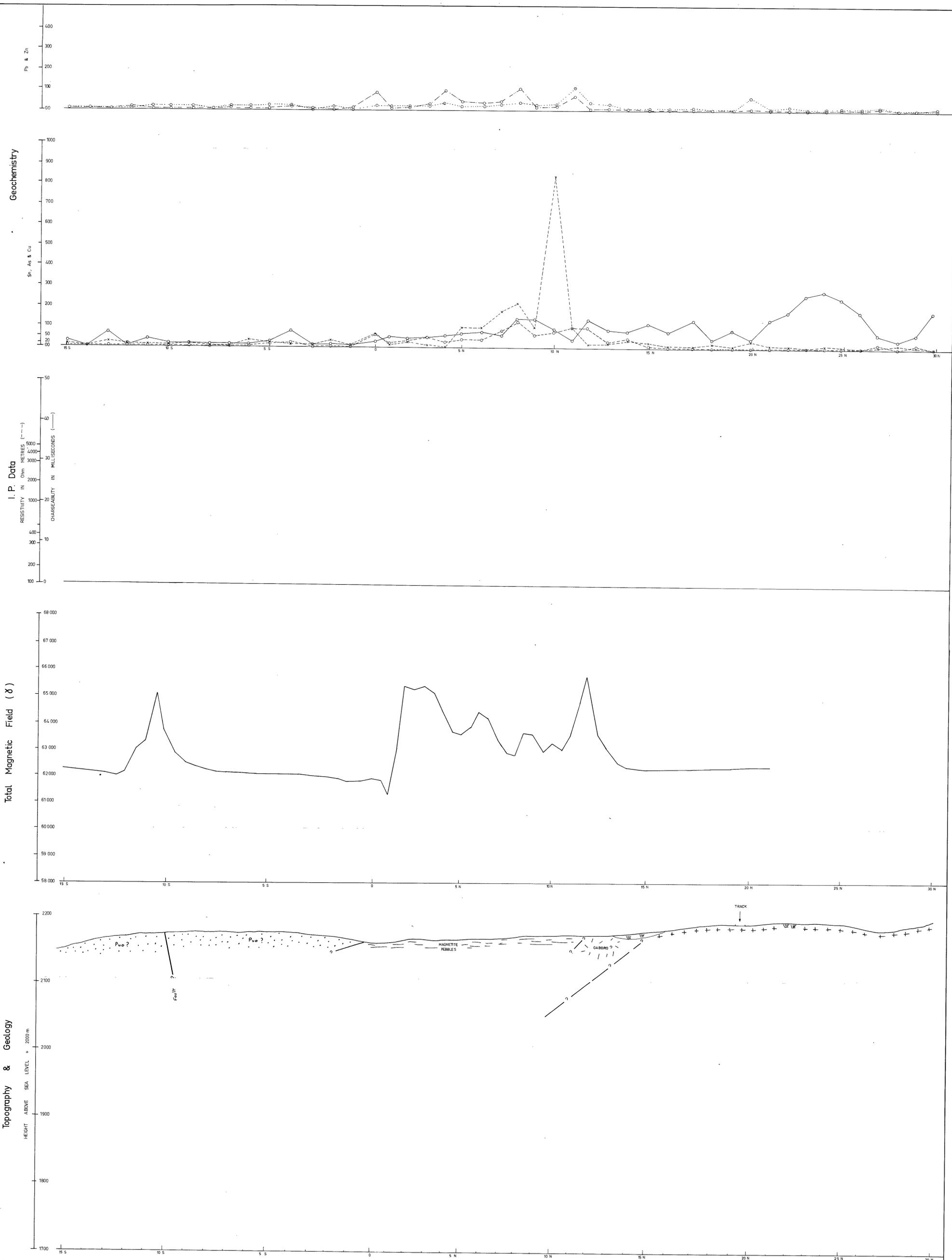
5m

451065  
76-1173

RENISON LIMITED  
TRIAL HARBOUR - S.P.L 129  
AREA D  
MAGNETIC PROFILES  
VERTICAL SCALE - 2cms 1000 x

GEOLOGIST	K. WELLS	SCALE	1:2000 METRES
DRAUGHTSMAN	J. MATTHEWS		
DATE	MAY, 1976		
REVISIONS			

DRAWING No.  
1234 Fig 66



451066  
 RENISON LIMITED 76-1175  
 S.P.L. 129  
 TRIAL HARBOUR AREA  
 LINE 21E. PROFILE

GEOLOGIST: K. WELLS  
 DRAUGHTSMAN: J. MATTHEWS  
