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E.L. 2/63

MT LINDSAY AREA

WESTERN TASMANIA

MERTON HILL PROGRESS REPORT

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SUMMARY

Exploration carried out at Merton Hill in 1981-82 consisted of a four hole diamond drilling program, and extension of the Merton Hill Grid, involving geochemical soil sampling, ground magnetics and geological mapping.

Assessment of the results of this and previous work has indicated that the prospect contains only subeconomic mineralization of silver, lead, zinc and minor tin in fault zones and thin veins. However, the work did succeed in clarifying the stratigraphy and structure of this complex area.

Further detailed work is not recommended in the immediate area, however preliminary results from a recent reconnaissance stream sediment survey in the general vicinity of Merton Hill indicate that exploration for similar targets further to the south-east may be worthwhile.

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1. INTRODUCTION

A group of abandoned tin workings were located in July 1979 at Merton Hill, approximately 8 kilometres north of Renison Bell, on the west coast of Tasmania. Previously, tin had been discovered there in 1911 and the workings were described by L.L. Waterhouse (1914) who referred to the presence of primary cassiterite, base metal sulphides and probable acid intrusives.

Geologically the area consists of Silurian and Cambrian sedimentary units which have been intruded by a Cambrian ultramafic body. Complex faulting of the area and tilting of fault blocks accompanied the intrusion of the ultramafics.

Prior to July 1981, Renison Limited had explored the area in detail by means of extensive close spaced gridding, a stream sediment survey and the drilling of three diamond drill holes totalling 469.3 metres. The purpose of this exploration program was the location of the tin - base metals mineralization exploited by the old workings. In 1981-82 work was directed towards investigation of the lateral and vertical extent of this mineralization.

2. LAND TENURE

Aberfoyle Limited is the holder of E.L. 2/63, renewed to 1st April 1983. Renison Limited is the operator through a Joint Venture Agreement with Consolidated Gold Fields Australia Limited, Paringa Mining and Exploration Company Limited and Aberfoyle Limited. Equity in the project as at March 1982 is:

Paringa	23.8%
C.G.F.A.	19.0%
Aberfoyle	16.2%
Renison	41.0%

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3. PREVIOUS WORK

A summary of work carried out is presented below.

1911 Tin mineralization was discovered at Merton Hill and exploited by means of three adits, numerous pits and some sluicing of the surrounding creeks.

1979- 1980 Renison Limited located the Merton Hill workings and undertook the following work:

- (a) Establishment of 3.0 kilometres of cut grid in six lines, and completion of soil sampling, magnetics, gradient array, I.P. and resistivity surveys, and geological mapping thereon.
- (b) Chip sampling of Adits 1 and 3 (Adit 2 has a collapsed portal).

1980 - 1981 Renison Limited carried out:

- (a) A stream sediment orientation survey of surrounding creeks.
- (b) A three hole diamond drilling program totalling 469.3 metres.

The results of Renison's work are discussed in the "Merton Hill Area, Progress Report (May 1980)" and the "Mt Lindsay Area, Annual Report 1980-1981".

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4. WORK COMPLETED 1981 - 1982

Work completed at Merton Hill in 1981 - 1982 consisted of a four hole drilling program, grid line extensions and detailed geological mapping. This work cost \$118,513 to complete. Expenditure details are provided in Appendix 1.

4.1. Merton Hill Grid Extension

As an aid in siting the proposed drill holes (MH4 - MH7) and to determine if there are further anomalies in the vicinity of Merton Hill, the existing cut grid was extended. Eight grid lines and a sub-baseline were cut to the north-west of the Merton Hill Grid and two lines were cut to the south-east, totalling 5.29 kilometres in lines spaced 100 metres apart. The location of these lines is shown on the 1:1000 and 1:10,000 Interpretative and Factual Geology Plans (Plans 2 and 3). The following work was undertaken along them:

- (a) Geochemical sampling was carried out on all grid lines and part of the sub-baseline. Samples were taken by hand auger from a maximum depth of one metre, or as deep as conditions allowed. The samples were sieved and the minus 180 micron fractions assayed for Sn and As by X.R.F. and for Cu, Pb, Zn and Ni by A.A.S. in the Renison Assay Laboratory.
- (b) Magnetic readings were taken on all lines and the sub-baseline, at 10 metre intervals. A Geometrics G816 Magnetometer was used with a sensor height of 2.6 metres. Base station corrections were made for diurnal variation.
- (c) Geological Mapping was carried out in conjunction with mapping of access roads and creeks.

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The results of the above work are presented on 1:1000 Soil Geochemistry Plans 4(a)-(d), 1:1000 Magnetic Survey Plans 5(a)-(d), Composite Line Profiles 6(a)-(h) and 6(m)-(o), and 1:1000 Interpretative and Factual Geology Plans 3(a)-(d).

4.2. Preliminary V.L.F. Survey

A V.L.F. survey was carried out to test whether the technique could be used to determine the positions of major geological boundaries (such as the ultramafic/sedimentary units boundary) and/or fault zones, particularly mineralised ones. Four lines, 1300E, 1400E, 1700E and 1800E, were read at 15 metre intervals using a Phoenix VLF-2 meter. Results are presented in Appendix 6.

4.3. Drilling

In 1980 - 1981 three diamond drill holes were completed at Merton Hill and suggested the existence of a steeply dipping, north-westerly trending, tin-lead-zinc-silver-mineralized fault zone and adjacent mineralized limestone. To investigate the lateral and vertical extent of this inferred fault zone, four more diamond drill holes totalling 1,295 metres were completed. Each drill hole is located near a cut grid line. Plan and section views are presented on Plans 3, 6 and 7.

Mineralized intervals were analysed for Sn, As, Cu, Pb, Zn, S, Fe, and  $WO_3$  by X.R.F., and Ag, Bi, acid soluble Sn and Sb by A.A.S. Samples from MH4 and MH5 were analysed by AMDEL in Adelaide, and those from MH6 at the Renison Assay Laboratory. No samples were analysed from MH7.

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5. RESULTS

5.1. Geology

Drilling and detailed mapping at Merton Hill in 1981 - 1982 has changed the interpretation of the mineralization and the geology to a considerable extent.

At Merton Hill, geological mapping was hindered by poor outcrop except for resistive quartzite units, and minor outcrop in the creeks and on newly constructed roads.

The units present in the area comprise, from younger to older, Silurian Amber Shale (Sa), Crotty Quartzite (Sc), Cambrian Dundas Group sediments (Edh) and the Cambrian Ultramafic Complex (Es). The Amber Shale consists largely of shale and calcareous shale, but also includes two distinct members, a sandstone/quartzite (Sas) unit and a limestone unit (Sal). The two are usually separated by a calcareous shale band up to 25 metres thick. The Crotty Quartzite comprises clean quartz sandstone-quartzite. The Dundas Group rocks consist of a complex sequence of conglomerates, shales, sandstones, tuffs and tuffaceous sediments. The Ultramafic complex comprises serpentinite and basic volcanics (Eg).

The Crotty Quartzite and Amber Shale are in fault contact with Dundas Group rocks or the Ultramafic Complex. The latter two, although interpreted as being in fault contact with each other, were probably emplaced together. A number of other faults occur within the area, mostly oriented north-east and dipping moderately to steeply in both directions. One exception is the Merton Creek Fault which strikes north-west; this is a major fault extending north-west to the Meredith Granite contact and possibly south-east as far as the Pieman River.

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The resulting geological picture is complex. The area is distinguished from most of the rest of the Huskisson Syncline in the intensity of structural disturbance. Bedding is generally overturned and therefore dips are usually to the south-west. In addition, there is evidence that multiple movements have occurred on many of the faults with the result that the sequence of faulting events is unclear.

The structural disturbance and reported presence of acid intrusive dykes both add to the exploration interest in this area. Both could reflect the forceful intrusion of a stanniferous granite cupola at some depth beneath the prospect. The lack of economically significant mineralization perhaps indicates that other factors have prevented the formation of an orebody (see section 6).

5.2. Merton Hill Grid Extension

The Grid Extension work was essentially disappointing and failed to delineate any further anomalies. However, both the geochemistry and the magnetic survey helped to define the rock units and structures at Merton Hill, as shown below.

5.2.1. Geochemistry

A summary of each element's response over various geological features is presented in Table 1. Contoured results at 1:1000 scale are presented as Soil Geochemistry Plans 4(a)-(d).

TABLE 1  
GEOCHEMICAL AND MAGNETIC RESPONSES  
OVER GEOLOGICAL FEATURES AT MERTON HILL

	Sn	As	Cu	Pb	Zn	Ni	Mags
Tertiary Gravels	W	-	-	-	-	-	-
Silurian Sediments	-	-	-	-	-	-	-
Cambrian Dundas Group	-	-	W	W	M	-	-
Ultramafics	-	-	-	M	S	S	S
Ultramafic Contact	-	W	W	-	-	M	V.S
Merton Creek Fault Zone	-	-	W	W	M	M	-
Old Workings	S	M	S	S	M	-	-

S = STRONG; M = MODERATE; W = WEAK; - = NO RESPONSE

- (a) Tin: On ten of the eleven extension lines, tin values were at or below detection level (10ppm). On Line 1700E several weakly anomalous values of 20-30ppm were encountered, which may represent a local concentration from the tin bearing Tertiary Gravels (Tg). Several small pits also occur in the vicinity of this anomaly.
- (b) Arsenic: On all lines except 1800E, values are mostly at or below the detection limit (10ppm); minor one to four point anomalies occur in the range 20-40ppm, generally in soils overlying the ultramafics. On line 1800E values average 40ppm; this is thought to be due to inaccurate assays carried out on a faulty X.R.F. machine.
- (c) Copper: Background values over the grid are below detection limit (5ppm) except in soils overlying the Cambrian Ultramafics and Dundas Group sediments, where they average 10ppm with spot values up to

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40ppm. A belt of anomalous values, ranging from 10-30ppm, follows Merton Creek from the north-west to line 700E; these are probably associated with a major fault interpreted in that position.

- (d) Lead: Similarly to copper, background values are below detection limit (10ppm) except over the ultramafics and part of the Dundas group, where they average 20ppm, varying up to 140ppm. Again anomalous values ranging from 20-50ppm occur along the Merton Creek fault zone from lines 400 to 900E.
- (e) Zinc: This reflects the lead pattern; background values are 5ppm, except over the ultramafics and part of the Dundas Group, where they average 50ppm and vary up to 160ppm. Values averaging 20ppm occur along Merton Creek fault zone from the north-west to line 1000E.
- (f) Nickel: This element provides a very useful discriminant between the ultramafics and other lithologies. Values over the ultramafics average 1000ppm, whereas background values over the rest of the grid are largely below detection limit (10ppm) with minor spot highs up to 100ppm. Along Merton Creek from the north-west to line 800E, values range from 50 to 100ppm, probably reflecting either drainage from the ultramafic or the underlying fault zone. At 500E/240N a nickel content of 1340ppm occurs; this is probably either due to ultramafic contamination at the sample site or a mistake in sample identification during sample preparation.

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5.2.2. Magnetic Survey

A general pattern has emerged from magnetic surveying of the Merton Hill Grid which has three main characteristics:

- (a) Relatively high and generally erratic values over the Cambrian Serpentinite.
- (b) An even higher peak at or very close to the boundary between serpentinite and other lithologies.
- (c) A relatively low and even response over all lithologies other than serpentinite; the magnetics therefore discriminate between the Cambrian basic volcanics and the rest of the ultramafic complex. Magnetic values gradually decrease with distance from the serpentinite contact indicating that it dips to the north-east.

5.3. Preliminary V.L.F. Survey

On the four grid lines tested, the major faulted serpentinite/sediments boundary ('s' in graphs - Appendix 6) which was expected to be conductive, did not show any significant response. However, for grid lines 1300E and 1400E, the graphs of dip angle show a distinct sigmoidal curve with a change of inflection at about 250N. This sigmoidal curve indicates the presence of some conductor which may be the Merton Hill mineralization. The mineralized zone within Crotty Quartzite is thought to occur between 230N and 260N on both of these lines. Lack of significant response on Lines 1700E and 1800E supports the inference that the mineralization does not extend that far south.

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5.4. Drilling

Both drilling and surface mapping have helped define three different types of mineralization at Merton Hill.

- (a) Sn-Pb-Zn-Ag mineralized veins within Silurian Crotty Quartzite (Sc).
- (b) Pb-Zn-Ag-ankerite veins with minor Sn within the Limestone Member (Sal) of the Silurian Amber Shale.
- (c) Sn-Pb-Zn-Ag mineralized fault breccias.

Table 2 summarizes the mineralization types intersected in the seven completed drill holes.

TABLE 2

Drill Hole	Type (a)	Type (b)	Type (c)
MH1	*	-	*
MH2	-	*	*
MH3	-	*	-
MH4	-	*	-
MH5	-	*	*
MH6	-	-	-
MH7	-	-	-

\* = PRESENT

- = ABSENT

In 1981-82 drilling was directed towards finding extensions, both laterally from, and at depth below the mineralization intersected in drill holes MH1 to MH3.

## Drill hole details:

DDH MH4, 375 metres deep, was drilled in a south-westerly direction to test for the down-dip extension of mineralization intersection in MH1. The hole was collared in the Sandstone Member of the Amber Shale (Sas) and intersected Amber Shales (Sa) from 21.5 to 145.6 metres, the Amber Limestone Member (Sal) to 369.5 metres and finished in Cambrian Serpentinite (Es).

Mineralization in the drill hole comprises several zones of sphalerite-galena-ankerite veins within Amber Limestone, commonly containing high silver values. Tin, however, was only detected in one vein at 357-358 metres, which included pyrite as well as sphalerite and galena, and assayed 0.04% Sn. The association with pyrite may be significant.

DDH MH5, 331 metres deep, was drilled in a south-westerly direction to test for the at depth extension of mineralization encountered in MH2. The hole was collared in Silurian Amber Shale and intersected Amber Sandstone and calcareous shale to 118.6 metres, Amber Limestone and minor calcareous shale to 314.4 metres, Cambrian Dundas Group (Edh) tuffs, shales and acid intrusive dykes to 318.5 metres, finishing in serpentinite.

Three fault intersections are interpreted within the drill hole, at 51.3, 157.7 and 257.2 metres. The first has caused the fault-repetition of the Amber Sandstone Member and the other two have resulted in the unusually large thickness of Amber Limestone. All three appear to represent one fault striking near parallel to the drill hole and dipping shallowly to the south-east. The northern fault block appears to have moved in a south-westerly direction with respect to the southern block. Owing to structural complexity in the vicinity of this drill hole, a structure contour plan was drawn up to aid geological interpretation (see Figure 8).

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From 212.2 to 314.4 metres, there is an increasing abundance of sphalerite-galena-ankerite veins in the limestone. Zones including these veins were assayed, and moderate lead, lesser zinc, and corresponding moderate silver values resulted. Tin was detected in only one vein of sphalerite-galena-ankerite at 281-282 metres, assaying 0.02% Sn. Part of the acid intrusive dykes (within the Dundas group intersection) contain flecks of pyrrhotite, however assaying revealed no anomalous tin or base metals.

DDH MH6, 397 metres deep, was drilled in a south-westerly direction to test for the south-eastern extension of the Merton Hill mineralization. The hole was collared in the Amber Sandstone Member and intersected sandstone and calcareous shale to 29.2 metres, and a wide unit of Amber Limestone to 168.9 metres. Below this point the hole intersected Cambrian Dundas Group rocks, comprising shales, sandstones, tuffs, tuffaceous sandstone and carbonate-bearing conglomerates; the latter were encountered between 236.9 and 388.7 metres (true thickness approximately 115 metres) and contain carbonate as veins, coarsely crystalline matrix and, in places, replacing some clasts. The hole was completed in Cambrian Serpentinite.

A band of black, sulphurous-smelling clay or altered calcareous shale was encountered at 17.5-25.0 metres, and included minor anomalous zinc values (<0.35%). The Dundas Group tuffs and tuffaceous sandstones contain apparently syngenetic pyrite and pyrrhotite; the latter are barren of tin and base metals.

Between 236.9 and 251.4 metres the carbonate matrix in the conglomerate unit is partly replaced by pyrite and trace chalcopyrite; no anomalous amounts of tin, base metals or silver were obtained when the interval was assayed, however. Despite this, the carbonate content and width of the conglomerate suggests that this unit

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is prospective for replacement mineralization elsewhere; it is thought to extend from line 1700E as far south as the Pieman River.

DDH MH7, 192 metres deep, was drilled in a south-westerly direction to test for the north-western extension of the Merton Hill mineralization. The hole intersected Silurian Amber Shales and calcareous shales to 153.2 metres, Amber Limestone to 161.6 metres, and finished in Cambrian basic volcanics (Eg). The latter has been regarded as part of the Cambrian Ultramafic Complex; it is spatially associated with the ultramafics and contains serpentine veins and alteration throughout.

A fault zone striking north-east and dipping towards the north-west separates the shales from the limestone; the south-eastern fault block is interpreted to have moved to the north-east with respect to the north-western block.

Minor barren ankerite veins were intersected within the interval 56.7-93.8 metres; one thin galena- and sphalerite-bearing vein occurs at 71.0 metres. The latter probably represents the most north-westerly extent of the mineralizing influence.

The holes were all designed to be completed in the Cambrian Serpentinite because both the structures and lithologies north-east of its contact were considered prospective for tin-base metals mineralization. However, the dip of the ultramafic-sediment contact is steeper (in places) than the early drilling results indicated. As a consequence, the first three drill holes went much deeper than planned and a total of 1,295 metres was drilled, compared with the 1,000 metres anticipated.

6. DISCUSSION

Three types of mineralization occur at Merton Hill:

- (a) A steeply dipping mineralized zone, within Crotty Quartzite. The mineralization consists of a network of sphalerite and galena-bearing veins with abundant pyrite (and pyrrhotite?). Tin occurs primarily as cassiterite in patchy concentrations. High silver values are associated with correspondingly high lead and zinc values. This zone was intersected in DDH MHL and apparently also occurs within Adits 1 and 3. The absence of similar mineralization in the Amber Shale perhaps reflects the relatively plastic nature of the shale and its consequent inability to host a fracture system.

The zone's potential size is limited by several factors:

- (i) The dimensions of the Crotty Quartzite block "available" for mineralization. The quartzite is cut off both laterally and at depth by fault zones and, as a consequence, occurs as a wedge shape approximately 500 metres long and 80 metres deep.
- (ii) The width of the mineralized vein system. From the adit sampling and drilling results, the width is unlikely to exceed 10 metres.
- (iii) The lack of geochemical response over the Crotty quartzite north-west of the workings indicates that the mineralization is unlikely to be present there within 30 metres of the surface.

Given the assay results from MH1 and the Adits, the maximum dimensions of this zone are therefore about 500 x 10 x 50m<sup>3</sup>, i.e. assuming an s.g. of 3.5, the maximum potential size is around 900,000 tonnes at a grade of perhaps 0.1-0.2% Sn, 0.5-1% Pb, 1-2% Zn and 25-50g/t Ag. As such, it is too small and low grade to justify further work.

SG high  
for quartzite!  
↑  
looking at  
more. min. pot.  
deeper down!

- (b) Mineralized veins occurring singly or in discontinuous zones in the Silurian Amber Limestone. The veins consist of ankerite, sphalerite and galena, with rare patches of pyrite and/or pyrrhotite. Lead, zinc and silver contents are commonly high but tin is generally absent; low tin values, where present, are usually associated with patches of pyrite and/or pyrrhotite. Bulked grades (over 5m or more of intersection) are always less than 40g/t silver and 2% lead and zinc combined.

Base metal enrichment and vein frequency are at a maximum near the old workings, from lines 1100 to 1400E, and decrease both to the north-west and south-east. In MH6 and MH7, only ankerite veins devoid of sphalerite and galena are present (with one exception, a 3cm vein in MH7); these are interpreted as occurring on the outer limit of the vein-bearing zone.

This mineralization type is regarded as uneconomic because of the discontinuous nature of the veining and the large amounts of intervening unaltered country rock.

- (c) Mineralized fault zone breccias. Two examples have been intersected:
- (i) In MH1, a mineralized tin-bearing breccia occurs at the faulted contact between Crotty Quartzite and Dundas Group rocks.

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- (ii) In MH2, a mineralized, cavernous fault zone was encountered at the contact between Amber Shale and Amber Limestone. This fault strikes north-east and dips south-east, and was also intersected several times in MH5; the lowermost intersection is also weakly mineralized. In both cases the mineralization is tin-barren.

At least some of the movement on the faults is thought to post-date the mineralization as mineralized fragments occur within the breccias.

Example (i) comprised 3m of 0.2% Sn, 1.3% Pb, 3.7% Zn and 53 g/t Ag. Its tonnage potential is considered small because other drill intersections of the same fault were unmineralized, and soil geochemical responses over it are confined to the vicinity of the workings.

Example (ii) comprised 14m of 1.8% Pb, 3.6% Zn and 67 g/t Ag in MH2, and 11m of 0.4% Pb, 0.8% Zn and 13 g/t Ag in MH5. (Note: the MH2 assays only represent 10% recovery.) The potential size of this zone is limited by the lack of any mineralization in the other two intersections in MH5. Given the poor grades at depth and the limited tonnage potential, this zone is not considered economically attractive.

Exploration at Merton Hill has outlined a low grade zone of vein-type mineralization centred around the old workings. This is thought to have formed by transport of hydrothermal fluids along fault and fracture zones and deposition of base metal sulphides and minor cassiterite therein. Despite a number of features which should have been conducive to the formation of a tin-base metals orebody (i.e. presence of acid dykes, "plumbing system" in numerous fault zones, presence of carbonate), results of detailed exploration here have been disappointing. The following points are relevant:

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- (a) There may not have been sufficient hydrothermal fluid to form a major orebody. The Amber Limestone is an obvious reactive unit which was apparently readily mineralized; with more hydrothermal fluid input, a more massive vein stockwork or replacement orebody may have formed.
  - (b) Hydrothermal tin deposits are commonly zoned. A tin-rich zone near the granitic source is often enveloped by a more widespread zinc-lead bearing zone, therefore more significant tin mineralization may occur at greater depths. However, as the drill holes have tested the carbonate and some fault zones up to 300 metres below the surface in the vicinity of the workings, such orebodies would have to be very deeply buried indeed. In any case, the fact that tin grades appear to decline with depth tends to contradict this idea.
  - (c) The Amber Limestone body may be too large; contact between the hydrothermal fluids and the carbonate has resulted in widespread, low-grade sulphide veining/replacement. A smaller carbonate body may have been completely replaced, resulting in high grade mineralization.
  - (d) It is considered unlikely that a major orebody occurs between the drill holes. All of the available data points to the area around the old workings as the centre of mineralization; drill holes have tested this zone at 100 metre spacing along strike and the area has been covered by gradient array I.P. with consistently disappointing results.

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7. CONCLUSIONS AND RECOMMENDATIONS

The results of the work in 1981 - 1982 at Merton Hill were essentially disappointing and further detailed work in the immediate area is not recommended.

Nevertheless, preliminary results from the reconnaissance stream sediment survey to the north and east of Merton Hill, carried out in December 1981 - January 1982, indicate that the area may still be prospective.

It is therefore recommended that some future work on the Mt Lindsay Licence area should be directed towards investigating those potential ore-bearing units on structures highlighted by the detailed investigation at Merton Hill; namely calcareous units in the Silurian Amber Shale (Sal), calcareous conglomerate of the Cambrian Dundas Group (Edh) and large scale fault zones.

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- 027
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028

APPENDIX 1

EXPENDITURE

029

EXPENDITURE

	\$
Salaries (and loading)	12,557
Consumables	2,401
Renison Services - Survey	480
- Assay & Research	184
Outside Services - Track Cutting	3,127
- Site Access	8,361
- Diamond Drilling	90,717
- Other (Drafting, etc.)	686
	<hr/>
TOTAL	118,513

030

APPENDIX 2

DRILL LOGS - MH4, MH5, MH6 and MH7



# RENISON LIMITED - DRILL CORE RECORD

031

HOLE NUMBER	MH4	SURVEY				Distance D	VERTICAL		HORIZONTAL	
		Depth	Bearing (ANG)	Dip	From - To		D. Sin. Dip	R.L.	D. Cos. Dip	Prog. Total
PURPOSE	To test for depth extension of the mineralized fault zone intersected in MH 1 and MH 3	Collar set-up	217°	- 65°	0-12.5	12.5	11.3	2193.91	5.3	5.3
		15m	217°	-65.5°	-31.5	19.0	17.3	2176.62	7.9	13.2
		42m	* 239°	-66.5°	-57.0	25.5	23.4	2153.23	10.2	23.4
LOCATION	MERTON HILL	66m	inside casing	-70°	-74.0	17.0	16.0	2137.26	5.8	29.2
		82m	218°	-70.5°	-101.0	27.0	25.5	2111.80	9.0	38.2
		120m	216°	-71°	-127.5	26.5	25.1	2086.75	8.6	46.8
COLLAR R.L.	2205.234m	135m	216°	-70.5°	-150.0	22.5	21.2	2065.54	7.5	54.3
CO-ORDINATES	5 379 801.484 MY 367 721.293 ME	165m	217°	-69°	-180.0	30.0	28.0	2037.53	10.8	65.1
		195m	217°	-68.5°	-220.5	40.5	37.7	1999.85	14.8	79.9
LENGTH	375.0m	246m	219°	-67.5°	-271.5	51.0	47.1	1952.73	19.5	99.4
		297m	219°	-66.5°	-321.0	49.5	45.4	1907.34	19.7	119.1
HOLE SIZE	0 - 3m HW 3m-121m HQ 121m-375m BQ	345m	221°	-64.75°	-360.0	39.0	35.3	1872.06	16.6	135.7
		375m	221.5°	-65°	-375.0	15.0	13.4	1858.70	6.8	142.5
DATE DRILLED	5.8.1981 - 11.9.1981									
SIGNIFICANT CORE LOSS ZONES				* Dubious						
ORE ZONE GROUND CONDITIONS				Heading						
LOGGED BY	LINDA MARTIN.									
COMMENTS	ALL ASSAYS DONE BY ANDEL, ADELARDC.									

### SUMMARY - ASSAY DATA

LODE NAME	FROM	TO	LENGTH (m)	AVERAGE WEIGHTED ASSAYS										B.C.A.
				Sn. %	Acid Sol. Sn.	Cu. %	As ppm	S.	Pb. %	Zn. %	Bi. ppm	WO <sub>3</sub> ppm	Ag g/t	
SIL. AMBER SHALE	133.0	134.0	1	<0.01	100 ppm	<0.01	30		0.46	0.42	<100	<10	12	
SIL. AMBER LIMESTONE MEMBER	140.0	151.0	5	<0.01	100 ppm	<0.01	20		0.82	0.73	<100	<10	40	
"	230.1	231.1	1	<0.01	100 ppm	<0.01	<20		0.27	0.57	<100	<10	5	
"	322.4	324.4	2	<0.01	<100 ppm	<0.01	20		0.12	0.32	<100	<10	5	
"	334.8	335.8	1	<0.01	100	<0.01	420		0.56	1.1	<100	<10	16	
"	357.0	360.0	3	0.01	<100	<0.01	<20		0.056	0.46	<100	<10	2	

785033

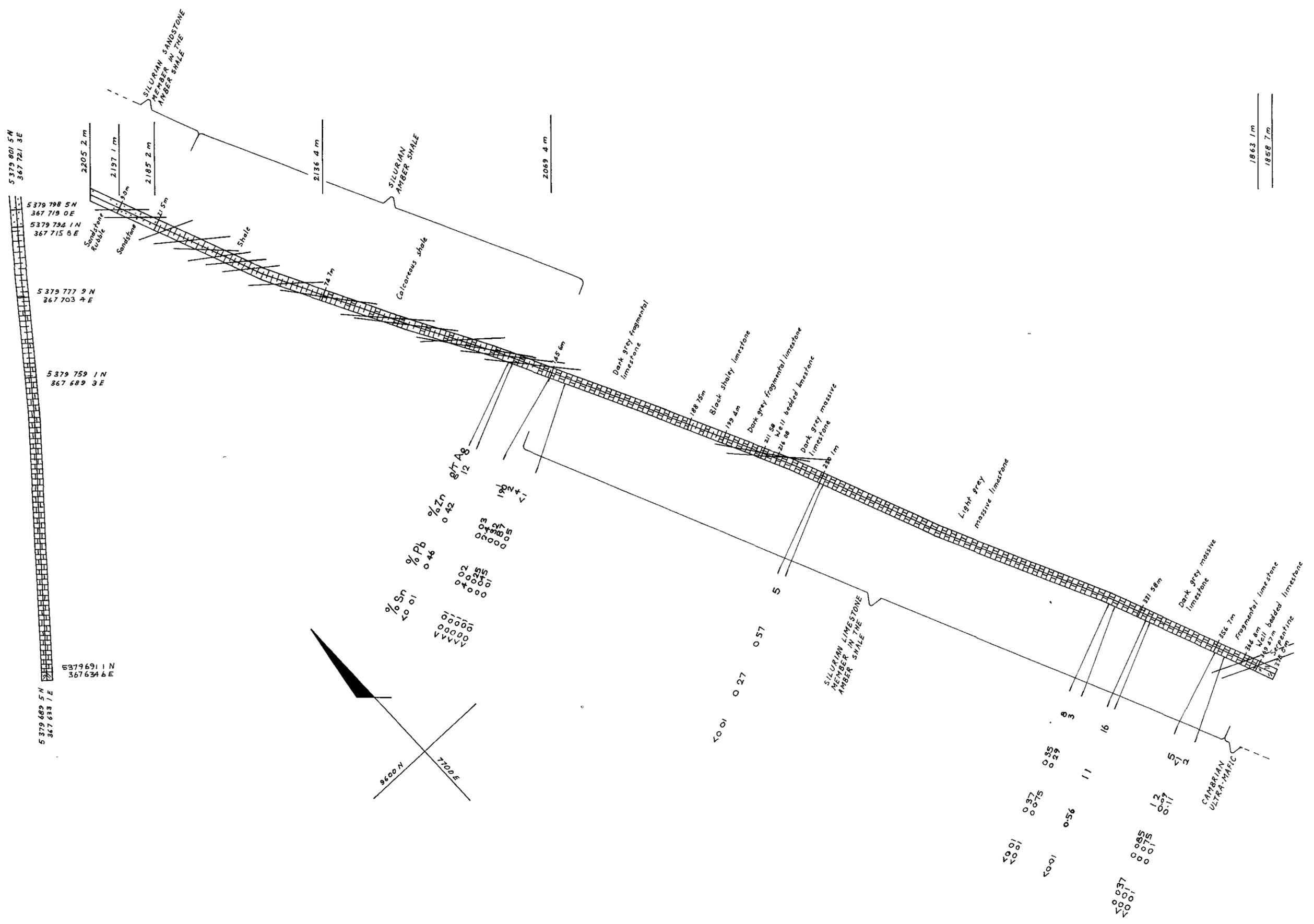
032

HOLE No MH 4



RENISON LIMITED  
DIAMOND DRILL HOLE PLOT

785034



1863.1m  
1856.7m



034

DIAMOND DRILL RECORD

HOLE NUMBER : MH4

LOGGED BY : LINDA MARTIN

MWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	PPM Sn.												
FROM	TD	m	%			FROM	TO	TOTAL	ACID SOL.	PPM Cu.	PPM As.	% S.	% Pb.	% Zn.	PPM Bi.	g/t Ag	ppm NO <sub>3</sub>	
				calcareous shale matrix. Fossils of "Tentaculites", crinoid ossicles, gastropods and corals especially in calcareous light grey layers. Zones of pods, "boudins" and lenses of calcareous material in calcareous shale grade into well layered calcareous shale; bedding at 96m - 14°; 125m - 9°; 128m - 5°; 132m - 12°; 138m - 15°; 139.5m - 16° Fine light brown sandy layers, approx 20cm wide at 98.6 - 99.1m at 11° and 115.55 - 115.96m at 21° Fine carbonate veining sub-parallel T.C.A. at 96.1 - 103.62m and 108.85 - 112.60m. 94.5 - 124.6m : Zone of hard but very broken core with fractures sub parallel T.C.A. Fault zone from 117.0 - 121.1m with poor core recovery of 25%, containing wide calcite-ankerite vein with pyrite crystals MINERALIZED VEINS AT: 133.41 - 133.78m : Ankerite-sphalerite-galena vein, 0.4cm wide at 12°, with minor patchy replacement of the matrix by sphalerite and galena.														
145.6	362.47	43.15	100	LIMESTONE 145.6 - 188.75m: Dark grey, fragmental limestone grading from calcareous shale above. Shale matrix forming 5-20% of rock, is moulded around limestone clasts and in places grades into stylolites. Minor specks or aggregates of pyrite in the stylolites. The rock is very fossiliferous with crinoid ossicles (→ 0.7cm), brachiopods and corals. Minor silty zones. Minor well bedded areas are distorted and faulted. Calcite veining throughout unit at 70° - 90° T.C.A. and up to 2cm wide. Gradational lower boundary. MINERALIZED ZONES AT: 146.85 - 148.45m: Zone of ankerite-sphalerite-galena veining and replaced patches; veins fine, irregular up to 4cm wide, at approx 30°. 148.63 - 150.05m: Ankerite-sphalerite-galena-calcite vein, 5cm wide at 25°. 188.75 - 192.4m : Black to dark grey, fractured shaley zone, with minor fine to medium grained sandstone bands. Gradational upper + lower boundaries. Minor white calcite veining throughout unit Light grey recrystallized zone with calcite veining at 195.5 - 196.1m 199.4m - 211.58m : Similar to 145.6 - 188.75m: 211.58m - 216.09m : Medium grey well bedded limestone; o at 212m - 12°; at 214m - 19°. Calcite filled faulted upper and lower boundaries.	LIMESTONE													
				146.85 - 148.45m: Zone of ankerite-sphalerite-galena veining and replaced patches; veins fine, irregular up to 4cm wide, at approx 30°.		146.0	147.0	6	<100	430	30	0.02	0.03	<100	1	<10		
				148.63 - 150.05m: Ankerite-sphalerite-galena-calcite vein, 5cm wide at 25°.		147.0	148.0	40	100	100	30	4.0	2.4	<100	190	<10		
				188.75 - 192.4m : Black to dark grey, fractured shaley zone, with minor fine to medium grained sandstone bands. Gradational upper + lower boundaries. Minor white calcite veining throughout unit		148.0	149.0	12	100	20	60	0.235	0.32	<100	2	<10		
				Light grey recrystallized zone with calcite veining at 195.5 - 196.1m		149.0	150.0	30	100	40	430	0.245	0.87	<100	4	<10		
				199.4m - 211.58m : Similar to 145.6 - 188.75m:		150.0	151.0	44	100	420	420	0.01	0.05	<100	<1	<10		
				211.58m - 216.09m : Medium grey well bedded limestone; o at 212m - 12°; at 214m - 19°. Calcite filled faulted upper and lower boundaries.														

785036

035

DIAMOND DRILL RECORD

HOLE NUMBER : ME4

LOGGED BY : LINDA MARTIN

DATE

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	PPM Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	PPM Cu.	PPM As.	% S.	% Pb.	% Zn.	PPM Bi.	g/t Ag
				<b>MINERALIZED VEIN AT:</b>												
				215.55m : Ankerite - Minor sphalerite and galena vein, 2cm wide, irregular, at approx. 65°, associated with numerous fine veinlets. Where ankerite veins have intersected calcite veins, the calcite veins have been replaced along part of their length.												
		0.32	88	216.03 - 216.45m: Brecciated well bedded and massive limestone in calcite matrix.												
		13.65	100	216.45 - 230.1m: Dark grey massive limestone grading into limestones with light grey rounded fragments at 226m.												
		101.48	100	230.1 - 331.58m: Light grey massive fossiliferous limestone with large frags. of coral, shells, crinoid ossicles and "tentaculites". Minor stylolites. Faulted upper boundary at 5°, filled with calcite, yellow ankerite and minor patches of sphalerite and galena. Coarse grained white calcite veins at 297.86m and 298.06m. Brecciated and fractured at 302.95m, 2cm wide, filled with calcite and pyrite crystals.		230.1	231.1	36	100	40	420	0.27	0.57	<100	5	<10
				<b>MINERALIZED VEINS AT:</b>												
				276.44m : Two thin veins of ankerite, 0.2cm. at 34°												
				278.76m : 3cm wide, replaced some of patches of ankerite, sphalerite and galena, at approx. 40°, between fine irregular veins.												
				278.92m: Irregular ank., SPH and GAL. vein, 0.3cm wide at 38°												
				281.76m: Vein of ank. and minor gal., 0.8cm wide at 40°												
				285.97m: ank.-minor SPH and GAL. vein, 0.2cm wide at 33°												
				286.23m: Yellow ank. vein, 0.1cm wide at 29°												
				288.83m: Yellow ank.-Minor SPH and GAL. vein, 0.8cm wide at 36°												
				322.03m: ANK. vein, 0.1cm wide at 33°												
				322.49m: Numerous fine ANK.-minor SPH+GAL. veinlets at 41°, which replace areas of calcite veins where they intersect.		322.4	323.4	18	400	40	30	0.37	0.35	<100	8	<10
				322.73m: Irregular ANK. Vein, 1cm wide at 5°-15°, replacing a stylolite and associated with patches of coarse grained ankerite-minor SPH. and GAL. which replaces calcite veins.												
				323.80m: Ankerite-Calcite vein, approx 3cm wide at 5°-10°		323.4	324.4	20	100	20	420	0.075	0.29	<100	3	<10
				324.1m: Ankerite - Calcite vein, 3cm wide with patches of sphalerite and galena replacing surrounds rock.												
				324.31m: Irregular sphalerite ankerite vein, 0.1-0.4cm wide at 33°, replacing a stylolite.												
				327.0m: Two ankerite-Calcite veins, at 51° and 85° associated with fine ankerite veinlets at 50°. Limestone is replaced by patches of SPH., Galena, Ankerite and minor Pyrite at 326.92-327.06m												

785037

036

DIAMOND DRILL RECORD

HOLE NUMBER : MR4

LOGGED BY : LINDA MARTIN

NWPE

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	PPM. Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACIDSOL.	PPM.Cu	PPM.Al	% S.	% Pb.	% Zn.	PPM. Bi.	g/t Ag
		25.15	100	331.55 - 336.7m: Dark grey more massive silty limestone with minor white fossil fragments of corals and minor light grey rounded clasts. Fine stylolite in places and fine irregular white calcite veinlets throughout unit. Faulted upper and lower contacts with coarse calcite fillings. MINERALIZED VEINS AT: 335.07m: Sheared vein of ankerite and sphalerite specks, 2cm wide at 25°, with carbonaceous coatings. Vein pinches and swells irregularly, and in places the limestone has been replaced by patches of fine grained galena, sphalerite, ankerite and minor pyrite. 335.46m: Irregular vein of ankerite, SPH, and Galena, in places replacing the surrounding rock.												
		7.7	96	355.7 - 364.8m: Medium grey fragmental limestone with stylolites and irregular shaley bands. Broken core with irregular calcite veins and bands. MINERALIZED VEINS AT: 357.33m: Ankerite-Calcite-Minor Sphal., gal. and pyrite vein approx. 4cm wide, partially replacing carbon filled stylolites. Vein pinches and swells and grades into replaced zone of mostly sphalerite in surrounding rock, from 357.1 - 357.36m 359.44m: Ankerite-sphalerite veining, 0.1-0.2cm wide, at 29° 359.25m: Irregular, Ank. - sphal. vein, 0.2-0.3 cm wide at 30°												
		4.67	100	364.8 - 369.47m: Medium grey, well bedded limestone. So at 365m - 45°; at 366m - 48°; at 369m - 44°. MINERALIZED ZONES AT: 367.64m: ANK.-SPH.-GAL. Vein at 46°, 1 cm wide, along bedding, associated with minor replaced patches in the surrounding rock. 369.90 - 369.47m: Limestone appears to be replaced by very fine grained sphal., galena and pyrite and is intersected by numerous calcite-serpentine filled shears, core is fractured and slicken-sided.												
		369.47	375.0	5.53	100	SERPENTINE 369.47 - 372.1m Light green, altered with fine calcite veining; crystals of chromite to 0.1cm diam. Slightly crumbly core. 372.1 - 375.0m : Medium to dark green, harder and "soapy". Crystals of chromite to 0.1cm diam.	CAMBRIAN ULTRA-Mafic									

MAGNETIC SUSCEPTIBILITY (x 10<sup>-6</sup> C.G.S. UNITS.)  
ALL READINGS < 100

785038

# RENISON LIMITED - DRILL CORE RECORD

037

HOLE NUMBER	MH5	SURVEY			From - To	Distance D	VERTICAL		HORIZONTAL	
		Depth	Bear (°T)	Dip			D Sin. Dip	R.L.	D Cos. Dip	Prog. Total
PURPOSE	To Test For Depth Extension of the Mineralized Fault Zone Intersected in ME2	Collar set-up	211°	-50°	0 - 9.0	9.0	6.89	2180.72	5.79	5.79
		18m	210°	-51.25°	- 34.5	25.5	19.89	2160.85	15.96	21.75
LOCATION	MERTON HILL	51m	inside logs	-54°	- 70.5	36.00	29.12	2131.71	21.16	42.91
		90m	212°	-57.25°	-105.0	34.5	29.02	2102.69	18.66	61.57
COLLIAR R.L.	2187.608m	120m	210°	-55.75°	-135.0	30.00	24.80	2077.89	16.88	78.45
		150m	210°	-55°	-170.0	35.0	28.67	2049.22	20.09	98.53
CO-ORDINATES	5 379 675.336 m <sup>N</sup> 367 872.242 m <sup>E</sup>	190m	205.5°	-53°	-208.0	38.0	30.35	2018.87	22.87	121.40
		226m	205°	-51.25°	-243.0	35.0	27.30	1991.57	21.91	143.31
LENGTH	331m	260m	205°	-48.75°	-274.5	31.5	23.68	1967.89	20.77	164.08
		289m	205°	-47.75°	-310.0	35.5	26.28	1941.61	23.87	187.95
HOLE SIZE	0 - 3m HW 40 - 33m N.C. 3 - 150m HQ	331m	205°	-47°	-331	21.0	15.36	1926.25	14.32	202.27
DATE DRILLED	16.9.1981 - 14.10.1981									
SIGNIFICANT CORE LOSS ZONES										
ORE ZONE GROUND CONDITIONS										
LOGGED BY	LINDA MARTIN									
COMMENTS	ALL ASSAYS DONE BY ANDEL, ADELAIDE.									

### SUMMARY - ASSAY DATA

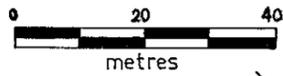
LODE NAME	FROM	TO	LENGTH (m)	AVERAGE WEIGHTED ASSAYS										B.C.A.
				Sn. %	Acid Sol. Sn.	Cu. %	As. ppm	Sb. ppm	Pb. %	Zn. %	Bi. ppm	WO <sub>2</sub>	Ag g/t	
SIL. LIMESTONE MEMBER	244.3	268.5	24	0.01	4100 ppm	0.01	420	10	0.328	0.509	4100		8.2	
"	281.0	292.0	1	0.021	3000 ppm	0.028	420	100	3.7	6.8	4100		120	
CAMBRIAN DUNDAS GROUP SEDIMENTS.	317.3	318.3	1	0.01	4100 ppm	0.01	420	28	0.025	0.065	4100		2	

785039.

038

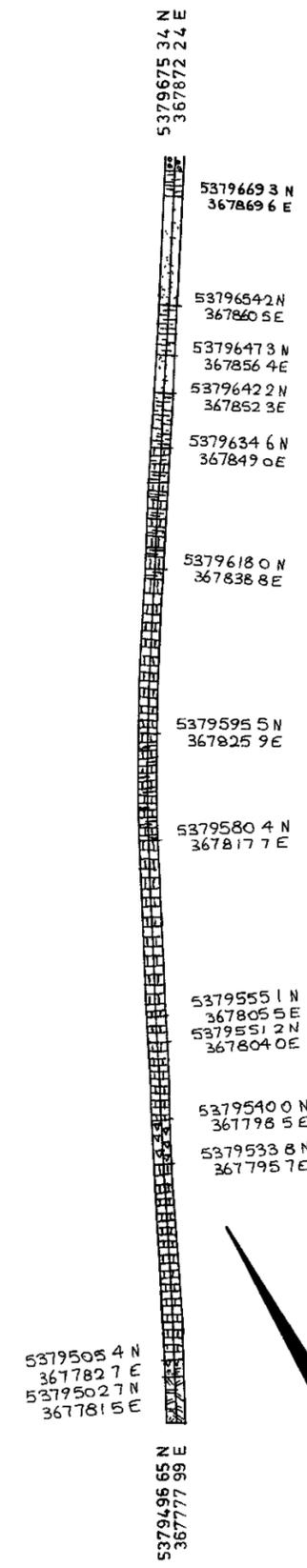
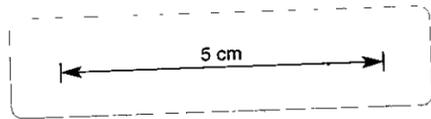
HOLE No. MH 5

SCALE



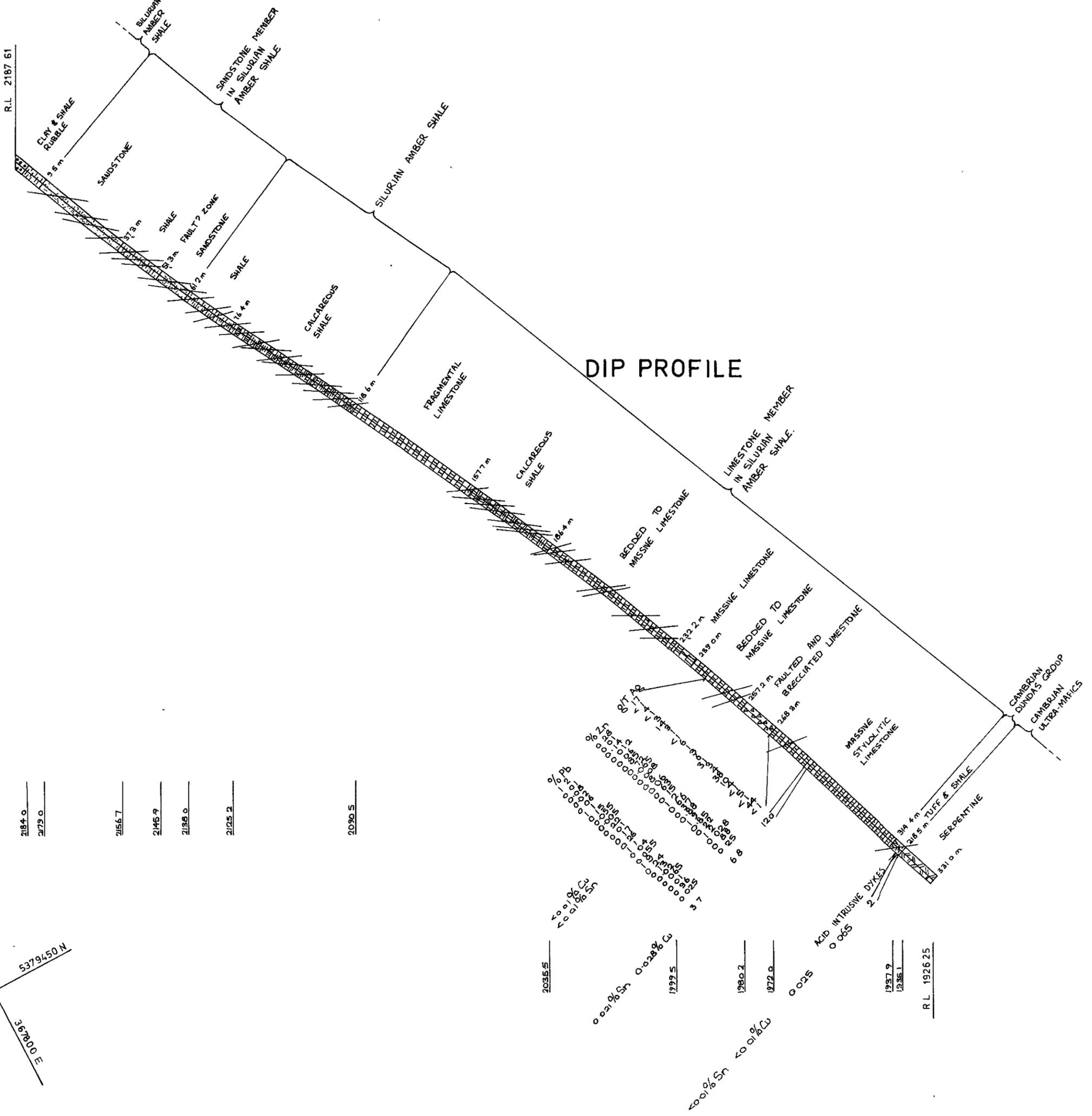
# RENISON LIMITED DIAMOND DRILL HOLE PLOT

785040



PLAN

5379505 4 N  
367782 7 E  
5379502 7 N  
367781 5 E



DIP PROFILE

039

DIAMOND DRILL RECORD

HOLE NUMBER : ME5

LOGGED BY : LINDA MARTIN

HWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
0	3	-	-	No Core.												
3	9.5	3.9	60	Clay and Minor Shale Fragments.	SIL. AMBER SHALE											
9.5	11.0	0.9	60	Clay and Sandstone Chips.												
11.0	37.3	6.1	51	Sandstone. 11.0 - 23.0m: Fine to medium grained sandstone with brownish 'Tarry' staining. Massive to vaguely bedded; at 16m - 29° Minor qtz veining. Broken core.	Sandstone Member of Silurian Amber Formation											
		6.76	65	23.0 - 33.4m: Light grey to white sandstone composed mostly of quartz with minor feldspar, mica + black opaque minerals. Vaguely bedded with minor shale layers. So at 25m - 29°, 27m - 21°, 29m - 26°. Light brown iron-oxide staining from 28m-31m.												
		3.1	80	33.4 - 37.3: Medium grey sandstone with dark grey shale layers 1-3cm wide. Sandstone is coarser grained. Unit grades from sandstone with shale layers to shale. So at 34m - 40°; 35.5m - 36°.												
37.3	51.3	8.4	60	SHALE Light grey to green, fine grained well bedded shale. So at 37m - 41°; 41m - 40°; 45m - 35°; 48m - 32°. 47.4m - 51.3m: Zone of very fractured and crumbly core. (Possibly a fault zone).	SILURIAN AMBER SHALE											
51.3	61.2	9.9	100	SANDSTONE 51.3 - 55.4m: Light grey, medium grained, massive to vaguely bedded, with minor qtz. veining; So at 54m - 15°. 55.4 - 61.2m: Medium grey sandstone with dark grey shale layers 1-3cm wide. Grading to dark grey shale unit below. So at 56m - 31°; 57m - 30°; 59m - 30°.	SANDSTONE MEMBER OF SILURIAN AMBER FORMATION											
61.2	76.4	9.8	65	SHALE Light to medium grey, fine grained, well bedded and fossiliferous, with minor coarser grained, light grey, calcareous + fossiliferous layers, 1-4cm wide. So at 64m - 39°; 69m - 43°; 70m - 41°; 72m-49°; 76m - 40°. The Shale has been altered to clay in places; core is broken.	SILURIAN AMBER SHALE											

785041

040

DIAMOND DRILL RECORD

HOLE NUMBER : M15

LOGGED BY : LINK & MARTIN

MWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
76.4	118.6	41.35	98	<p><u>CALCAREOUS SHALE</u></p> <p>76.4 - 95.7m: Medium grey shale with light grey to white coarser grained calcareous fossiliferous sands 1-5cm wide forming up to 30% of the rock. These bands are 'boudinaged' in places probably as the result of consolidation. The upper boundary of these bands is gradational, while the lower one is sharp indicating that the sequence is "aging" down the drill hole. Upper and lower "boundaries" of the unit are gradational.</p> <p>So at 77m - 38°; 81m - 37°; 83m - 42°; 86m - 41° 89m - 31°; 91m - 36°; 94m - 40°.</p> <p>95.7 - 118.6m: Calcareous fossiliferous bands now forming 60 - 70% of rock. Shale layers are thin, wavy and are squashed around more competent limestone bands or fragments. They are often stylolitic in appearance. Increase in white calcite veins.</p> <p>So at 97m - 30°; 100m - 39°; 102m - 38°; 103m - 33°; 107m - 31°; 110m - 30°; 114m - 36°; 116m - 34°; 117m - 40°.</p>												
118.6	157.7	13.2	100	<p><u>LIMESTONE</u></p> <p>118.6 - 131.8m: Dark to medium grey fragmental limestone with fine layers of shale as stylolites. Numerous fossils within the clasts and as matrix fragments: Fossils of gastropods, brachiopods, crinoid ossicles, corals and bryozoans. Minor calcite veins at 0°-20° and 1-2cm wide. At 125.0m, A 1-4cm wide vein of coarsely crystalline calcite at 10°.</p> <p>131.8 - 141.76m: Light grey limestone with pinkish (oxidised?) fossil fragments.</p> <p>141.76 - 155.62m: Medium grey, with more numerous and thicker black stylolites. Increase in irregular white carbonate veining at 0°-30°. Sheared upper boundary. At 141.97m an ankerite vein, 1cm wide at 21°.</p> <p>155.62 - 157.7m: Zone of brecciated limestone and bedded calcareous shale, with numerous calcite veins at 0°-30°. In places the rock has been replaced by recrystallized calcite. The core is broken and crumbly.</p>	LIMESTONE											
157.7	186.45	23.33	100	<p><u>CALCAREOUS SHALE</u></p> <p>157.7 - 181.03m: Well bedded dark grey shale with calcareous layers to 5cm width, composed of fossil fragments mostly crinoid ossicles. Minor calcite veining, 0-20°, 1-3cm wide. At 163m, 4cm wide vein of coarsely crystalline calcite at 5°.</p>												

785042

DIAMOND DRILL RECORD

HOLE NUMBER : MR5

LOGGED BY LINDA MARTIN

NWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.											
FROM	TO	m	%			FROM	TO	TOTAL	ACIDSOL.	% Cu.	% Al.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag	% WO <sub>3</sub>
				So at 159m - 39°; 161m - 34°; 164m - 28°; 167m - 32°; 169m - 29°; 171m - 15°; 175m - 29°; 178m - 30°; 180m - 30°.													
		5.13	95	181.03m - 186.43m Brecciated calcareous shale fragments with numerous white calcite veins, in a sheared matrix of dark grey to black shale and carbonaceous material. The matrix is sheared at approx. 50°-60°. At 186.36m, and irregular yellow ankerite vein 1-2 mm wide at approx 40°, with minor spots of sphalerite and galena replacing some of the surrounding rock.													
186.43	232.24	45.81	100	<b>BEDDED TO MASSIVE LIMESTONE:</b> Medium grey, well bedded to 193.5m then grades into more massive limestone with stylolites subparallel to bedding, and with minor well bedded zones. Minor irregular calcite veining at 40°-50°, and coarse grained calcite veins up to 5cm wide at 0-20°. Minor slightly altered limestone zones sometimes associated with wide coarse grained calcite veins. Here the limestone is bleached, softer and more porous. Boundaries of the zones are diffuse and gradational. Zones at: <u>231.94 - 232.0m</u> with calcite vein at 232.0, 4 cm wide. <u>232.14 - 232.24m</u> with calcite vein at 232.24m, 3 cm wide. Bedding: 187m - 51°                      218m - 40° 189m - 43°                      219m - 40° 193m - 40°                      224m - 46° 205m - 45°                      228m - 42° 207m - 46°                      229m - 40° <b>MINERALIZED VEINS:</b> <u>212.2m:</u> Ankerite-Calcite-Minor Galena vein at 39°, 1 cm wide. <u>214.5m:</u> Irregular Galena-Sphalerite vein at 18°, 2m wide. associated with minor ankerite veins along an irregular stylolite. <u>215.6m:</u> Irregular patch of ankerite-sphalerite-galena as part of vein intersected by drill hole. <u>217.95m:</u> Irregular ankerite-sphal. - gal. - calcite vein at 29°, 0.5cm wide. <u>218.25m:</u> Anker. - Sphal. - Gal. Vein along bedding at 40°, 0.5cm wide. <u>224.24m:</u> Anker. - Sphal. - Gal. Vein along bedding at 46°, 1cm wide													

041

785043



043

DIAMOND DRILL RECORD

HOLE NUMBER : MR5

LOGGED BY : LINDA MARTIN

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	PPM Sn.												
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	PPMCu	PPMAs	PPMSb	% Pb.	% Zn.	PPMBi	g/t Ag	% WO <sub>3</sub>	
				255.6m: Irregular veinlets of anker... associated with patches of sphalerite replacing matrix over 1cm.		255.5	256.5	34	100	20	<20	10	0.17	0.63	<100	3		
				256.40 - 256.77m: Irregular ankerite vein at 0°-10° with minor spots of sphalerite and galena.		256.5	257.5	8	100	<20	<20	8	0.26	0.15	<100	6		
						257.5	258.5	38	<100	80	<20	18	1.1	1.2	<100	31		
257.2	268.7	10.87	98	<b>FAULTED AND BRECCIATED LIMESTONE</b> with recrystallized grey calcite in patches, zones and "healing" fractures. Numerous calcite and ankerite veins, with patchy mineralization. Bleached and porous zone with gradational boundaries at 261.8 - 262.0m. <b>MINERALIZED VEINS</b> 259.97 - 259.15m: Sphal.-Anker.-Gal. as irregular veinlets at 65° and replacing the matrix in a zone 4-5cm wide. 260.6 - 261.15m: Irregular patches of sphal., anker, and minor gal. 262.0 - 263.35m: Wide vein of anker, minor sphal. and gal., 5-7cm wide, subparallel to core axis. 264.55m: Irregular zone of veinlets and patches of sphal., and anker. 267.05 - 267.65m: Irregular anker. vein 10-15cm wide with patches of sphal. and galena in the vein and in the matrix.														
										DETM. LIMIT (μ)	DETM. LIMIT (100)							
						258.5	259.5	34	<100	20	<20	8	0.04	0.66	<100	3		
						259.5	260.5	16	<100	20	<20	6	0.055	0.37	<100	4		
						260.5	261.5	30	<100	40	<20	38	1.9	0.88	<100	38		
						261.5	262.5	60	100	80	<20	10	0.24	1.9	<100	10		
						262.5	263.5	38	<100	90	<20	44	0.13	0.85	<100	4		
						263.5	264.5	24	100	<20	<20	8	0.02	0.22	<100	<1		
						264.5	265.5	110	100	80	<20	8	0.065	1.2	<100	5		
						265.5	266.5	4	100	20	<20	14	0.01	0.028	<100	<1		
						266.5	267.5	60	100	60	<20	38	0.96	0.88	<100	44		
268.3	314.4	46.12	100	<b>MASSIVE STYLOLITIC LIMESTONE:</b> More massive less well bedded, medium grey limestone. From 279.1m onwards the limestone is intersected by numerous calcite veins and medium grey recrystallized calcite veins and zones. Minor brecciated zones. Some zones of bleaching: 272.4m - 8cm wide altered crumbly zone. 277.65 - 277.85m - altered crumbly zone associated with irregular coarse calcite veining. From 285.2m onwards the limestone is coarser grained with a sandy appearance. Lower boundary of unit is obscured by poor core recovery but is probably a sheared one. 300.85 - 300.34m: Thin band of dark grey limestone with banded and convoluted syngenetic pyrite. Bedding at 274m - 64°. <b>MINERALIZED VEINS:</b> 268.92m: Anker - minor sphal. and gal. vein at 41°, 0.5cm wide. 270.04m: Irregular anker. - minor sphal. and gal. vein at 48°, 0.4cm wide. 271.37 - 271.70m: Anker. - very minor sphal. and gal. patches at 9°, 1 cm wide. 271.79m: Sphal. - Gal.- Ank. vein along stylolites subparallel to bedding at 67°, 0.8 cm wide and slickensided. 273.8m: Sphal.-Gal-Ank. vein along stylolites, 1-2cm wide at 64°.														
						267.5	268.5	18	100	20	<20	4	0.025	0.25	<100	<1		

785045



# RENISON LIMITED - DRILL CORE RECORD

045

HOLE NUMBER	MH6	SURVEY			From - To	Distance D	VERTICAL		HORIZONTAL	
		Depth	Bear. (AMC)	Dip			D. Sin. Dip	R.L.	D. Cos. Dip	Prog. Total
PURPOSE	To Test for Lateral extension to the South East, of the mineralized fault zone intersected in ME2	Collar set-up	234°	-50°	0 - 6.5	6.5	4.98	2186.63	4.18	4.18
		13m inside								
LOCATION	MERTON HILL	35m	231°	-52°	-57.0	33.0	26.00	2146.98	20.32	35.45
		79m	231°	-51°	-89.5	32.5	25.26	2121.72	20.45	55.90
COLIAR R.L.	2191.609M	100m	230.5°	-51°	110.5	21.0	16.32	2105.40	13.22	62.12
		121m	230°	-50°	133.0	22.5	17.24	2088.16	14.46	76.58
COORDINATES	5 379 377.665mN ; 368 113. 656mE.	145m	230°	-50°	160.0	27.0	20.68	2067.48	17.36	93.94
		175m	231°	-50°	185.0	25.0	19.15	2048.33	16.07	110.01
LENGTH	397m	195m	234.5°	-50.25	203.0	18.0	13.84	2034.49	11.51	121.52
		211m	235°	-50°	225.5	22.5	17.24	2017.25	14.46	135.98
HOLE SIZE	0 - 3m H.W 307 - 397m B.O. 3 - 60m H.C 60 - 307m H.C	240m	237°	-48°	255.0	29.5	21.92	1995.33	19.74	155.72
		270m	238°	-48°	293.0	38.0	28.24	1967.09	25.43	181.15
DATE DRILLED	16.10.1981 - 6.11.1981	316m	238°	-46.75°	330.5	37.5	27.31	1939.78	25.69	206.84
		345m	238°	-45.5°	365.0	34.5	24.61	1915.17	24.18	231.02
SIGNIFICANT CORE LOSS ZONES		385m	239°	-42°	391.0	26.0	17.40	1897.77	19.32	250.34
		397m	241°	-41.5°	397.0	6.0	3.98	1893.79	4.49	254.83
ORE ZONE GROUND CONDITIONS										
LOGGED BY	LINDA MARTIN									
COMMENTS	ALL ASSAYS Done AT RENISON LABORATORY.									

### SUMMARY - ASSAY DATA

LODE NAME	FROM	TO	LENGTH (m)	AVERAGE WEIGHTED ASSAYS											B.C.A.
				Sn	Acid Sol. Sn	Cu	As	S	Pb	Zn	Bi. ppm	WO <sub>3</sub>	Ag g/t	% Fe	
SIL. AMBER SHALE	18.0	28.6	10.6	<0.01	<10 ppm	0.01	<0.1	1.26	0.01	0.104	10	<1	1.9		
SANDWICH DUNDAS GROUP SEDIMENT	227.0	250.0	23	<0.01	<10 ppm	0.015	<0.1	0.83	<0.01	0.01	17	<1	6.73		

785047



047

DIAMOND DRILL RECORD

HOLE NUMBER : ME6

LOGGED BY : LINDA MARTIN

HWPS

INTERVAL (m)	RECOVERY	DESCRIPTION	FORM.	% Sn											
				FROM	TO	TOTAL	PER ACID SOL.	% Cu	% As	% S	% Pb	% Zn	Ppm Bi	g/t Ag	% Fe
0	5	0.1	2	SAND AND SANDSTONE FRAGMENTS											
5	17.5	3.4	52	SANDSTONE 5.0 - 11.5m: Coarse to medium grained, qtz. sandstone with minor chromite lenses. Well bedded to massive, becoming finer grained towards base of unit. Minor qtz. Veins. So at 5m - 28°											
		3.5	58	11.5 - 17.5m: Fine to medium grained with minor fine dark grey clay wisps. Minor qtz. veining. So at 17m - 68°											
17.5	29.2	2.4	77	CALCAREOUS SHALE 17.5 - 20.6m: Black clay with sulphurous smell											
		1.3	28	20.6 - 25.0m: Black and dark grey banded shale, weathered with calcareous material leached out. Well bedded. So at 22m - 48°											
		0.8	19	25.0 - 29.2m: Light grey fresh calcareous shale. Well bedded. So at 27m - 22°											
29.2	168.85	51.8	95	LIMESTONE 29.2 - 81.75m: Medium grey bedded limestone with dark grey irregular shale layers grading to wisps then stylolites. So at 33m - 23° 36m - 19° 41m - 24° 43m - 24° 47m - 25° 50m - 21° 65m - 27° Zones at 55.4 - 57.95m and 61.2 - 62.75m of brecciated limestone, with recrystallized patches and veins of grey calcite, and with numerous intersecting veins and veinlets of white calcite.											
		29.5	100	81.75m - 112.25m: Light grey massive limestone with stylolites grading into some well bedded areas; fine grained grading to coarse grained towards base of unit. Bedding at: 86m - 50°; 94m - 47°; 97m - 48° 102m - 41°; 109m - 44°											
		2.5	90	112.25 - 115.1m: Zone of brecciated limestone and broken core with numerous thick white calcite veins and irregular fine veinlets. Some irregular barren ankerite-calcite veins.											

785049

048

DIAMOND DRILL RECORD

HOLE NUMBER : ME6

LOGGED BY : LINDA MARTIN

HWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn												
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu	% As	% S	% Pb	% Zn	#m Bi	g/t Ag	% Fe	
		26.3	100	115.1m - 161.4m: Medium grey, coarse grained massive limestone with minor stylolites, grading into some very coarse gritty zones with large shelly fragments. Minor more clay rich layers which grade into stylolites. Minor white calcite veining. Some slightly bleached more porous zones up to 20cm wide.														
		2.8	37	161.4 - 169.85m Bleached, leached and altered limestone with numerous calcite veins and irregular veinlets. Broken crumbly core in places. Minor pyrite coatings on fracture planes. Lower boundary is obscured by core loss.														
169.85	176.15	7.3	100	SANDSTONE TO PEBBLY CONGLOMERATE 169.85 - 172.0m: Medium green coarse grained to gritty sandstone with bands of pebbly conglomerate. Clasts are rounded and composed of red, green + minor black chert, shale and SST. Has dark green chlorite and minor chalcocopyrite along shear surfaces. 172.0 - 176.15m: Graded into a red 'oxidized' form of above rock.	CAMBRIAN PENINS GROUP SEDS													
176.15	228.35	52.2	100	SHALE TO SANDSTONE: Medium green to dark grey fine grained sandstone to shale. Massive to finely laminated with minor low angle cross laminations in upper part of unit. Lower part of unit has fine sandstone layers with gradational upper boundaries and ripped up, eroded lower boundaries indicating that the rocks are 'younging' uphole. Minor pebble bands. Numerous fine irregular veins and veinlets of white calcite in places up to 5cm wide, in first 20m of unit. Bedding at: 177m - 74°      205m - 41° 180m - 61°      208m - 47° 184m - 47°      212m - 50° 192m - 42°      215m - 50° 195m - 48°      218m - 47° 198m - 32°      222m - 47° 203m - 31°      226m - 55°														
228.35	235.73	7.38	100	TUFFACEOUS SANDSTONE TO TUFF Fine to coarse grained, light to medium grey with medium green and brownish cherty clasts and green chloritic squashed pumice fragments. Mostly tuffaceous sandstone which grades in places into crystalline lithic-vitric tuff bands with very fine grained light grey matrix. Has specks of pyrite and chalcocopyrite particularly in the tuff bands. At 233.2m to base of unit the tuffaceous sandstone is interbedded with finely laminated dark grey shale layers up to 40cm wide with specks and clots of pyrite along the laminations.		227.0	228.0	<0.01	<10	0.01	<0.1	1.1	<0.01	0.02	20	<1	7.2	
						228.0	229.0	<0.01	<10	0.01	<0.1	0.6	<0.01	0.01	10	<1	4.2	
						229.0	230.0	<0.01	<10	0.01	<0.1	<0.1	<0.01	0.01	10	<1	3.5	
						230.0	231.0	<0.01	<10	<0.01	<0.1	<0.1	<0.01	0.01	10	<1	3.2	
						231.0	232.0	<0.01	<10	0.01	<0.1	0.2	<0.01	0.01	10	<1	3.4	
						232.0	233.0	<0.01	<10	0.02	<0.1	2.1	<0.01	0.01	20	1	5.0	
						233.0	234.0	<0.01	<10	0.01	<0.1	0.3	<0.01	0.01	20	<1	3.9	
						234.0	235.0	<0.01	<10	0.01	<0.1	1.3	<0.01	0.02	20	<1	5.1	
						235.0	236.0	<0.01	<10	<0.01	<0.1	1.3	<0.01	0.01	20	<1	3.5	
						236.0	237.0	<0.01	<10	<0.01	<0.1	<0.1	<0.01	0.01	20	<1	2.3	

ALL SA VALUES <10ppm

785050





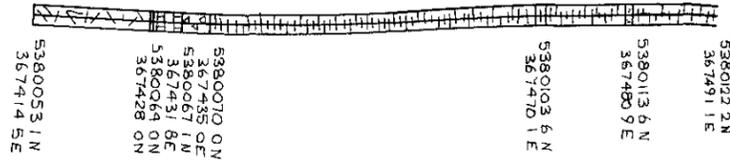
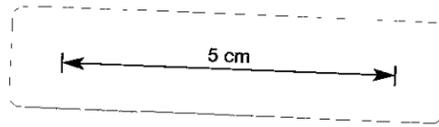
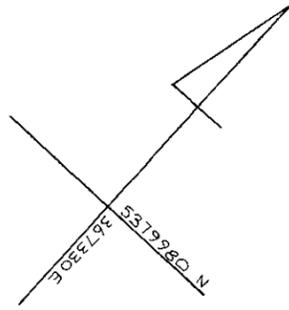
051

HOLE No. MH 7

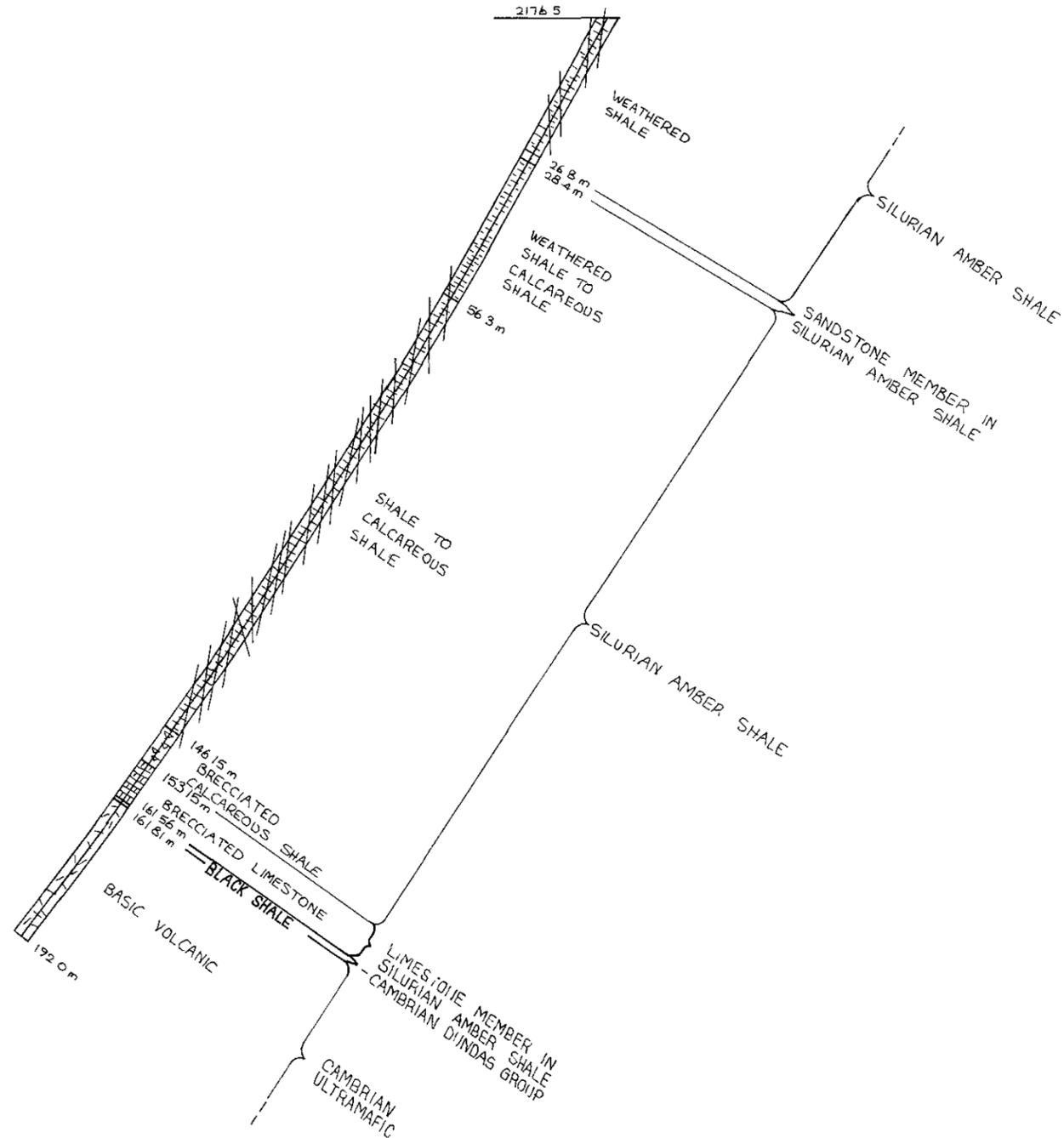


RENISON LIMITED  
DIAMOND DRILL HOLE PLOT

785053



- 2152.5
- 2151.2
- 2127.4
- 2051.0
- 2045.0
- 2038.6
- 2038.4
- 2015.0



U52

DIAMOND DRILL RECORD

MOLE NUMBER : ME7  
 LOGGED BY : LINDA MARTIN

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn.											
FROM	TO	m	%			FROM	TO	TOTAL	ACIDSOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag	% WO <sub>3</sub>
0	1.0	-	-	Clay													
1.0	26.85	10.2	39	Shale: Medium brown, weathered crumbly shale. Very broken rubbly rock. Well bedded, with cleavage along bedding. Bedding at: 2m - 22°      19m - 22° 7m - 26°      21m - 32° 17m - 31°	SILURIAN AMBER shale												
26.85	28.40	0.7	45	SANDSTONE: Light grey to brown sandstone to quartzite. Medium grained. Broken core with unit boundaries obscured by core loss.	SILURIAN AMBER SANDSTONE MEMBER												
28.40	153.15	7.5	26	SHALE TO CALCAREOUS SHALE 28.40 - 56.3m: Similar to unit at 1.0 - 26.85m. May be calcareous but too weathered to determine.													
		89.85	100	56.3m - 146.15m: Fresh medium to light grey shale with cream to light grey more calcareous bands. Well bedded at: 57m - 25°    81m - 26°    114m - 23° 59m - 26°    84m - 32°    117m - 22° 62m - 30°    87m - 29°    122m - 35° 64m - 32°    91m - 21°    125m - 59° 66m - 33°    93m - 23°    127m - 34° 69m - 22°    96m - 29°    129m - 25° 72m - 24°    99m - 25°    133m - 23° 74m - 20°    104m - 25°    136m - 27° 76m - 29°    108m - 22°    141m - 22° 79m - 30°    111m - 28° From 56.7 - 93.8m: A zone of fine irregular calcite-minor ankerite veins with minor wider veins at 25°-35°, up to 5cm wide at 63.85m, 64.2m, 66.4m, 71.0m, 71.25m, 82.93m, 85.15m and 92.45m. The vein at 71.0m is also mineralized with fine patches of sphalerite and galena.													
		3.15	45	146.15 - 153.15m: Brecciated zone with recrystallized calcite matrix, and minor irregular calcite-ankerite veining.													
153.15	161.56	5.23	95	LIMESTONE 153.15 - 158.66m: Brecciated massive, medium grey limestone with stylolites and minor shale bands. Broken core.	AMBER MEMBER SILURIAN												
		2.9	100	158.66 - 161.56m: Massive medium grey limestone with stylolites. Numerous irregular white calcite veins swelling to 4cm width.	AMBER MEMBER												

785054

053

DIAMOND DRILL RECORD

HOLE NUMBER : MET

LOGGED BY : LINDA MARTIN

HWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
161.56	161.81	0.22	90	<p><b>BLACK SHALE:</b></p> <p>Soft, very sheared black shale, with minor white fragments of calcite vein material, incorporated into rock. Upper contact is sheared and slightly irregular at 25°-90°, and is marked by fine veinlets of ankerite and minor patches of reddish sphalerite. Lower contact, is irregular, at 50° and marked by light grey calcite vein.</p>	<p>CANBERRA</p> <p>DUNDAS</p> <p>GROUP</p>											
161.81	192.0	30.19	100	<p><b>BASIC VOLCANIC:</b></p> <p>Medium to dark green, fine to medium grained with minor "serpentinized" zones. In places the rock has small vesicle-like structures up to 0.7cm diameter. Minor brecciated zones and minor white calcite veining. Minor specks of pyrrhotite in places.</p> <p>E.O.H.</p>	<p>CANBERRA</p> <p>MULLAL</p> <p>MARLB</p> <p>SAMPLED</p>											
						<p>MAGNETIC SUSCEPTIBILITY (x 10<sup>-6</sup> C.G.S. UNITS)</p> <p>0 - 192.0 ... ALL READINGS S. 100</p>										

785055

054

APPENDIX 3

MERTON HILL GRID SOIL SAMPLE SHEETS

055

785057

Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILL

TRAVERSE 360 N

DATE 8/8/1981 OBS

SUB-BASELINE.

STATION	SAMPLE No.	DEPTH(CM)	DESCRIPTION
600 E		30	Orange clay
615		30	" "
630		30	Yellow Orange clay
645		30	" " "
6●		30	" " "
675		30	Yellow clay
690		30	" "
705		40	" "
720		40	" "
735		40	Yellow Grey clay
750		40	" " "
765		40	Yellow orange clay
780		30	Yellow grey clay
7●		30	Yellow orange clay
810		20	Grey clay
825		30	" "
840		40	Grey clay coarse quartz
855		40	" white clay
870		40	Grey pebbly clay
885		20	grey clay Quartz outcrop
TOTAL 20 SAMPLES			

056

785058

Form No. 69/89

RENISON LIMITED

## FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILLTRAVERSE Line 1800EDATE 31/7/1981 OBS

STATION	SAMPLE No.	DEPTH (cm)	DESCRIPTION
• 15N	.	25 cm	Powder green yellow brown clay -- rocky
30N		20 cm	Brown clay - rocky
45N		70 cm	Dark grey clay
60N		70 cm	Dark grey green clay
75N		50 cm	" " " " very wet
90N		35	Dark orange grey clay
105N		40	Dark orange clay
120N		25	Orange clay
135N		35	Orange clay
150N		30	Orange clay
165N		40	Orange clay
180N		30	Orange gummy clay
195N		35	Orange brown clay
210N		30	Orange clay
225N		30	Orange clay
240N		30	Orange yellow brown clay
255N		40	Orange grey white clay
270N		35	Grey-white clay
285N		40	Grey bone gummy clay
300N		35	Grey clay. Quartz pebbles
315N		30	Grey clay
330N	road	60	Brown clay
345N	road	60	Brown clay
360N	road	60	Brown clay
375N	road	60	Brown grey



FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILL TRAVERSE 1700 E DATE 3/8/1981 OBS

STATION	SAMPLE No.	DEPTH (CM)	DESCRIPTION
00 N		10	<sup>BROWN SOIL</sup>
15 N		10	Rocky broken brown soil
30 N		30	Rocky brown grey yellow soil
45 N		30	" " " " "
60 N		70	Rocky brown green clay
75 N		30	Brown clay
90 N		30	Brown clay very wet - Bed Rock
105 N		70	Rocky grey greasy clay
120 N	crack	70	Dark grey clay
135 N		50	Yellow orange clay - friable
150 N		40	" " " " "
165 N		40	Grey orange clay
180 N		40	Orange brown clay - rocky
195 N		50	Orange brown clay
210 N		70	Orange brown friable rocky
220 N		60	Orange clay
240 N		50	" "
255 N		40	" "
270 N		60	Grey brown clay
285 N		40	Orange brown clay
300 N		30	Grey brown gritty clay
315 N		30	Grey clay
330 N		40	" "
345 N		65	Dark grey white clay
360 N		60	Grey friable Quartz soil
375 N		70	White grey gritty Quartz



## FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILLTRAVERSE 1000EDATE 4/8/1981 OBS

STATION <small>NORTHING</small>	SAMPLE NO.	DEPTH (cm)	DESCRIPTION
.15.0 N	.	70	Green brown clay
30.0		60	Brown orange green clay
45		60	" " " " Rocky
60		0	No SAMPLE BEDROCK
.75		0	" "
90	CREEK	40	Dark grey green greasy clay
105		60	Sandy light grey soil
120		60	" " " "
135		10	Grey soil coarse quartz
150		40	" " " "
165		30	" " " "
180		30	Grey soil gritty
195		20	" " " " Rocky bottom
210		40	Light grey greasy clay, Quartz outcrop
225		50	Bedrock - light grey soil
240		40	Bedrock " " "
255		60	Light grey friable soil Quartz outcrop
270		40	" " " "
285		80	White sandy quartz soil
300		70	" " " "
315		70	Brown orange sandy
330		45	Light grey white gritty clay
345		30	" " " " "
360		35	" " " " "
375		30	" " " " "
390		30	Light grey white gritty clay

061

785063

Form No. 69/89

RENISON LIMITED

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILL

TRaverse 1000 E

DATE 4/8/1981 OBS

STATION(N)	SAMPLE No.	DEPTH(cm)	DESCRIPTION
405 N		60	Light grey gritty soil
420		60	" " " "
435	CREEK	70	Grey clay fine gritty
450		30	light grey white clay Rocky
465		60	" " " "
480		70	Light grey soil coarse quartz
495		70	" " " " "
510		50	Grey gritty coarse
525		50	" " "
540		50	Streaky light green brown clay
555		50	" " " " "
570		50	Light grey peasy clay
585		40	" " " "
600		40	Light grey coarse quartz grit
610		55	" " " " "
630		70	Light grey white soil
645		70	" " " "
650		70	Light grey soil
TOTAL 42 SAMPLES			

## FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON Hill

TRAVERSE

900EDATE 4/8/1981 OBS

STATION(N)	SAMPLE No.	DEPTH(Cms)	DESCRIPTION
15 N	.	0	No SAMPLE
30		0	" "
45		30	Rocky brown green clay
60		60	" " " "
75		35	" " " "
90		35	Green greasy clay very fine
100		35	" " " "
120		40	Brown clay rock bottom
135		40	" " " "
150		20	" " " "
165		20	Light brown soil <sup>Black</sup> rock chips
180		30	Grey white sandy clay
195		30	Orange yellow clay
210		40	Yellow brown gritty clay
225		40	Grey white sandy soil
240		35	Red orange clay
255		40	Grey white sandy coarse qtz
270		30	Grey white clayey soil
285		30	" " " "
300		45	Grey soil
315		40	" " coarse quartz
330		40	Dark grey white clayey soil
345		30	Grey soil
360		30	Grey soil rocky quartz
375		35	" " " "
390		35	" " gritty quartz



FIELD SHEET FOR GEOCHEMICAL SURVEY

054  
 AREA MERTON HILL TRAVERSE 800E DATE 3/8/1981 OBS

STATION (N)	SAMPLE No.	DEPTH (cms)	DESCRIPTION
.375N	.	70	Grey clay
390		60	Grey brown greasy clay
405		40	Grey brown clay
420		40	White grey clay
435		40	Grey white soil gritty quartz
450		40	Grey white soil
455		60	White sandy soil
480		40	Grey soil
495		40	" "
510		50	Light grey clay gritty
525		50	Light brown fine clay
540		50	Grey brown clay
555		40	White brown clay
570	Dill Pad M. CK	70	Grey green clay
585		50	Yellow orange clay
600		50	White grey clay
615		70	Dark grey clay
630		70	Grey clay coarse quartz
645		30	Grey white clay
660		40	Grey clay coarse quartz
675		30	" " " "
690		30	" " coarse quartz & outcrop
705		20	Grey clay quartz outcropping
710		O/C	N/S. O/C. quartz-boulder
TOTAL 23 SAMPLES			

FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILL

TRAVERSE 700 E

DATE 5/8/1981 OBS

STATION(N)	SAMPLE No.	DEPTH (cm)	DESCRIPTION
375		40	Orange clay
390		40	" "
405		30	White grey clay
420		40	White brown clay
435		40	White brown grey clay
450		70	Grey greasy clay fine quartz
465		60	White grey clay
480		70	Grey clay
495		70	Grey greasy clay
510		50	Grey sandy clay
525		50	Swampy brown greasy clay
540		50	Orange brown clay
555	creek	40	" " "
570		30	White grey clay fine quartz
585		50	Grey white clay
600		30	Grey clay
615		70	" " coarse quartz
630		60	Grey gritty clay
645		60	Dark grey "
660		70	light grey sandy soil
675		70	White soil sandy
690		70	Grey & gritty soil
705		60	" " " "
710		60	" " " "
TOTAL 24	SAMPLES		
			end

FIELD SHEET FOR GEOCHEMICAL SURVEY

066

AREA MERTON HILL

TRAVERSE 600E

DATE 7/8/1981 OBS

STATION(V)	SAMPLE No.	DEPTH (cm's)	DESCRIPTION
375		30	Brown green clay
390		40	Brown clay
405		70	Blue grey clay very fine
420		70	" " " "
435		70	Grey clay very fine
450		70	Grey brown clay serpentine? chip
465		70	Grey clay
480		70	" "
495		50	" "
510		70	Brown grey clay
525		65	Brown clay
540	CREEK	70	" " very fine
555		70	Grey gritty clay
570		30	Grey sandy "
585		60	" " "
600		30	" " "
615		60	White sandy soil
630		70	" " "
645		60	Grey sandy soil
660		50	" " "
675		50	Grey gritty "
690		60	" " "
705		40	Brown clay
710		60	White brown clay
TOTAL	24	SAMPLES	end

067  
AREA MERTON HILLTRAVERSE 500 EDATE 7/8/1981 OBS

STATION	SAMPLE No.	DEPTH	DESCRIPTION
375		35	Orange clay
390		35	" " rocky
405		40	Orange clay
420		40	" "
435		40	" "
450		40	" "
465		70	Grey brown clay
480		50	Yellow brown clay
495		50	" " "
510		70	Brown grey clay very fine
525		70	Grey clay very fine
540		70	" "
555		65	" "
570		50	Grey brown clay
585		65	" " "
600		50	" " "
615		50	" " "
630		40	Grey white sandy clay
645		30	Grey soil Rocky bottom
660		40	" " " "
675		40	Grey white gritty clay
690		50	" " " "
705		50	" " " "
720		70	Grey white soil
735		70	" " "



## FIELD SHEET FOR GEOCHEMICAL SURVEY

AREA MERTON HILL

TRAVERSE 400 E.