 DATE: MAY, 1976

SCALE: 1:2000 METRES  
 0 40 80

REVISIONS: 1235  
 DRAWING No. Fig 7a

**GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- As
- W

**QUATERNARY**

- SWAMP

**DEVONIAN**

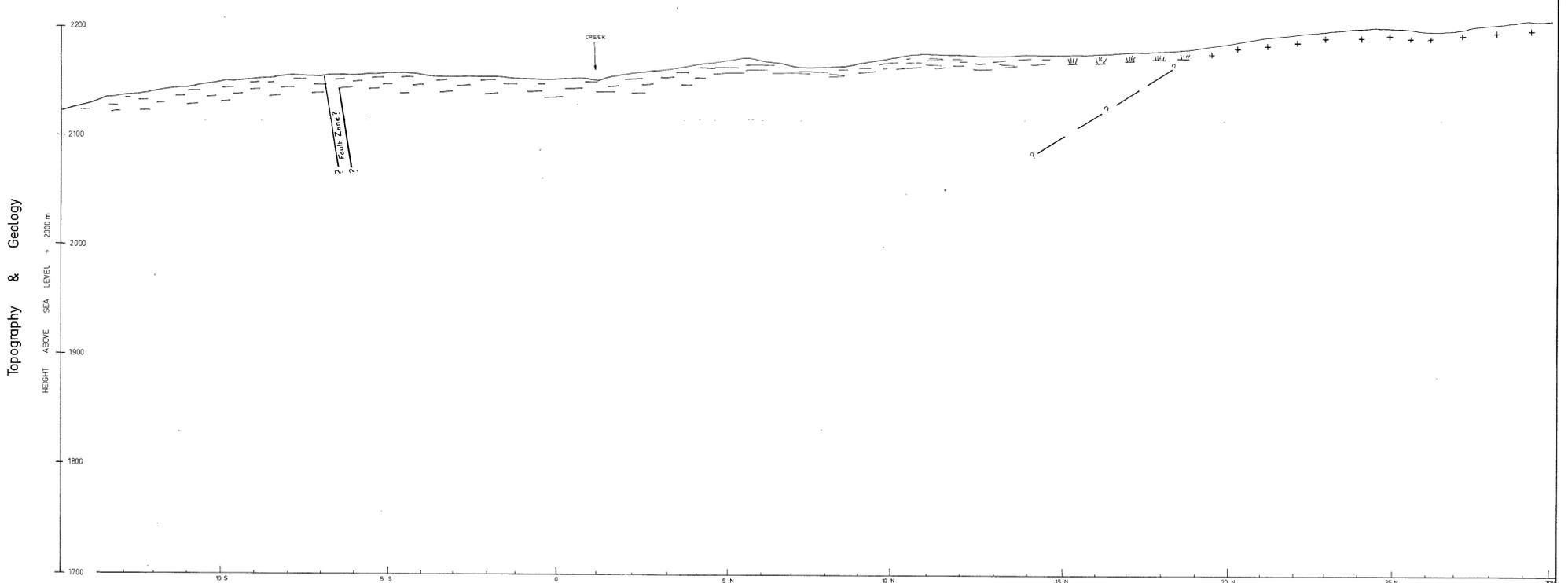
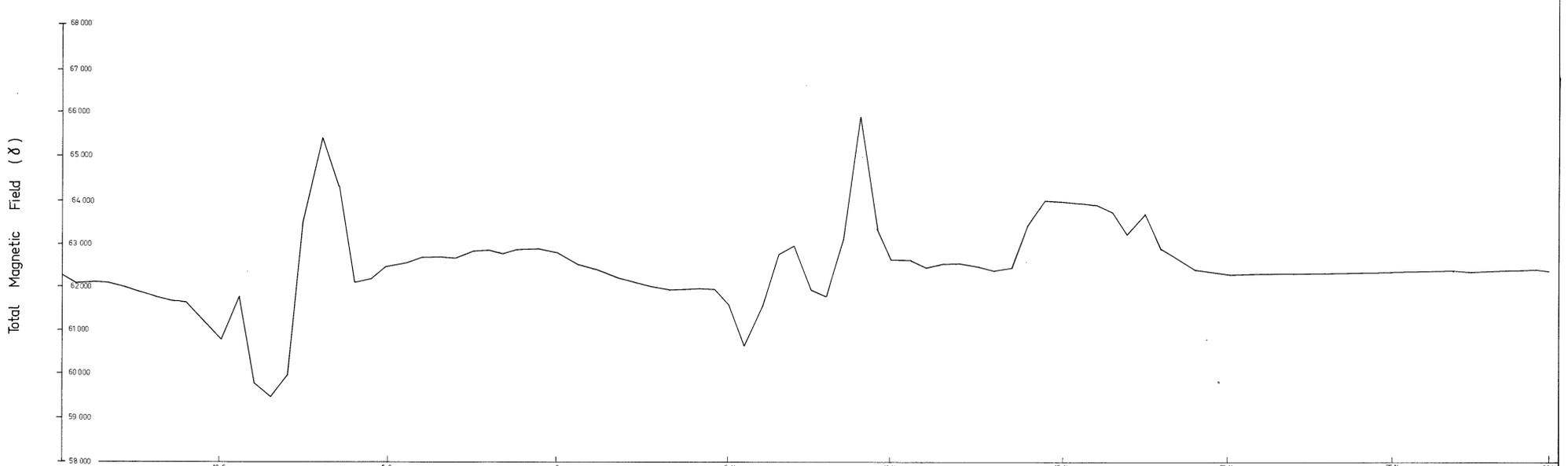
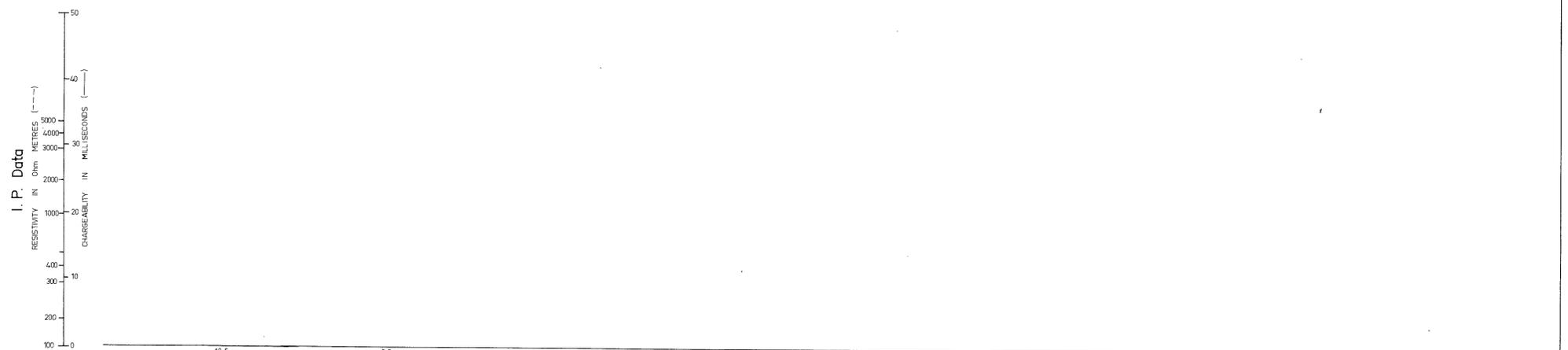
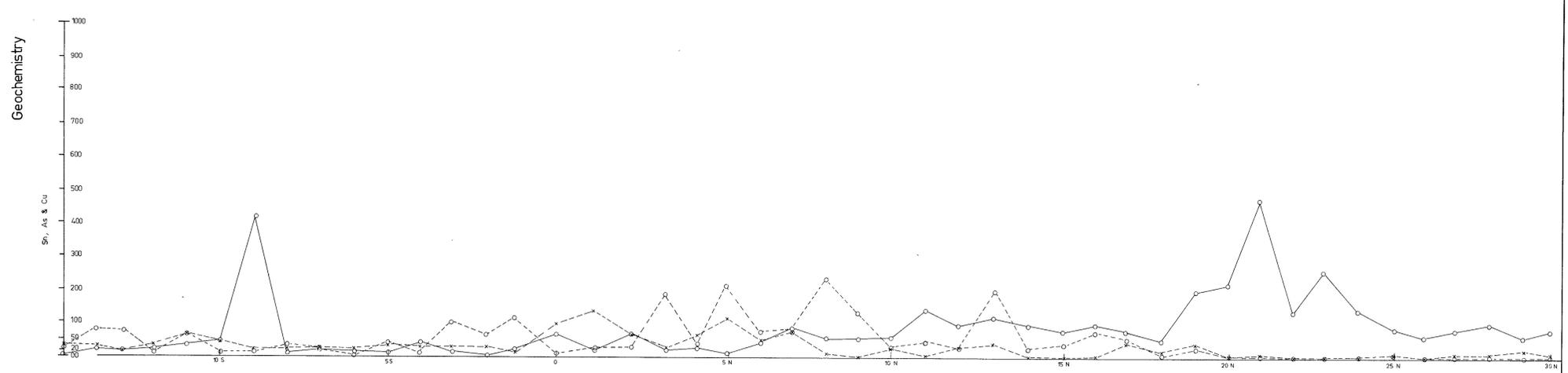
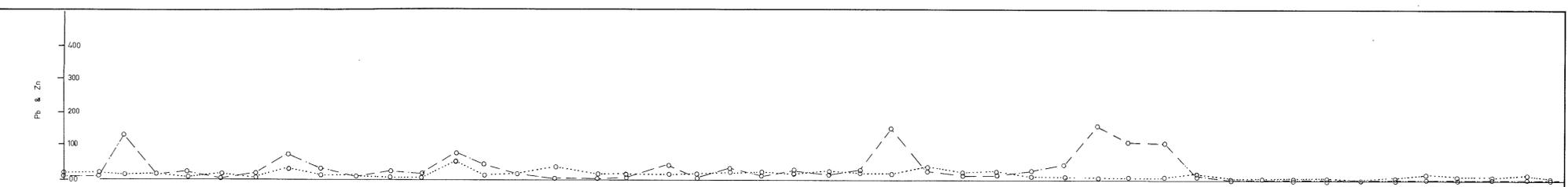
- ADAMELITE (Heemskirk Granite)