DATE 8/8/1981 OBS.

STATION	SAMPLE No.	DEPTH (CM)	DESCRIPTION
.375		.0	No/SAMPLE River wash
390	creek	20	Green white gritty clay
405		30	Green brown gritty clay
420		40	Orange brown clay
435		0	No/SAMPLE - rock o/c <sup>SOIL</sup> ROCK SAMPLE
450		40	Orange brown clay
465		40	" " " " coarse quartz
480		45	Brown grey clay gritty
495	creek	70	Grey green clay very fine
510		65	Brown green clay gritty
525		60	Orange brown clay
540		60	Brown cream clay
555	creek	60	" " " " sandy
570		70	Grey gritty clay
585		50	" " " "
600		50	" " " "
615		25	Light grey white sandy soil
630		50	" " " " "
645		50	" " " " "
660		60	" " " " "
675		50	" " " " " rocks
690		30	Light grey white very sandy soil
705		70	" " " " "
720		70	" " " " "
735		60	Light grey white gritty soil



## FIELD SHEET FOR GEOCHEMICAL SURVEY

071  
AREA MERTON HILLTRAVERSE 300EDATE 8/8/1981 OBS

STATION	SAMPLE No.	DEPTH (CM)	DESCRIPTION
375		5	Very Rocky brown soil
390		0	NO SAMPLE BEDROCK
405		5-8	Red Brown Soil
420		5-10	" " "
435		10	Red Brown soil
450		10	Red Brown soil Rock outcrop
460		40	Brown Green clay
480		40	Yellow green friable clay
495		30	" " " "
510		30	Brown Green yellow soil rock outcrop
525		30	Orange grey soil rocky
540	MERTON CK.	20	Brown friable soil rocky
555		70	Brown grey clay
570		60	Cream grey clay - sandy
585		70	Grey clay - fine
600		60	Grey clay - fine -
615	creek	70	Grey sandy greasy clay
630	creek	70	Brown gritty clay
645	creek	70	" " "
660		30	" " "
675		40	Grey gritty white clay
690		40	Grey clay
705		30	" "
720		30	Grey sandy soil coarse quartz
735		40	" " " "



APPENDIX 4

MERTON HILL GRID SOIL SAMPLE ASSAY RESULTS



RENISON LIMITED

GEOCHEMICAL ASSAY RESULTS

Area: ..... Merton Hill .....  
 Grid Line: MH ..... 300K .....  
 Date: March 1982 .....

Page of

	Sn	As	Cu	Pb	Zn	Ni
375	10	L10	10	45	150	3270
390	NO SAMPLE					
405	10	L10	25	50	125	2660
420	10	L10	5	40	110	2340
435	10	L10	5	35	85	3470
450	20	L10	5	28	80	4220
465	10	L10	5	30	65	3560
480	20	L10	5	50	120	4080
495	L10	L10	10	50	125	970
510	40	L10	5	20	80	620
525	L10	L10	10	30	70	1050
540	L10	L10	5	15	55	1010
555	L10	L10	25	10	5	190
570	L10	L10	25	10	5	210
585	L10	L10	5	10	5	L10
600	110	L10	25	10	5	210
615	L10	L10	25	5	L10	L10
630	L10	L10	25	5	L10	L10
645	L10	L10	25	5	5	L10
660	L10	L10	25	25	5	10
675	L10	L10	25	25	5	L10
690	L10	L10	25	5	5	L10
705	L10	L10	25	5	10	30
720	L10	L10	5	5	15	10
735	L10	L10	5	5	10	10
750	L10	L10	25	5	5	10



077

RENISON LIMITED

GEOCHEMICAL ASSAY RESULTS

Area: Melton Hill  
 Grid Line: N.H. 400. N  
 Date: March 1982

785079

Sample No.	Sn	As	Cu	Pb	Zn	Ni
375 NOS						
390 N	L10	L10	5	15	75	7240
405	L10	L10	10	10	76	114
420	L10	L10	10	15	60	980
435			NS			
450	L10	L10	55	25	60	80
465	L10	L10	50	15	70	120
480	L10	L10	10	10	95	3410
495	L10	L10	10	15	95	1550
510	L10	L10	10	15	95	1700
525	10	L10	10	10	95	2130
540	L10	L10	15	15	130	2110
555	L10	L10	5	75	10	310
570	L10	L10	75	10	15	10
585	L10	L10	75	5	5	L10
600	L10	L10	11	5	5	L10
615	L10	L10	5	75	5	L10
630	L10	L10	75	75	5	L10
645	L10	L10	75	5	10	L10
660	L10	L10	75	5	5	L10
675	L10	L10	75	75	10	L10
690	L10	L10	75	5	5	10
705	L10	L10	75	5	5	L10
720	L10	L10	75	75	5	L10
735	L10	L10	75	75	5	L10
750	L10	L10	5	10	10	L10



RENISON LIMITEDGEOCHEMICAL ASSAY RESULTSArea: ... Meiton Hill .....

Page of

Grid Line: ... MH 500E .....Date: ... MARCH .....

	Sn	As	Cu	Pb	Zn	NT
375 N	<10	<10	13	11	42	63
390	<10	<10	41	7	60	254
405	<10	<10	50	23	65	108
420	<10	<10	36	19	58	62
435	<10	<10	28	12	35	37
450	<10	<10	30	14	20	76
465	<10	<10	12	6	16	15
480	<10	<10	11	6	5	11
495	<10	<10	6	19	2	13
510	<10	<10	13	32	43	143
525	<10	<10	14	21	40	247
540	<10	<10	3	5	12	105
555	<10	<10	3	5	5	3
570	<10	<10	3	2	10	7
585	<10	<10	4	<1	11	8
600	<10	<10	2	1	57	1340
615	<10	<10	3	1	30	9
630	<10	<10	1	<1	8	2
645	<10	<10	10	37	30	5
660	<10	<10	5	12	10	9
675	<10	<10	1	6	6	4
690	<10	<10	2	3	7	3
705	<10	<10	2	<1	9	5
720	<10	<10	2	5	6	3
735	<10	<10	1	5	1	1
750	<10	<10	2	7	3	3



## RENISON LIMITED

## GEOCHEMICAL ASSAY RESULTS

Area: ..... Merton Hill .....

Grid Line: ..... MH ..... 600 E .....

Date: ..... March ..... 1982 .....

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	Sn	As	Cu	Pb	Zn	WF
375 N	<10	<10	69	12	51	43
390	<10	<10	52	18	61	51
405	<10	<10	34	8	40	18
420	<10	<10	34	10	53	36
435	<10	<10	39	12	76	44
450	<10	<10	37	15	67	45
465	<10	<10	9	8	12	26
480	<10	<10	5	8	7	11
495	<10	<10	4	8	12	12
510	<10	<10	6	13	16	9
525	<10	<10	29	22	85	80
540	<10	<10	23	13	62	70
555	<10	<10	3	4	7	10
570	<10	<10	2	3	4	10
585	<10	<10	2	4	5	<10
600	<10	<10	1	21	4	<10
615	<10	<10	3	9	3	<10
630	<10	<10	2	2	4	10
645	<10	<10	2	4	8	10
660	<10	<10	1	1	3	<10
675	<10	<10	3	3	6	<10
690	<10	<10	2	5	6	<10
705	<10	<10	2	4	10	<10
710	<10	<10	1	3	2	<10
						<10

082

RENISON LIMITED

785084

GEOCHEMICAL ASSAY RESULTS

Area: *Melton Hill*  
 Grid Line: *M.H. 700 E*  
 Date: *MARCH 1982*

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	Sn	As	Cu	Pb	Zn	Ni
375 N	<10	<10	16	10	22	<10
390	<10	<10	4	9	10	<10
405	<10	<10	2	2	9	<10
420	<10	<10	7	9	18	<10
435	<10	<10	5	13	7	<10
450	<10	<10	3	10	8	<10
465	<10	<10	2	10	5	<10
480	<10	<10	3	11	4	<10
495	<10	<10	9	30	34	20
510	<10	<10	5	22	33	20
525	<10	<10	9	29	51	20
540	<10	<10	6	40	100	230
555	10	<10	5	7	15	10
570	10	<10	5	5	6	<10
585	<10	<10	4	3	7	<10
600	<10	<10	4	4	7	<10
615	<10	<10	7	6	12	<10
630	<10	<10	8	3	7	<10
645	<10	<10	4	5	15	<10
660	<10	<10	1	2	8	<10
675	<10	<10	5	6	13	<10
690	<10	<10	13	4	11	<10
705	<10	<10	3	3	10	10
710	<10	<10	5	10	10	<10

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RENISON LIMITED

GEOCHEMICAL ASSAY RESULTS

Area: ..... Merton Hill .....  
 Grid Line: M.H. 800 E .....  
 Date: ..... MARCH 1982 .....

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	Sn	As	Cu	Pb	Zn	NI
375 N	<10	<10	5	<10	10	<10
390	<10	<10	25	<10	5	<10
405	<10	<10	25	<10	5	<10
420	<10	<10	25	<10	25	<10
435	<10	<10	25	<10	5	10
450	<10	<10	25	<10	15	<10
465	<10	10	25	<10	25	<10
480	<10	<10	25	<10	5	<10
495	<10	<10	25	<10	25	<10
510	<10	<10	25	<10	25	<10
525	<10	<10	25	<10	5	<10
540	<10	<10	25	10	5	<10
555	<10	<10	25	10	15	<10
570	<10	<10	15	50	250	80
585	<10	<10	25	<10	10	<10
615	<10	<10	25	<10	25	<10
630	<10	<10	5	<10	10	10
645	<10	<10	25	<10	25	<10
660	<10	<10	5	<10	5	<10
675	<10	<10	25	<10	25	<10
690	<10	<10	25	<10	25	<10
705	<10	<10	25	<10	25	<10

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RENISON LIMITED

GEOCHEMICAL ASSAY RESULTS

Area: Merton Hill  
 Grid Line: MH 900 E  
 Date: March 1982

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	Sn	As	Cu	Pb	Zn	NI
30 N NS						
45 N	L10	20	20	15	105	4280
60	L10	L10	15	10	70	1670
75	L10	L10	5	15	55	2330
90	10	L10	15	15	80	2200
105	L10	L10	10	15	120	2830
120	L10	10	25	15	95	1130
135	10	10	45	15	20	370
150	L10	10	45	5	10	30
165	L10	30	45	5	5	30
180	L10	20	45	5	5	30
195	L10	20	5	10	15	30
210	L10	20	45	10	15	30
225	10	L10	45	5	5	L10
240	10	20	25	15	20	80
255	L10	L10	10	5	10	10
270	L10	L10	45	45	5	L10
285	L10	L10	45	45	5	L10
300	L10	L10	5	45	5	L10
315	L10	L10	45	45	5	L10
330	L10	L10	45	45	5	L10
345	L10	L10	45	45	5	L10
360	L10	L10	45	5	5	L10
375	L10	L10	45	5	5	L10
390	10	10	45	15	5	L10
405	L10	L10	45	5	5	L10



RENISON LIMITED

GEOCHEMICAL ASSAY RESULTS

Merton Hill

Area: Merton Hill  
 Grid Line: Mt. 1000 E  
 Date: March 1982

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086

Sn	As	Cu	Pb	Zn	NI
10	7.10	5	15	65	1450
30	7.10	5	5	15	10
45	20	5	15	65	1830
60	(No Sample)				
75					
90	10	10	10	90	950
105	10	7.5	15	5	60
120	7.10	7.5	20	15	70
135	7.10	5	5	5	10
150	7.10	5	5	5	10
165	7.10	7.5	7.5	7.5	7.10
180	7.10	7.5	7.5	5	7.10
195	7.10	5	10	10	10
210	7.10	7.5	15	20	7.10
225	7.10	7.5	5	5	7.10
240	7.10	7.5	7.5	5	7.10
255	7.10	7.5	5	5	7.10
270	7.10	7.5	5	5	7.10
285	7.10	7.5	5	5	7.10
300	7.10	7.5	5	5	7.10
315	10	7.5	20	5	7.10
330	7.10	5	10	5	7.10
345	10	7.5	5	5	7.10
360	7.10	5	7.5	5	7.10
375	10	7.5	5	5	7.10
390	10	7.10	5	20	7.10



## GEOCHEMICAL ASSAY RESULTS

Area: ... Merton Hill .....  
 Grid Line: MH ..... 1700 E .....  
 Date: ..... March 1982 .....

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	Sn	As	Cu	Pb	Zn	Ni
00 N	<10	20	5	110	25	2050
15	10	30	10	115	45	2630
30	10	20	5	85	25	2000
45	10	<10	5	20	100	3000
60	10	30	5	10	60	1520
75	10	<10	5	15	65	1920
90	<10	<10	5	15	85	1900
105	10	<10	10	10	85	1970
120	10	<10	25	15	100	940
135	<10	20	35	25	25	20
150	20	10	30	15	25	20
165	<10	<10	5	10	10	<10
180	20	10	20	20	15	10
195	<10	10	10	40	20	<10
210	20	20	10	65	25	<10
225	<sup>&lt;10</sup>	10	15	40	20	<10
240	30	10	15	45	25	<10
255	20	20	10	30	10	10
270	<10	<10	40	140	105	60
285	<10	10	15	30	20	10
300	10	<10	25	40	35	20
315	<10	10	5	25	35	160
330	<10	<10	<5	<10	10	<10
345	<10	<10	<5	<10	10	<10
360	<10	<10	<5	<10	<5	<10
375	<10	<10	<5	<10	10	<10



030

RENISON LIMITED

785092

GEOCHEMICAL ASSAY RESULTS

Area: ..... Merton Hill .....  
 Grid Line: M.H. 1800 E .....  
 Date: MARCH 1982 .....

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		Sn	As	Cu	Pb	Zn	NI
15	N	10	10	20	20	70	1200
30		10	10	5	20	70	3100
45		<10	<10	10	10	20	440
60		<10	<10	15	20	70	1000
75		<10	20	15	20	85	1900
90		10	10	15	10	70	370
105		<10	50	15	30	60	1000
120		<10	60	10	10	5	<10
135		<10	50	5	10	5	<10
150		<10	50	10	10	5	<10
165		<10	50	10	10	5	<10
180		<10	50	<5	<10	<5	<10
195		<10	50	10	40	20	<10
210		<10	60	10	<10	25	<10
225		<10	60	10	20	15	<10
240		<10	50	5	20	<5	<10
255		<10	40	<5	<10	<5	<10
270		<10	60	<5	<10	<5	<10
285		<10	40	<5	<10	<5	<10
300		<10	50	<5	<10	<5	<10
315		<10	50	<5	<10	<5	<10
330		<10	40	5	<10	15	10
345		<10	50	<5	<10	10	<10
360		<10	60	<5	<10	<5	<10
360	Resample	<10	50	<5	<10	<5	<10
375		<10	50	<5	<10	<5	<10



APPENDIX 5

MERTON HILL GRID MAGNETIC SURVEY SHEETS

## PROTON MAGNETOMETER FIELD RECORDINGS

785095

Date: BASE. STN. Operator: Tommy Grid Location: Master Hills

TIME	Gamma Reading	Time	GAMMA READING
	<u>BASE READING:</u>		
9.00	62545	1.40	62533
9.10	62543	1.50	62534
9.20	62544	2.00	62535
9.30	62544	2.10	62534
9.40	62545	2.20	62535
9.50	62544	2.30	62535
● 10.00	62543	2.40	62535
10.10	62544	2.50	62535
10.20	62542	3.00	62538
10.30	62541	3.10	62543
10.40	62542	3.20	62541
10.50	62543	3.3	62544
11.00	62543	3.40	62549
11.10	62542	3.50	62549
11.20	62540	4.00	62550
● 11.30	62544	4.10	62551
11.40	62542	4.20	62550
11.50	62542	4.30	62553
.0	62541	4.40	62551
12.10	62541	4.50	62550
12.20	62538	5.00	62552
12.30	62538	5.10	62553
12.40	62536	5.20	62553
12.50	62535	5.30	62553
13.00	62533	5.40	62554
1.10	62535		
1.20	62535		
1.30	62533		



## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 360N

Operator: G.M.

Grid Location: Merton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
620 E	63885		+12	63897
10	63880		+12	63892
600	63722	1.00	+12	63734
590	63707	4.12	-6	63701
80	63681		-6	63675
70	63705		-6	63699
60	63688		-6	63682
50	63661		-6	63655
40	63649		-6	63643
30	63641		-6	63635
20	63645		-6	63639
10	63631		-5	63626
500	63631		-5	63626
490	63635		-5	63630
80	63633		-5	63628
70	63633		-5	63628
60	63689	4.02	-5	63684
50	64004		-5	63999
40	64334		-5	64329
30	64509		-5	64504
20	64581		-5	64576
10	64923		-5	64918
400	64525		-4	64521
390	64420		-4	64416
80	64334		-4	64330
70	64253		-4	64249
60	64314		-4	64310
250	62057	3.51	-4	12053

## PROTON MAGNETOMETER FIELD RECORDINGS

785098

Date: 360 N

Operator: G.M.

Grid Location: Merton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
900	63760	11.41 am	+3	63763
890	63808		+3	63811
80	63999		+3	64002
70	63984		+3	63987
60	63980		+3	63983
50	63974		+3	63977
40	63953		+3	63956
30	63943		+3	63946
20	63936		+3	63939
10	63934		+3	63937
800	63936	11.45 am	+3	63939
790	63917	4.18 pm	-5	63912
80	63910		-5	63905
70	63902		-5	63897
60	63900		-5	63895
50	63890		-6	63884
40	63886		-6	63880
30	63874		-6	63868
20	63864		-6	63858
10	63877	4.12 pm	-6	63871
700	63880	12.51	+10	63890
690	63760		+10	63770
80	63776		+10	63786
70	63752		+10	63762
60	63828		+11	63838
50	63821		+11	63831
40	63835		+11	63845
630	63871		+12	62884

## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 300 E

Operator: G.M.

Grid Location: *Merton Hill*

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360 N	63927	3.00	+7	63934
70	63729		+7	63736
80	63932		+7	63939
90	64071		+6	64077
400	64033		+6	64039
10	64121		+5	64126
20	63936		+5	63941
30	63934		+4	63938
40	64002		+4	64006
50	64162		+3	64165
60	64244		+3	64247
70	64396		+2	64398
80	64745		+2	64747
90	64813	3.10	+2	64815
500	64756		+2	64758
10	64982		+2	64984
20	64963		+2	64965
30	64594		+2	64596
40	64649		+3	64652
50	64897		+3	64900
60	64723		+3	64726
70	65097		+3	65100
80	64892		+4	64896
90	64404		+4	64408
600	63930		+4	63934
10	63722	3.20	+4	63726
20	63539		+4	63543
30	63421		+4	63425



## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 400 E

Operator: G.M.

Grid Location: Herton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360 N	64526	2.15	+ 10	64536
70	64546		+ 10	64556
80	64530		+ 10	64540
90	64620		+ 10	64630
400	64857		+ 10	64867
10	65185		+ 10	65195
20	64458		+ 10	64468
30	63964		+ 10	63974
40	63525		+ 10	63535
50	63424		+ 10	63434
60	63328		+ 10	63338
70	63339		+ 10	63349
80	63334		+ 10	63344
90	63281		+ 10	63291
500	63260		+ 10	63270
10	63253		+ 10	63263
20	63250		+ 10	63260
30	63242		+ 10	63252
40	63235	2.25	+ 10	63245
50	63242		+ 10	63252
60	63238		+ 10	63248
70	63230		+ 10	63240
80	63215		+ 10	63225
90	63209		+ 10	63219
600	63200		+ 10	63210
10	63187		+ 10	63197
20	63181		+ 10	63191
30	62110			



## PROTON MAGNETOMETER FIELD RECORDINGS

785103

Date: 500E

Operator: G.M.

Grid Location: Merton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360	63625	2.00	+10	63635
70	63585		+10	63595
80	63538		+10	63548
90	63513		+10	63523
400	63499		+10	63509
10	63474		+10	63484
20	63461		+10	63471
30	63442		+10	63452
40	63411		+10	63421
50	63404		+11	63415
60	63387		+11	63398
70	63363		+11	63374
80	63345		+11	63356
90	63320	1.53	+11	63331
500	63308		+11	63319
10	63293		+11	63304
20	63290		+11	63301
30	63274		+11	63285
40	63263		+11	63274
50	63249		+12	63261
60	63248		+12	63260
70	63239		+12	63251
80	63227		+12	63239
90	63218		+12	63230
600	63202		+12	63214
10	63186		+12	63198
20	63149	1.45	+12	63160
30	63132		+12	63144



## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 600 E Operator: G.M. Grid Location: Horton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360	63721	1.04	+12	63733
70	63706		+12	63718
80	63699		+12	63711
90	63680		+12	63692
400	63633		+11	63644
10	63598		+11	63609
20	63558		+11	63569
30	63525		+11	63536
40	63487		+10	63497
50	63459		+10	63469
60	63425		+10	63435
70	63391	1.09	+10	63401
80	63365		+10	63375
90	63332		+10	63342
500	63306		+10	63316
10	63272		+10	63282
20	63236		+10	63246
30	63213		+10	63223
40	63200		+10	63210
50	63194		+10	63204
60	63190		+10	63200
70	63173		+10	63183
80	63152		+10	63162
90	63131		+10	63141
600	63143		+10	63153
10	63122		+10	63132
30	63092		+10	63102



## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 700 E

Operator: G.M.

Grid Location: Mordon Mill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360 N	63880	12.50	+10	63890
70	63821		+10	63831
80	63790		+10	63800
90	63752		+10	63762
400	63721		+10	63731
10	63657		+10	63667
20	63622	12.48	+10	63632
30	63572		+10	63582
40	63531		+10	63541
50	63501		+10	63511
60	63451		+10	63461
70	63417		+10	63427
80	63367		+9	63376
90	63308		+9	63317
500	63276		+9	63285
10	63238		+9	63247
20	63175		+9	63184
30	63135		+9	63144
40	63116		+9	63125
50	63072		+9	63081
60	63040		+9	63049
70	63011		+9	63020
80	62977	12.38	+9	62986
90	62946		+9	62955
600	62927		+9	62936
10	62897		+9	62906
20	62872		+9	62881
10	1000			



## PROTON MAGNETOMETER FIELD RECORDINGS

785109

Date: 800E

Operator: G.M.

Grid Location: Merton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
360N	63936	11.45 am	+3	63939
70	63919		+3	63922
80	63865		+3	63868
90	63800		+3	63803
400	63727		+3	63730
10	63627		+3	63630
20	63571		+3	63574
30	63535		+3	63538
40	63501		+3	63504
50	63459		+3	63462
60	63395		+3	63398
70	63301		+3	63304
80	63274		+3	63277
90	63229		+3	63232
500	63114	11.52 am	+3	63117
10	63095		+3	63098
20	63067		+3	63070
30	62945		+3	62948
40	62933		+3	62936
50	62907		+3	62910
60	62899		+4	62903
70	62869		+4	62873
80	62843		+4	62847
90	62799		+4	62803
600	62783		+4	62787
10	62727		+4	62731
20	62720	12.00	+4	62724
120	62711			



## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 900 E

Operator: G.M.

Grid Location: Herton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
0.0	63958	4:43 pm	-6	63952
10	63781		-6	63775
20	63771		-6	63765
30	63751		-6	63745
40	63844		-6	63838
50	63984		-6	63978
60	63792		-6	63786
70	63801		-6	63795
80	63802		-6	63796
90	63814		-6	63808
100	63772		-7	63765
10	64124		-7	64117
20	64130		-7	64123
30	64229		-7	64222
40	64253		-7	64246
50	64297		-7	64290
60	64987		-7	64980
70	64298	4:35 pm	-8	64290
80	64590		-8	64582
90	64300		-8	64292
200	64357		-8	64349
10	64141		-7	64134
20	64286		-7	64279
30	64803		-7	64796
40	65391		-7	65384
50	65256		-6	65250
60	65060	4:25 pm	-6	65054
270	64753		-6	64747

## PROTON MAGNETOMETER FIELD RECORDINGS

785112

Date: 900E

Operator: G.M.

Grid Location: Merton Hill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
280	64565		-6	64559
290	64447		-6	64441
300	64371		-6	64365
10	64303		-5	64298
20	64215		-5	64210
30	64160		-5	64155
40	64092		-5	64087
50	64001		-5	63996
60	63911	4:22 pm ↑	-5	63906
70	63890	11:40 am	+3	63893
80	63781		+3	63784
90	63747		+3	63750
400	63725		+3	63728
10	63720		+3	63723
20	63698		+3	63701
30	63644		+3	63647
40	63564		+3	63567
50	63448		+4	63452
60	63355		+4	63359
70	63385		+4	63389
80	63227		+4	63331
90	63176		+4	63180
500	63133		+4	63137
10	63063		+4	63067
20	63019	11:30	+4	63023
30	62986		+4	62990
40	62939		+5	62944
550	62821		+5	62826



## PROTON MAGNETOMETER FIELD RECORDINGS

785114

Date: 1000E Operator: G.M. Grid Location: Merton Mill

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
0-0	63856	4.43 pm	-6	63850
10	63789		-6	63783
20	63777		-6	63771
30	63832		-6	63826
40	63953		-5	63948
50	64047		-5	64042
60	64164		-5	64159
70	64049		-5	64044
80	63902		-5	63897
90	63930		-6	63924
100	63984		-6	63978
10	63901		-6	63895
20	64000		-7	63993
30	63934		-7	63927
40	63992		-7	63985
50	64062	5.00 pm.	-7	64055
60	64203		-7	64196
70	64253		-7	64246
80	64278		-7	64271
90	64328		-7	64321
200	64462		-8	64454
10	65431		-8	65423
20	64832		-8	64824
30	64706		-8	64698
40	64503		-8	64495
50	64350	5.10 pm	-8	64342
60	64354		-8	64246
270	64150		-8	64142

PROTON MAGNETOMETER FIELD RECORDINGS

113

Date: 1000E

Operator: G.M.

Grid Location: *Merton Hill*

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
280 N	64117		- 8	64109
90	64087		- 8	64079
300	64047		- 8	64039
10	64025		- 8	64017
20	63989		- 8	63981
30	63971		- 8	63963
40	63953		- 8	63945
50	63901	5:17 pm. end	- 8	63893
60	63840	10:58 am	+ 2	63842
70	63769		+ 2	63771
80	63639		+ 2	63641
90	63638		+ 2	63640
400	63561		+ 2	63563
10	63480		+ 2	63482
20	63408		+ 2	63410
30	63340		+ 2	63342
40	63272		+ 2	63274
50	63210		+ 2	63212
60	63147		+ 3	63150
70	63106		+ 3	63109
80	63067		+ 3	63070
90	63032		+ 3	63035
500	62973		+ 3	62976
10	62942		+ 3	62945
20	62891		+ 3	62894
30	62847		+ 3	62850
40	62814		+ 3	62817
550	62767	11:09 am	+ 2	62770



PROTON MAGNETOMETER FIELD RECORDINGS

785117

145

Date: 1700 E

Operator: *esm*

Grid Location: *Merton Hill*

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
0.0	64470		+1	64471
10	64692		+1	64693
20	64671		+1	64672
30	64502		+1	64503
40	64495		+1	64496
50	64442		+1	64443
60	64086		+1	64087
70	63688	9.59	+2	63690
80	63696		+2	63698
90	64102		+2	64104
100	64537		+2	64539
10	64449		+2	64451
20	65001		+2	65003
30	65059		+2	65061
40	65284		+2	65286
50	65112		+2	65114
60	64755		+2	64757
70	64398		+2	64400
80	64151		+1	64152
90	63899		+1	63900
200	63727		+1	63728
10	63382		+1	63383
20	63472		+1	63473
30	63352		+1	63353
40	63246		+1	63247
50	63205		+1	63206
60	63018	10.08	+1	63019
270	62934			

## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 1700E

Operator: G.M.

Grid Location: *Merton Hill*

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
280	62870		+1	62871
90	62816		+1	62817
300	62731		+1	62732
10	62675		+1	62676
20	62676		+2	62678
30	62635		+2	62637
40	62630		+2	62632
50	62626		+2	62628
60	62615		+2	62617
70	62605		+2	62607
80	62587		+2	62589
90	62586	10.18	+3	62589
400	62548		+3	62551
10	62527		+3	62530
20	62510		+3	62513
30	62500		+3	62503
40	62483		+3	62486
50	62478		+3	62481
60	62469		+3	62472
70	62458		+3	62461
80	62450		+3	62453
90	62441		+3	62444
500	62426		+3	62429
10	62420		+3	62423
20	62417		+3	62420
30	62417		+3	62420
40	62411		+3	62414
50	62411		+3	62415





## PROTON MAGNETOMETER FIELD RECORDINGS

Date: 1800E

Operator: G.M.

Grid Location: Merton Hill.

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
320 N	62586		0	62586
10	62587		0	62587
300	62611		0	62611
290	62627		0	62627
80	62659		0	62659
70	62680		0	62680
60	62708		0	62708
50	62726		0	62726
40	62758	9.38	0	62758
30	62789		0	62789
20	62852		0	62852
10	62915		0	62915
200	62996		0	62996
190	63094		0	63094
80	63137		0	63137
70	63244		+1	63245
60	63395		+1	63396
50	63480		+1	63481
40	63656		+1	63657
30	63928		+1	63929
20	64279		+1	64280
10	64659		+1	64660
100	65582	9.48	+1	65583
90	65221		+1	65222
80	64772		+1	64773
70	64444		+1	64445
60	64350		+1	64351
50	1. 1 ~			

## PROTON MAGNETOMETER FIELD RECORDINGS

Date:

6/8/1981

Operator: GREG MALLINSON.  
(CONTRACTOR)

Grid Location: Merton Hill.

1800 E

Grid Station	Gamma Reading	Time	Diurnal Correction	Corrected Reading
600 N	62389	9:19	+1	62390
590	62394		+1	62395
80	62399		+1	62400
70	62398		+1	62399
60	62403		+1	62404
50	62408		+1	62409
40	62412		+1	62413
30	62410		+1	62411
20	62408		+1	62409
5 10	62403	9:23	+1	62404
500	62440		+1	62441
490	62464		+1	62465
80	62428		+1	62429
70	62433		+1	62434
60	62439		+1	62440
50	62441		+1	62442
40	62458		+1	62459
30	62478		+1	62479
20	62490	9:28	+1	62491
10	62507		+1	62508
400	62518		+1	62519
390	62529		+1	62530
80	62531		+1	62532
70	62531		+1	62532
60	62529		+1	62530
50	62531		+1	62532
40	62536		+1	62537
3 20	62557			

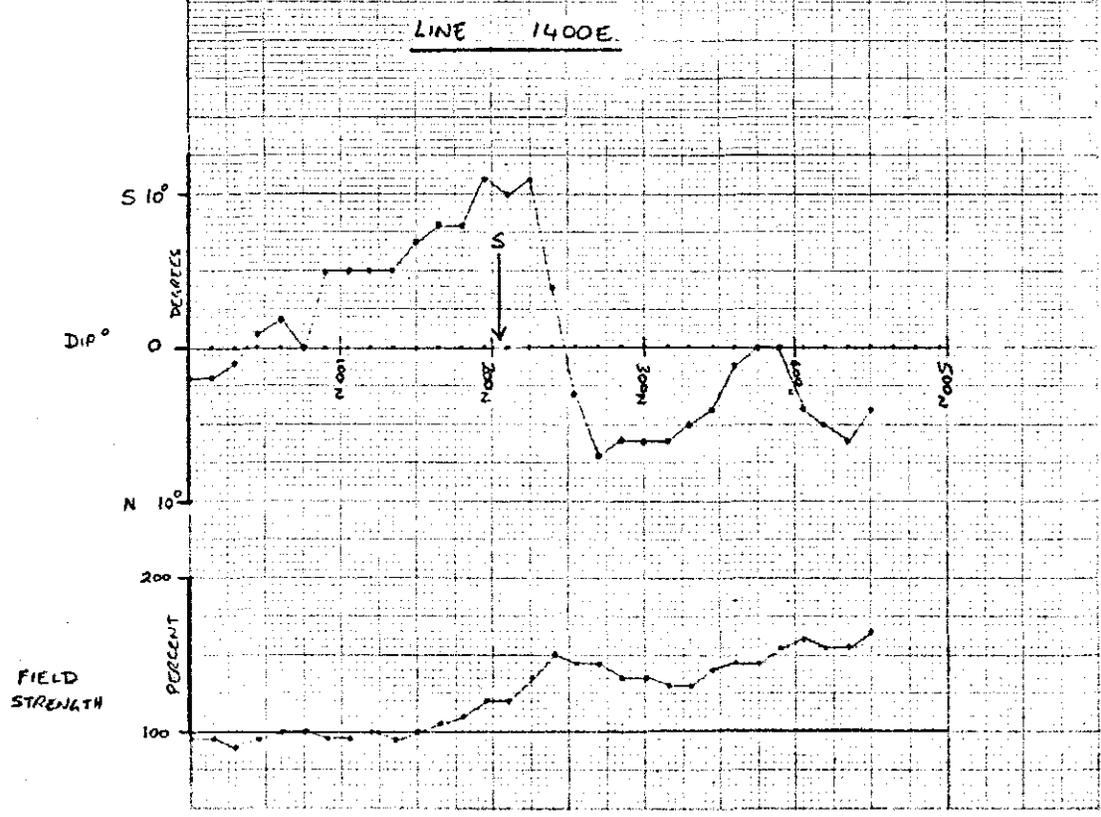
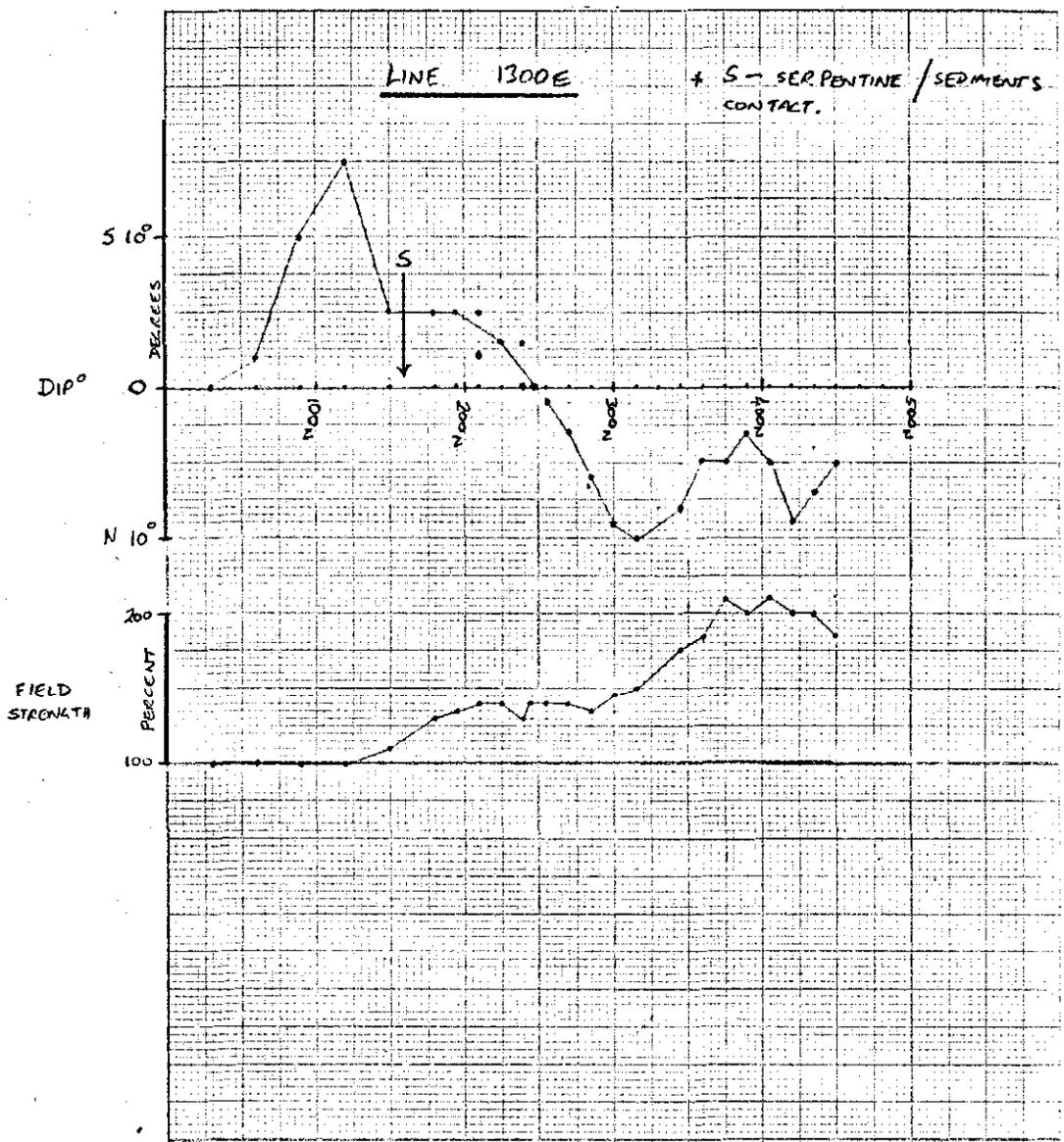
APPENDIX 6

V.L.F. SURVEY RESULTS AND GRAPHS

124

MERTON HILL V. L. F. SURVEY.

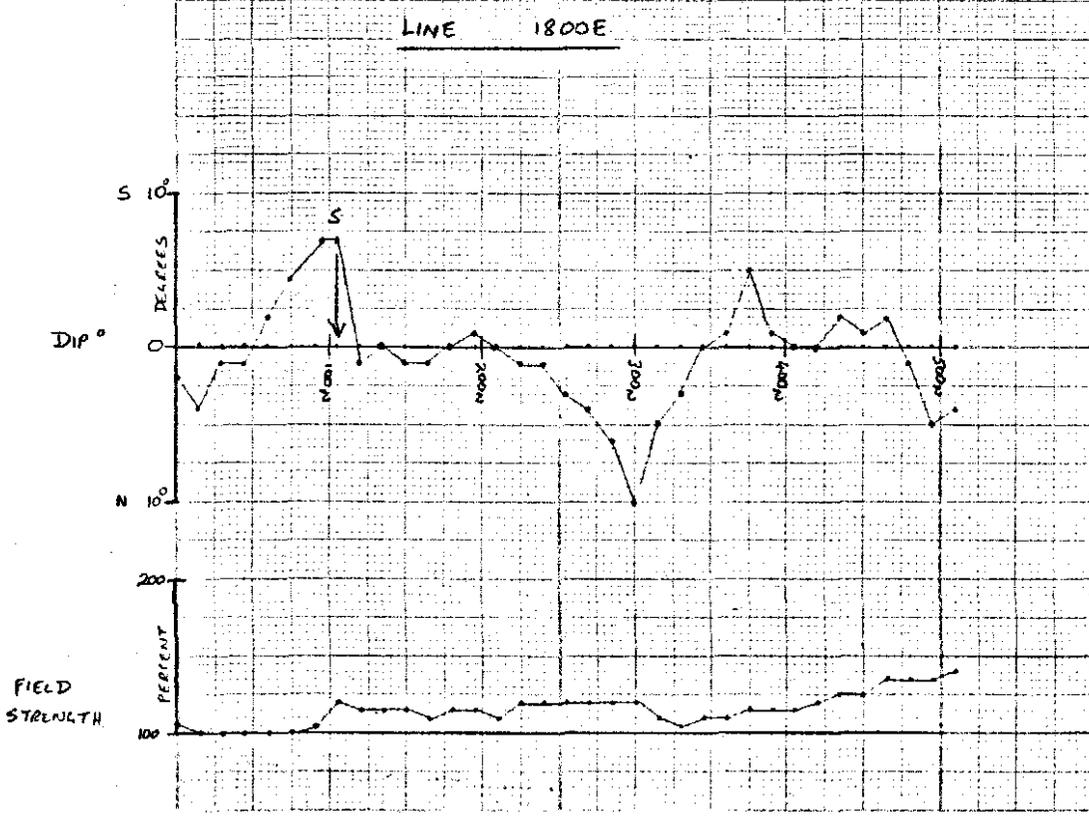
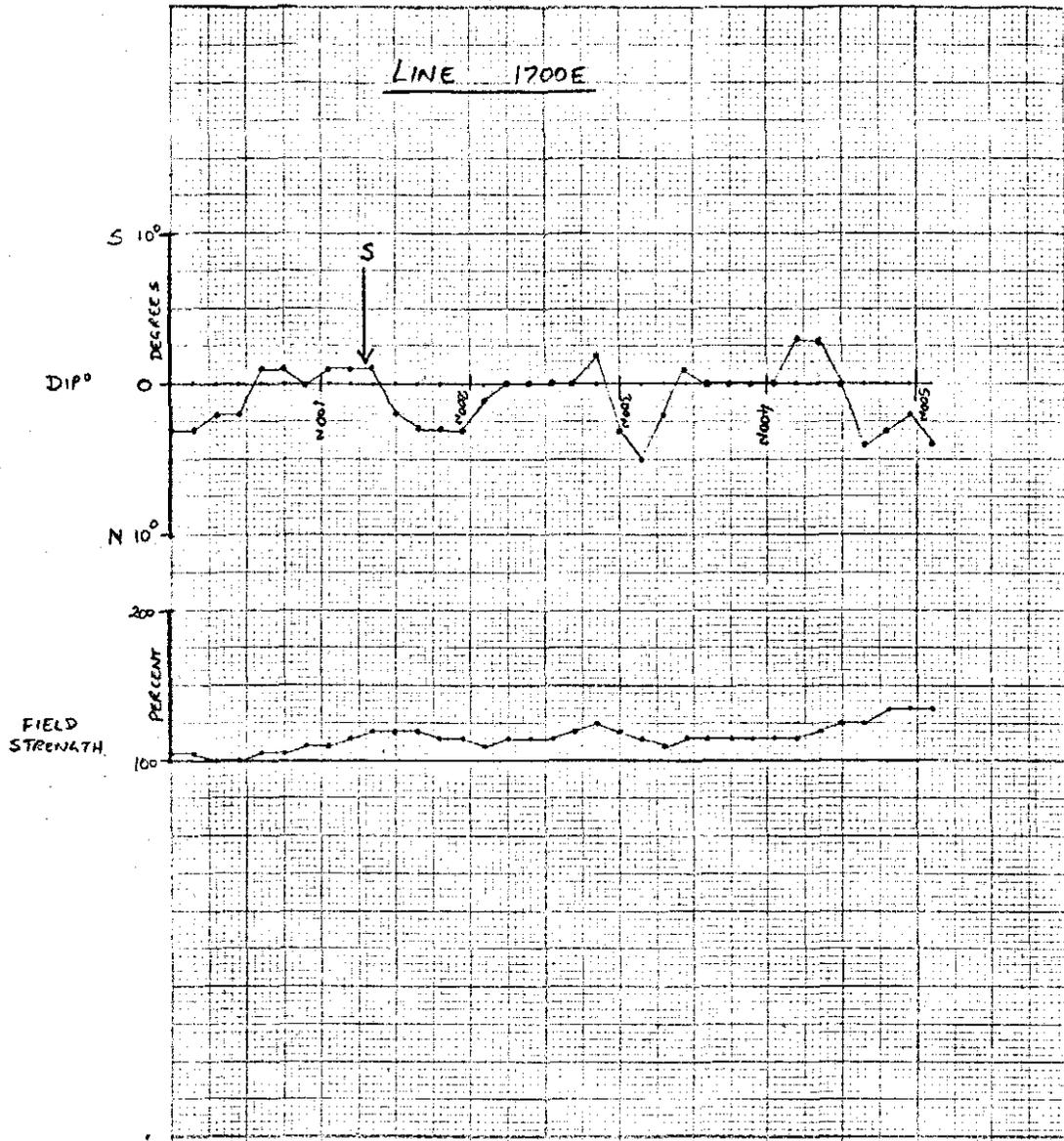
785124



123

MERTON HILL V.L.F. SURVEY

785125



12A

## V.L.F METER FIELD RECORDINGS

785126

Date: 28/10/1981

Operator: L. MARTIN

Grid Location: 1300E

Grid Station	DIP. °	FIELD STRENGTH	TIME	
<u>BASE STATION</u> 1400E/100N	1° N	100	14.10.	
30 N	0°	100	14.16	
60 N	2° S	100	14.21	
90 N	10° S	100	14.23	
120 N	15° S	100	14.25	
150 N	5° S	110	14.31	
180 N	5° S	130	14.34	
195 N	5° S	135	14.46	
210 N	2° S / 5° S	140	14.38/47	
225 N	3° S	140	14.44	
240 N	0° / 3° S	130 / 130	14.40 / 14.49	
245 N	0	140	14.51	
255 N	10° N	140	14.55	
270 N	30° N	140	14.57	
285 N	6° N	135	14.59	
300 N	9° N	145	15.02	
315 N	10° N	150	15.07	NEAR DDH MHI ON DRILL PAD
345 N	8° N	175	15.12	
360 N	5° N	185	15.15	
375 N	5° N	210	15.19	
390 N	3° N	200	15.21	
405 N	5° N	210	15.23	
420 N	9° N	200	15.26	
435 N	7° N	200	15.28	
450 N	5° N	185	15.31	5A 50F ROAD.