**CAMBRIAN**

- GABBRO
- TUFFS and ARGILLITES (Altered basites and silted) (Crimson Creek formation)

**I.P.**

- CHARGEABILITY
- RESISTIVITY



451067  
 RENISON LIMITED 76-1173  
 S.P.L. 129  
 TRIAL HARBOUR AREA  
 LINE 22E. PROFILE

GEOLOGIST K. WELLS  
 DRAUGHTSMAN J. MATTHEWS  
 DATE MAY, 1976  
 REVISIONS

SCALE 1:2000 METRES  
 0 40 80

DRAWING No  
 1236  
 FIG 7b

**GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- As
- W

**I.P.**

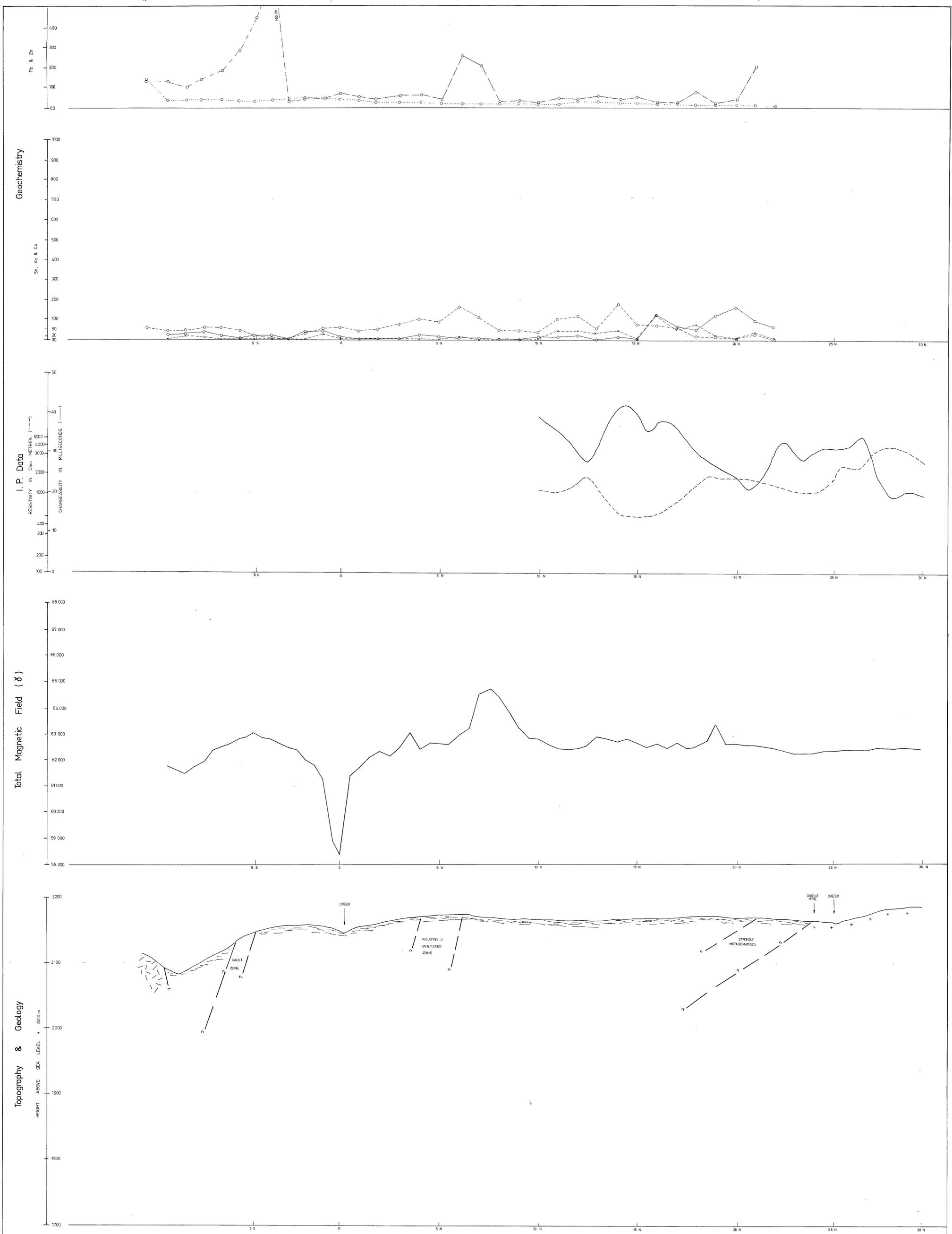
- CHARGEABILITY
- RESISTIVITY

**QUATERNARY**

- SWAMP

**DEVONIAN**

- ADAMELLITE (Heensirk Granite)