V.L.F METER FIELD RECORDINGS

785127

Date: 28/10/1981

Operator: L. MARTIN

Grid Location: 1400E.

Grid Station	DIP. °	FIELD STRENGTH	TIME	
450N	4° N	165	15.43	
435N	6° N	155	15.48	
420N	5° N	155	15.50	
405N	4° N	160	15.53	
390N	0	155	15.55	
375N	0	145	15.58	
360N	1° N	145	16.00	
345N	4° N	140	16.04	JUST NORTH OF DDH. MH. 2.
330N	5° N	130	16.09	
315N	6° N	130	16.11	
300N	6° N	135	16.14	
285N	6° N	135	16.16	
270N	7° N	145	16.18	
255N	3° N	145	16.22	
240N	4° S	150	16.25	
225N	11° S	135	16.28	
210N	10° S	120	16.31	
195N	11° S	120	16.35	
180N	8° S	110	16.37	
165N	8° S	105	16.40	
150N	7° S	100	16.42	
135N	5° S	95	16.44	
120N	5° S	100	16.46	
105N	5° S	95	16.48	
90N	5° S	95	16.49	
75N	0°	100	16.51	
60N	2° S	100	16.53	
45N	10°	100		



127

## V.L.F METER FIELD RECORDINGS

785129

Date: 29/10/1981

Operator: L. MARTIN

Grid Location: 1700E

Grid Station	DIP. °	FIELD STRENGTH	TIME	
BASE STATION:	2°N	100	13.25	
1400E/00N				
00N	3°N	105	13.31	
15N	3°N	105	13.33	
30N	2°N	100	13.36	
45N	2°N	100	13.37	
60N	1°S	105	13.39	
75N	1°S	105	13.41	
90N	0°	110	13.43	
105N	1°S	110	13.45	
120N	1°S	115	13.46	
135N	1°S	120	13.48	
150N	2°N	120	13.52	
165N	3°N	120	13.54	
180N	3°N	115	13.55	5 MN OF 180N IS A 2M LONG TRENCH
195N	3°N	115	13.58	
210N	1°N	110	13.59	
225N	0°	115	14.02	
240N	0°	115	14.07	
255N	0°	115	14.10	AT ROAD
270N	0°	120	14.12	
285N	2°S	125	14.15	
300N	3°N	120	14.18	
315N	5°N	115	14.22	
330N	2°N	110	14.26	
345N	1°S	115	14.29	
360N	0°	110	14.32	



129

V.L.F METER FIELD RECORDINGS

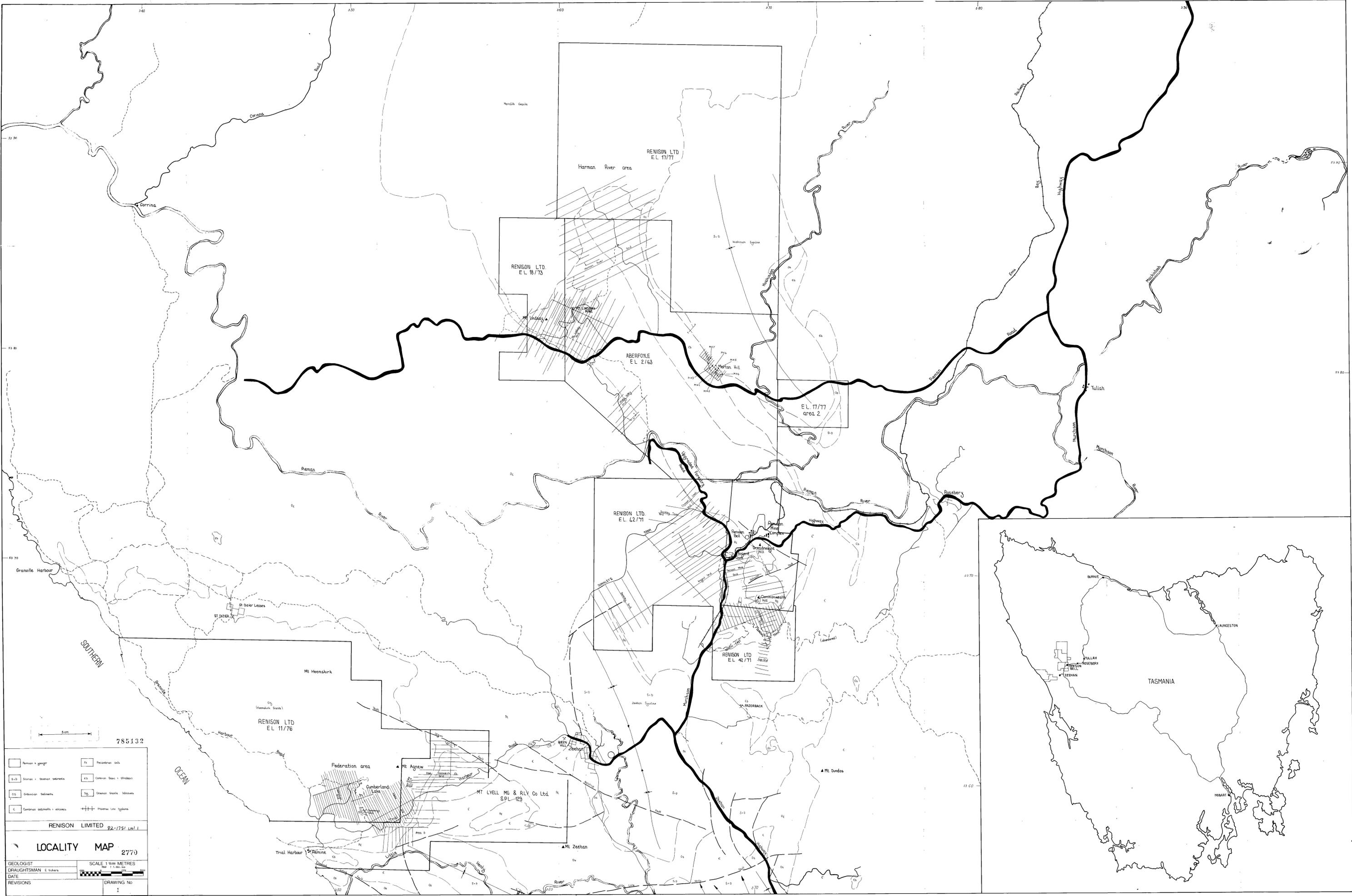
785131

Date: 29/10/1981

Operator: L. MARTIN.

Grid Location: 1800E.

Grid Station	DIP-°	FIELD STRENGTH	TIME	
510N	4° N	140	15.21	
495N	5° N	135	15.28	CREEK PARALLEL
480N	1° N	135	15.33	467-500N
465N	2° S	135	15.37	
450N	1° S	125	15.40	
435N	2° S	125	15.43	
420N	0°	120	15.45	
405N	0°	115	15.49	TOP OF HILL NEAR DIAMOND DRILL.
390N	1° S	115	15.50	
375N	5° S	115	15.52	
360N	1° S	110	15.55	
345N	0	110	15.56	
330N	3° N	105	15.58	
315N	5° N	110	15.59	
300N	10° N	120	16.02	
285N	6° N	120	16.05	
270N	4° N	120	16.08	
255N	3° N	120	16.10	TOP OF HILL 255 - 265N
240N	1° N	120	16.13	
225N	1° N	120	16.15	
210N	0	110	16.16	
195N	1° S	115	16.18	
180N	0	115	16.20	
165N	1° N	110	16.22	
150N	1° N	115	16.24	
135N	0	115	16.25	
120N	1° N	115	16.26	
105N	7° S	120	16.27	SEEP. CONTACT AS BREAK IN SLOPE AT 110N



785132

□ Permian + gneiss	□ Pz Precambrian units
□ S+D Silurian - Devonian sediments	□ C3 Cambrian basal + ultrabasic
□ O3 Ordovician sediments	□ O2 Ordovician granites + intrusions
□ C Cambrian sediments + intrusions	+++ Pressure Line Systems

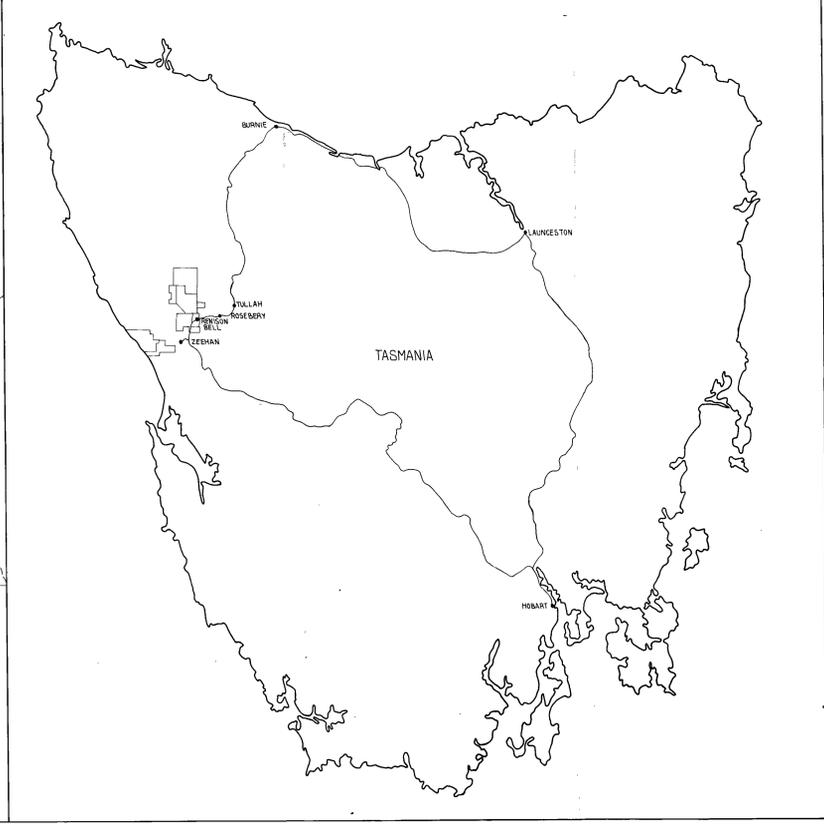
RENON LIMITED 92-1751/1-1

**LOCALITY MAP 2770**

GEOLOGIST: E. HICKS  
 DRAUGHTSMAN: E. HICKS  
 DATE: \_\_\_\_\_  
 REVISIONS: \_\_\_\_\_

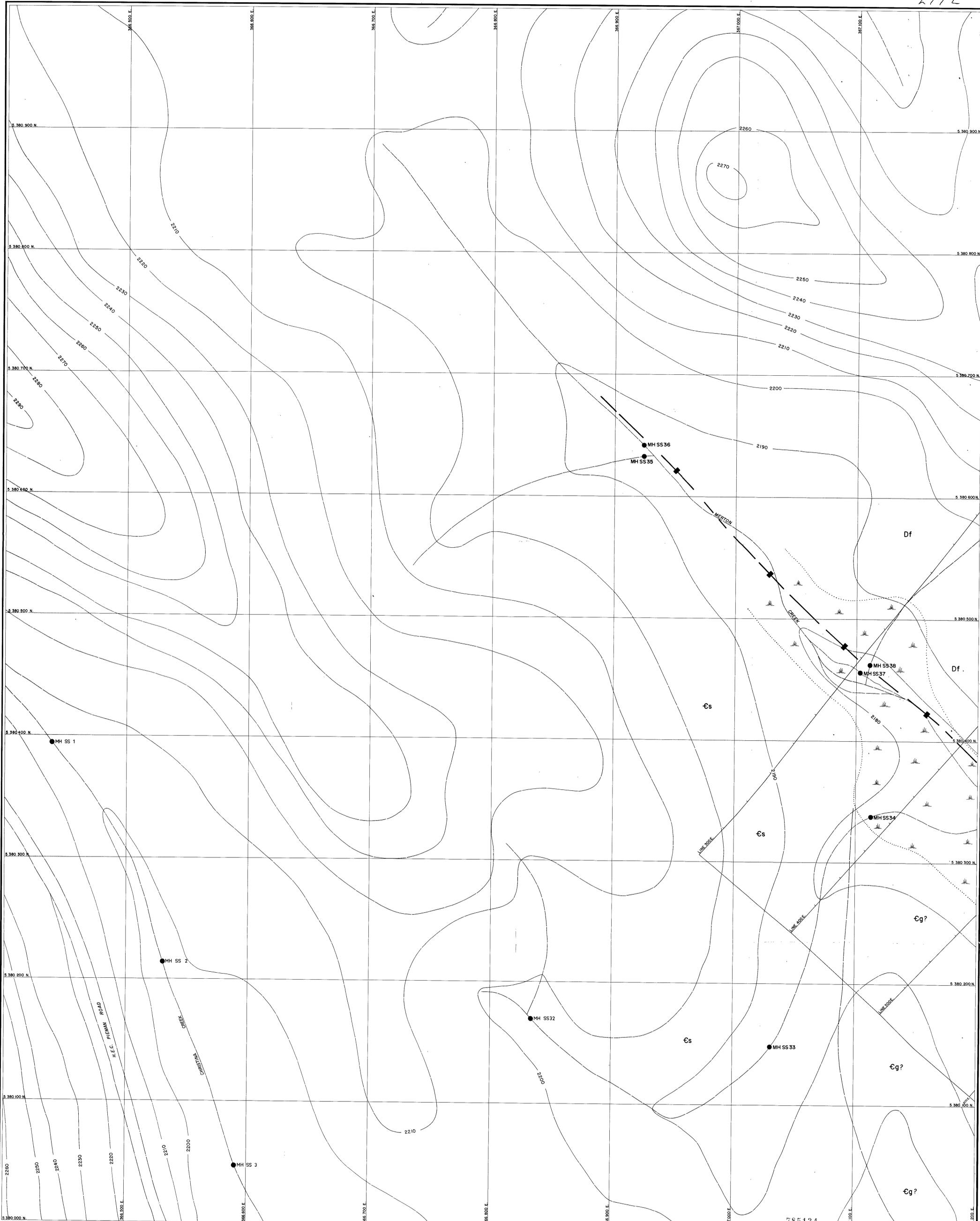
SCALE 1:50,000 METRES  
 1:50,000

DRAWING No. 1



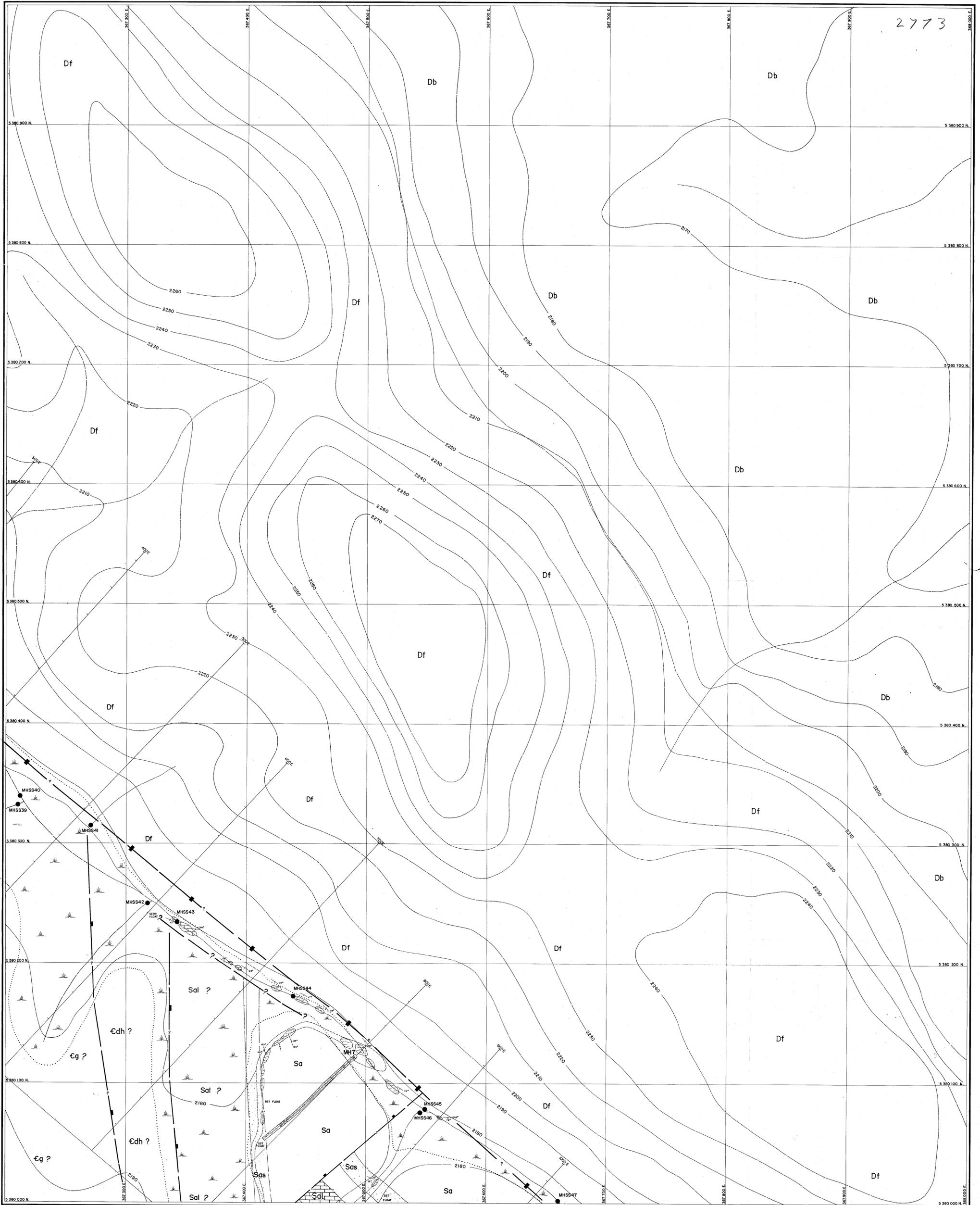
2770





<b>SEDIMENTARY ROCKS</b> <b>Quaternary</b> Qca Recent Alluvium <b>Tertiary</b> Tg Tertiary Gravels		<b>Devonian</b> Db Bell Shale <b>Silurian</b> Sca Under Amber Shale Sil Siliceous Sandstone member Ssl Limestone member Sc Cratty Quartzite		<b>Ordovician</b> Ogl Gordon Limestone Om? Maino P Sandstone		<b>Cambrian</b> Cca Upper Dundas Group Ccb Silurian Formation Ccc Upper Cambrian Cc Middle Cambrian Cc Crimmon Creek Formation		<b>Pre-Cambrian</b> p-co Conglomerates p-cf Black, fossiliferous p-cs Pyritic Shale Cc Crimmon Creek Formation		<b>IGNEOUS ROCKS</b> Tb Tertiary Basalt Dm Devonian Wreath Gm Granite Dm Devonian Acid Intrusives Ea Upper Cambrian Cg Cambrian Basal or Gabbroic Rocks		<b>SYMBOLS</b> Dip and Strike of Bedding (Facing shown) Dip and Strike of Cleavage, undifferentiated Axial Plane of small anticline Anticlinal, Synclinal Axis Observed outcrop Fossil locality Interpreted Boundary Fault, approximate position Compositional layering in ultra-mafic Cleavage, parting, shear		RENISON LIMITED 82-1751 101/1 <b>E.L.2/63 - MERTON HILL AREA</b> <b>INTERPRETATIVE AND FACTUAL</b> <b>GEOLOGY PLAN 52</b> GEOLOGIST : L.A. MARTIN DRAUGHTSMAN : T.G.D.S. DATE : JANUARY 1982 REVISIONS : SCALE: 1:1000 METRES 20 10 0 10 20 30 40 DRAWING No. 2772 3a	
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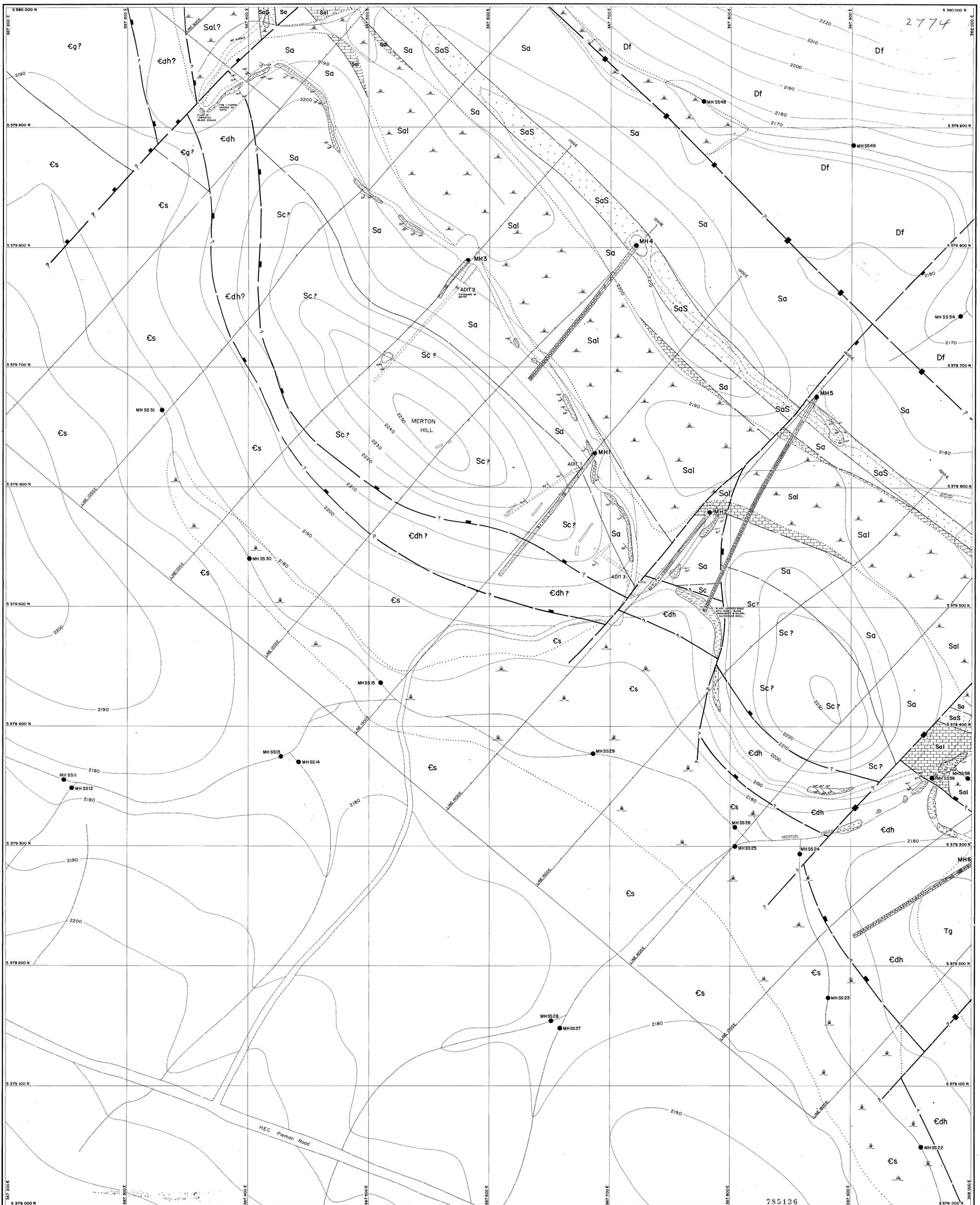
NOTE: For Diamond Drill Hole Geology, refer to sections



<b>SEDIMENTARY ROCKS</b> <b>Quaternary</b> Recent Alluvium (Qa) Tertiary Gravels (Tg)		<b>Devonian</b> Bell Shale (Db) Florence Quartzite (Dt)		<b>Silurian</b> Undiff. Amber Shale (Sa) Siliceous Sandstone member (Sas) Limestone member (Sal) Cratty Quartzite (Sc)		<b>Ordovician</b> Gordon Limestone (Og) Maino? Sandstone (Om)		<b>Cambrian</b> Upper Dundas Group (Cd) Conglomerates (Cc) Black Pebbly Pyritic Shale (Cp) Middle Cambrian (Cm) Crimson Creek Formation (Cf)		<b>Pre-Cambrian</b> Oolite Quartzite and Shale (pO)		<b>IGNEOUS ROCKS</b> Tertiary Basalt (Tb) Devonian Mafic Granite (Dm) Devonian? Acid Intrusives (Di) Upper Cambrian Saponitites and Meta-ultramafic complexes (Cs) Cambrian Base of Gabbroic Rocks (Cg)		<b>SYMBOLS</b> Dip and Strike of Bedding (Facing known) Dip and Strike of Bedding (Facing unknown) Dip and Strike of Cleavage, undifferentiated. Axial Plane of small anticline. Anticline, Synclinal Axis.		Observed outcrop Fossil locality Interpreted Boundary Fault, approximate position Compositional layering in Ultramafic Cleavage, panning, shear		RENISON LIMITED 22-1751 VbJ 2 <b>E.L.2/63 - MERTON HILL AREA</b> <b>INTERPRETATIVE AND FACTUAL</b> <b>GEOLOGY PLAN 53 788135</b> GEOLOGIST: L.A. MARTIN DRAUGHTSMAN: T.G.S. DATE: JANUARY 1982 SCALE: 1:1000 METRES REVISIONS:		Drawing No. 3b 2773	
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NOTE: For Diamond Drill Hole Geology, refer to sections.

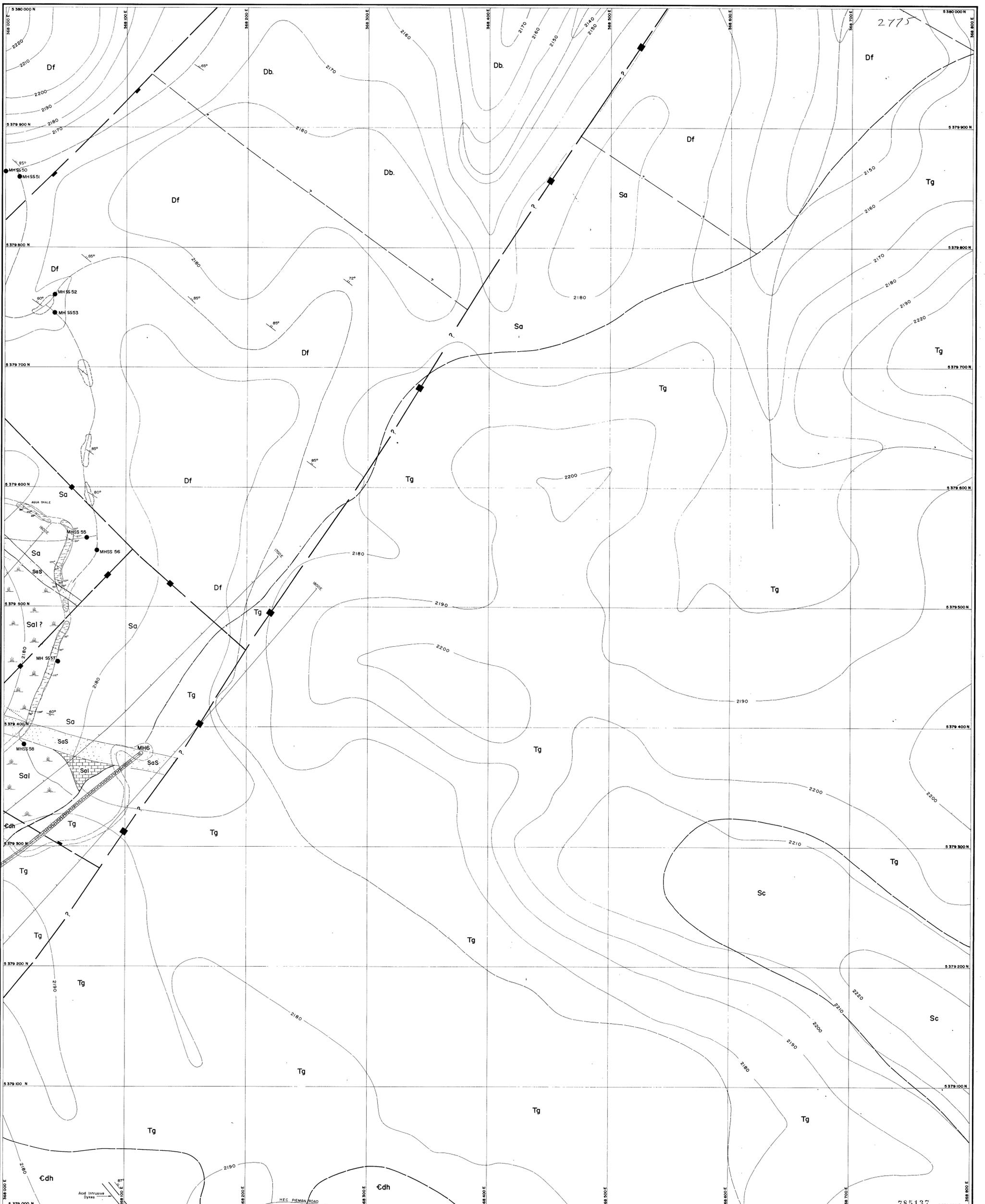
2774



785136

<b>SEDIMENTARY ROCKS</b> <b>Quaternary</b> [Qa] Recent Alluvium <b>Tertiary</b> [Tg] Tertiary Gravels		<b>Devonian</b> [Db] Bell Shale [Df] Florence Quartzite		<b>Silurian</b> [Ss] Silica Sandstone member [Sl] Limestone member [Sc] Crofty Quartzite		<b>Ordovician</b> [Ol] Gordon Limestone [Om] Momo ? Sandstone		<b>Cambrian</b> [C4] Upper Dundas Group Strathgordon Formation [C3] Black Fossiliferous Pyritic Shale [C2] Middle Cambrian [C1] Crimon Creek Formation		<b>Pre-Cambrian</b> [Pc] Gough Quartzite and Schist		<b>IGNEOUS ROCKS</b> [Tb] Tertiary Basalt [Dm] Devonian Meredith Granite [Di] Devonian ? Acid Intrusives [Cs] Upper Cambrian Serpentinized and Meta-ultramafic congl. lenses [Cg] Cambrian Basal or Gabbroic Rocks		<b>SYMBOLS</b> [Symbol] Dip and Strike of Bedding (Facing shown) [Symbol] Dip and Strike of Bedding (Facing unknown) [Symbol] Dip and Strike of Composition banding [Symbol] Dip and Strike of Cleavage, undifferentiated [Symbol] Axial Plane of small anticline [Symbol] Anticline, Synclinal Axis [Symbol] Observed outcrop [Symbol] Fossil locality [Symbol] Interpreted Boundary [Symbol] Fault, approximate position [Symbol] Compositional layering in ultra-mafic [Symbol] Cleavage, parting, shear		RENISON LIMITED 82-1751-1011 <b>E.L.2/63 - MERTON HILL AREA</b> <b>INTERPRETATIVE AND FACTUAL</b> <b>GEOLOGY PLAN 66</b> GEOLOGIST : L.A. MARTIN DRAUGHTSMAN : T.G.D.S. DATE : March 1982 REVISIONS : SCALE: 1:10000 METRES DRAWING No. 3c 2774	
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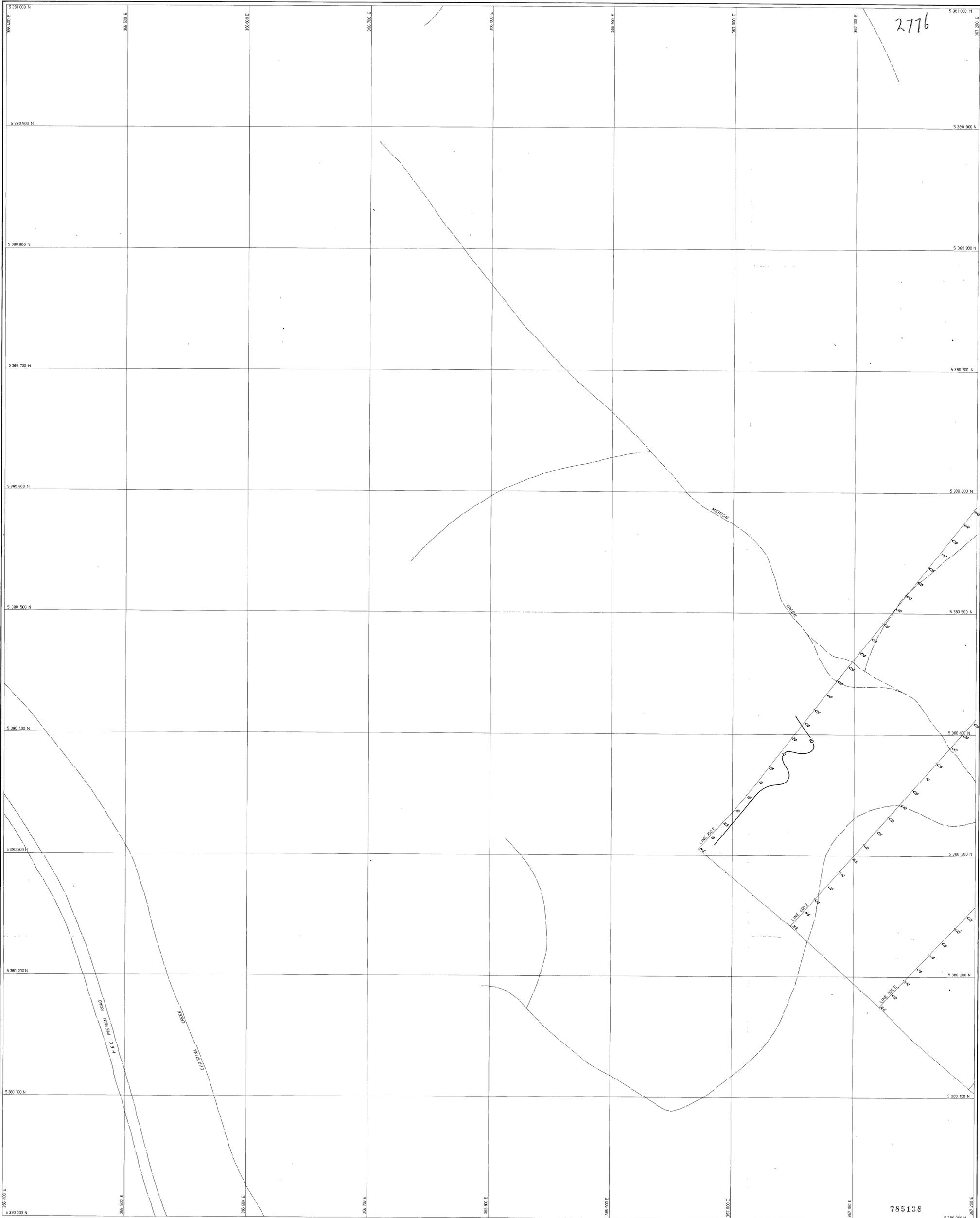
NOTE: For Diamond Drill Hole Geology, refer to sections.



<b>SEDIMENTARY ROCKS</b> <b>Quaternary</b> Recent Alluvium (Qa) Tertiary Gravels (Tg)		<b>Devonian</b> Belt Shale (Db) Florence Quartzite (Df)		<b>Silurian</b> Limestone member (Ss) Crofty Quartzite (Sc)		<b>Ordeevian</b> Gordon Limestone (Og) Maino Sandstone (Om)		<b>Cambrian</b> Upper Dundas Group (Ud) Phyllospongia (Ph) Upper Cambrian (Uc) Middle Cambrian (Mc) Crinan Creek Formation (Cc)		<b>Pre-Cambrian</b> Ortho Quartzite and Schist (Pc)		<b>IGNEOUS ROCKS</b> Tertiary Basalt (Tb) Devonian Meredith Granite (Dm) Devonian Acid Intrusives (Di) Upper Cambrian Serpentinites and Meta-ultra-mafic complexes (Cs) Cambrian Basalt or Gabbroic Rocks (Cg)		<b>SYMBOLS</b> Dip and Strike of Bedding (Facing known) Dip and Strike of Bedding (Facing unknown) Dip and Strike of Composition banding Dip and Strike of Cleavage, undifferentiated Axial Plane of small anticline Anticline, Synclinal Axis Observed outcrop Fossil locality Interpreted Boundary Fault, approximate position Compositional layering in ultra-mafic Cleavage, parting, shear Scale: 5 cm		RENISON LIMITED 22-175/161 <b>E.L.2/63 - MERTON HILL AREA</b> <b>INTERPRETATIVE AND FACTUAL</b> <b>GEOLOGY PLAN 67</b> GEOLOGIST: L.A. MARTIN DRAUGHTSMAN: T.G.D.S. DATE: March 1982 REVISIONS: SCALE: 1:1000 METRES DRAWING No. 2775 3d	
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NOTE: For Diamond Drill Hole Geology, refer to sections

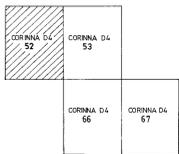
2776



785138

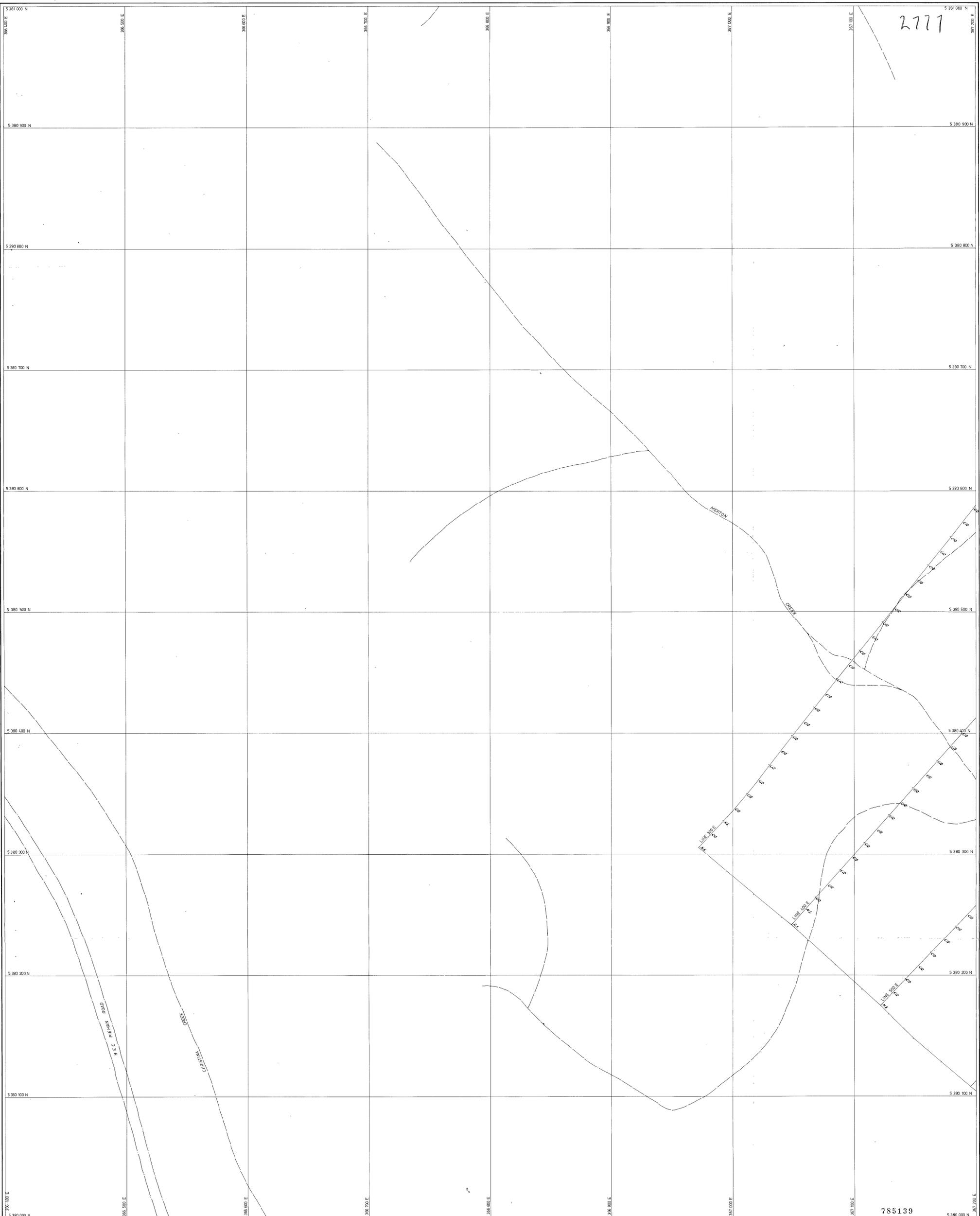
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10

- KEY
- Grid lines and page
  - HEC survey points
  - Add and dump.