- ARGILLITES (Altered, hornfels and silted) — [Onison Creek formation]



451068

RENISON LIMITED

S.P.L. 129  
TRIAL HARBOUR AREA  
LINE 23E, PROFILE

GEOLOGIST K. WELLS  
DRAUGHTSMAN J. MATTHEWS  
DATE MAY, 1976

SCALE 1:2000 METRES

REVISIONS 1237

DRAWING No. Fig 7c

**GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- × As
- × W

**I.P.**

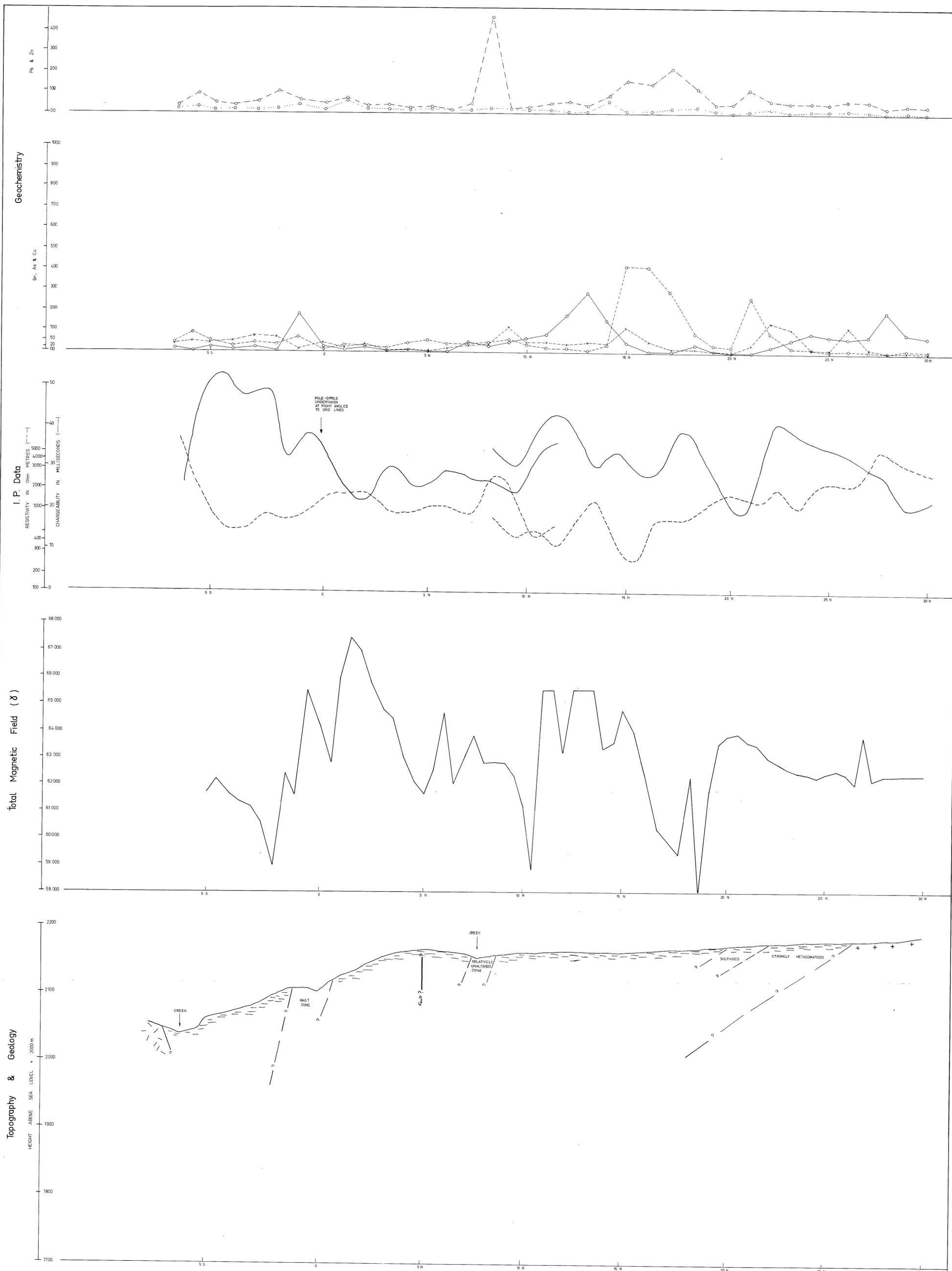
- CHARGEABILITY
- - - RESISTIVITY

**DEVONIAN**

- +++ ADAMELITE (Hemlock Granite)

**CAMBRIAN**

- GABBRO
- ARGILLITES (Exhibing alteration, porphyry & silicification)
- (Crimson Creek formation)



451069

RENISON LIMITED 76-1175

S.P.L. 129

TRIAL HARBOUR AREA

LINE 24 E. PROFILE

GEOLOGIST	K. WELLS	SCALE 1:2000 METRES
DRAUGHTSMAN	J. MATTHEWS	40 0 40 80
DATE	MAY, 1976	
REVISIONS		

1238 DRAWING No. Fig 7d

**GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- As
- W

**DEVONIAN**

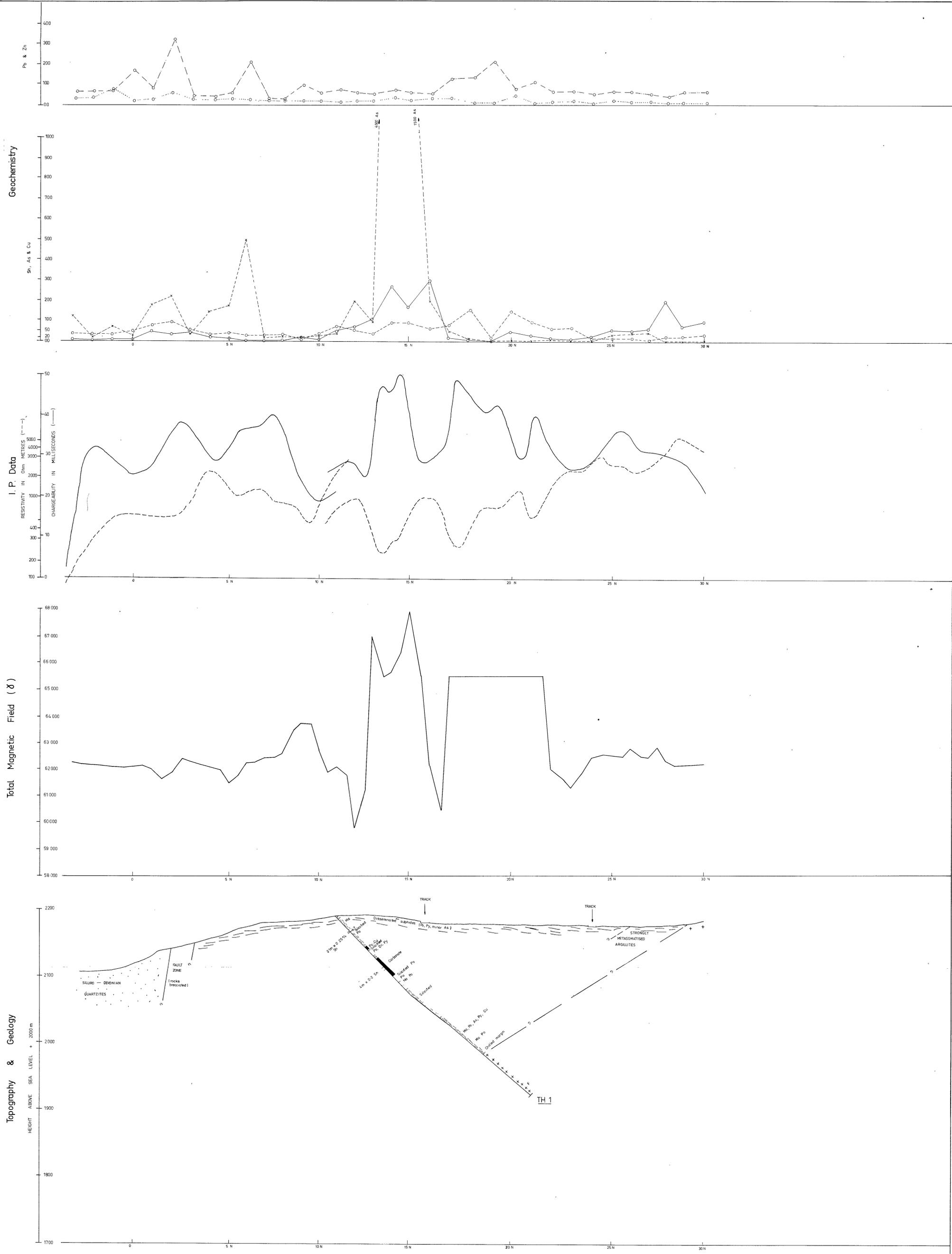
- ++ ADAMELITE (Heemskirk Granite)

**CAMBRIAN**

- ▧ GABBRO
- ▨ ARGILLITES (Altered, hornfelsed and silicified) (Crimson Creek Formation)