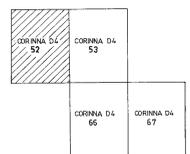
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DATE		NOV 1988	
DRAUGHTSMAN		TGD	
GEOLOGIST		L MARTIN	
SCALE		1:1000 METRES	
SOIL GEOCHEMISTRY - Sn			
MERTON HILL GRID			
E.L. 2/63 MT. LINDSAY AREA			
REVISIONS		277C	DRAWING No. 4a 1
GEOLOGIST		L MARTIN	
DRAUGHTSMAN		TGD	
DATE		NOV 1988	
SCALE		1:1000 METRES	
SOIL GEOCHEMISTRY - Sn			
MERTON HILL GRID			
E.L. 2/63 MT. LINDSAY AREA			
REVISIONS		277C	DRAWING No. 4a 1

2777



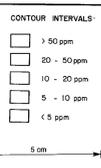
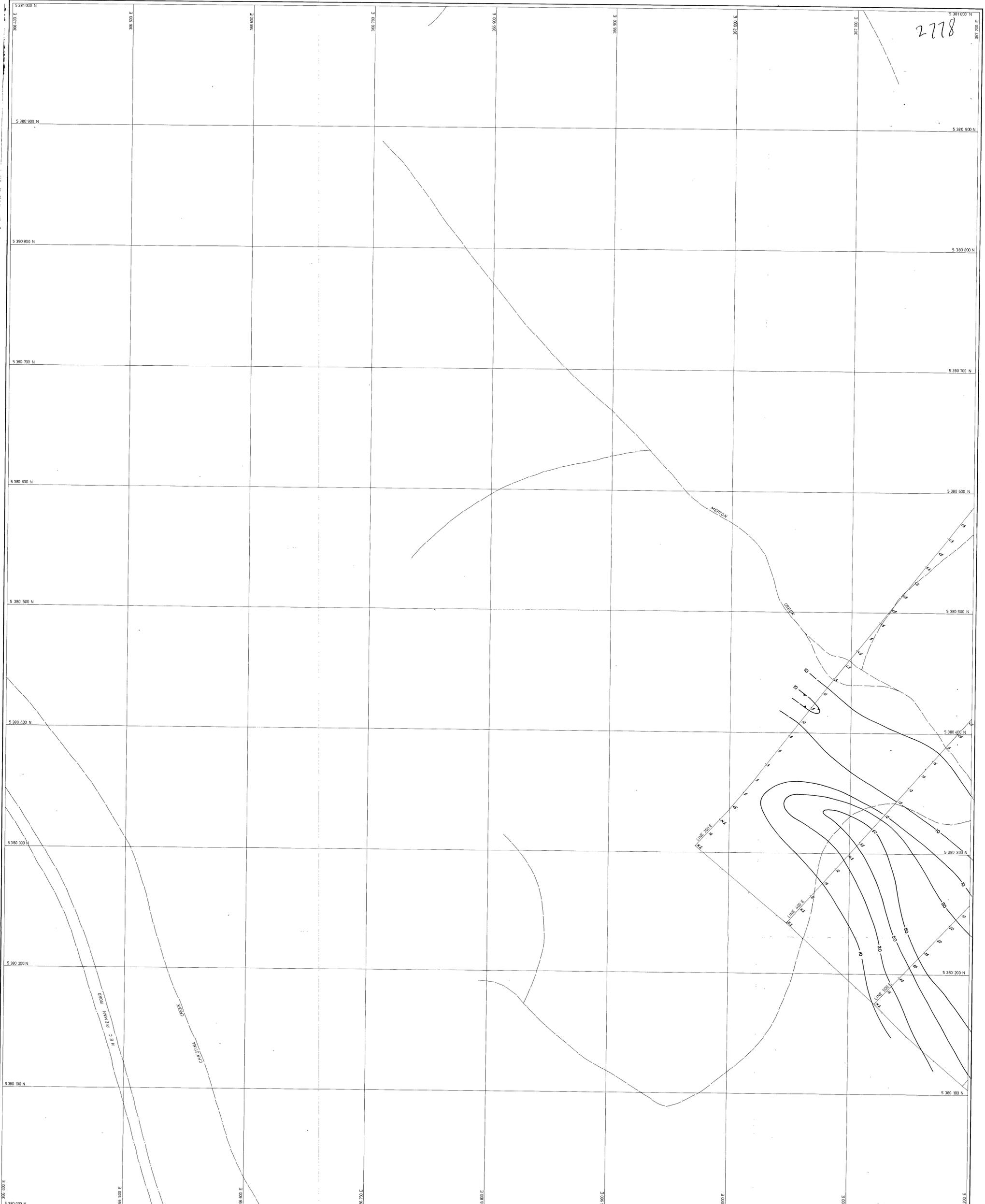
785139

- KEY**
- Grid lines and pegs
  - HEC survey points
  - Adf and dump



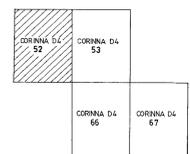
RENISON LIMITED 82-725/4611	
E.L. 2/63 MT. LINDSAY AREA MERTON HILL GRID	
SOIL GEOCHEMISTRY - A6	
GEOLOGIST L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN T.G.D.S.	
DATE DEC. 1981	
REVISIONS	DRAWING No 2777 4a 2

2778



KEY

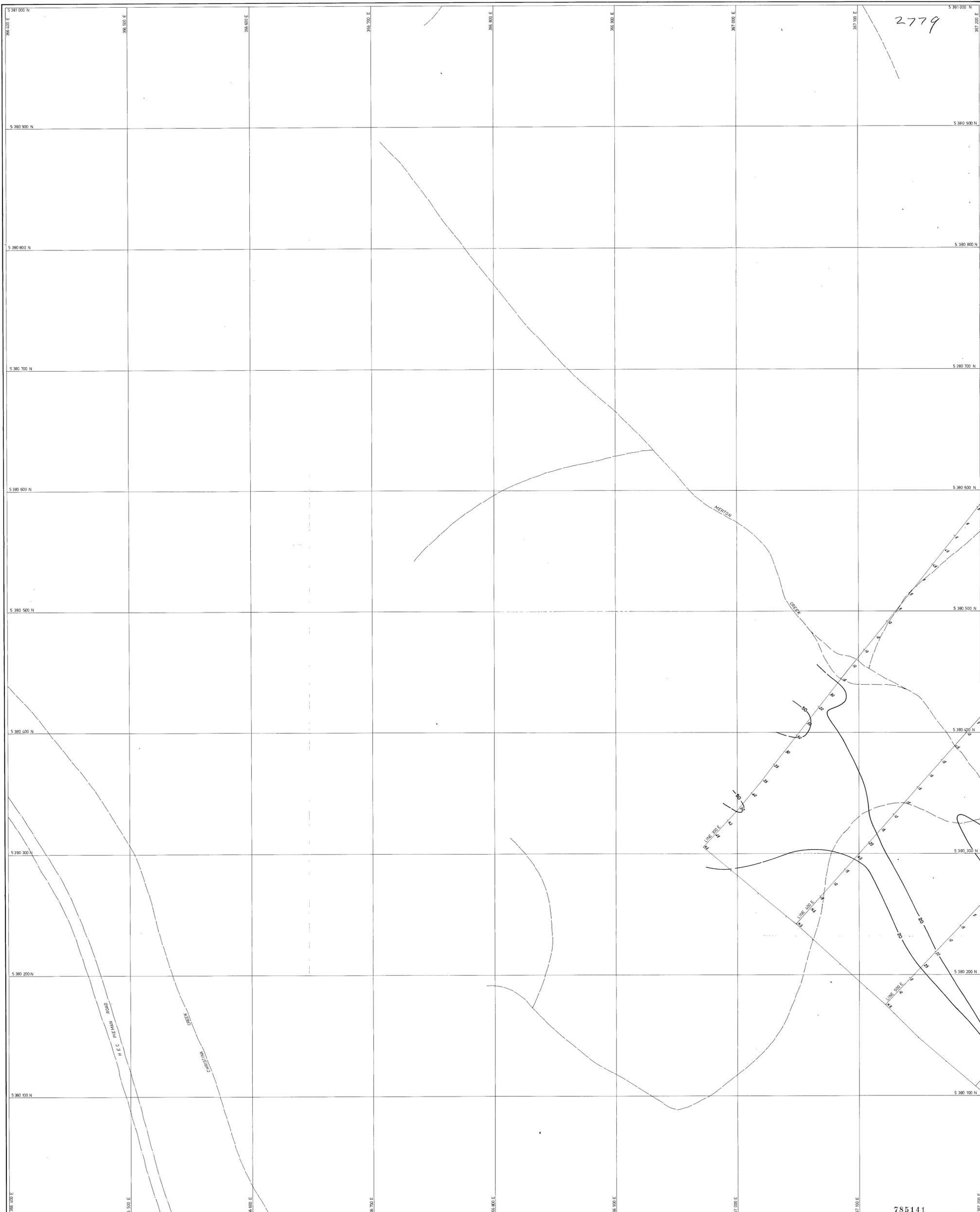
- Gold lines and pegs
- H.E.C. survey points
- Adit and dump



785140

REVISIONS	
DRAWING No. 4a 3	
DATE DEC 1981	
DRAUGHTSMAN T.G.B.S.	
GEOLOGIST L. MARTIN	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
SOIL GEOCHEMISTRY - Cu	
SCALE 1:1000 METRES	
82-1751 (6/1)	
RENSON LIMITED	

2779



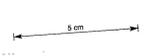
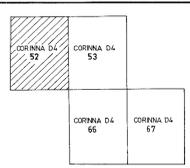
785141

CONTOUR INTERVALS.

[Symbol]	> 50 ppm
[Symbol]	20 - 50 ppm
[Symbol]	< 20 ppm

KEY.

[Symbol]	Grid lines and page
[Symbol]	H.E.C. survey points
[Symbol]	Adit and dump

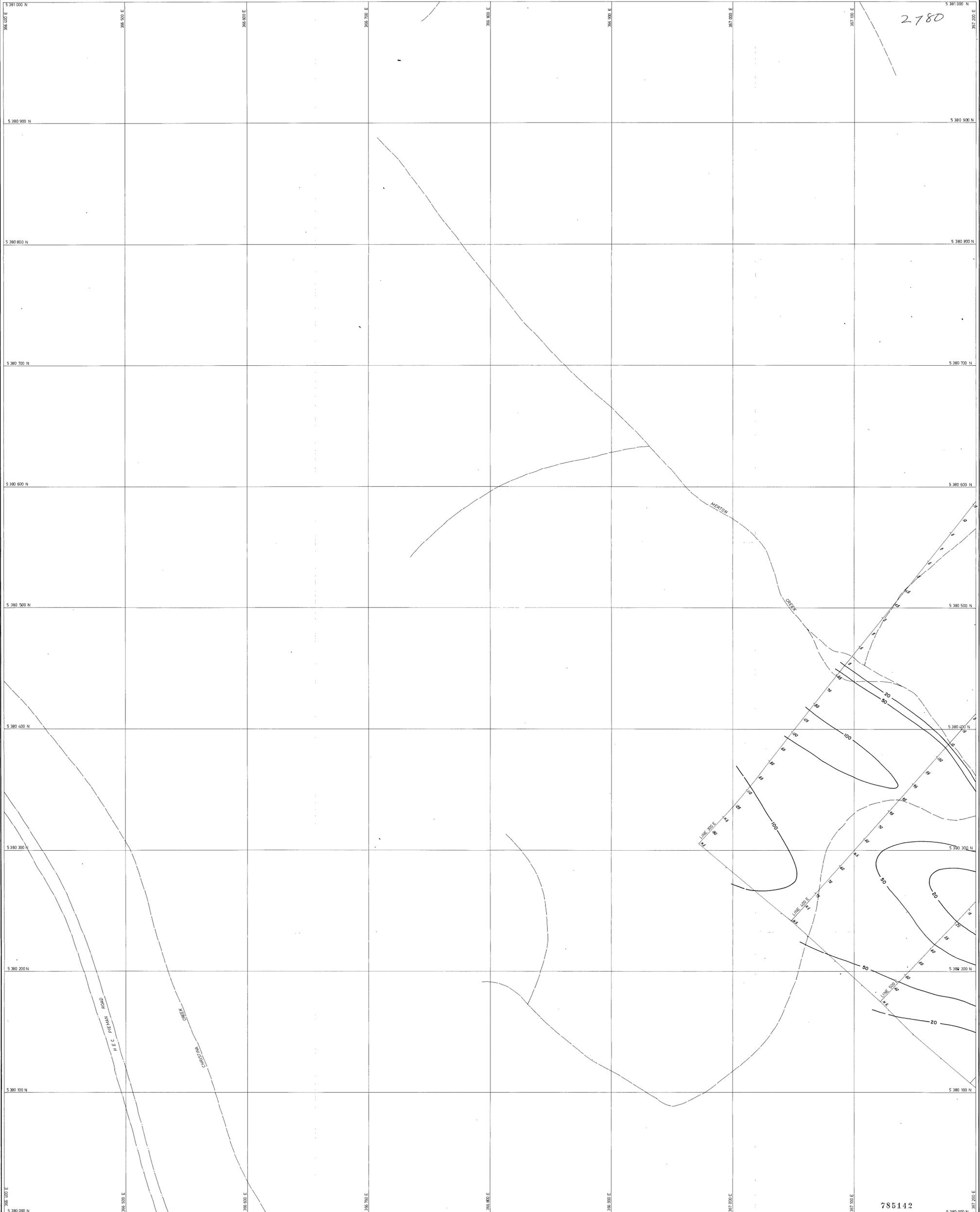


RENISON LIMITED 82-1751 16/11

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
SOIL GEOCHEMISTRY - Pb

GEOLOGIST	L. MARTIN	SCALE - 1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	[Scale bar]
DATE	DEC. 1981	
REVISIONS		DRAWING NO.
	2779	4a 4

2780



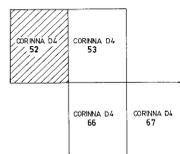
785142

CONTOUR INTERVALS

□	≥200ppm
□	100 - 200ppm
□	50 - 100ppm
□	20 - 50 ppm
□	<20ppm

KEY

—	Grid lines and pegs
•	HEC survey points
—	Add and dump

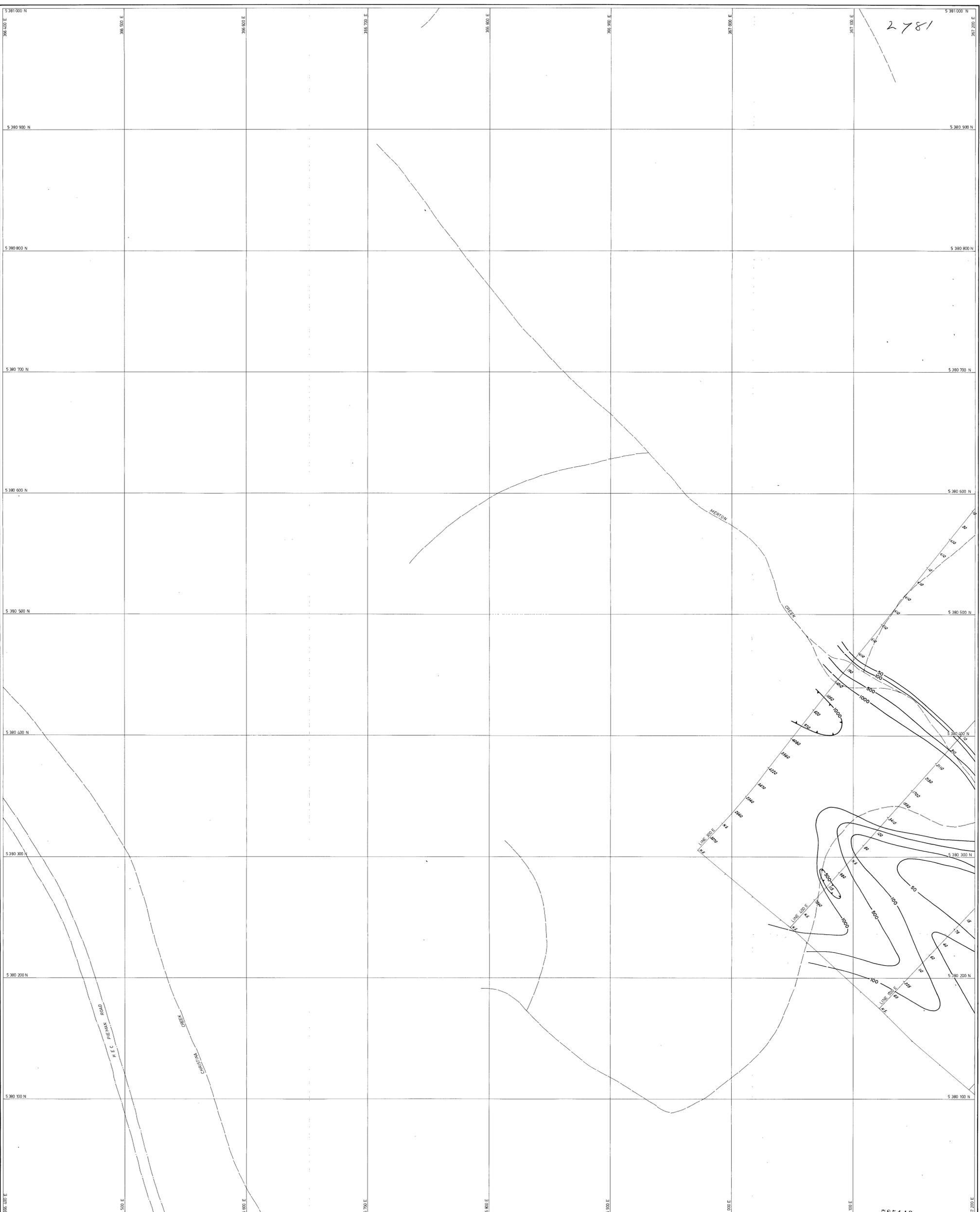


RENISON LIMITED 2780

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
SOIL GEOCHEMISTRY - Zn

GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	
DATE	DEC 1981	
REVISIONS		
	2780	DRAWING No. 4a 5

2781



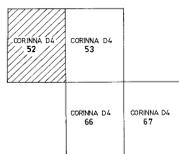
785143

CONTOUR INTERVALS

□	> 1000 ppm
□	500 - 1000 ppm
□	100 - 500 ppm
□	50 - 100 ppm
□	< 50 ppm

KEY

—	Grid lines and page
—	HEC survey points
—	Adit and dump



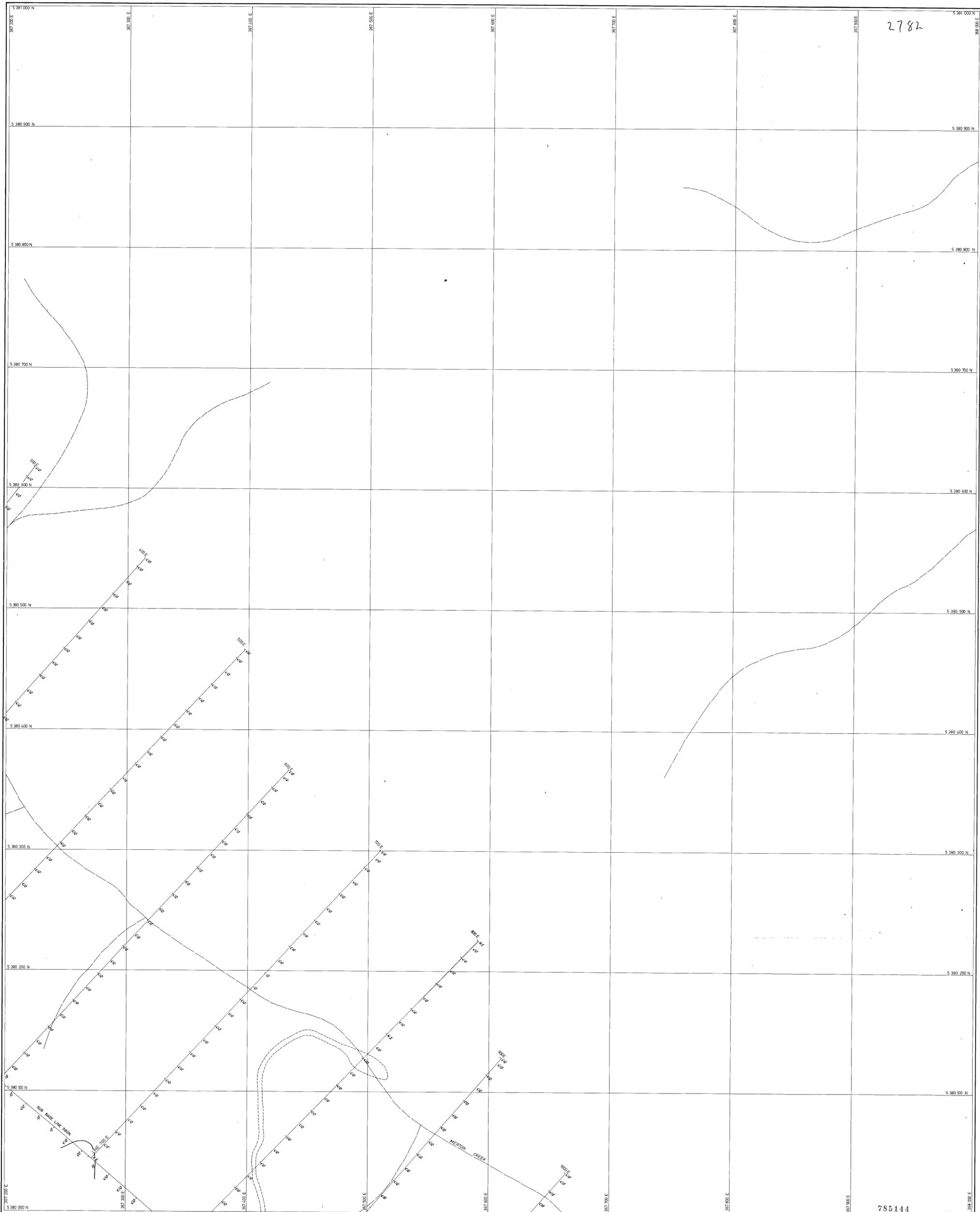
RENISON LIMITED 82-1251 10/1

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID

**SOIL GEOCHEMISTRY - Ni**

GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	
DATE	NOV 1988	
REVISIONS		DRAWING NO.
		4a 6

2782

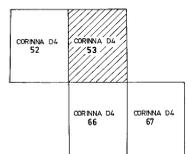


CONTOUR INTERVAL:  
□ 10

KEY:

- Grid lines and pegs
- HEC survey points
- Adit and dump

5 cm



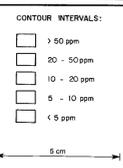
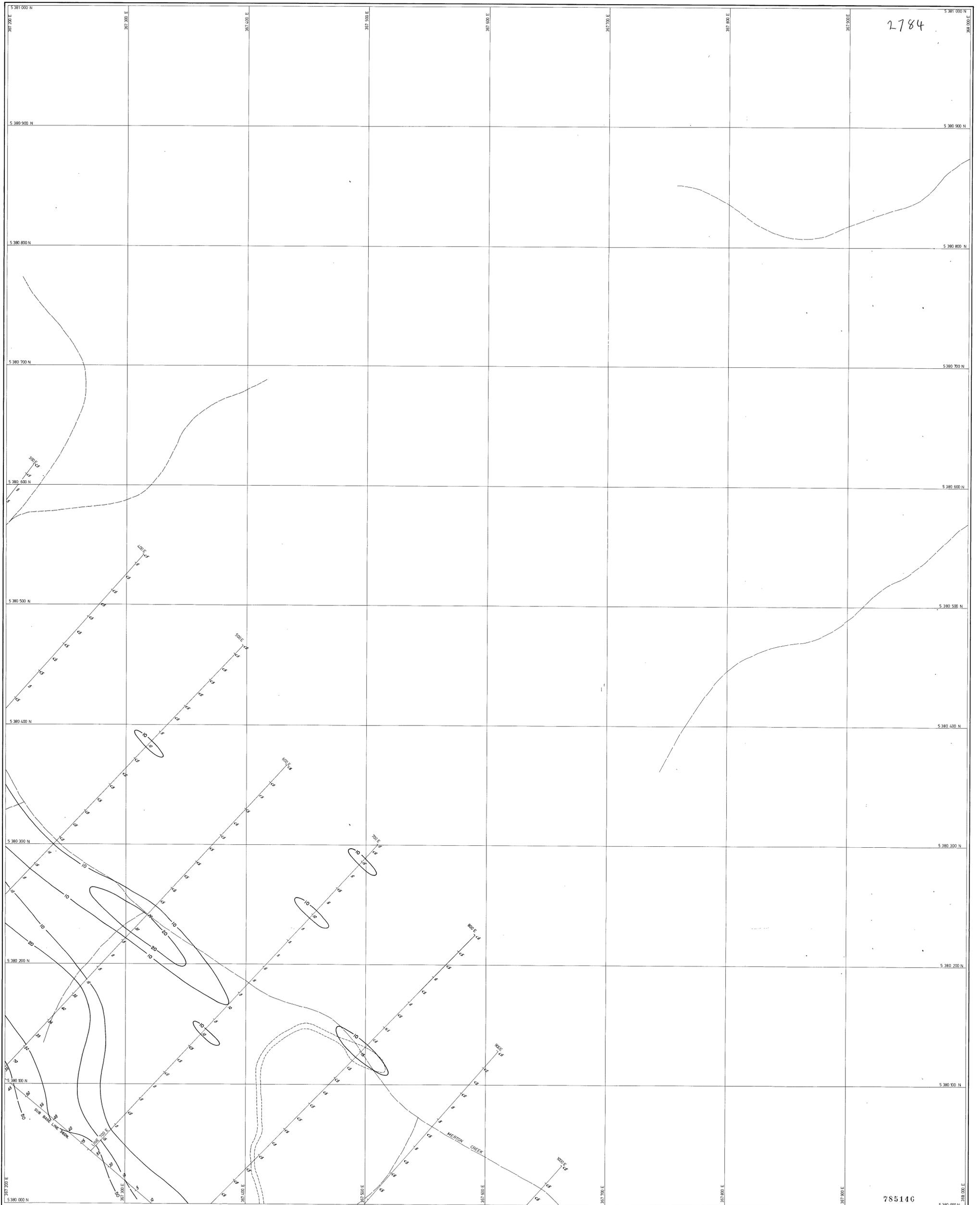
785144

RENISON LIMITED 82-175110/1	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
SOIL GEOCHEMISTRY - Sn	
GEOLOGIST	L. MARTIN
DRAUGHTSMAN	T.G.D.S.
DATE	DEC 1981
REVISIONS	
SCALE - 1:1000 METRES	
DRAWING No.	4b 1

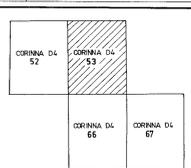
2782



2784



- KEY:
- Grid lines and pegs
  - HEC survey points.
  - Add and dump



RENISON LIMITED 82-1751 1011

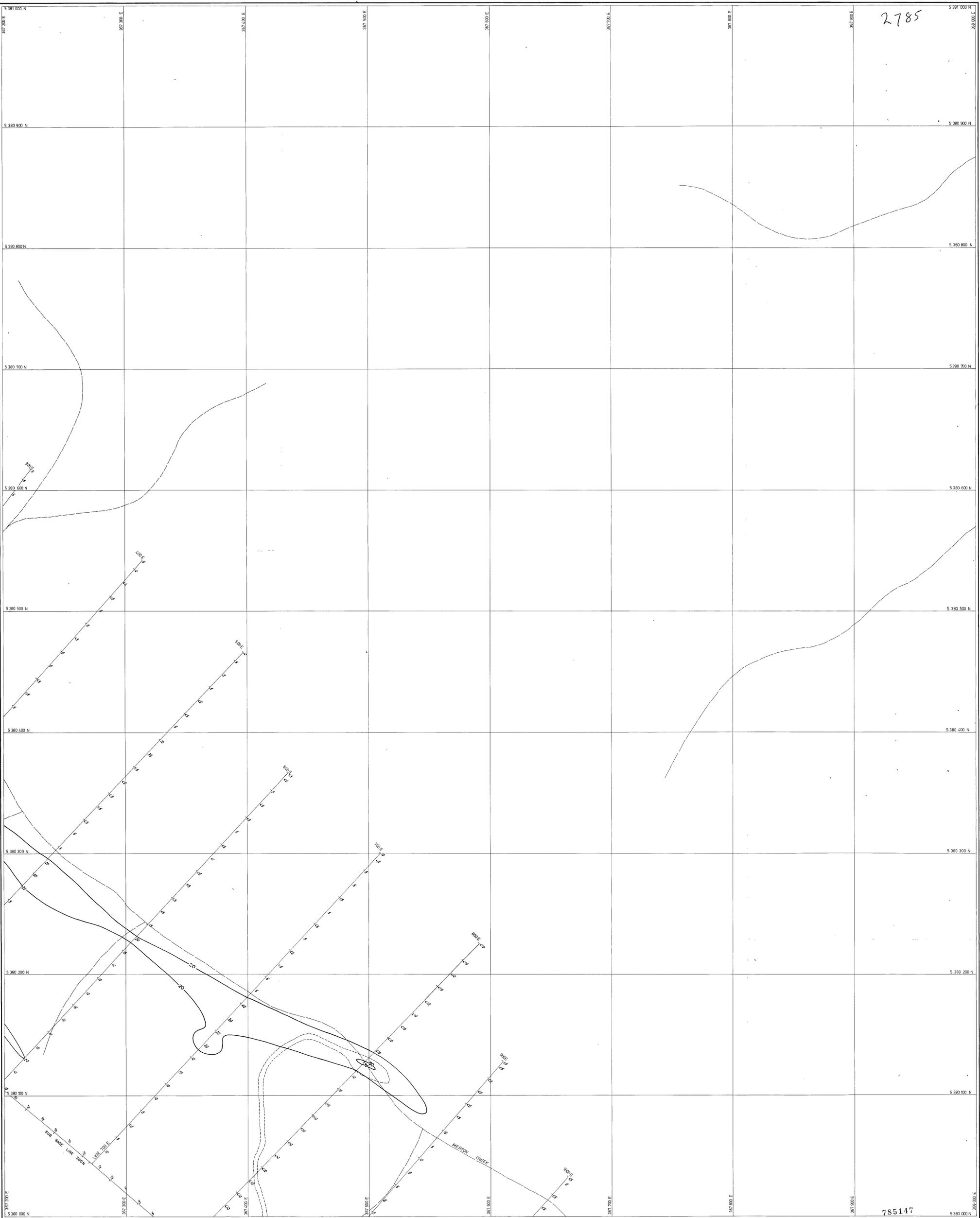
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
SOIL GEOCHEMISTRY - Cu

GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	
DATE	DEC 1981	
REVISIONS		

DRAWING No 4b3

785140

2785



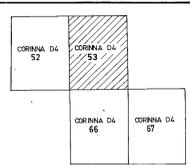
CONTOUR INTERVALS

- > 50 ppm
- 20 - 50 ppm
- < 20 ppm

KEY

- Grid lines and pegs
- HEC survey points
- Adit and dump

0 cm

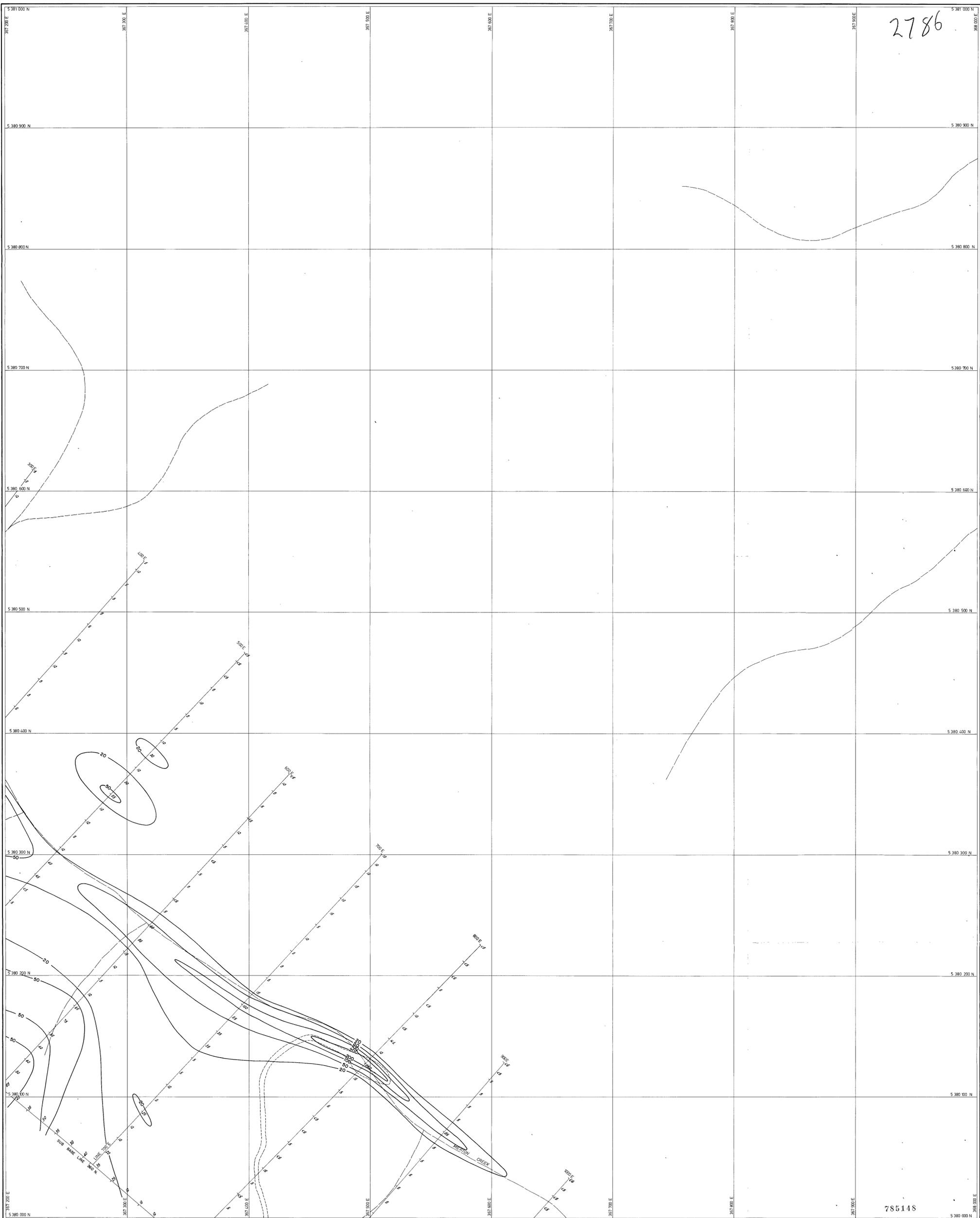


RENISON LIMITED 82-1751 1611  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 SOIL GEOCHEMISTRY - Pb

GEOLOGIST	L. MARTIN	SCALE	1:1000 METRES
DRAUGHTSMAN	T.G.D.S.		
DATE	DEC. 1981		
REVISIONS		DRAWING No.	4b 4

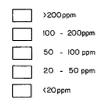
785117

2786



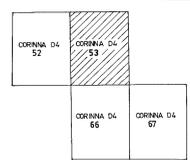
785148

CONTOUR INTERVALS:



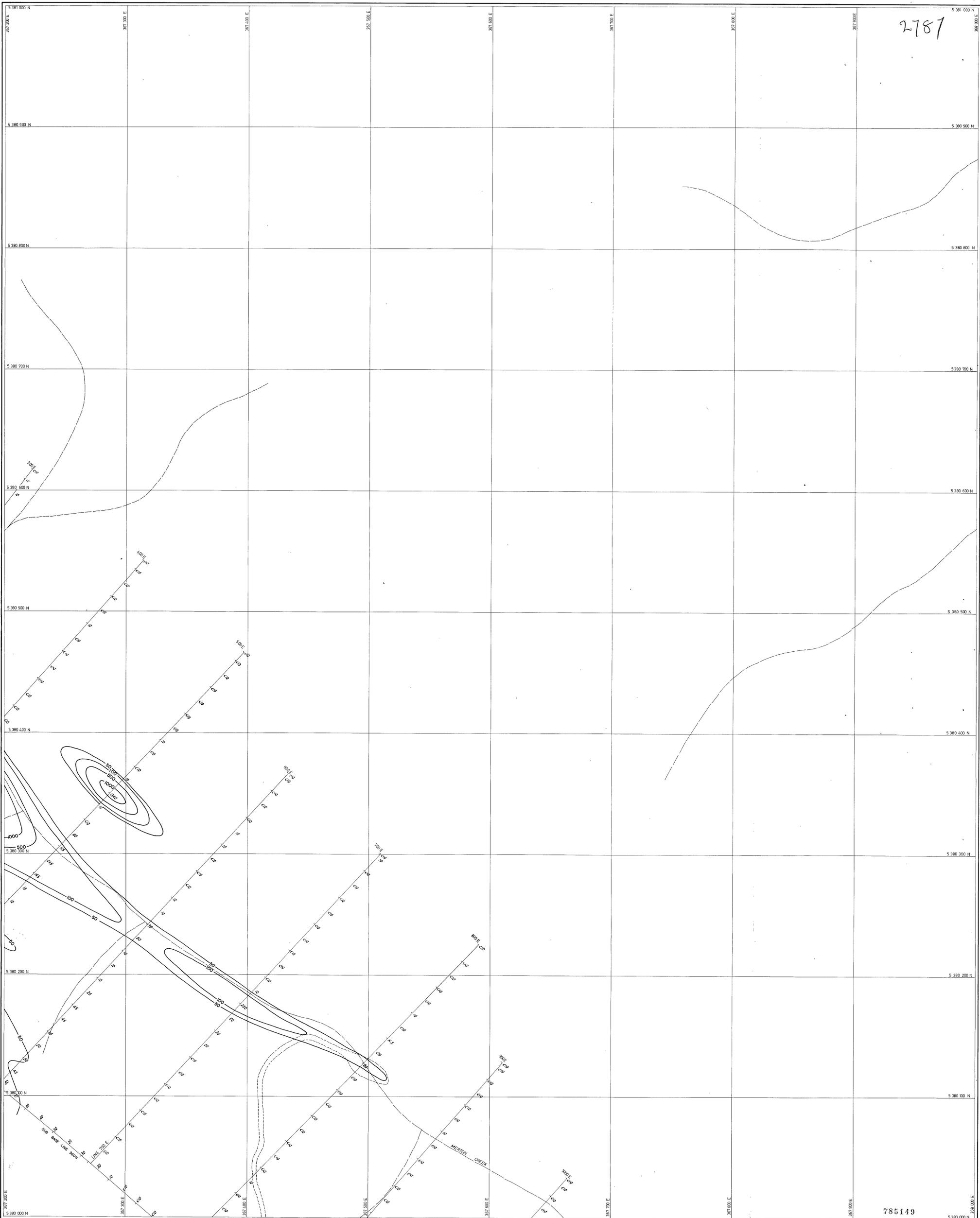
KEY:

- Grid lines and page
- HEC survey points
- Adit and dump



RENISON LIMITED		82-175146/1
E.L. 2/63 MT. LINDSAY AREA		
MERTON HILL GRID		
SOIL GEOCHEMISTRY - Zn		
GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T & S	0 10 20 30
DATE	DEC 1991	
REVISIONS		DRAWING No.
	2786	4b 5

2787

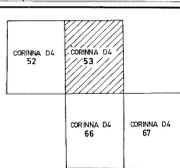


CONTOUR INTERVALS

- > 1000 ppm
- 500 - 1000 ppm
- 100 - 500 ppm
- 50 - 100 ppm
- < 50 ppm

KEY

- Grid lines and pegs
- HEC survey points
- Adit and dump

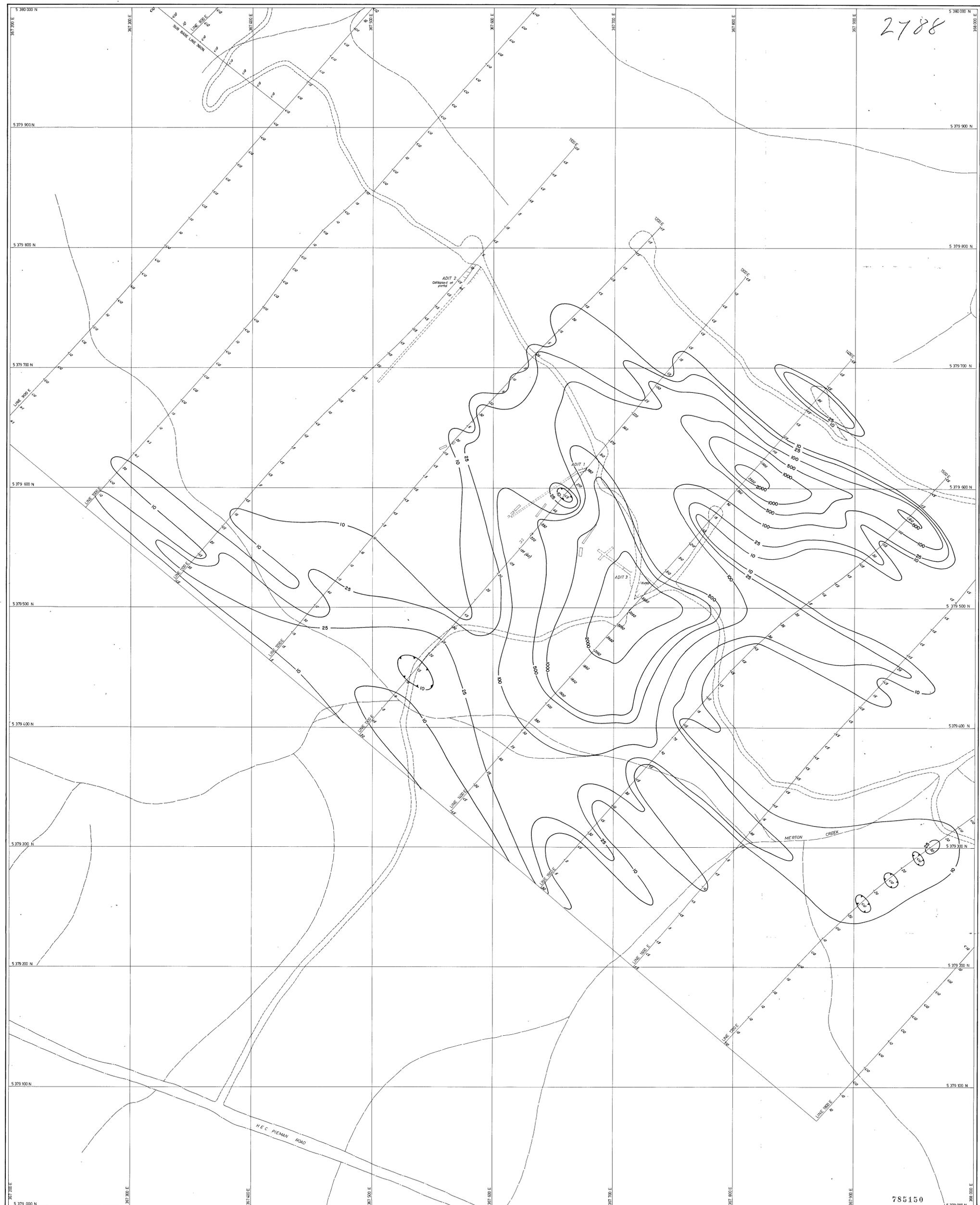


785149

REVISIONS		REVISIONS	
GEOLOGIST : L. MARTIN		SCALE: 1:1000 METRES	
DRAUGHTSMAN : T.G.S.		DATE : DEC. 1991	
DRAWING NO. 4b6		DRAWING NO. 4b6	

RENISON LIMITED 82-1751 Vol 1  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 SOIL GEOCHEMISTRY - Ni

2788



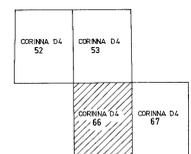
CONTOUR INTERVALS

□	> 2000 ppm
□	1000 - 2000 ppm
□	500 - 1000 ppm
□	100 - 500 ppm
□	25 - 100 ppm
□	10 - 25 ppm
□	< 10 ppm

KEY

- Grid lines and page
- H.E.C. survey points
- Adit and dump

5 cm



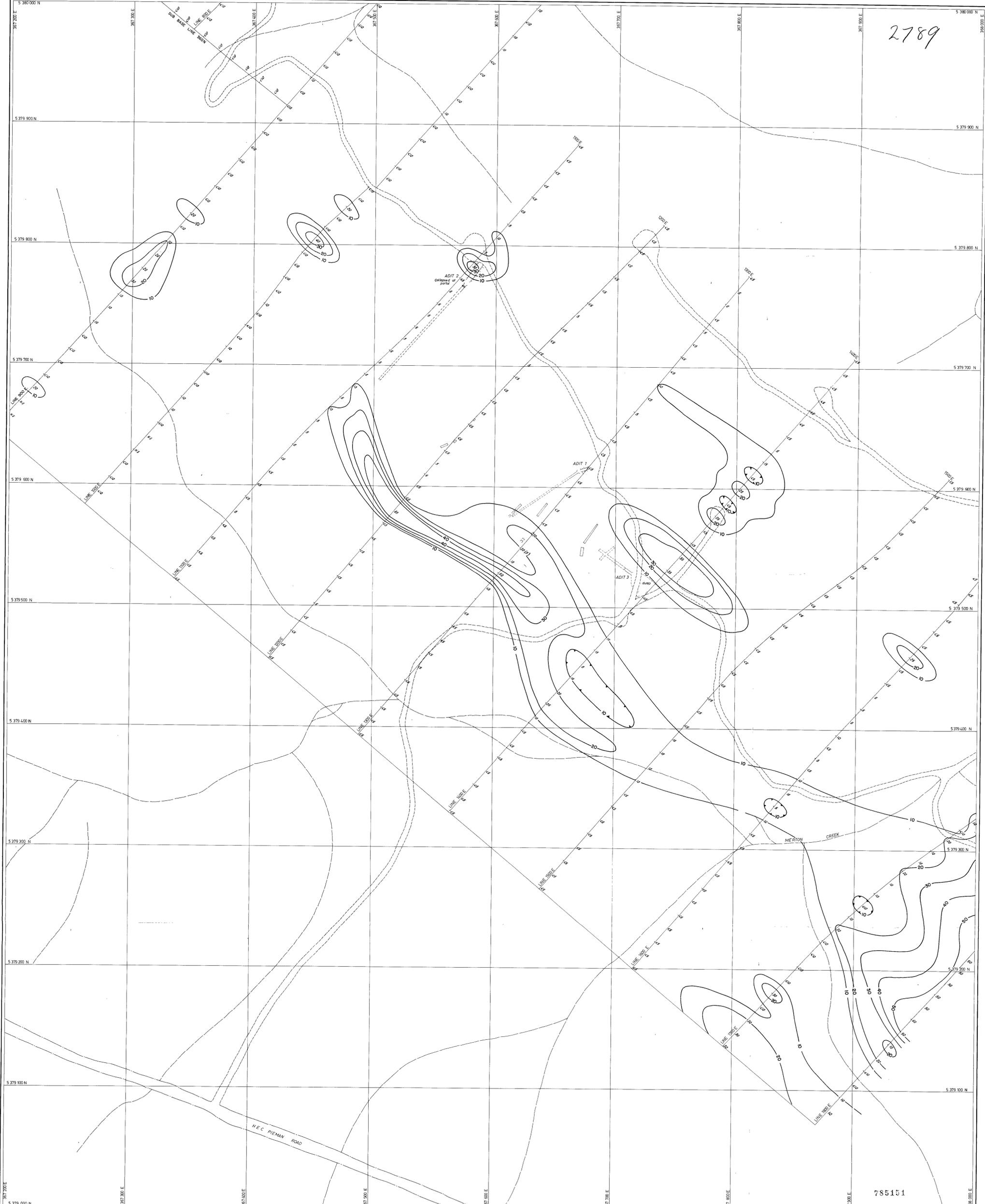
RENISON LIMITED 82-1751 1st Fl.