**I.P.**

- ~~~~~ CHARGEABILITY
- - - - RESISTIVITY



451070  
 RENISON LIMITED 76-1173  
 S.P.L. 129  
 TRIAL HARBOUR AREA  
 LINE 25 E. PROFILE  
 GEOLOGIST K WELLS SCALE 1:2000 METRES  
 DRAUGHTSMAN J MATTHEWS  
 DATE MAY, 1978  
 REVISIONS  
 1239 DRAWING No. Fig 7e

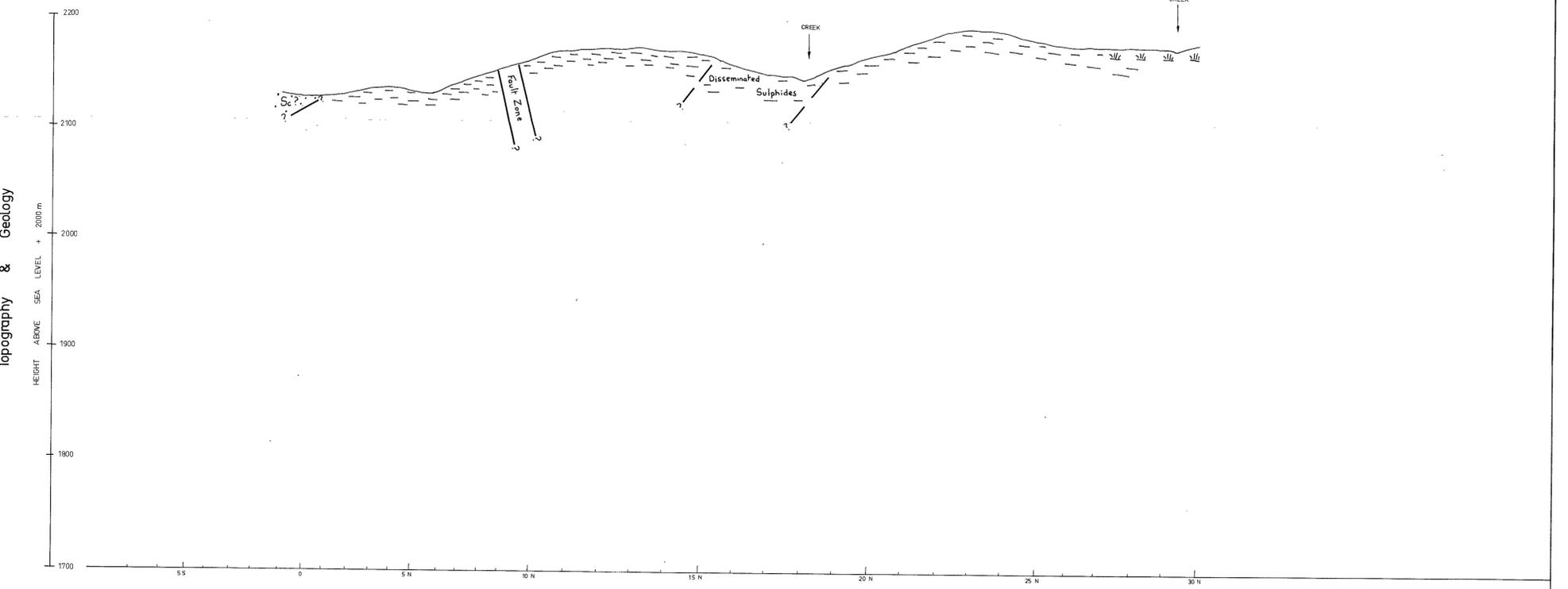
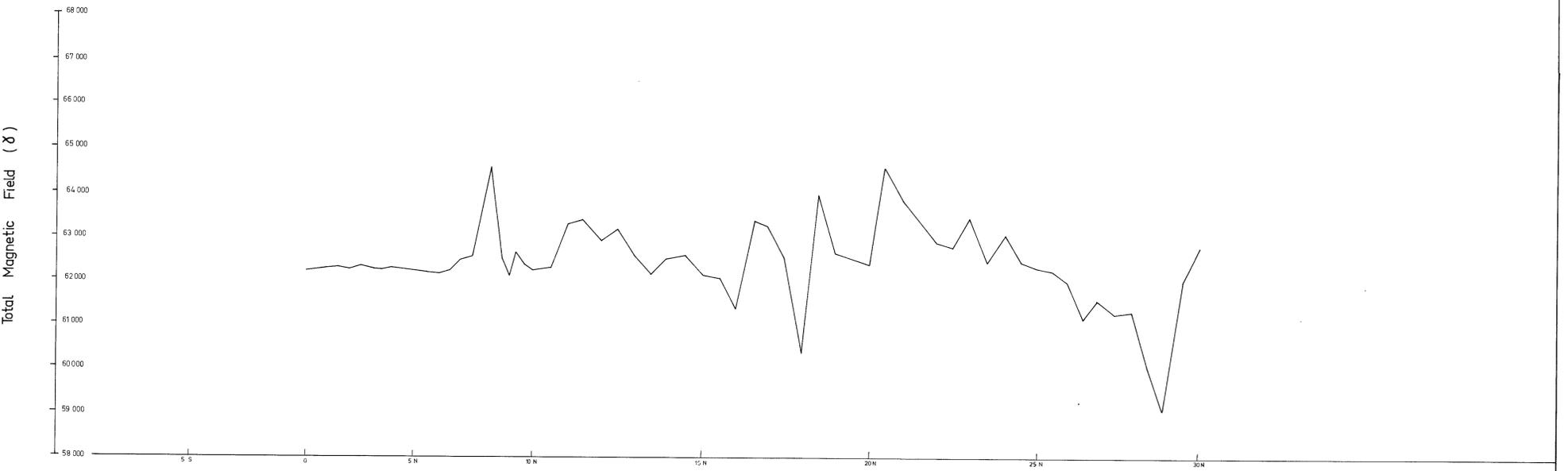
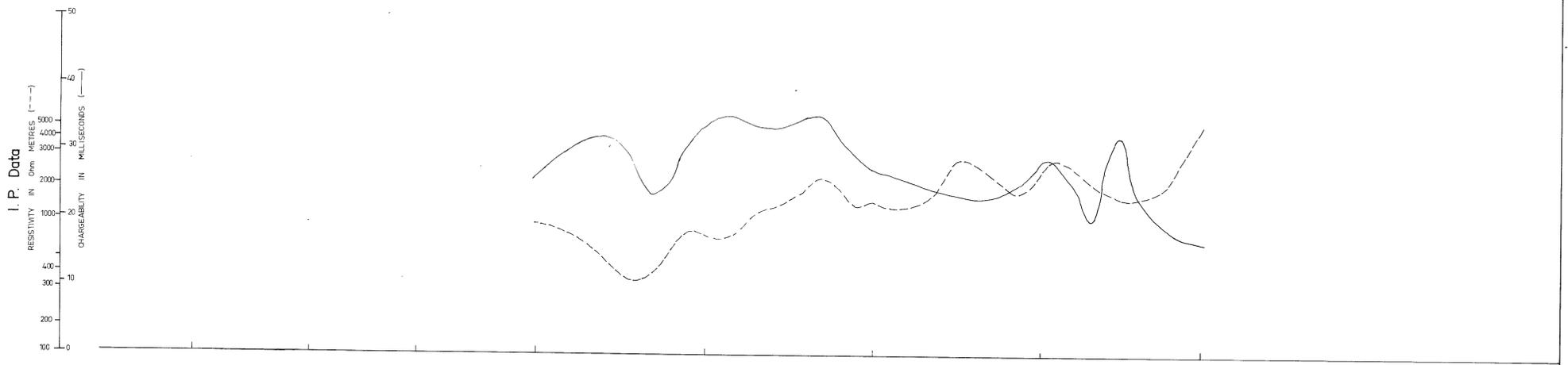
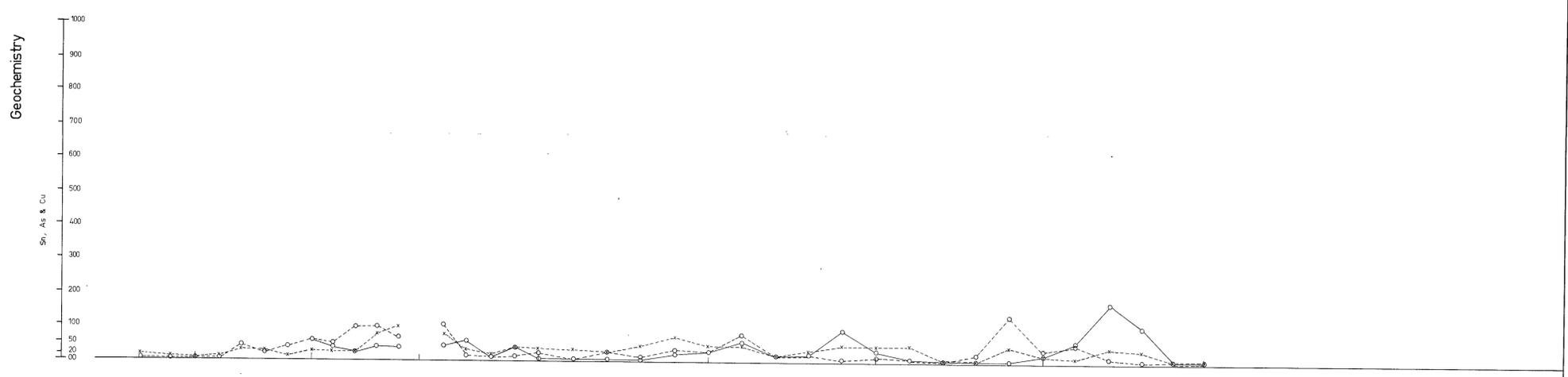
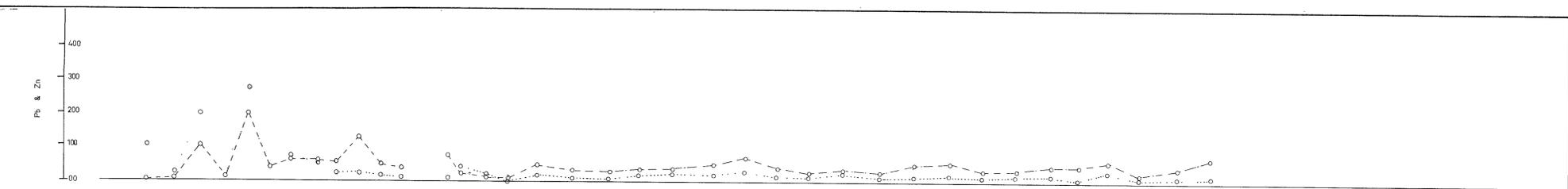
**GEO-CHEMISTRY**  
 I.P.  
 CHARGEABILITY  
 RESISTIVITY  
 Sn  
 Cu  
 Pb  
 Zn  
 As  
 W

**DEVONIAN**  
 ADAMELITE (Heinsberg Granite)

**SILURO-DEVONIAN**  
 QUARTZITES

**CAMBRIAN**  
 ARGILLITES  
 ARENITES  
 Partly ferruginous  
 Exhibiting alteration homeo- & siliceous  
 (Crusson Creek formation)

**OBSERVED MINERALISATION**  
 Massive - semi-massive magnetite with pyrrhotite  
 Magnetite  
 Pyrrhotite  
 Chalcopyrite  
 Pyrite  
 Cassiterite  
 Fluorite



451071

RENISON LIMITED 76-1173

S.P.L. 129

TRIAL HARBOUR AREA

LINE 26E PROFILE

GEOLOGIST	K WELLS	SCALE 1:2000 METRES
DRAUGHTSMAN	J MATTHEWS	0 40 80
DATE	MAY, 1976	
REVISIONS		

1240

DRAWING No  
**Fig 7f**

I.P.

CHARGEABILITY

RESISTIVITY

GEOCHEMISTRY

Sn

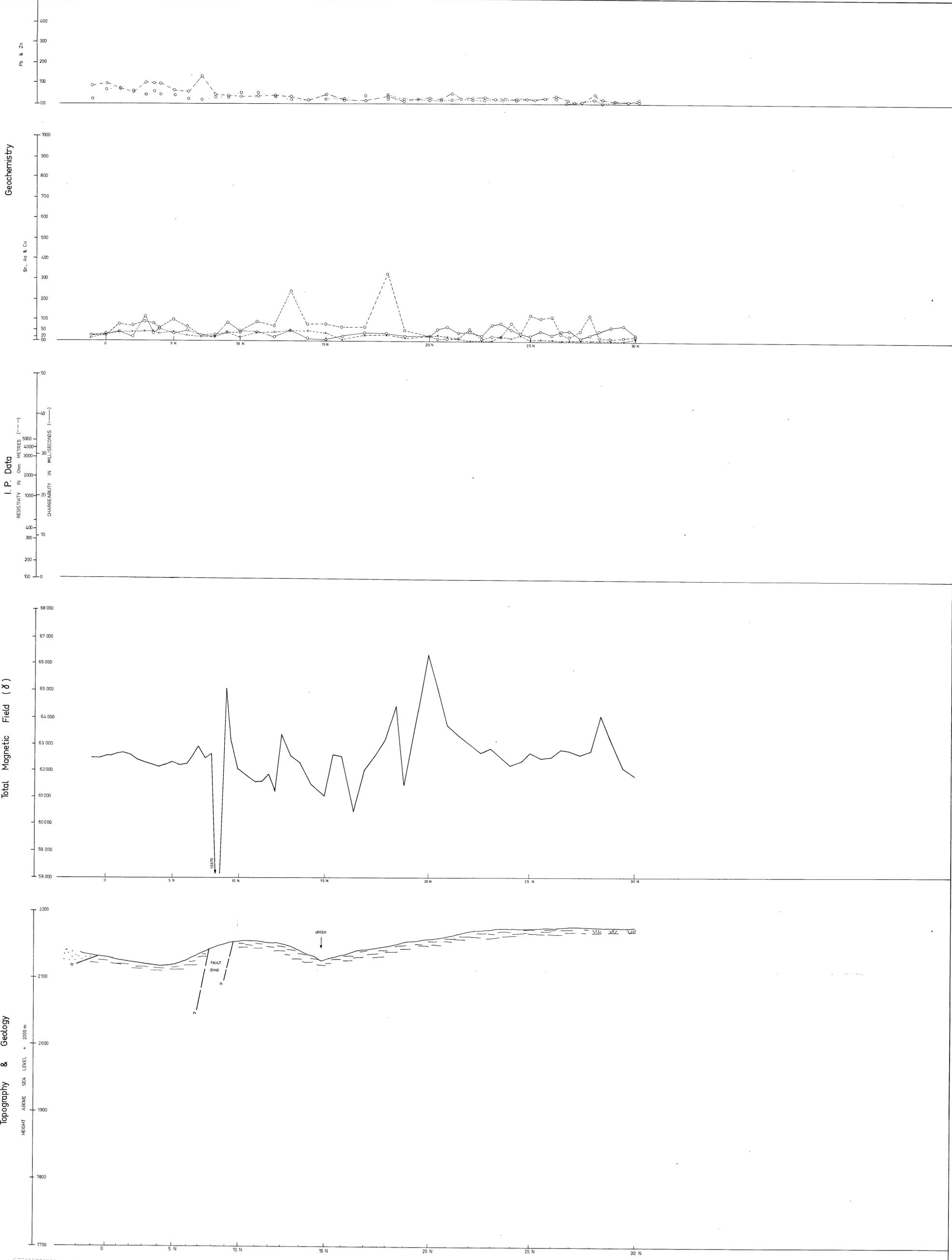
Cu

Pb

Zn

As

W



5 cm

451072

RENISON LIMITED		76-1173
S.P.L. 129		