**E.L. 2/63 MT. LINDSAY AREA**  
**MERTON HILL GRID**  
**SOIL GEOCHEMISTRY - Sn**

GEOLOGIST	L. MARTIN	SCALE	1:1000 METRES
DRAUGHTSMAN	T.G.D.S.		
DATE	NOV 1981	REVISIONS	DRAWING No.
		2788	4c 1

785150

2789



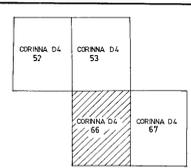
CONTOUR INTERVALS:

- > 50 ppm
- 40 - 50 ppm
- 30 - 40 ppm
- 20 - 30 ppm
- 10 - 20 ppm
- < 10 ppm

KEY:

- Grid lines and pegs
- H.E.C. survey points
- Adit and dump

NOTE: HIGH ARSENIC VALUES (3-40 PPM) ON LINE 380E ARE PROBABLY DUE TO UNRELIABLE READINGS FROM A FAULTY XRF MACHINE.



5 cm

RENISON LIMITED 82-1751 10/2

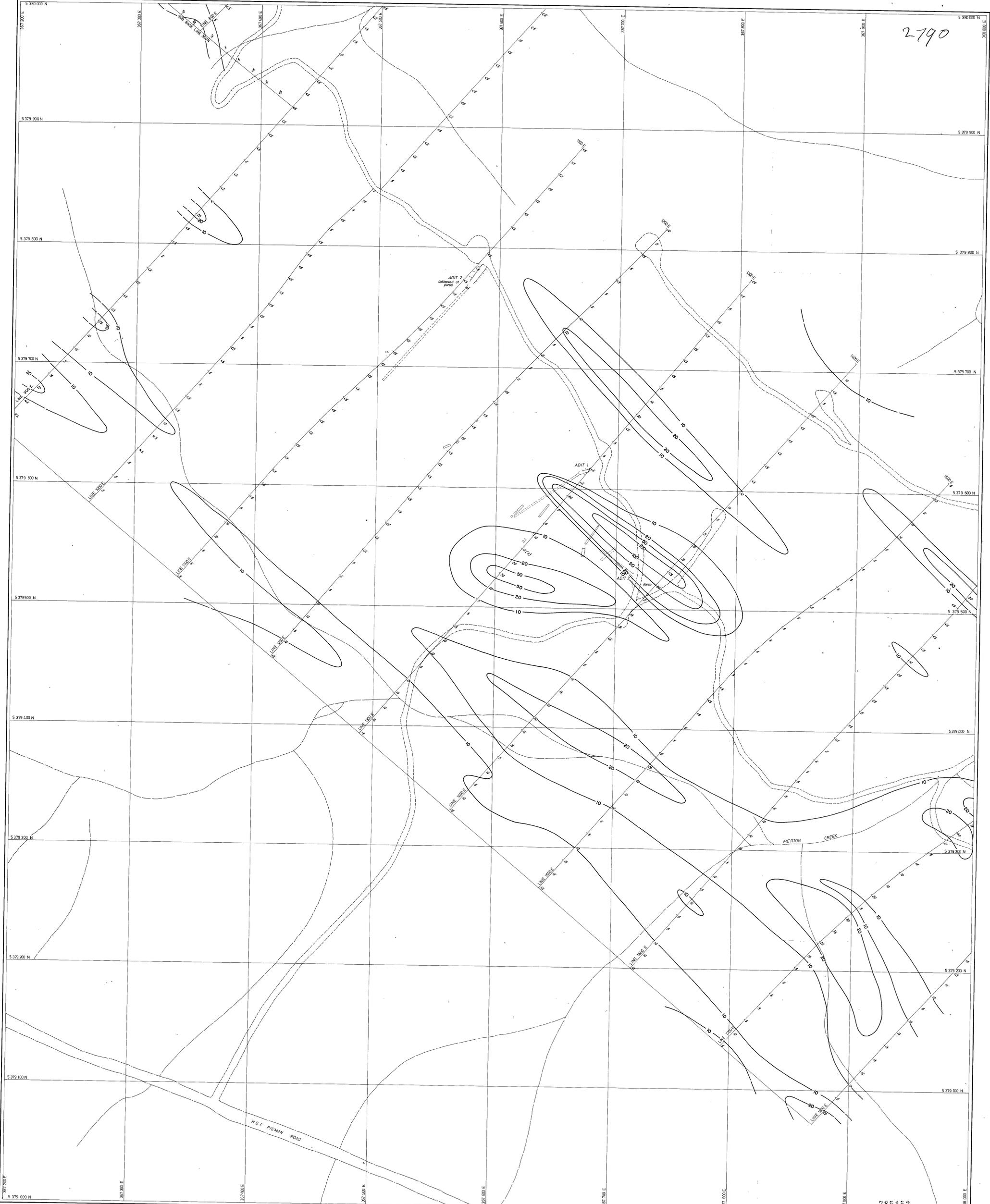
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
SOIL GEOCHEMISTRY - As

GEOLOGIST L. MARTIN  
DRAUGHTSMAN T.G.D.S.  
DATE NOV 1981  
REVISIONS

SCALE 1:1000 METRES  
DRAWING No 4c 2

785151

2790



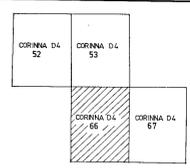
**CONTOUR INTERVALS**

□	> 100ppm
□	50 - 100ppm
□	20 - 50 ppm
□	10 - 20 ppm
□	< 10 ppm

5 cm

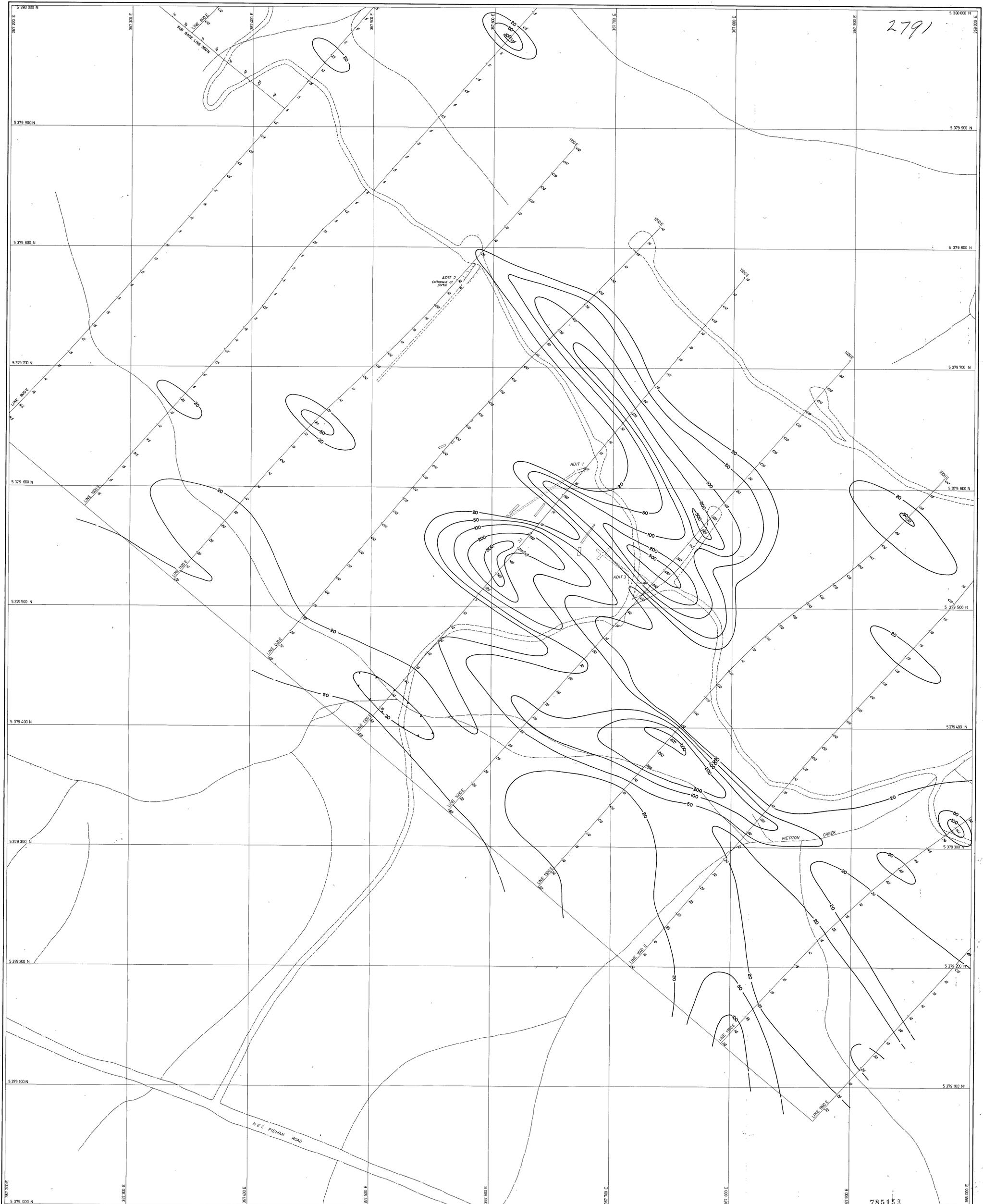
**KEY**

—	Grid lines and page
—	HEC survey points
—	Adit and dump



RENISON LIMITED 22-1751 Ubi 2	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
SOIL GEOCHEMISTRY - Cu	
GEOLOGIST	L. MARTIN
DRAUGHTSMAN	T.G. DEE
DATE	NOV 1981
REVISIONS	
SCALE 1:1000 METRES	
DRAWING NO. 785152	
2790 4c 3	

2791

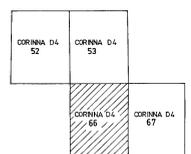


CONTOUR INTERVALS:

[Symbol]	> 500 ppm
[Symbol]	200 - 500ppm
[Symbol]	100 - 200ppm
[Symbol]	50 - 100 ppm
[Symbol]	20 - 50 ppm
[Symbol]	< 20 ppm

KEY:

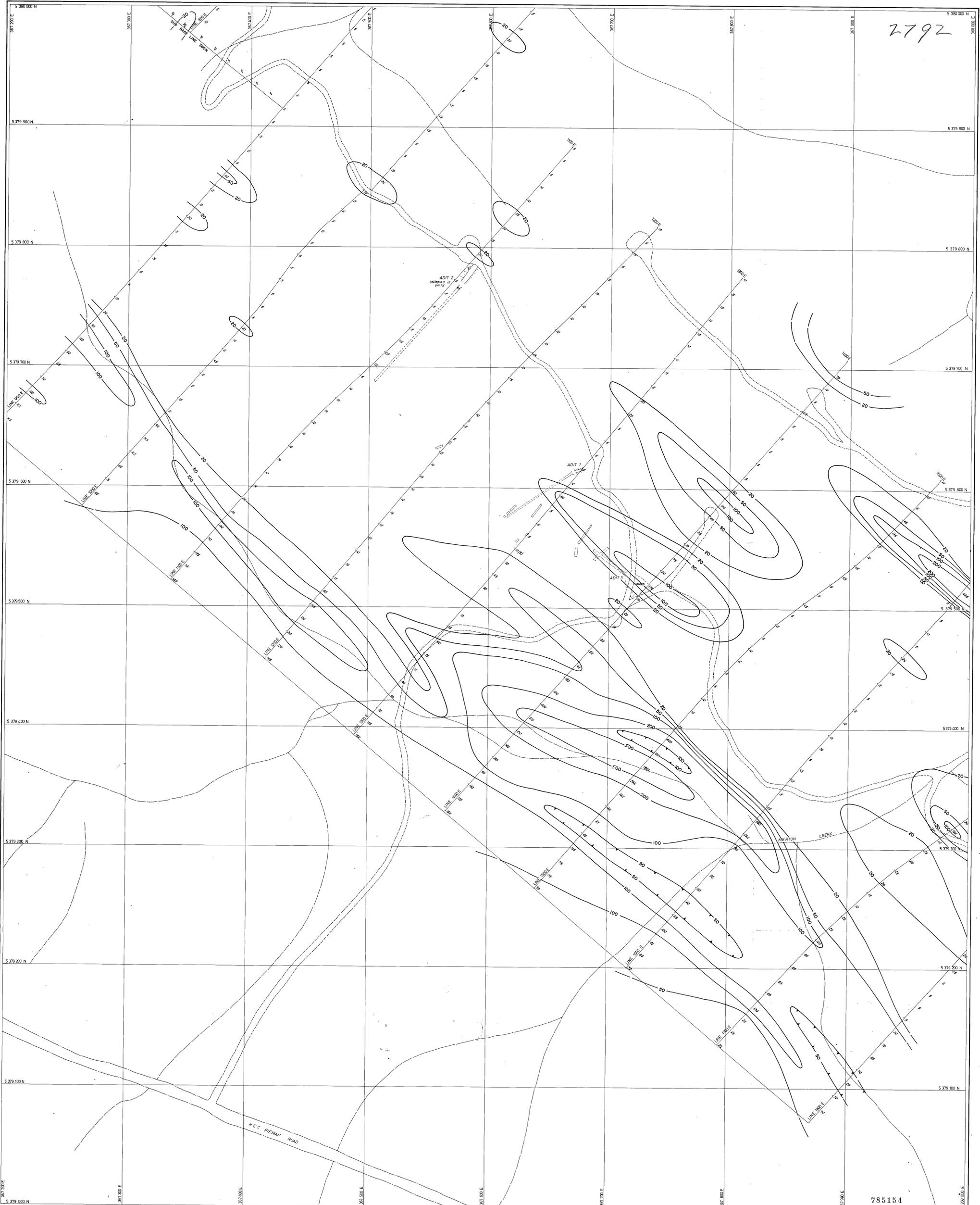
[Symbol]	Grid lines and page.
[Symbol]	H.E.C. survey points
[Symbol]	Adit end dump



RENISON LIMITED 82-1751 161/2	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
SOIL GEOCHEMISTRY - Pb	
GEOLOGIST L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN T.G.D.S.	DATE NOV. 1981
REVISIONS	DRAWING No. MH 204
	2791 4/64

785153

2792



785154

CONTOUR INTERVALS:

□	3500 ppm
□	200 - 500 ppm
□	100 - 200 ppm
□	50 - 100 ppm
□	20 - 50 ppm
□	< 20 ppm

KEY

—	Grid lines and pegs
—	HEC survey points
—	Adit and dump



CORINA D4 52	CORINA D4 53
CORINA D4 54	CORINA D4 57

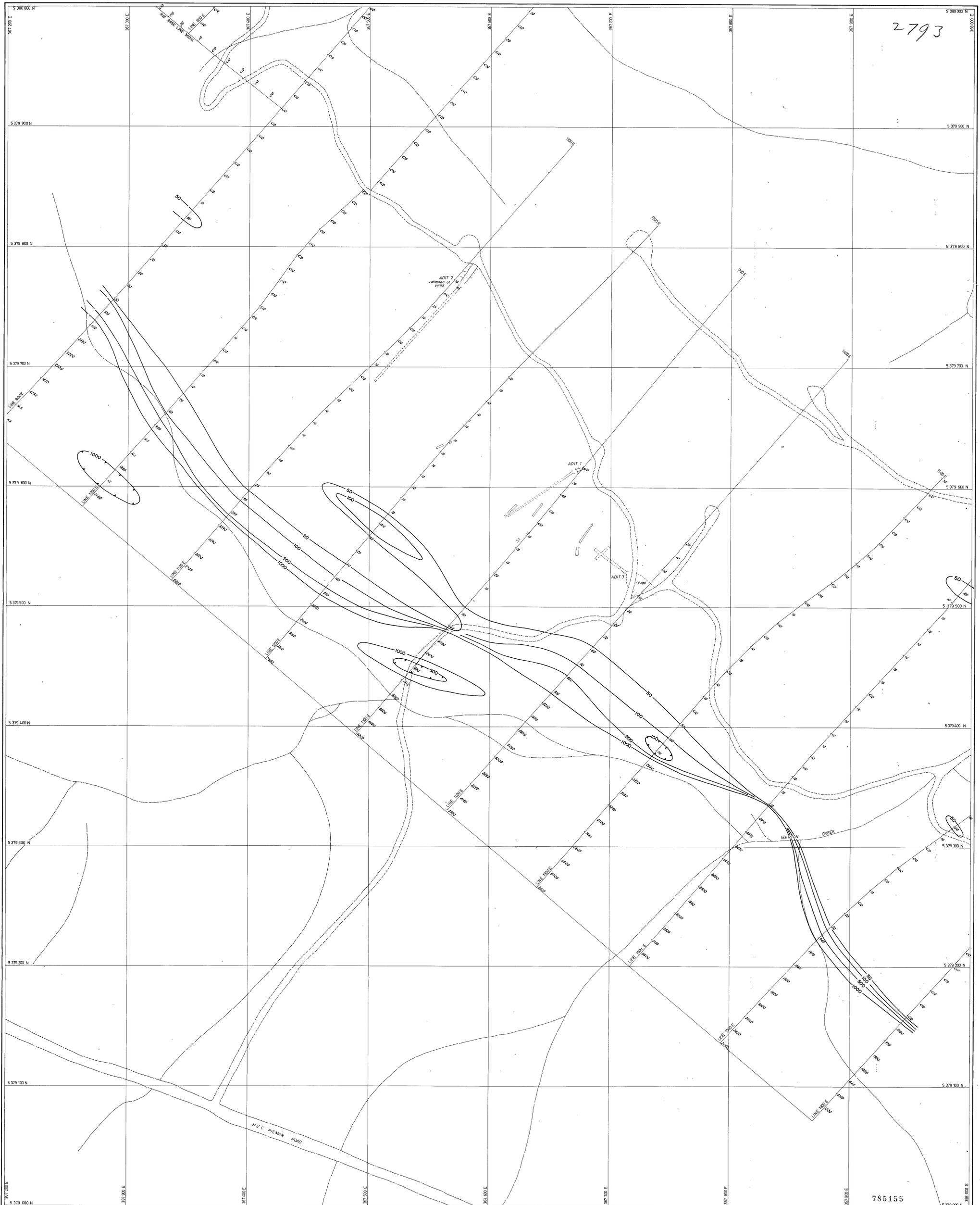


RENISON LIMITED 22-1751 1612  
**E.L. 2/63 MT. LINDSAY AREA**  
**MERTON HILL GRID**  
**SOIL GEOCHEMISTRY - Zn**

GEOLOGIST : L. MARTIN      SCALE 1:1000 METRES  
 DRAUGHTSMAN : T.G.D.S.  
 DATE : NOV 1981  
 REVISIONS

DRAWING No. 2792  
 4c 5

2793

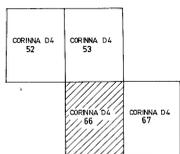


CONTOUR INTERVALS

[Symbol]	> 1000 ppm
[Symbol]	500 - 1000 ppm
[Symbol]	100 - 500 ppm
[Symbol]	50 - 100 ppm
[Symbol]	< 50 ppm

KEY

[Symbol]	Grid lines and pegs
[Symbol]	H.E.C. survey points
[Symbol]	Adit end dump



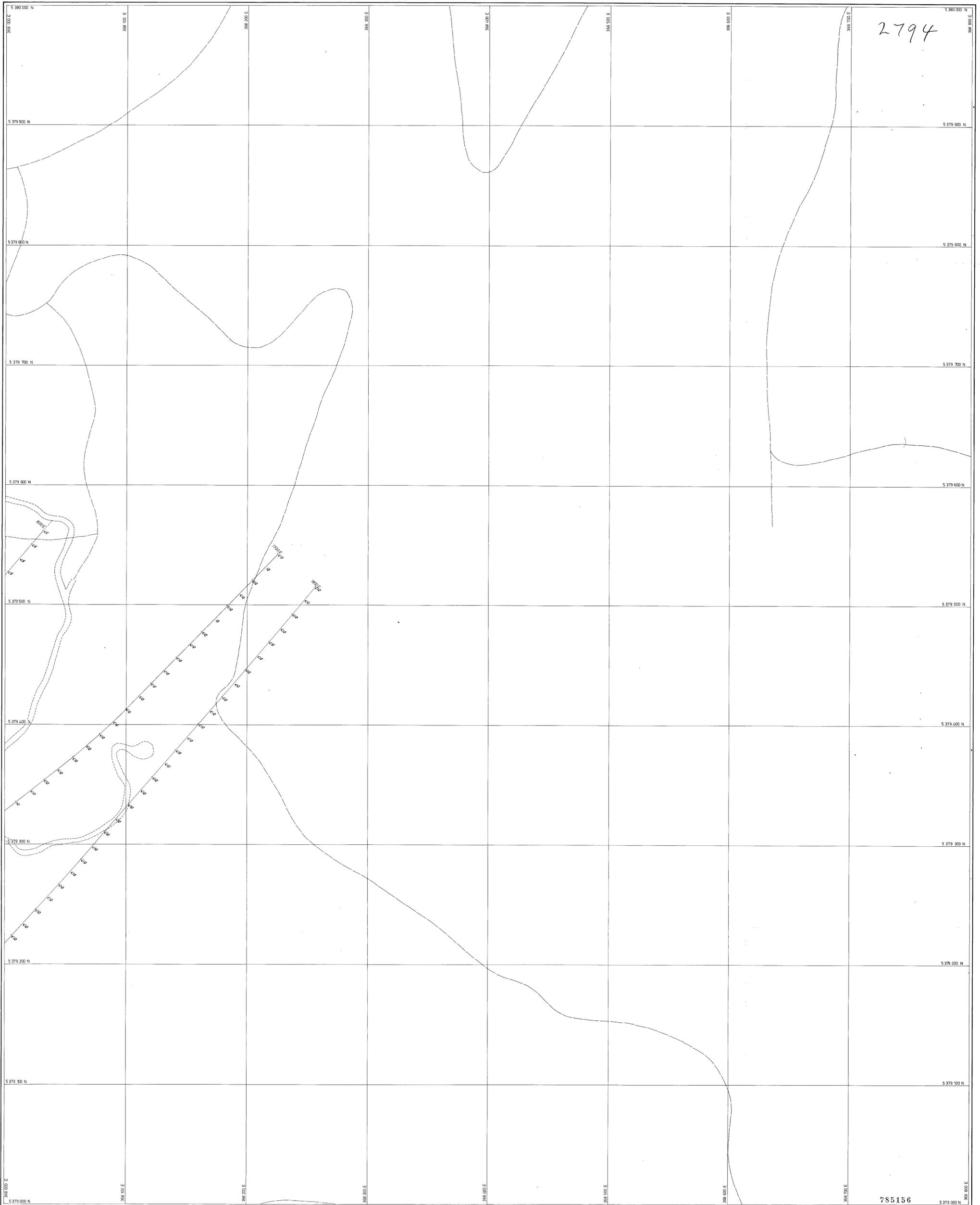
RENISON LIMITED 82-1751 Uel2  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 SOIL GEOCHEMISTRY - Ni

GEOLOGIST	L. MARTIN	SCALE	1:1000 METRES
DRAUGHTSMAN	T.G.D.S.		
DATE	NOV 1981	REVISIONS	
DRAWING No		2793	
MH 206		2/c 6	

785155

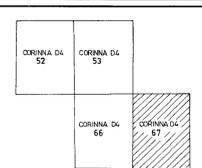
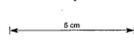
5 cm

2794



785156

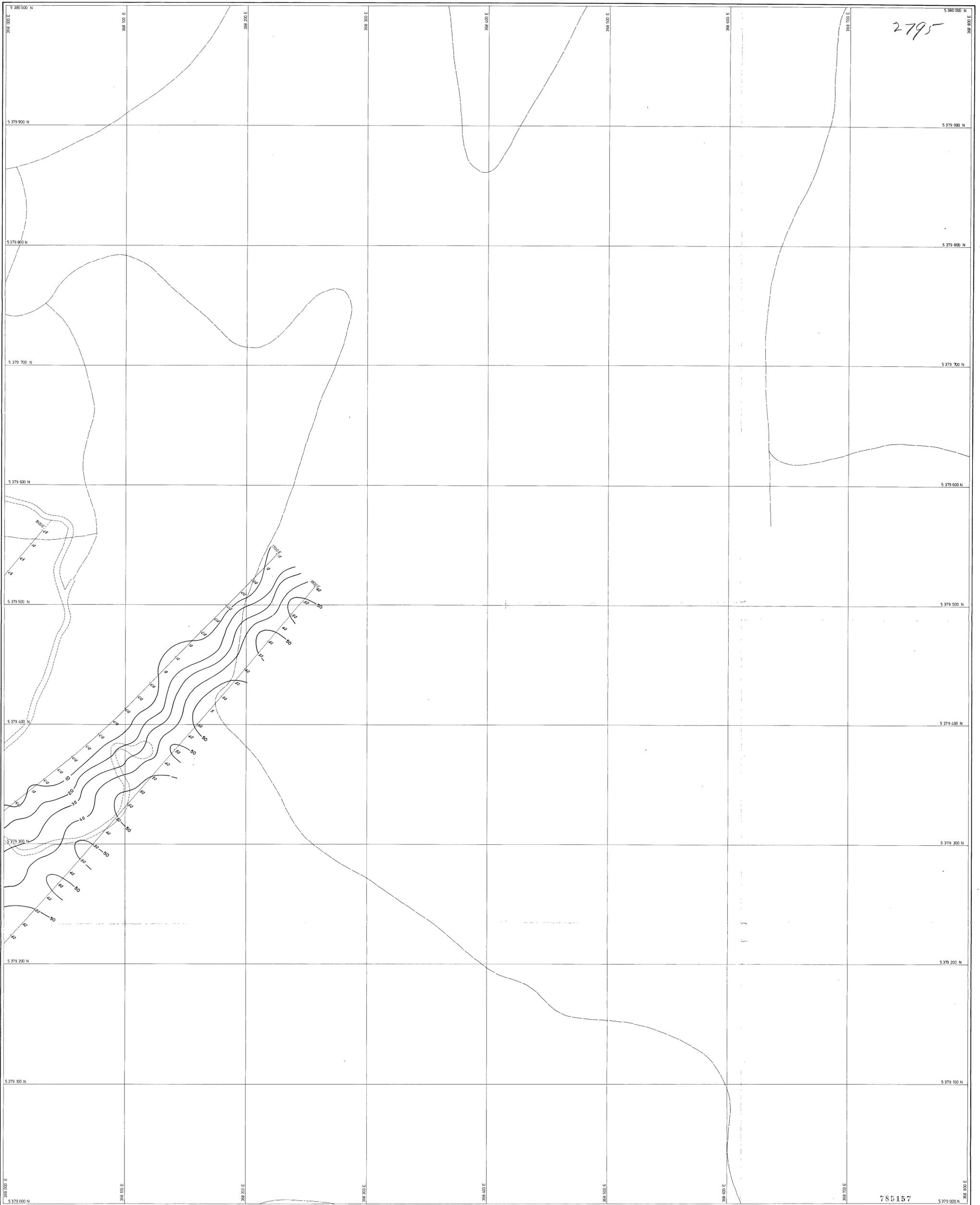
- KEY
- Grd lines and pegs
  - HEC survey points
  - ▨ Adm and dump



REVISIONS		SCALE 1:1000 METRES	
GEOLOGIST	L. MARTIN	DRAWING No. 4d 1	
DRAUGHTSMAN	T.S.D.S.	DATE DEC. 1981	
DATE	DEC. 1981	DRAWING No. 4d 1	
REVISIONS		DRAWING No. 4d 1	

RENISON LIMITED 82-1751 4/12  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 SOIL GEOCHEMISTRY - Sn

2795



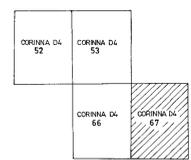
**CONTOUR INTERVALS**

150 ppm
40 - 50 ppm
30 - 40 ppm
20 - 30 ppm
10 - 20 ppm
< 10 ppm

**KEY:**

	Grid lines and page
	H.E.C. survey points
	Adit and dump

**NOTE** HIGH ARSENIC VALUES (>40 PPM) ON LINE 100E ARE PROBABLY DUE TO UNRELIABLE READINGS FROM A FAULTY XRF MACHINE



RENISON LIMITED 82-1751 U612

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID

**SOIL GEOCHEMISTRY - As**

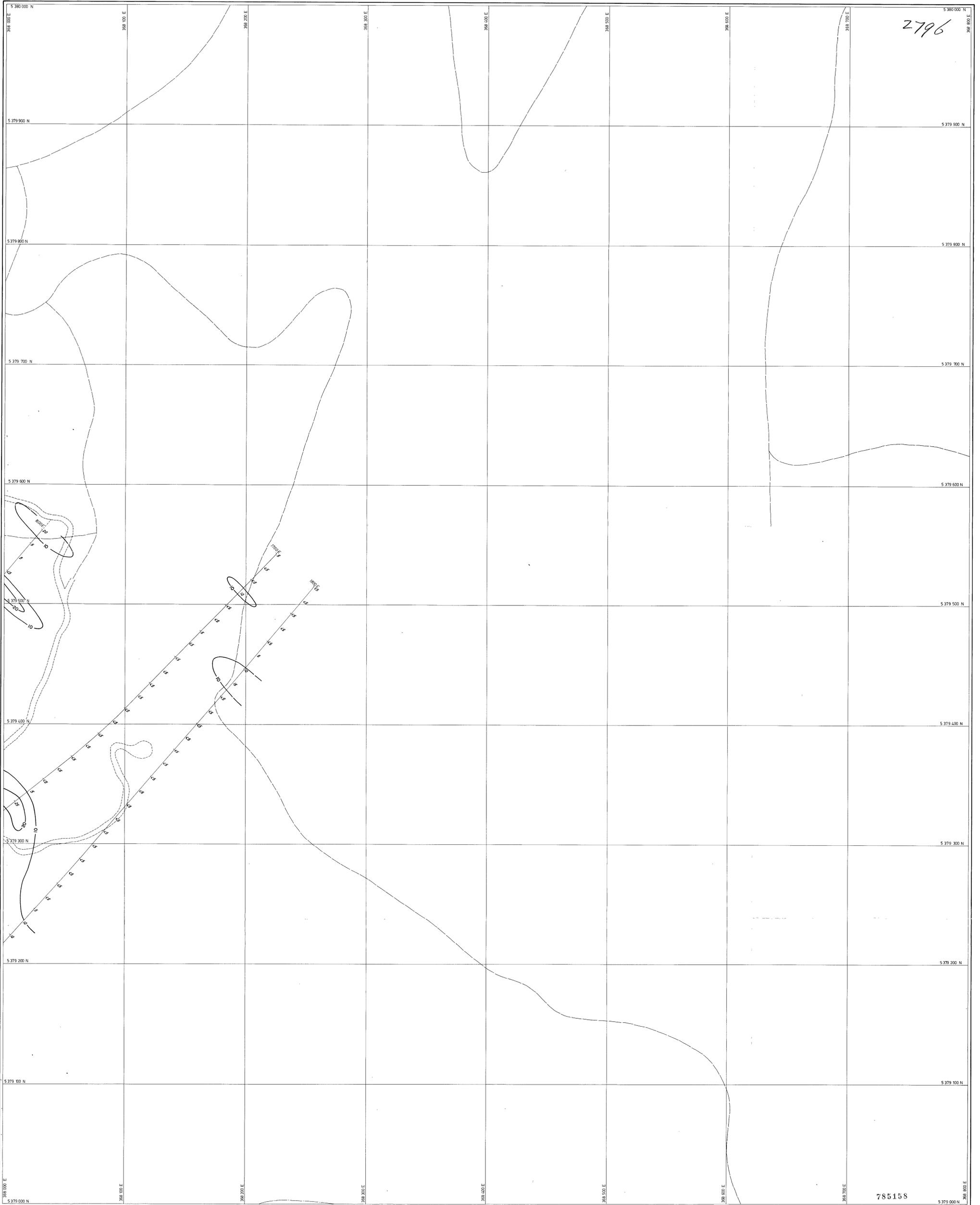
GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	
DATE	DEC. 1981	
REVISIONS		

DRAWING No 2795 **1d 2**

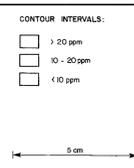
785157

5 379 000 N

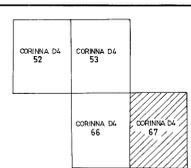
2796



785158



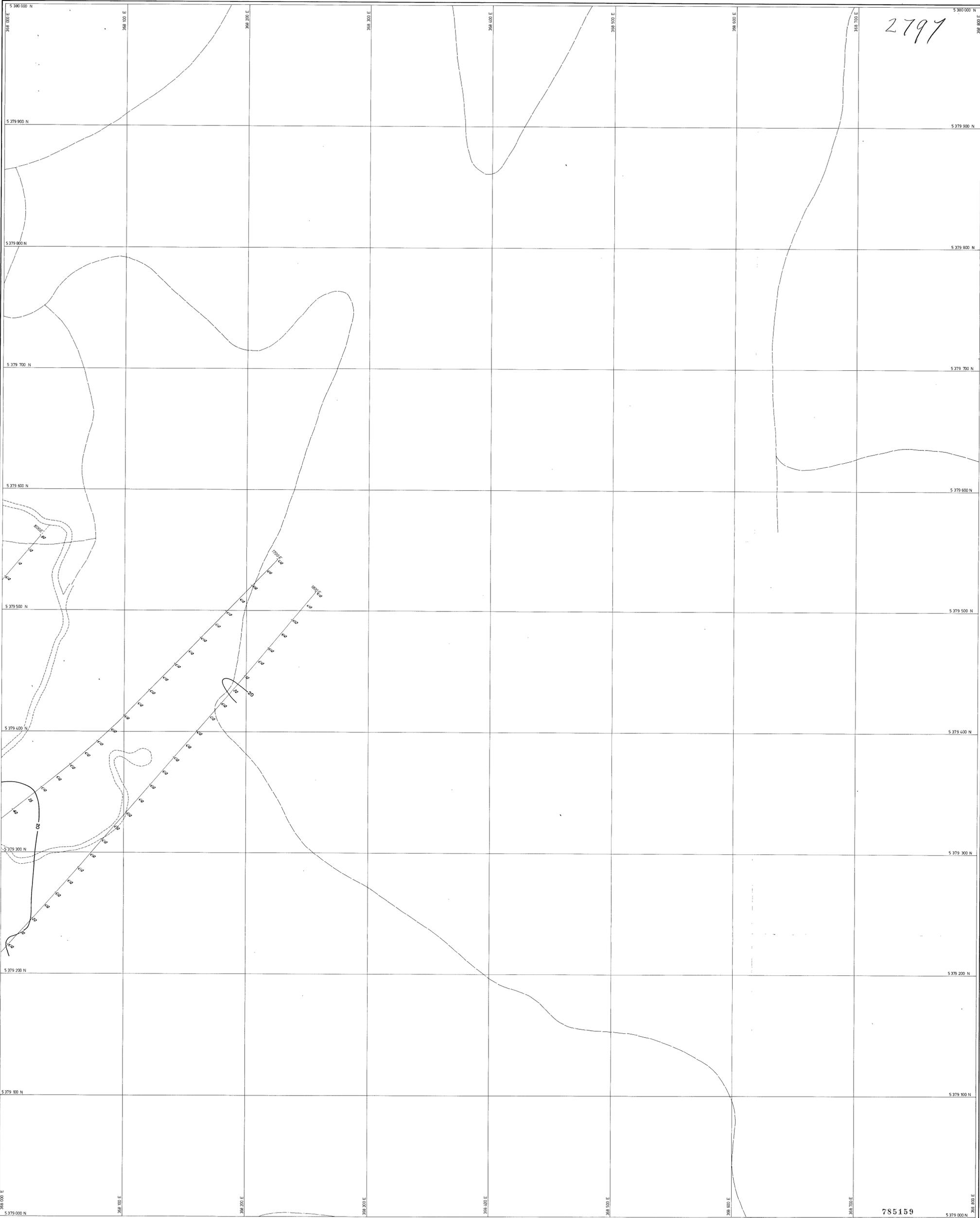
- KEY:
- Grid lines and page
  - H.E.C. survey points
  - A dirt road



RENISON LIMITED		22-1751 1602
E.L. 2/63 MT. LINDSAY AREA		
MERTON HILL GRID		
SOIL GEOCHEMISTRY - Cu		
GEOLOGIST	L. MARTIN	SCALE-1 1000 METRES
DRAUGHTSMAN	T.G.S.	
DATE	DEC 1981	
REVISIONS		DRAWING No.
		<b>4d 3</b>

2796

2797



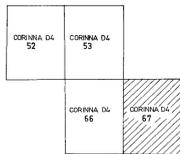
785159

CONTOUR INTERVALS:

[Solid line]	> 50 ppm
[Dashed line]	20 - 50 ppm
[Dotted line]	< 20 ppm

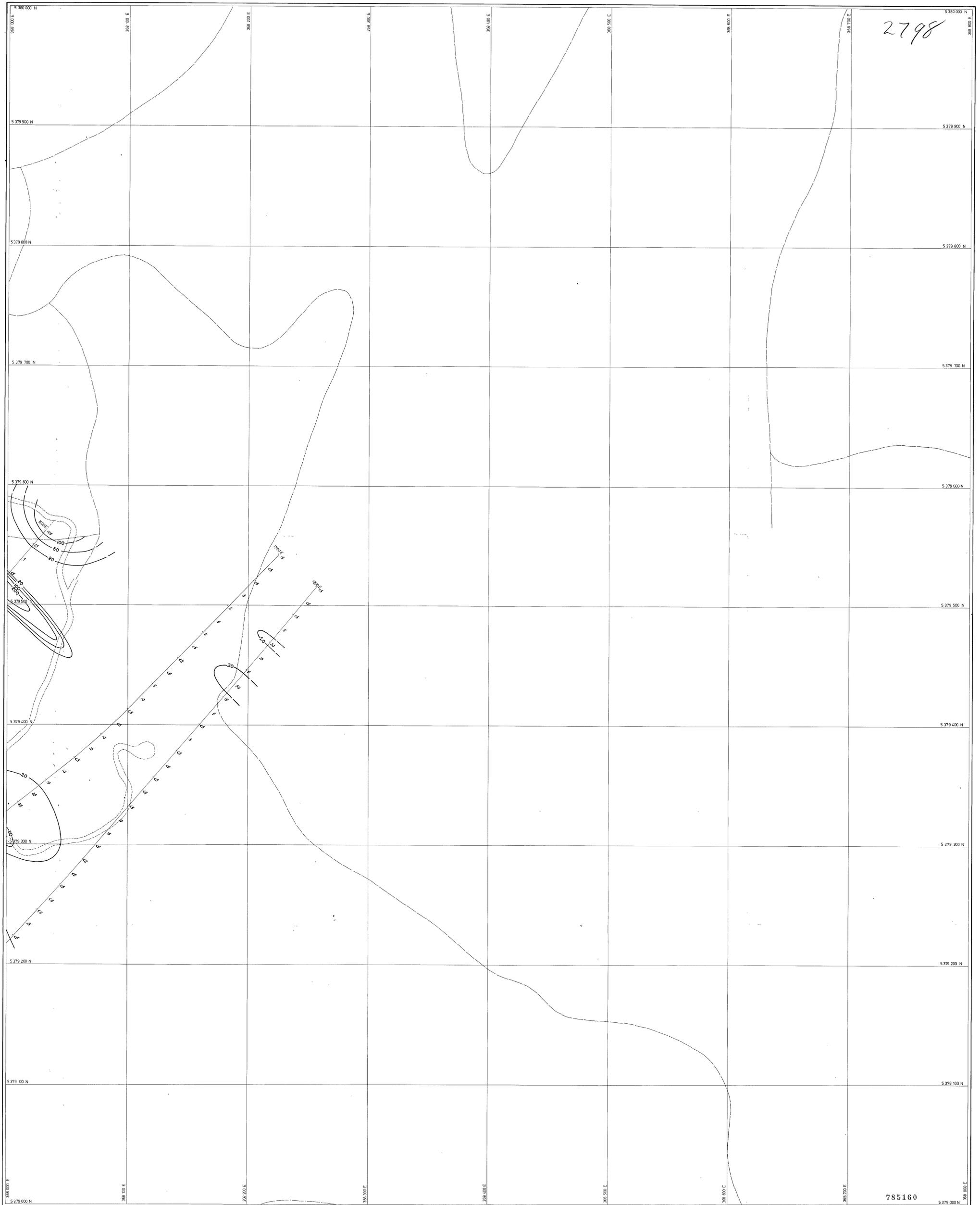
KEY:

[Grid lines and pegs]	Grid lines and pegs
[HEC survey points]	HEC survey points
[Aid and dump]	Aid and dump

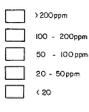


RENISON LIMITED		92-1751 U612
E.L. 2/63 MT. LINDSAY AREA		
MERTON HILL GRID		
SOIL GEOCHEMISTRY - Pb		
GEOLOGIST	L. MARTIN	SCALE: 1:1000 METRES
DRAUGHTSMAN	T.G. O'S.	[Scale bar]
DATE	DEC. 1991	
REVISIONS		
2797		DRAWING No 4d 4

2798

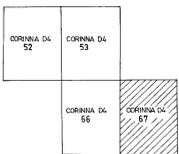


CONTOUR INTERVALS:



KEY:

- Grid lines and page.
- H.E.C. survey points
- ==== Adit and dump



785160

RENISON LIMITED 22-1751 U612

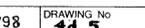
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID

SOIL GEOCHEMISTRY - Zn

GEOLOGIST L. MARTIN  
DRAUGHTSMAN T.G.D.S.