TRIAL HARBOUR AREA		
LINE 27E PROFILE		
GEOLOGIST	K WELLS	SCALE 1:2000 METRES
DRAUGHTSMAN	J MATTHEWS	0 40 80
DATE	MAY, 1976	
REVISIONS		
1241	DRAWING No	Fig 7g

I.P.  
 CHARGEABILITY  
 RESISTIVITY

GEOCHEMISTRY

Sn  
 Cu  
 Pb  
 Zn  
 As  
 W

QUATERNARY

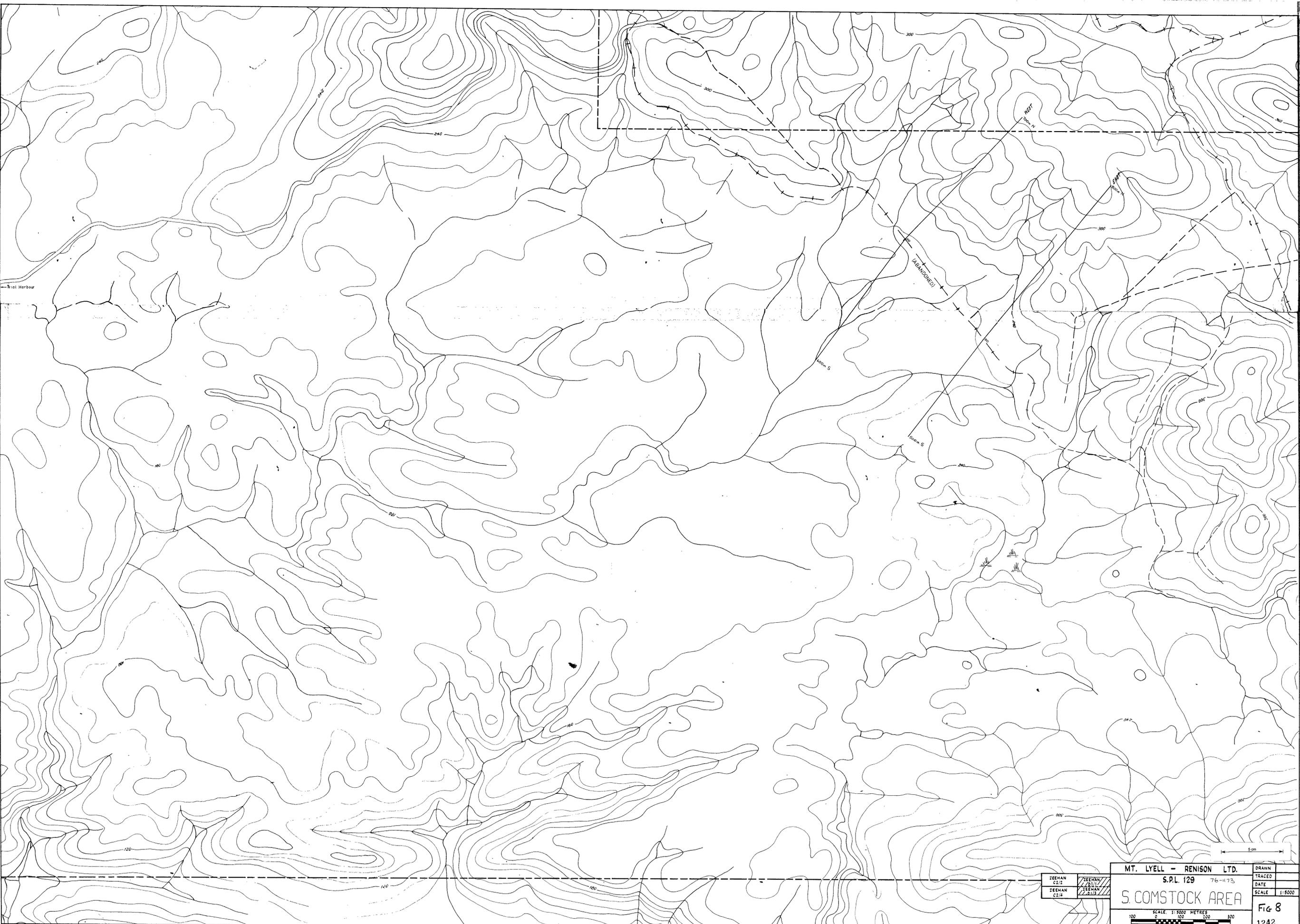
SWAMP

SILURO DEVONIAN

QUARTZITES

CAMBRIAN

TUFFS & ARGILLITES (Altered hornfels and siltified) (Crimson Creek formation)



Kiel Harbour

ABANDONED

MT. LVELL - RENISON LTD.

S.P.L. 129

S. COMSTOCK AREA

ZEEHAN  
C2/12  
ZEEHAN  
C2/14

ZEEHAN  
C2/13  
ZEEHAN  
C2/13

DRAWN	
TRACED	
DATE	76-11-73
SCALE	1:5000

SCALE 1:5000 METRES  
0 100 200 300

Fig 8  
1242