SCALE 1:1000 METRES

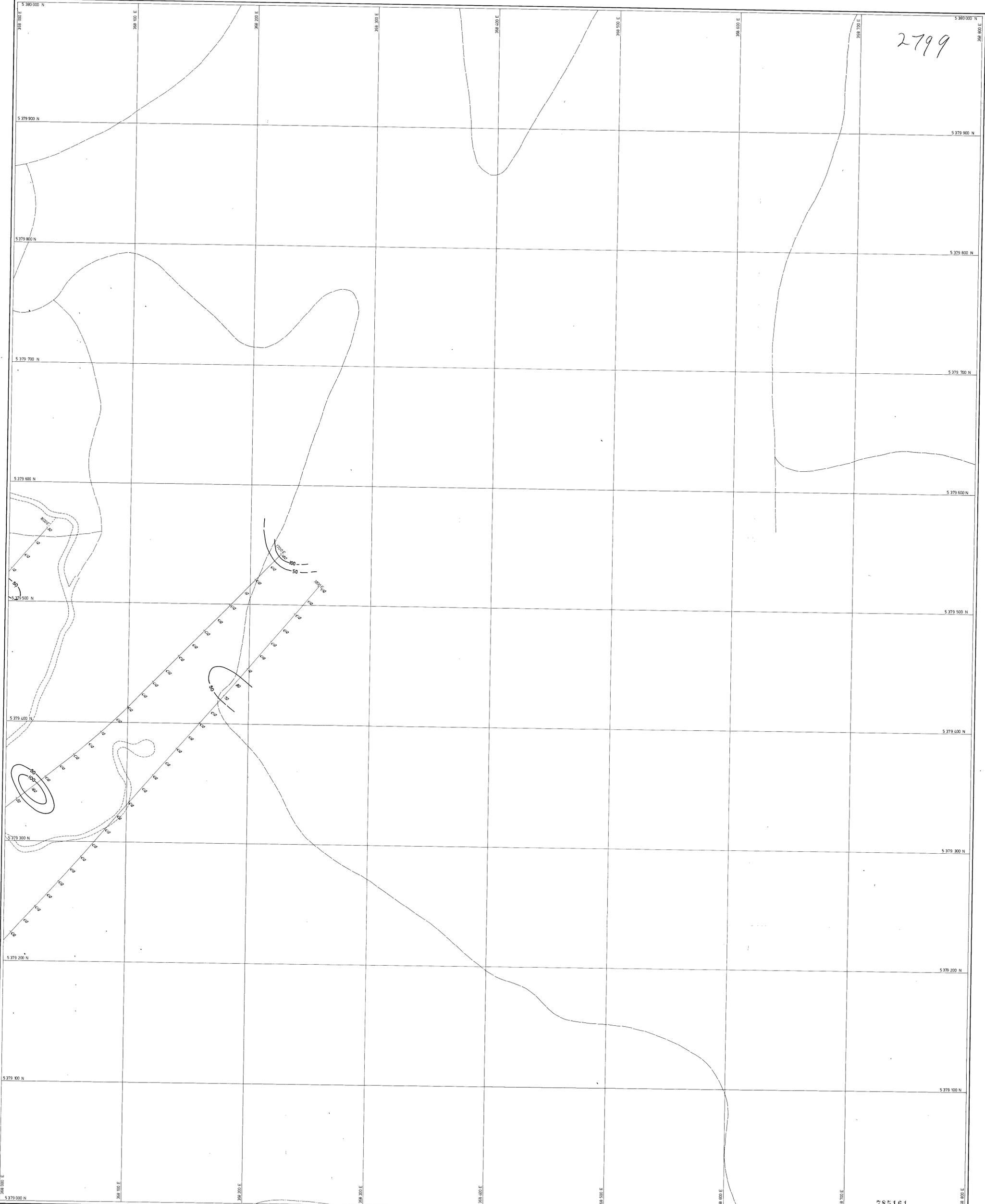
DATE DEC 1988



REVISIONS

2798 DRAWING No 4d 5

2799



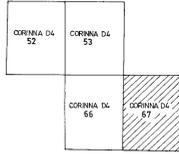
CONTOUR INTERVALS

- > 100 ppm
- 50 - 100 ppm
- < 50 ppm

KEY:

- Grid lines and page
- H.C. survey points
- Adit and dump

5 cm

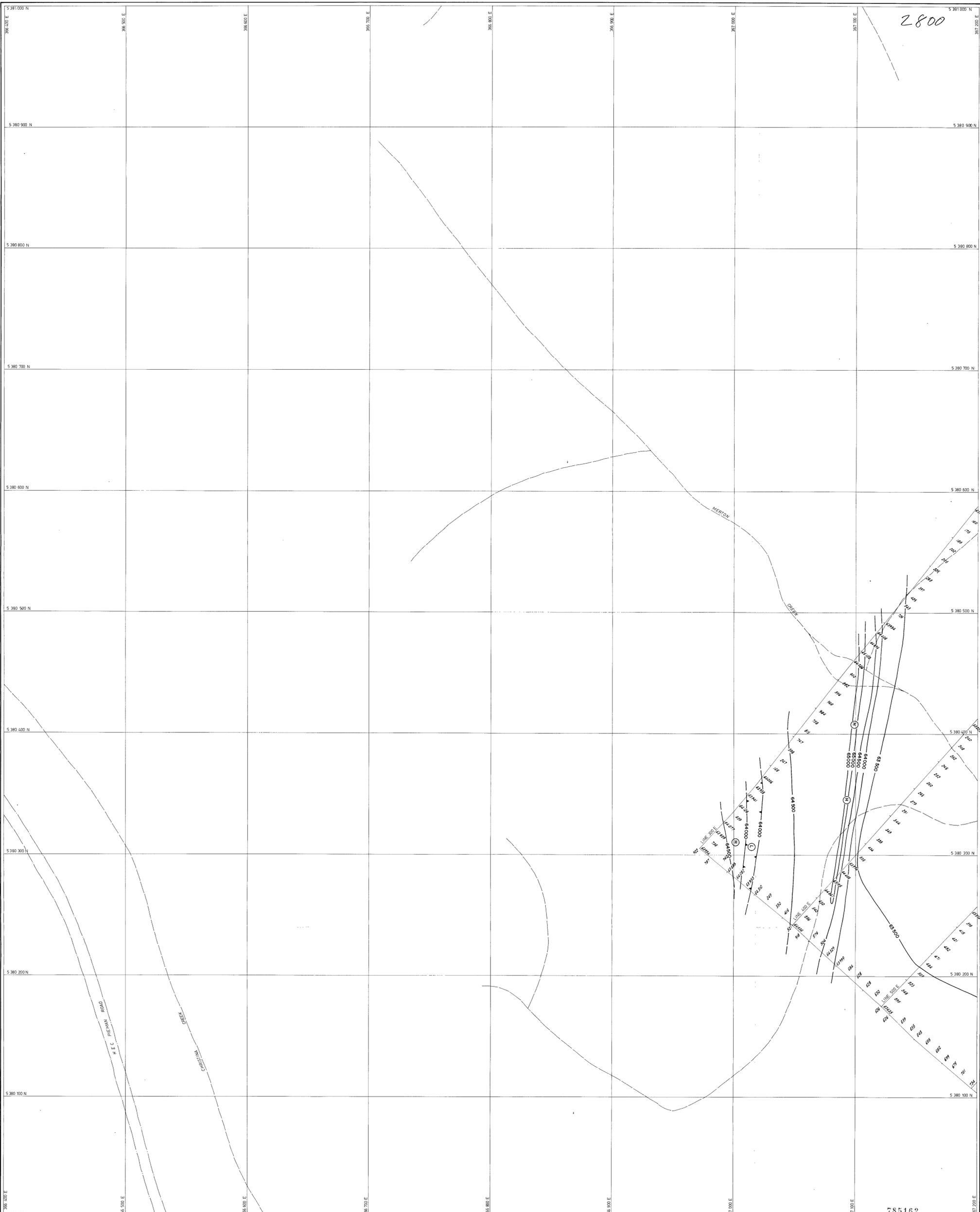


RENISON LIMITED 82-1751 U6/2	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
SOIL GEOCHEMISTRY - Ni	
GEOLOGIST	L. MARTIN
DRAUGHTSMAN	T.G. D'S
DATE	DEC. 1981
REVISIONS	
SCALE 1:1000 METRES	
DRAWING No	4d 6
2799	

785161

5 379 000 N

2800



785162

CONTOUR INTERVALS

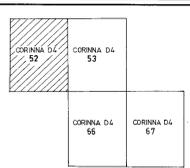
- 65 000ppm
- 64 000 - 65 000ppm
- 63 000 - 64 000ppm
- 62 000 - 63 000ppm
- 61 000 - 62 000ppm
- 60 000 - 61 000ppm
- 59 000 - 60 000ppm
- 58 000 - 59 000ppm
- 57 000 - 58 000ppm
- 56 000 - 57 000ppm
- 55 000 - 56 000ppm
- 54 000 - 55 000ppm
- 53 000 - 54 000ppm
- 52 000 - 53 000ppm
- 51 000 - 52 000ppm
- 50 000 - 51 000ppm
- 49 000 - 50 000ppm
- 48 000 - 49 000ppm
- 47 000 - 48 000ppm
- 46 000 - 47 000ppm
- 45 000 - 46 000ppm
- 44 000 - 45 000ppm
- 43 000 - 44 000ppm
- 42 000 - 43 000ppm
- 41 000 - 42 000ppm
- 40 000 - 41 000ppm
- 39 000 - 40 000ppm
- 38 000 - 39 000ppm
- 37 000 - 38 000ppm
- 36 000 - 37 000ppm
- 35 000 - 36 000ppm
- 34 000 - 35 000ppm
- 33 000 - 34 000ppm
- 32 000 - 33 000ppm
- 31 000 - 32 000ppm
- 30 000 - 31 000ppm
- 29 000 - 30 000ppm
- 28 000 - 29 000ppm
- 27 000 - 28 000ppm
- 26 000 - 27 000ppm
- 25 000 - 26 000ppm
- 24 000 - 25 000ppm
- 23 000 - 24 000ppm
- 22 000 - 23 000ppm
- 21 000 - 22 000ppm
- 20 000 - 21 000ppm
- 19 000 - 20 000ppm
- 18 000 - 19 000ppm
- 17 000 - 18 000ppm
- 16 000 - 17 000ppm
- 15 000 - 16 000ppm
- 14 000 - 15 000ppm
- 13 000 - 14 000ppm
- 12 000 - 13 000ppm
- 11 000 - 12 000ppm
- 10 000 - 11 000ppm
- 9 000 - 10 000ppm
- 8 000 - 9 000ppm
- 7 000 - 8 000ppm
- 6 000 - 7 000ppm
- 5 000 - 6 000ppm
- 4 000 - 5 000ppm
- 3 000 - 4 000ppm
- 2 000 - 3 000ppm
- 1 000 - 2 000ppm
- 0 - 1 000ppm
- -1 000 - 0ppm
- -2 000 - -1 000ppm
- -3 000 - -2 000ppm
- -4 000 - -3 000ppm
- -5 000 - -4 000ppm
- -6 000 - -5 000ppm
- -7 000 - -6 000ppm
- -8 000 - -7 000ppm
- -9 000 - -8 000ppm
- -10 000 - -9 000ppm
- -11 000 - -10 000ppm
- -12 000 - -11 000ppm
- -13 000 - -12 000ppm
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- -16 000 - -15 000ppm
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- -94 000 - -93 000ppm
- -95 000 - -94 000ppm
- -96 000 - -95 000ppm
- -97 000 - -96 000ppm
- -98 000 - -97 000ppm
- -99 000 - -98 000ppm
- -100 000 - -99 000ppm

KEY:

- Grid lines and pegs
- HEC survey points
- Add and dump

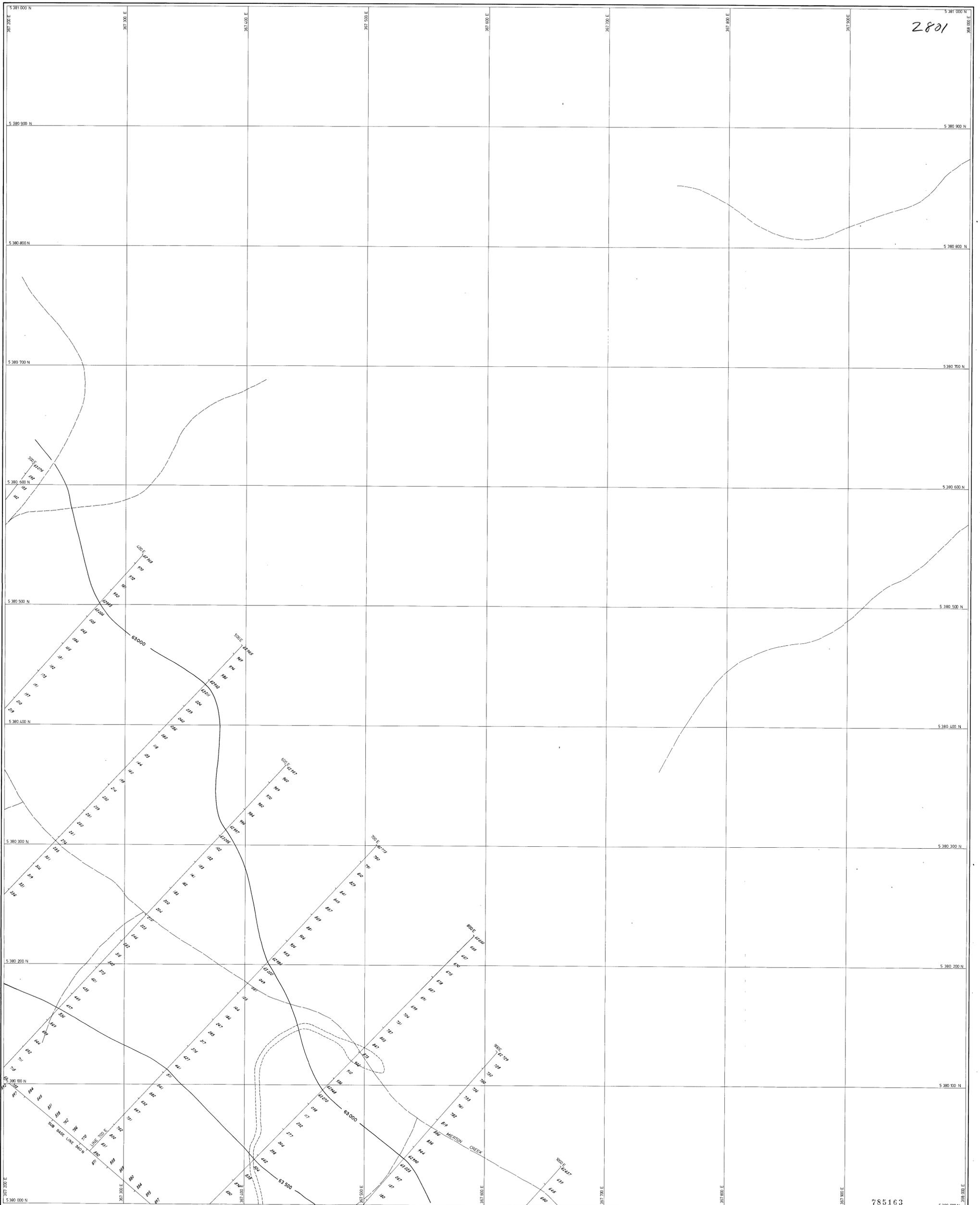
NOTES:

Magnetics Proton Magnetometer, Model 9816.  
 Contractors Pullock Brothers Oct 1975,  
 P Jackson March 1980,  
 G Morrison June 1981.  
 Base Station a) Line 100E-100E Zone south-east  
 of Merton Hill survey peg near  
 road at HEC road  
 b) Line 1700E-1800E, 300E-1000E  
 Grid site MHS  
 Base Station Value a) 62655 ±  
 b) 62545 ±  
 Contour Interval: 500 ±



RENISON LIMITED 22-1751 U6/2  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 MAGNETICS (PROTON)  
 GEOLOGIST L. MARTIN SCALE 1:1000 METRES  
 DRAUGHTSMAN Teds  
 DATE DEC 1981  
 REVISIONS 2800 DRAWING NO 5a

2801



785163

CONTOUR INTERVALS

- 63500 ppm
- 63000 - 63500ppm
- 62500ppm
- ⊕ High
- ⊖ Low

KEY

- Grid lines and pegs
- HEC survey points
- Add and dump

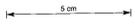
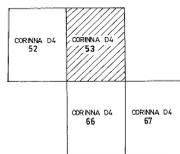
NOTES -

Magnetics Proton Magnetometer, Model 5816  
 Contractors Puffinb. Brothers Oct 1979,  
 Puffinb. March 1980,  
 G Mullison June 1981

Base Station a) Line 100E-100E 2km southwest  
 of HEC survey point 200  
 side of HEC road  
 b) Line 170E-100E, 300E-100E  
 dist. 100

Base Station Value a) 62835 ±  
 b) 62845 ±

Contour Interval 500 ±

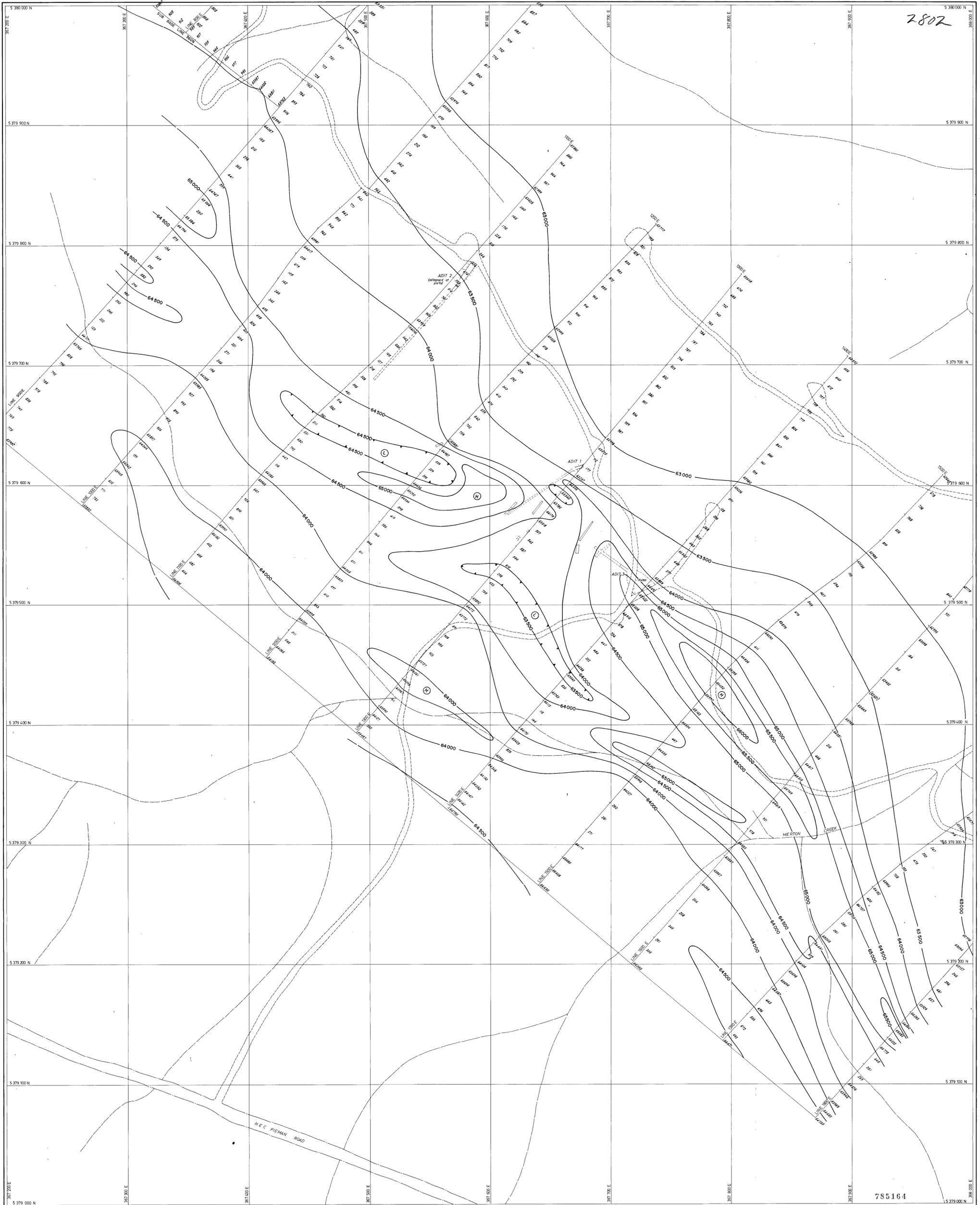


RENISON LIMITED 82-175/16/12

E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 MAGNETICS (PROTON)

GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.G.S.	25 0 20 10 5 0 5 10 20 25 30
DATE	DEC 1981	
REVISIONS		DRAWING No. 56

2802



785164

CONTOUR INTERVALS

- > 65 000 ppm
- 64 500 - 65 000 ppm
- 64 000 - 64 500 ppm
- 63 500 - 64 000 ppm
- 63 000 - 63 500 ppm
- < 63 000 ppm
- High
- Low

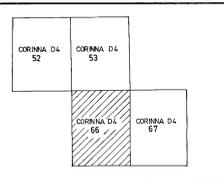
KEY

- Grid lines and pegs
- H.C. survey points
- Adit and dump



NOTES

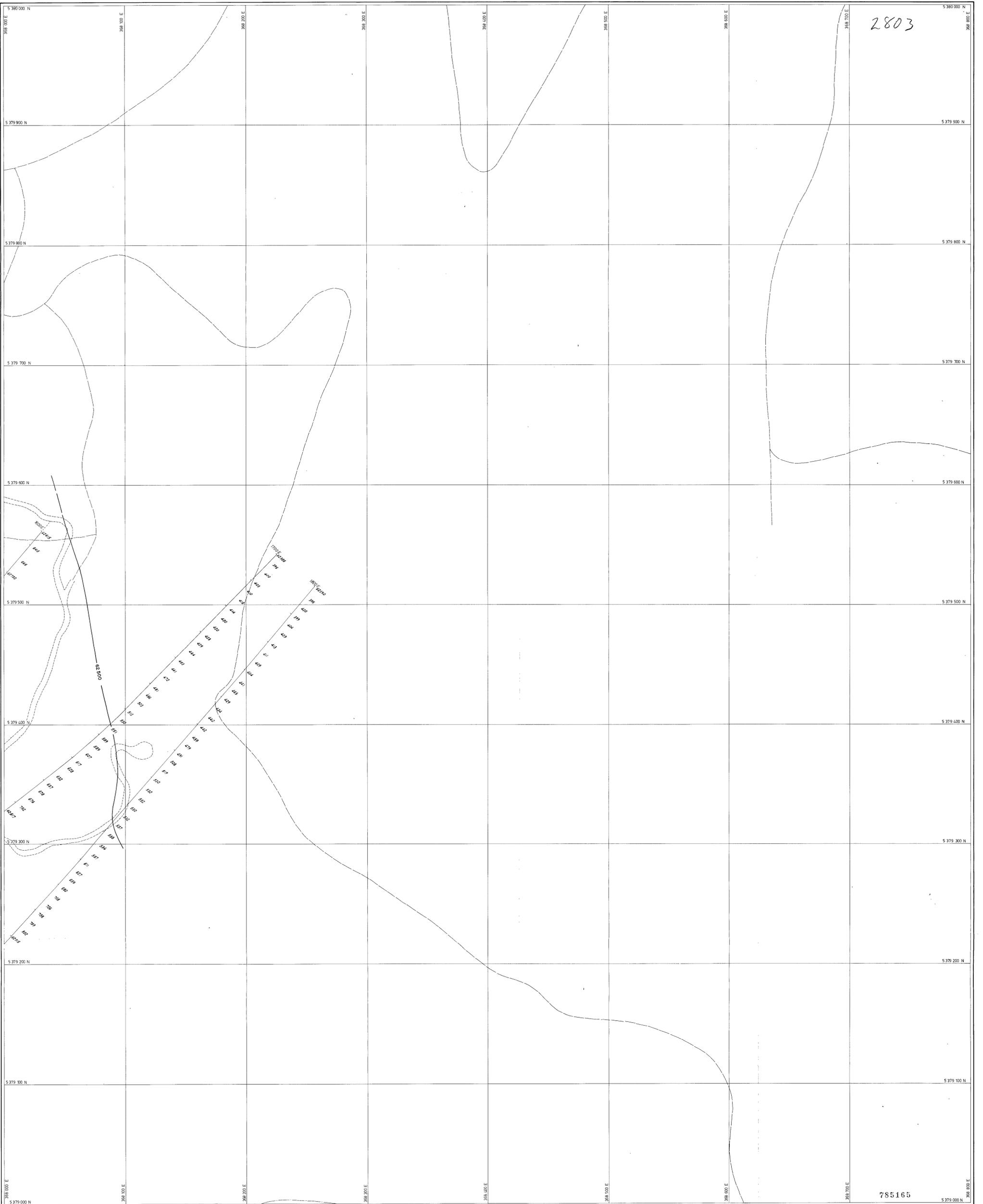
Magnetics Proton Magnetometer, Model 986  
 Contractors Pultock Brothers Oct 1979,  
 P. Gifford March 1980,  
 G. Mallinson June 1981  
 Base Station a) Lines 100E-800E, 300E-1000E  
 b) Lines 100E-800E, 300E-1000E  
 Base Station Value a) 62635 s  
 b) 62645 s  
 Contour Interval 500 s



RENISON LIMITED 22-175-1612  
**E.L. 2/63 MT. LINDSAY AREA**  
**MERTON HILL GRID**  
**MAGNETICS (PROTON)**

GEOLOGIST	L. MARTIN	SCALE	1:1000 METRES
DRAUGHTSMAN	T.G.D.S.	DATE	NOV 1981
REVISIONS		DRAWING No.	2802
			MH 309
			5 c

2803



785165

CONTOUR INTERVALS

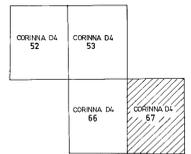
- < 63 000 ppm
- High
- Low

KEY

- Grid lines and pegs
- HEC survey points
- Adt and dump

NOTES -

Magnetics Proton Magnetometer, Model 9816  
 Contractors: Pollock Brothers Oct 1979,  
 P Baker March 1980,  
 G Morrison June 1981  
 Base Station: a) 62935 x  
 b) 62945 x  
 Contour Interval 500 x

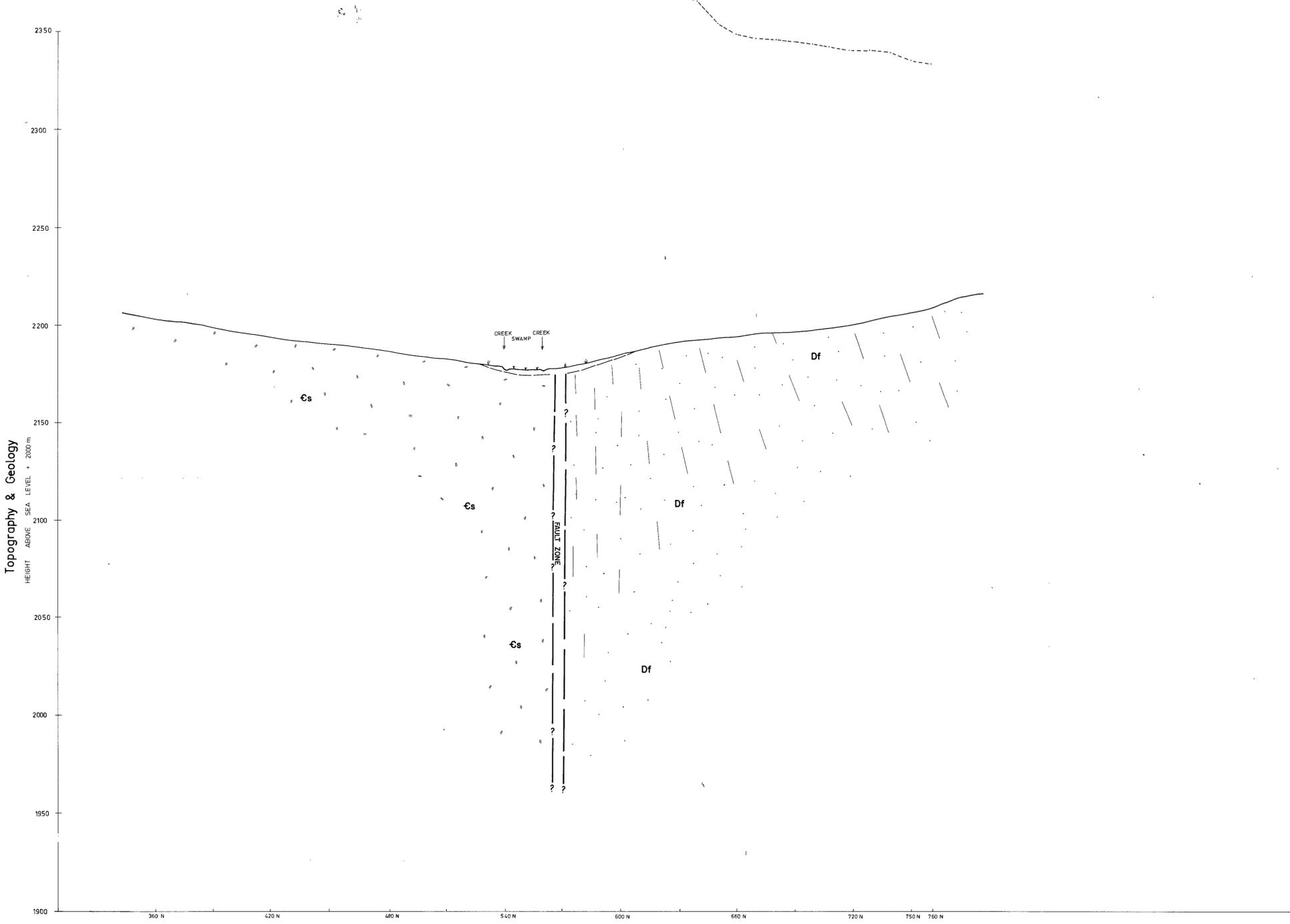
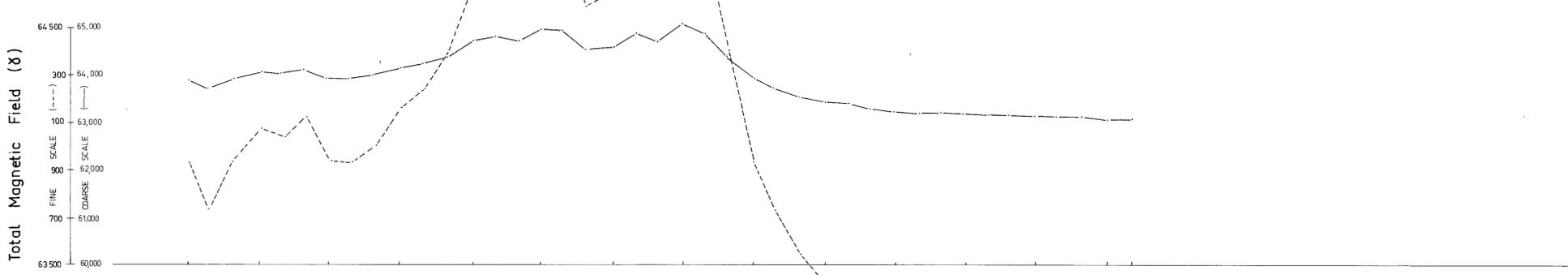
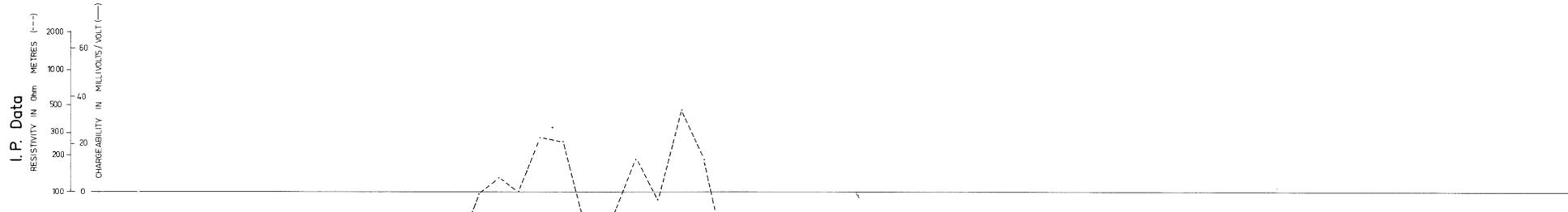
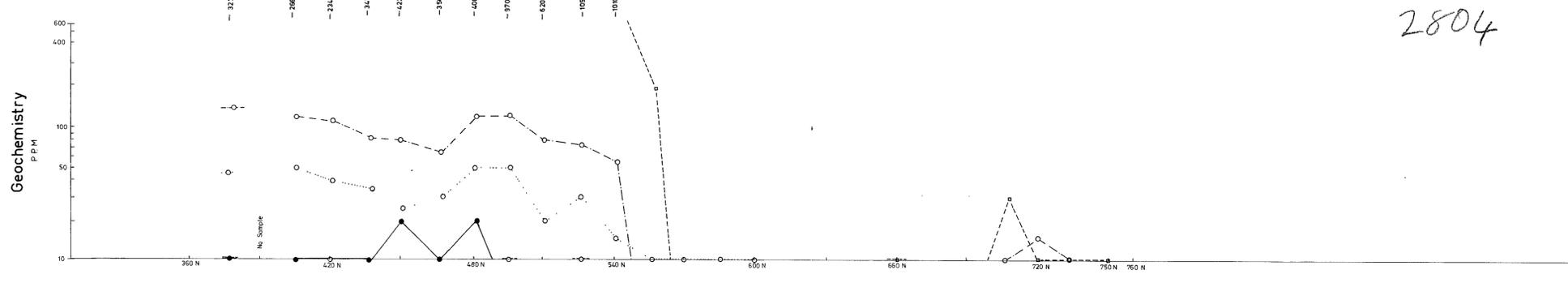


RENISON LIMITED

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID

MAGNETICS (PROTON)

GEOLOGIST	L. MARTIN	SCALE 1:1000 METRES
DRAUGHTSMAN	T.B.S.	70 10 0 10 20 30 40
DATE	DEC 1981	
REVISIONS		DRAWING No
	2803	5d



785166

RENISON LIMITED  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 LINE MH 300 mE

82-1751 16/2

SCALE 1:1000 METRES

GEOLOGIST: L. Martin  
 DRAUGHTSMAN: J. Matthews  
 DATE: March 1982

REVISIONS: 2804  
 DRAWING No: 6a

**I.P. DATA**  
 Chargeability (---)  
 Resistivity (—)

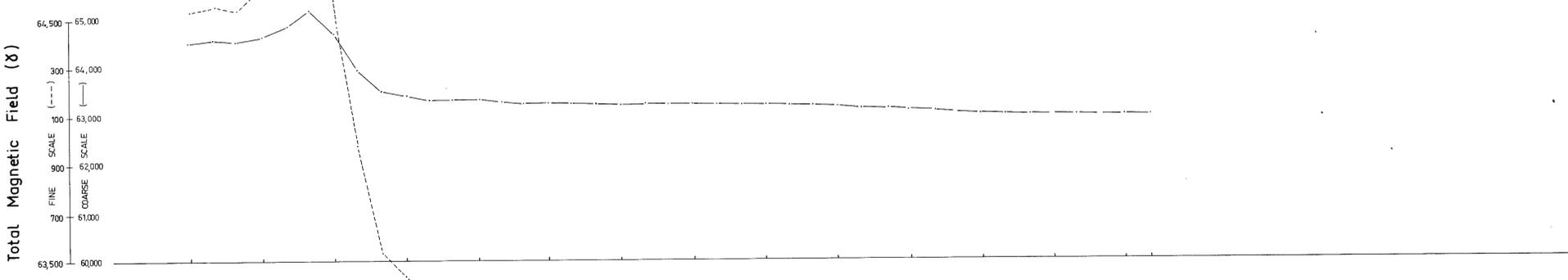
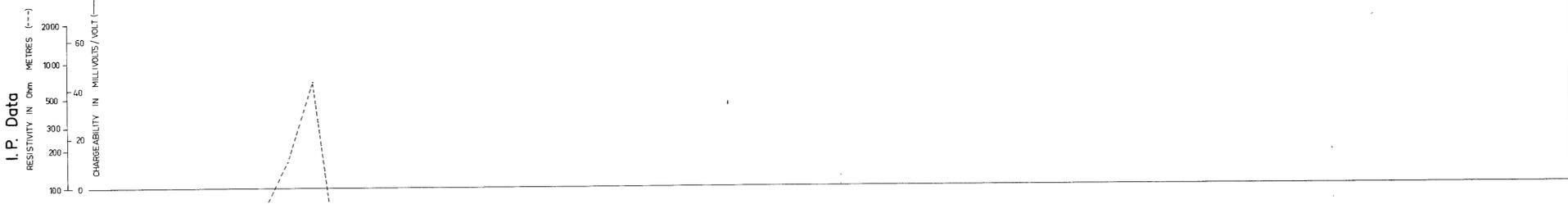
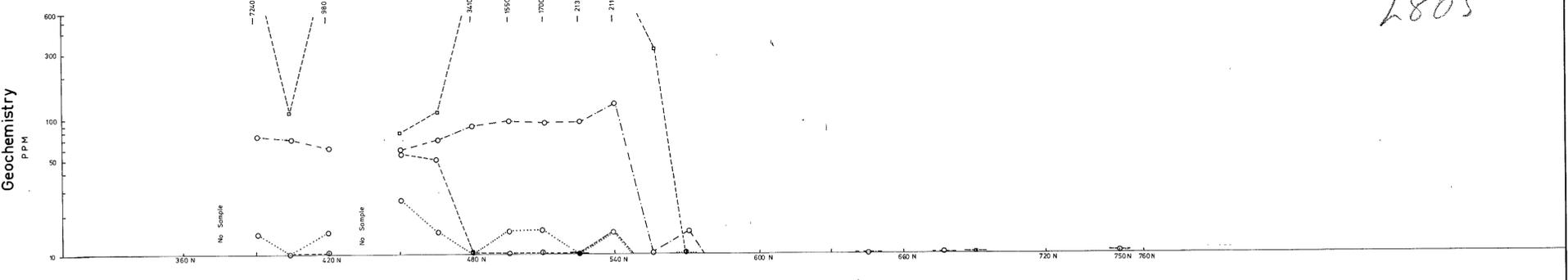
**MAGNETICS**  
 5000 X Scale (---)  
 1000 X Scale (—)

**SOIL GEOCHEMISTRY**  
 Sn  
 Cu  
 Pb  
 Zn  
 As  
 Ni

**LEGEND**

<b>TERTIARY</b> Tg Gravels	<b>SILURIAN</b> Ss Amber Shale Sas Amber Sandstone Member Ssl Amber Limestone Member Sc Crotty Quartzite	<b>CAMBRIAN</b> Edh Upper Dundas Group Eg Basic or Gabbroic Rocks Es Serpentinized and Ultramafic Rocks	Swamp, transported alluvium ?	Basic volcanic & brecciated	Sedimentary Brecon
<b>DEVONIAN</b> Db Bell Shale Df Florence Quartzite			Quartzite, sandstone, minor siltstones, shales	Shale	Fault Brecon
			Ultrabasic rocks, massive serpentinite	Ash Tuff	Siltstone
			Limestone	Tuffaceous sandstone	

50m



785167  
RENISON LIMITED  
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 400 mE

GEOLOGIST: L. Martin  
DRAUGHTSMAN: J. Matthews  
DATE: March 1982

SCALE 1:1000 METRES  
DRAWING No: 2805 6b

TERTIARY		SILURIAN		CAMBRIAN	
Tg	Grovels	Sa	Amber Shale	Edh	Upper Dundas Group
Db	Bell Shale	Sas	Amber Sandstone Member	Eg	Basic or Gabbroic Rocks
Df	Florence Quartzite	Ssl	Amber Limestone Member	Es	Serpentinites and Ultramafic Rocks
		Sc	Cratty Quartzite		

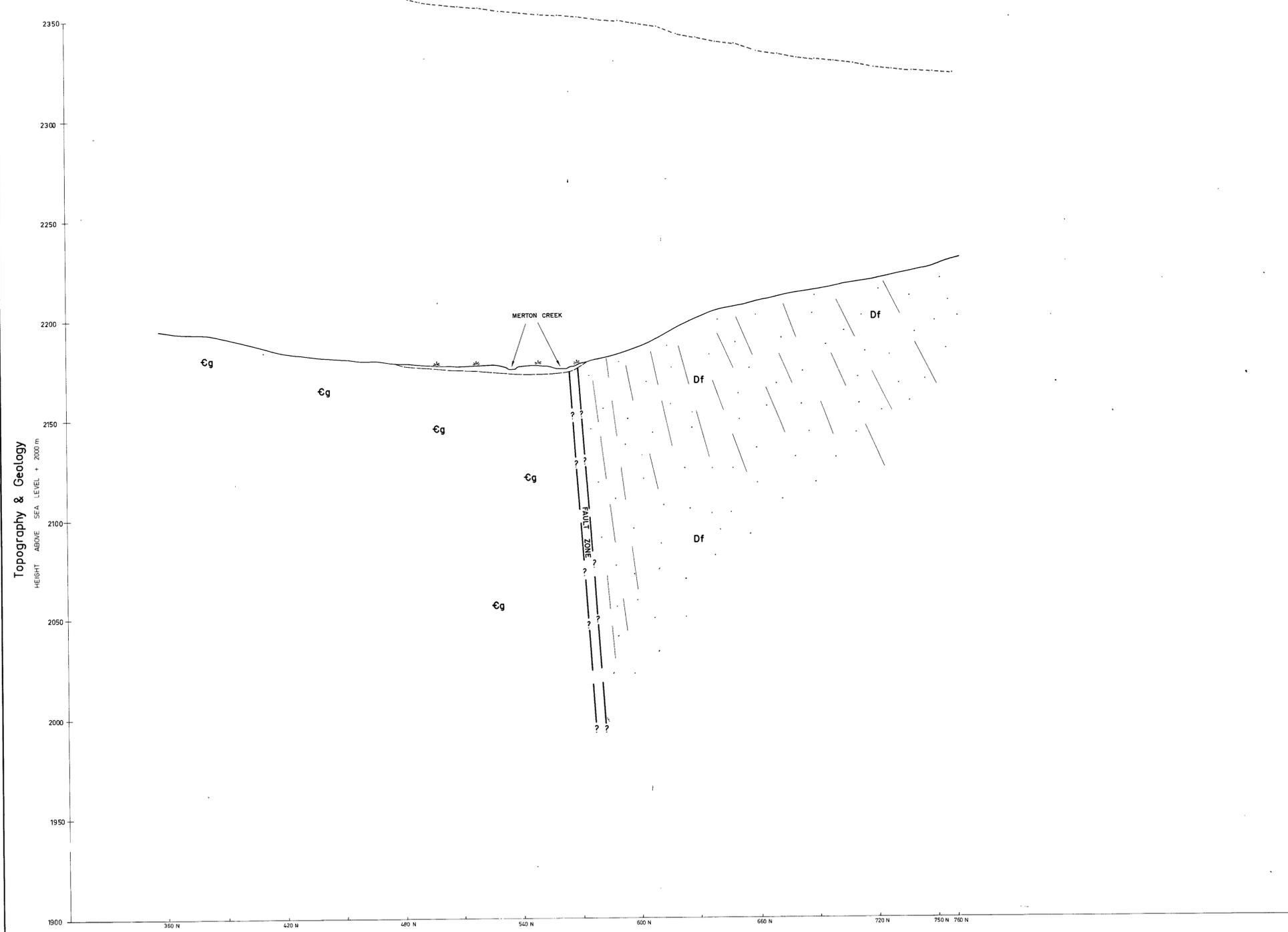
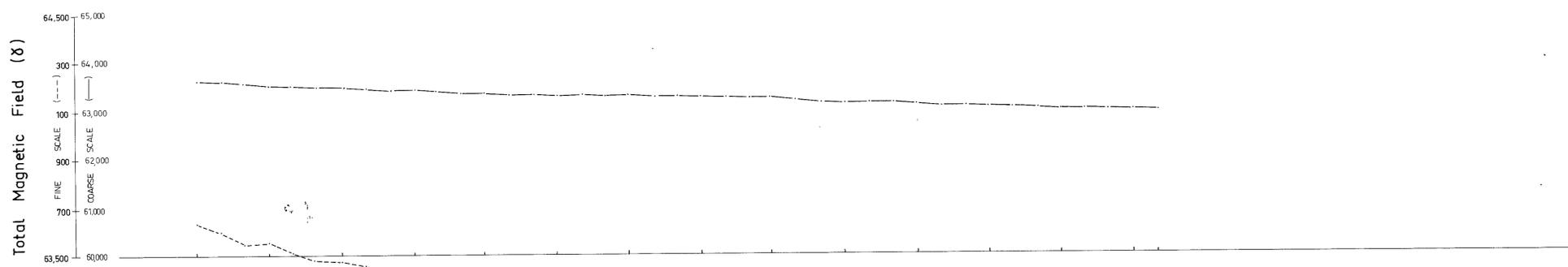
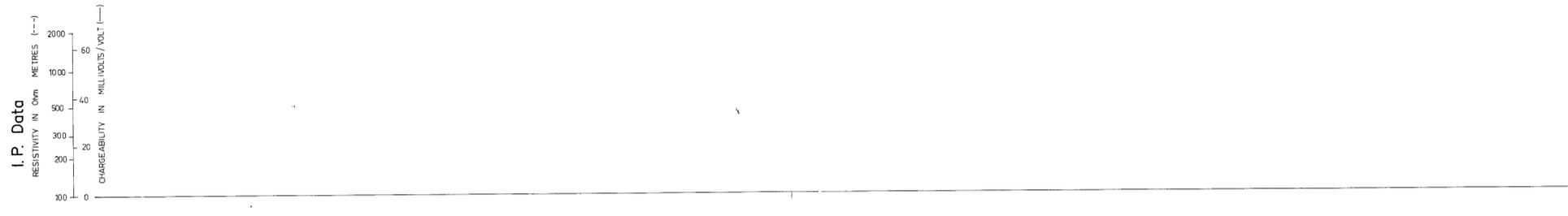
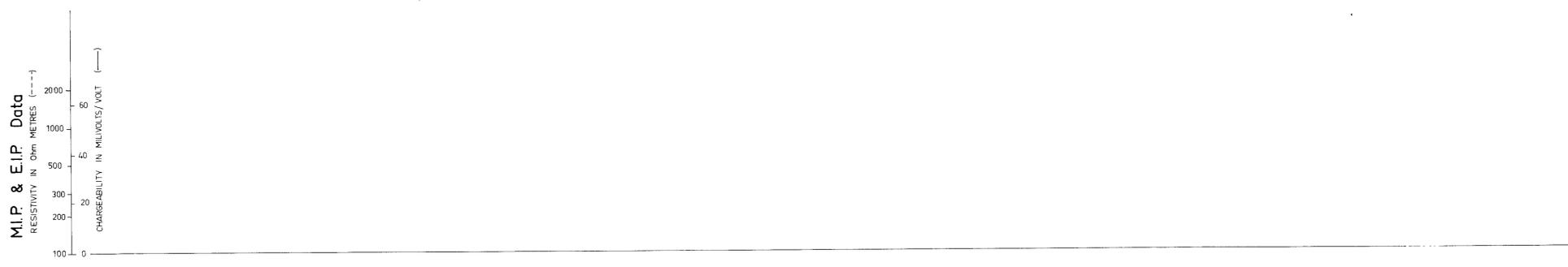
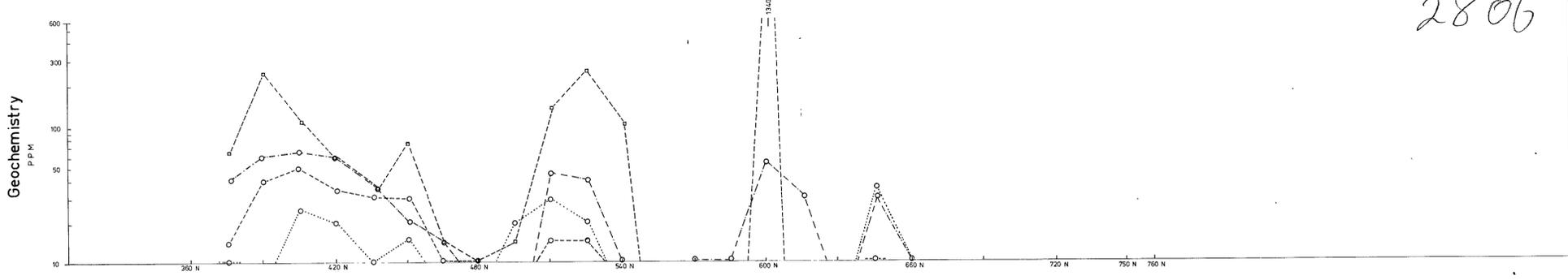
**LEGEND**

- Swamp, transported alluvium ?
- Quartzite, sandstone, minor siltstones, shales
- Ultrabasic rocks, massive serpentinite
- Limestone
- Basic volcanic & brecciated
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic boundary
- Faulted boundary

**MAGNETICS**  
5000 x Scale  
1000 x Scale

**SOIL GEOCHEMISTRY**  
Sn, Cu, Pb, Zn, As, Ni

5cm



785168

RENISON LIMITED 22-1751 1/2

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 500 mE

GEOLOGIST L. Martin  
DRAUGHTSMAN J. Matthews  
DATE March 1982

SCALE 1:1000 METRES

REVISIONS

2806 DRAWING No. 6c

**I.P. DATA**  
 Chargeability (—)  
 Resistivity (---)

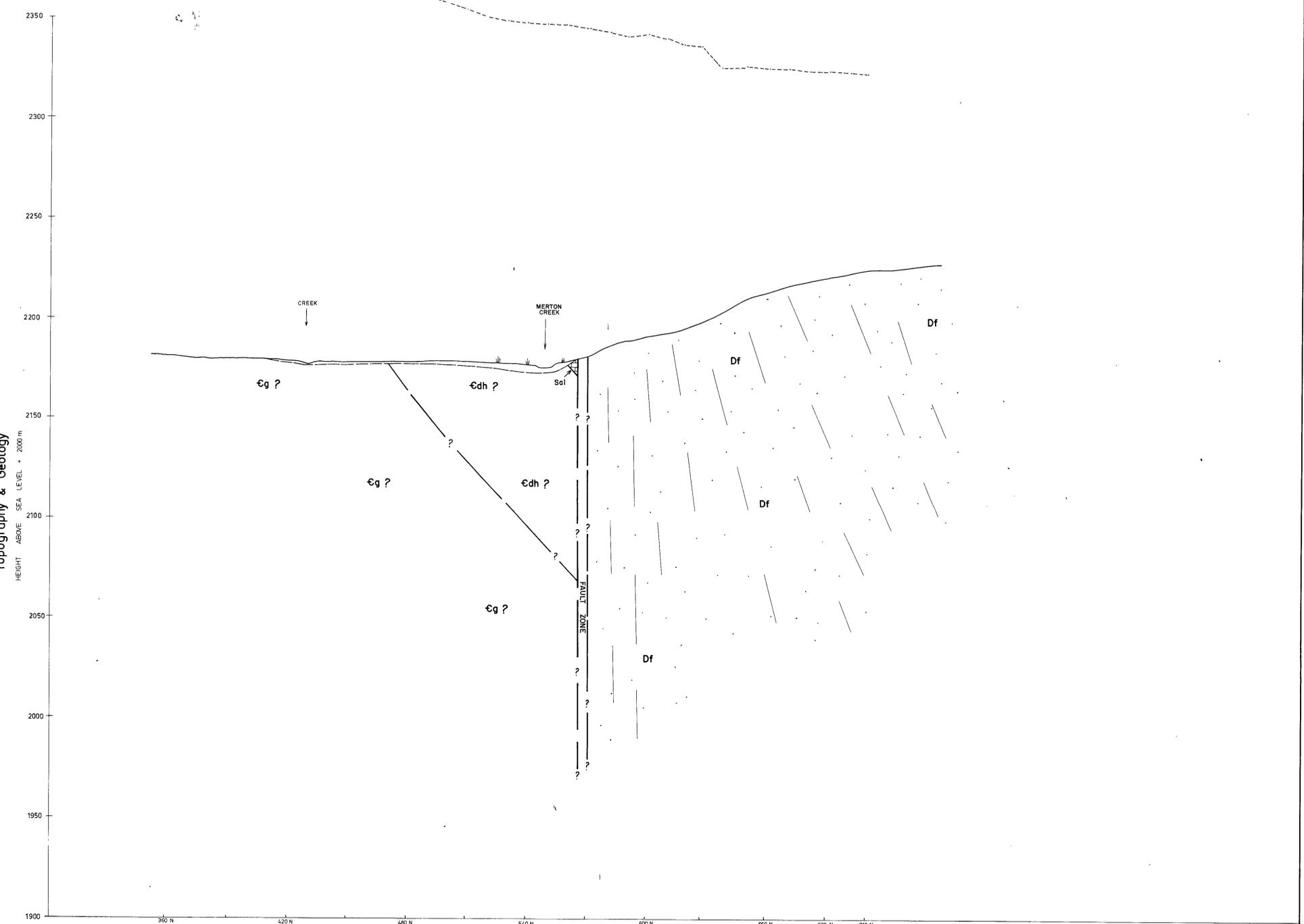
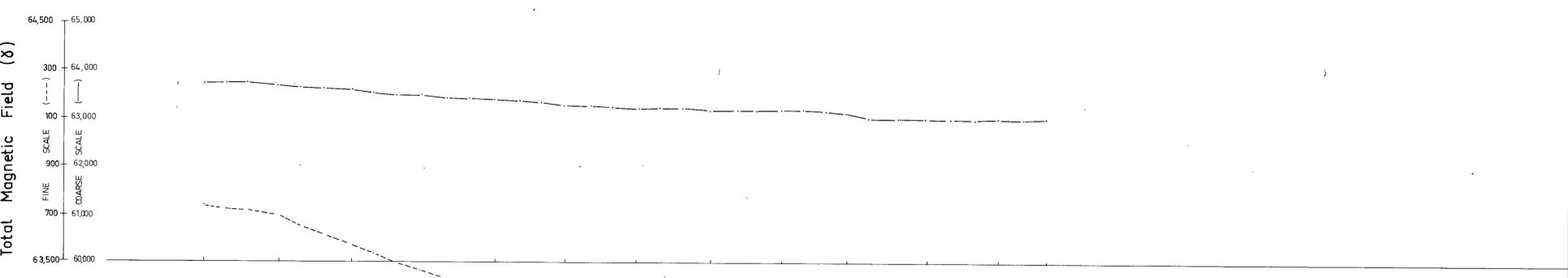
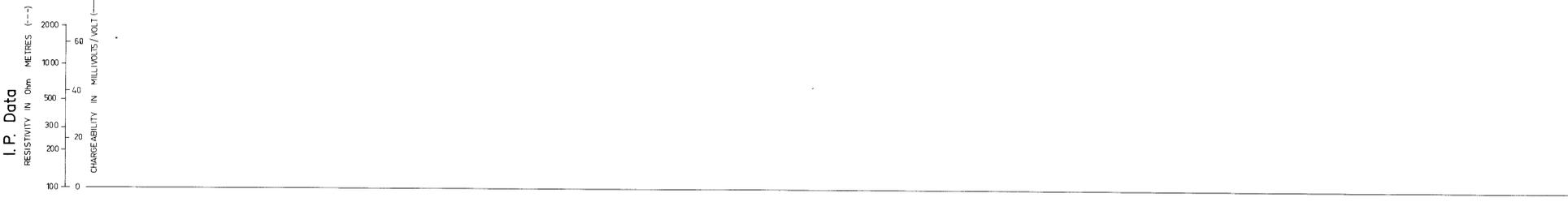
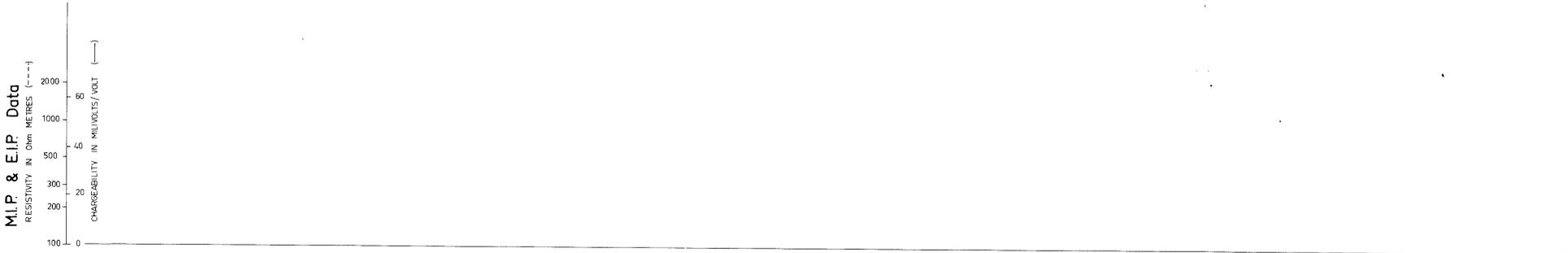
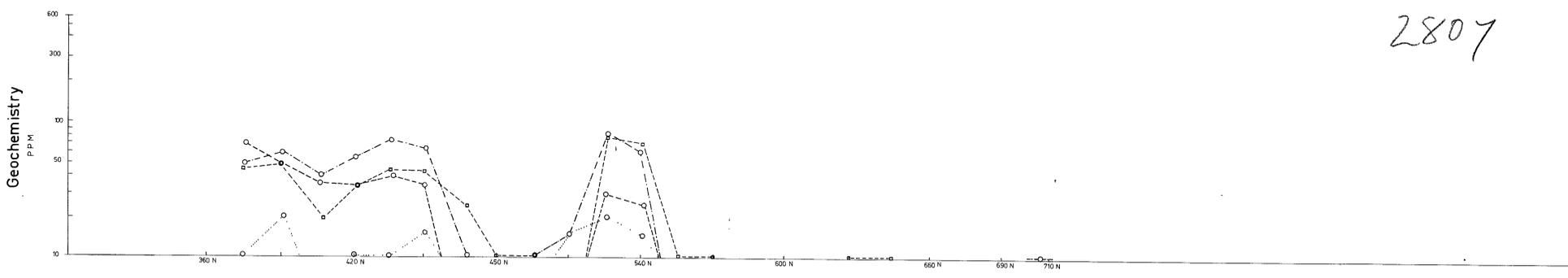
**MAGNETICS**  
 5000 x Scale (---)  
 1000 x Scale (---)

**SOIL GEOCHEMISTRY**  
 Sn (●)  
 Cu (○)  
 Pb (○)  
 Zn (○)  
 As (x)  
 Ni (○)

**LEGEND**

Tertiary	Silurian	Cambrian	Swamp, transported alluvium?	Basic volcanic & associated	Sedimentary Breccia
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group	Quartzite, sandstone, minor siltstone, shales	Shale	Fault Breccia
DEVONIAN	Sas Amber Sandstone Member	Eg Basic or Gabbroic Rocks	Ultrabasic rocks, massive serpentinite	Ash Tuff	Siltstone
Db Bell Shale	Ssl Amber Limestone Member	Es Serpentinites and Ultrabasic Rocks	Limestone	Tuffaceous sandstone	
Df Florence Quartzite	Sc Crotty Quartzite				

5cm



785169

RENISON LIMITED 82-1751/612

E. L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 600 mE

GEOLOGIST L. Martin  
DRAUGHTSMAN J. Matthews  
DATE March 1982

SCALE 1:1000 METRES

REVISIONS 2807 DRAWING No 6d

TERTIARY	SILURIAN	CAMBRIAN
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
Db Belt Shale	Sos Amber Sandstone Member	eg Basic or Gabbroic Rocks
Df Florence Quartzite	Sol Amber Limestone Member	Es Serpentinized and Ultrabasic Rocks
	Sc Crotty Quartzite	

I.P. DATA: Chargeability (solid line), Resistivity (dashed line)

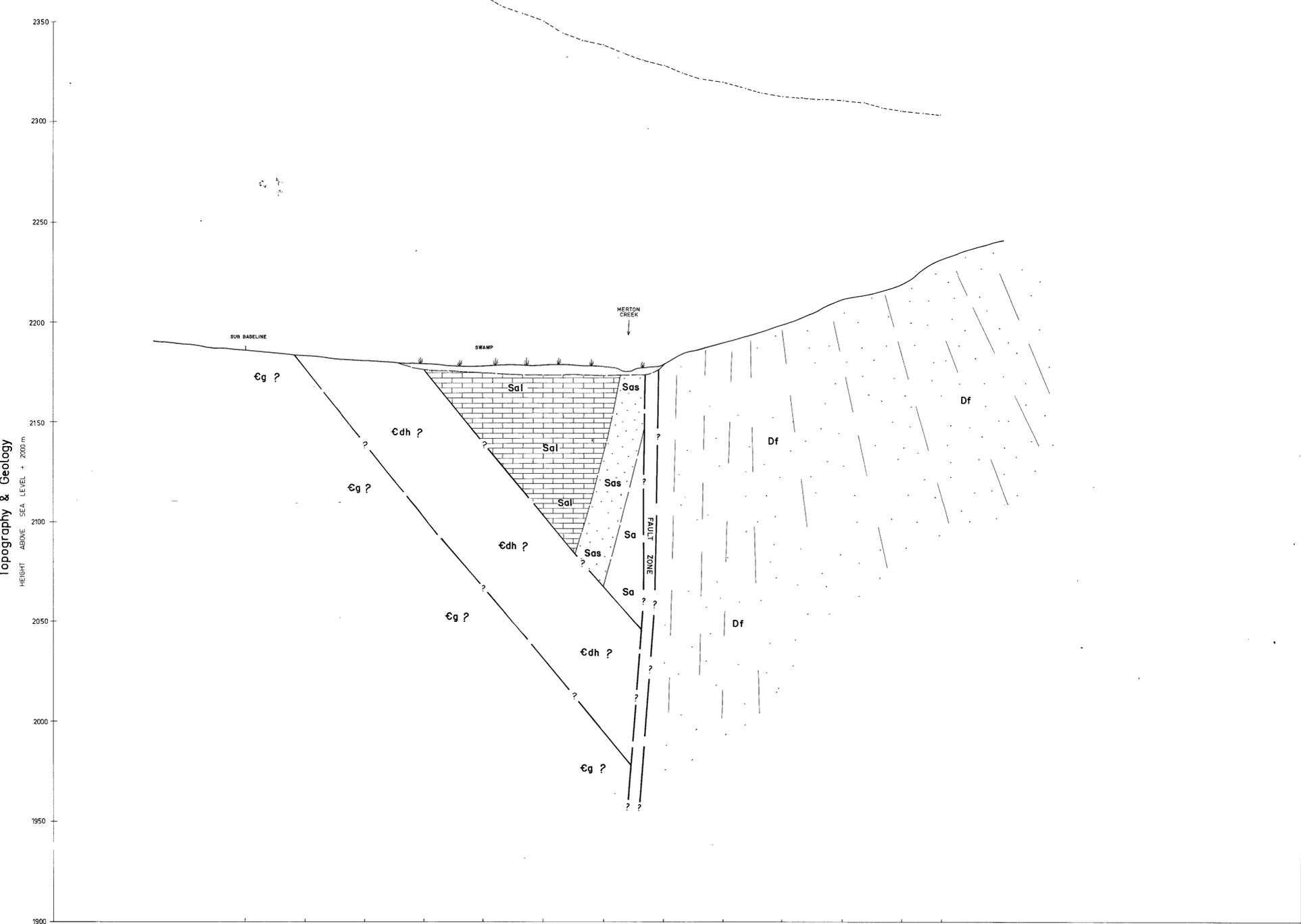
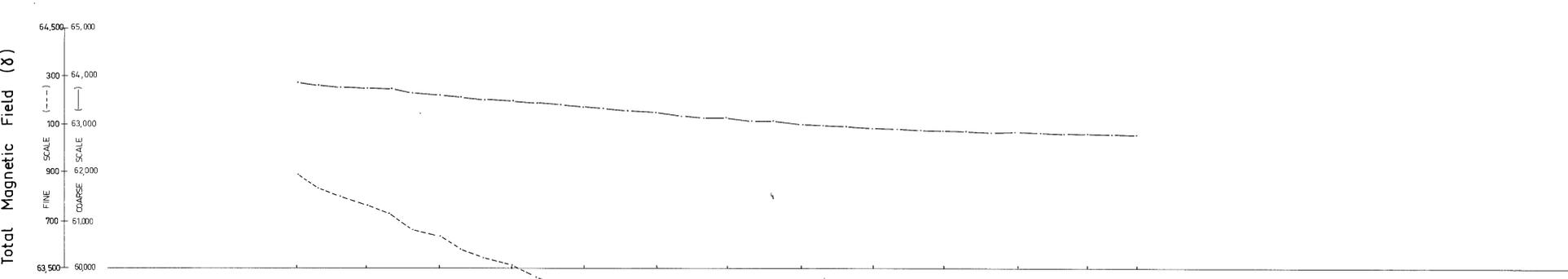
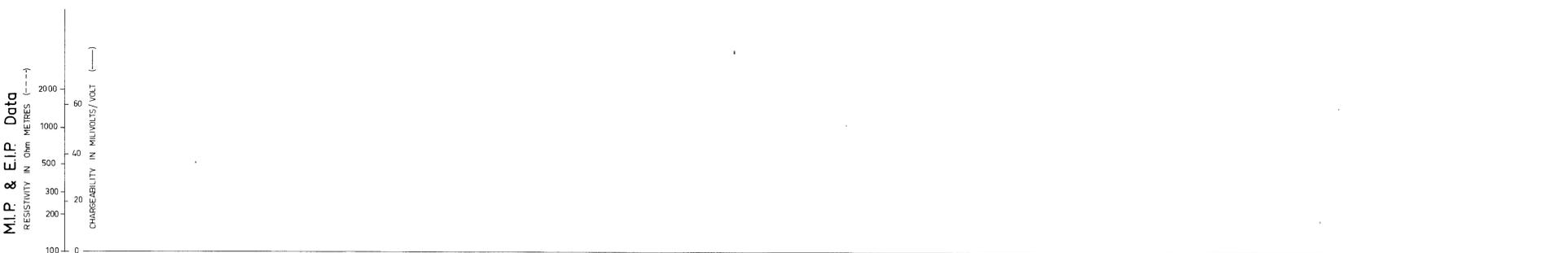
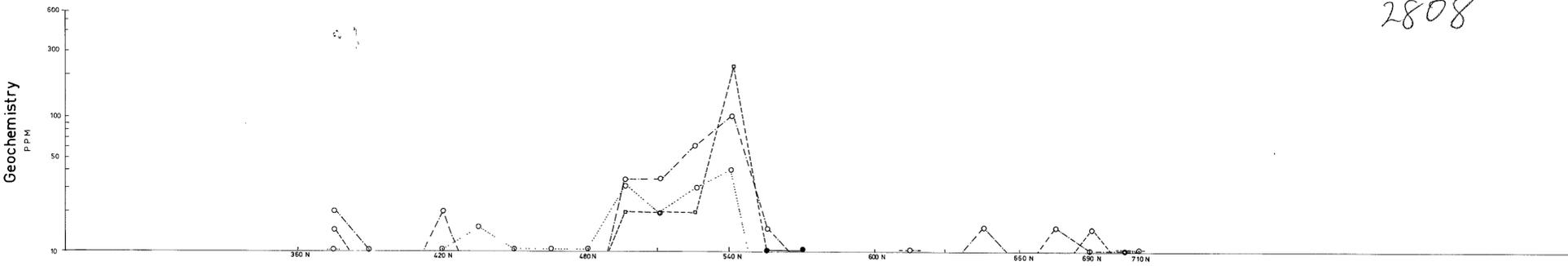
MAGNETICS: 5000 x Scale (dotted line), 1000 x Scale (dash-dot line)

SOIL GEOCHEMISTRY: Sn, Cu, Pb, Zn, AS, Ni

LEGEND:
 

- Swamp, transported alluvium?
- Basic volcanic & brecciated
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic boundary
- Faulted boundary

5 cm scale bar



785170

RENISON LIMITED

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 700 mE

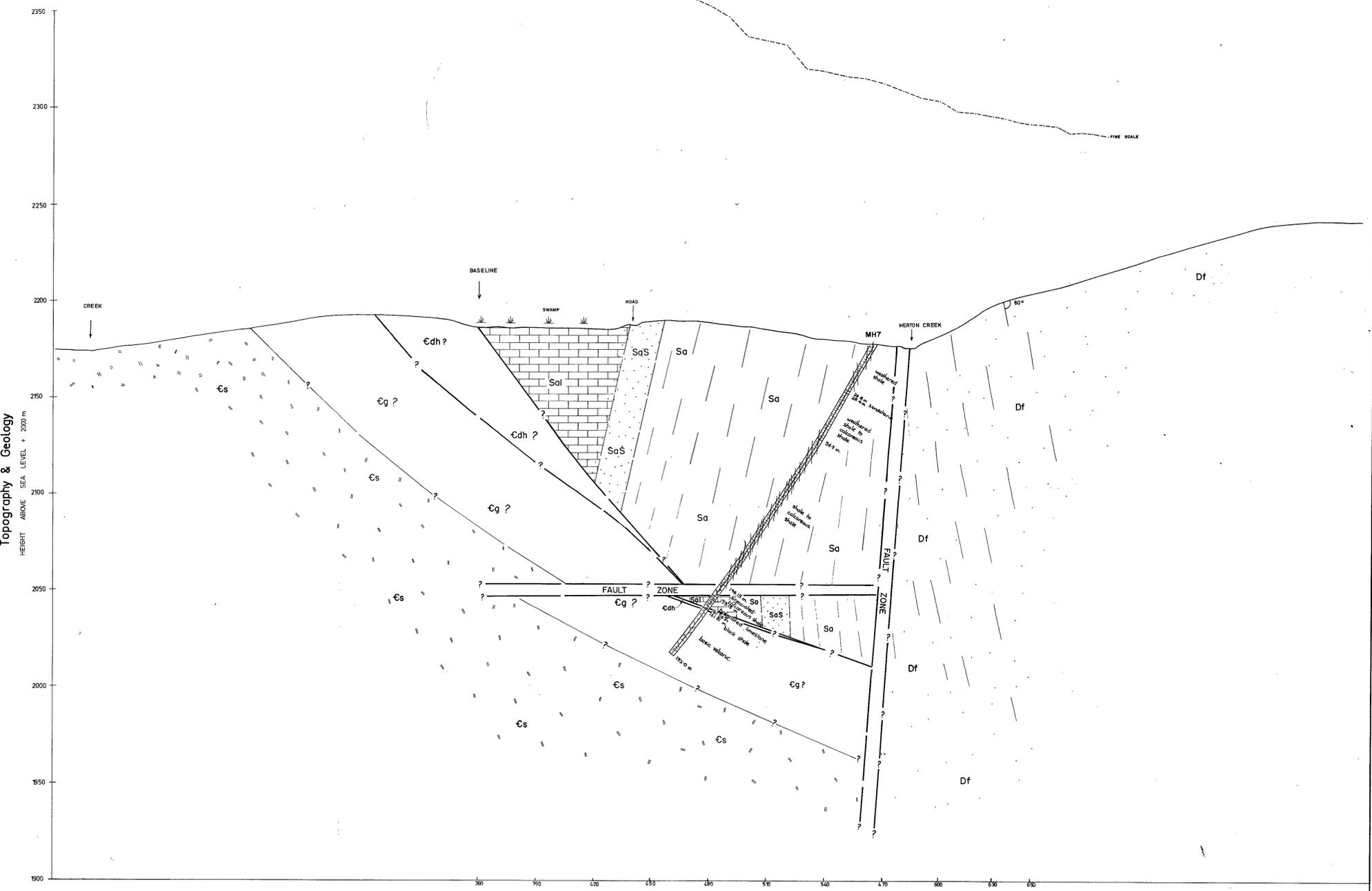
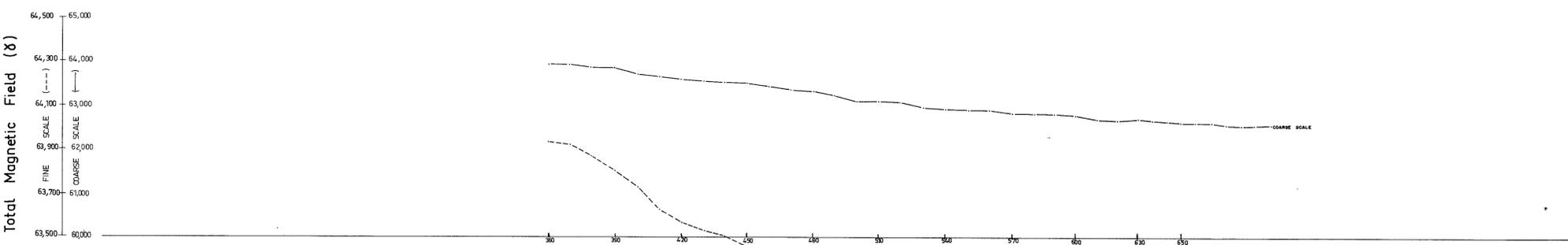
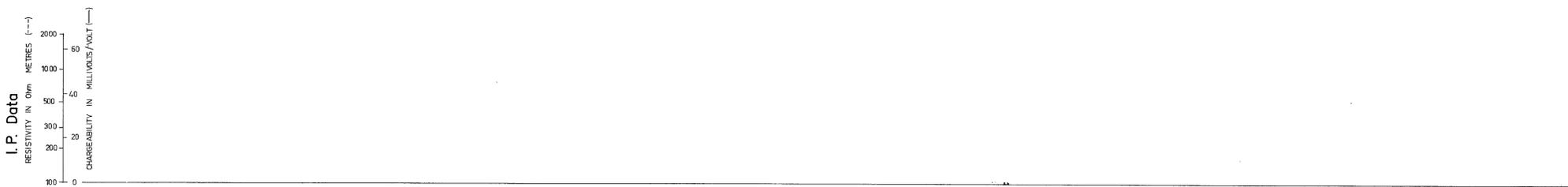
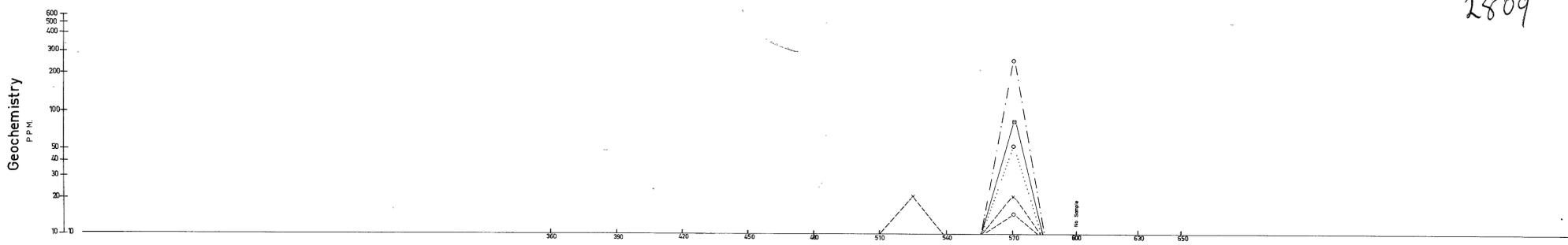
GEOLOGIST L.A. Martin  
DRAUGHTSMAN J.M. Matthews  
DATE March 1982

SCALE 1:1000 METRES

REVISIONS 2803 6e

<b>I.P. DATA</b> --- Chargeability - - - Resistivity		<b>MAGNETICS</b> --- 5000 x Scale - - - 1000 x Scale		<b>SOIL GEOCHEMISTRY</b> ● Sn ○ Cu ○ Pb ○ Zn ○ As ○ Ni		<b>LEGEND</b> [ * * ] Swamp, transported alluvium? [ ] Basal volcanic & brecciated [ ] Shale [ ] Ash Tuff [ ] Tuffaceous sandstone [ ] Quartzite, sandstone, minor siltstones, shales [ ] Ultrabasic rocks, massive serpentinite [ ] Limestone [ ] Sedimentary Brecon [ ] Fault Breccia [ ] Siltstone --- Stratigraphic boundary - - - Faulted boundary	
<b>TERTIARY</b> [ Tg ] Gravels [ Db ] Bell Shale [ Df ] Florence Quartzite		<b>SILURIAN</b> [ Sa ] Amber Shale [ Sas ] Amber Sandstone Member [ Sc ] Crotty Quartzite		<b>CAMBRIAN</b> [ Edh ] Upper Dundas Group [ Eg ] Basic or Gabbroic Rocks [ Es ] Serpentinized and Ultramafic Rocks			

5 cm



785171

**REINSON LIMITED** 82-1751 VOL 2  
**E.L. 2/63 MT. LINDSAY AREA**  
**MERTON HILL GRID**  
**LINE M.H. 800mE**

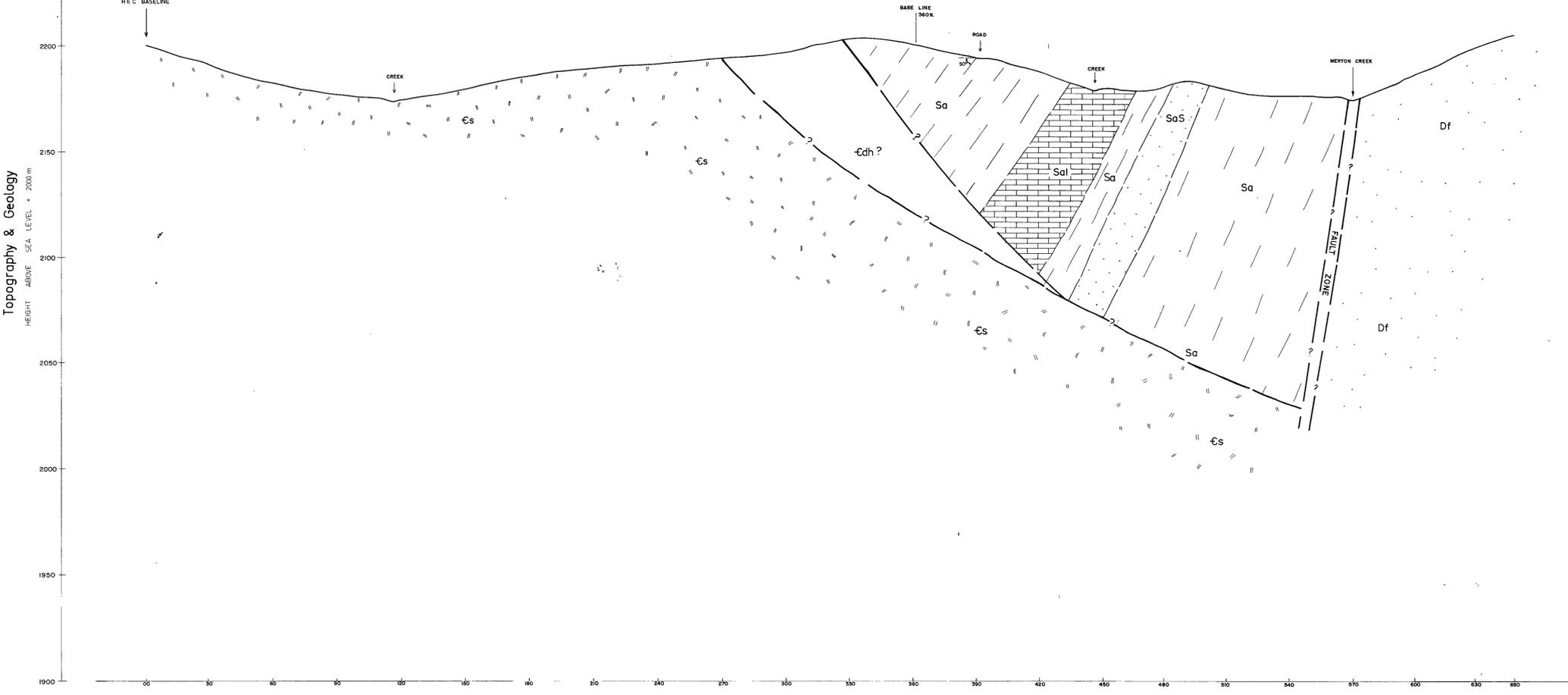
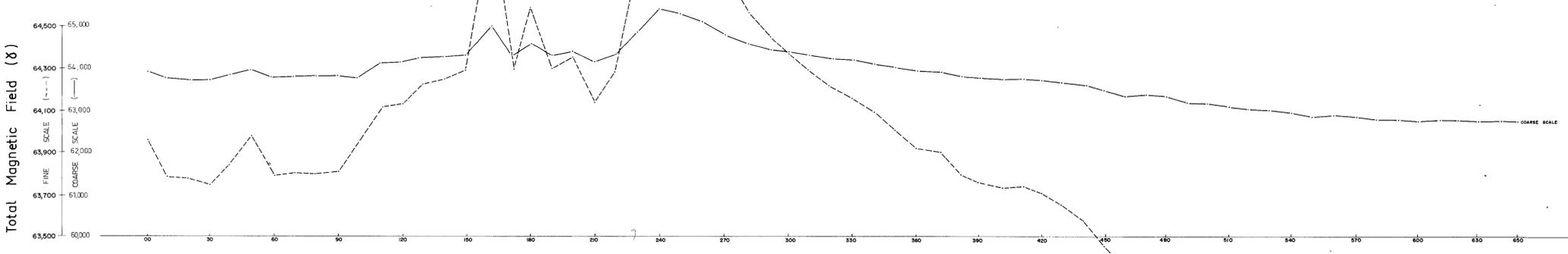
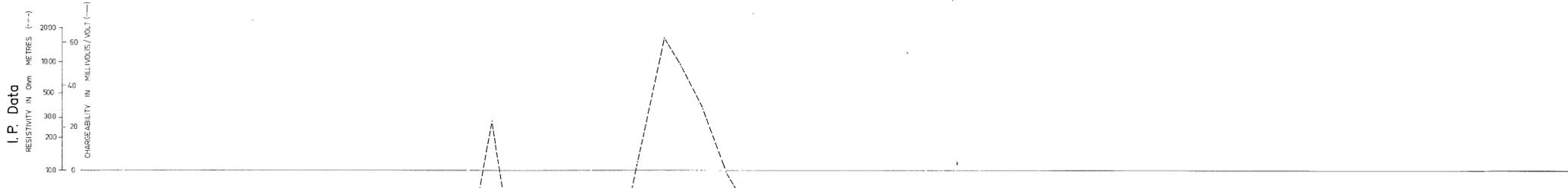
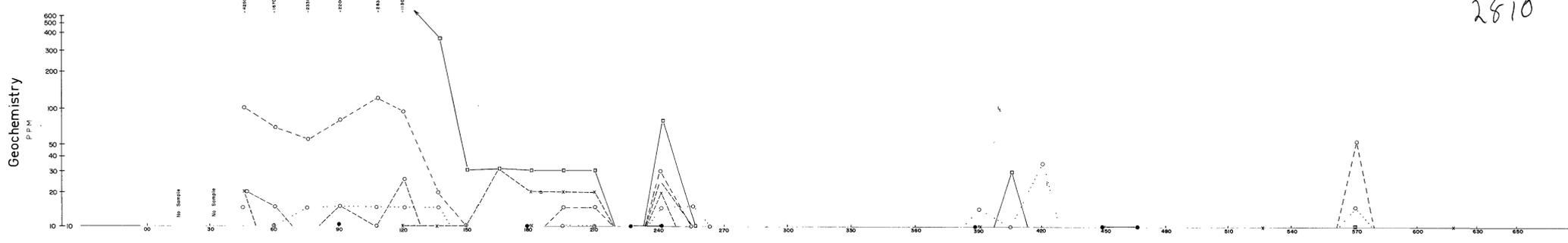
GEOLOGIST: L. Martin  
 DRAUGHTSMAN: T.G.O.S.  
 DATE: March 1982

SCALE 1:1000 METRES

REVISIONS: 2809 DRAWING No 6f

<b>I.P. DATA</b> --- Chargeability - - - Resistivity	<b>MAGNETICS</b> --- 5000 x Scale - - - 1000 x Scale	<b>SOIL GEOCHEMISTRY</b> ● Sn ○ Cu ○ Pb ○ Zn ○ As ○ Ni	<b>LEGEND</b> [Symbol] Swamp, transported alluvium? [Symbol] Quartzite, sandstone, minor siltstone, shales [Symbol] Ultrabasic rocks, massive serpentinite [Symbol] Limestone	<b>LEGEND</b> [Symbol] Basic volcanic & brecciated [Symbol] Shale [Symbol] Ash Tuff [Symbol] Tuftaceous sandstone	<b>LEGEND</b> [Symbol] Sedimentary Breccia [Symbol] Fault Breccia [Symbol] Siltstone --- Stratigraphic boundary - - - Faulted boundary
--	--	--	---	---	---

5 cm



785172

RENISON LIMITED

E.L. 2/63 MT. LINDSAY AREA

MERTON HILL GRID

LINE M.H. 900mE

GEOLOGIST: L. Martin

DRAUGHTSMAN: T.E.D.S.

DATE: February 1982

REVISIONS:

SCALE 1:1000 METRES

SCALE 1:1000 METRES

SCALE 1:1000 METRES

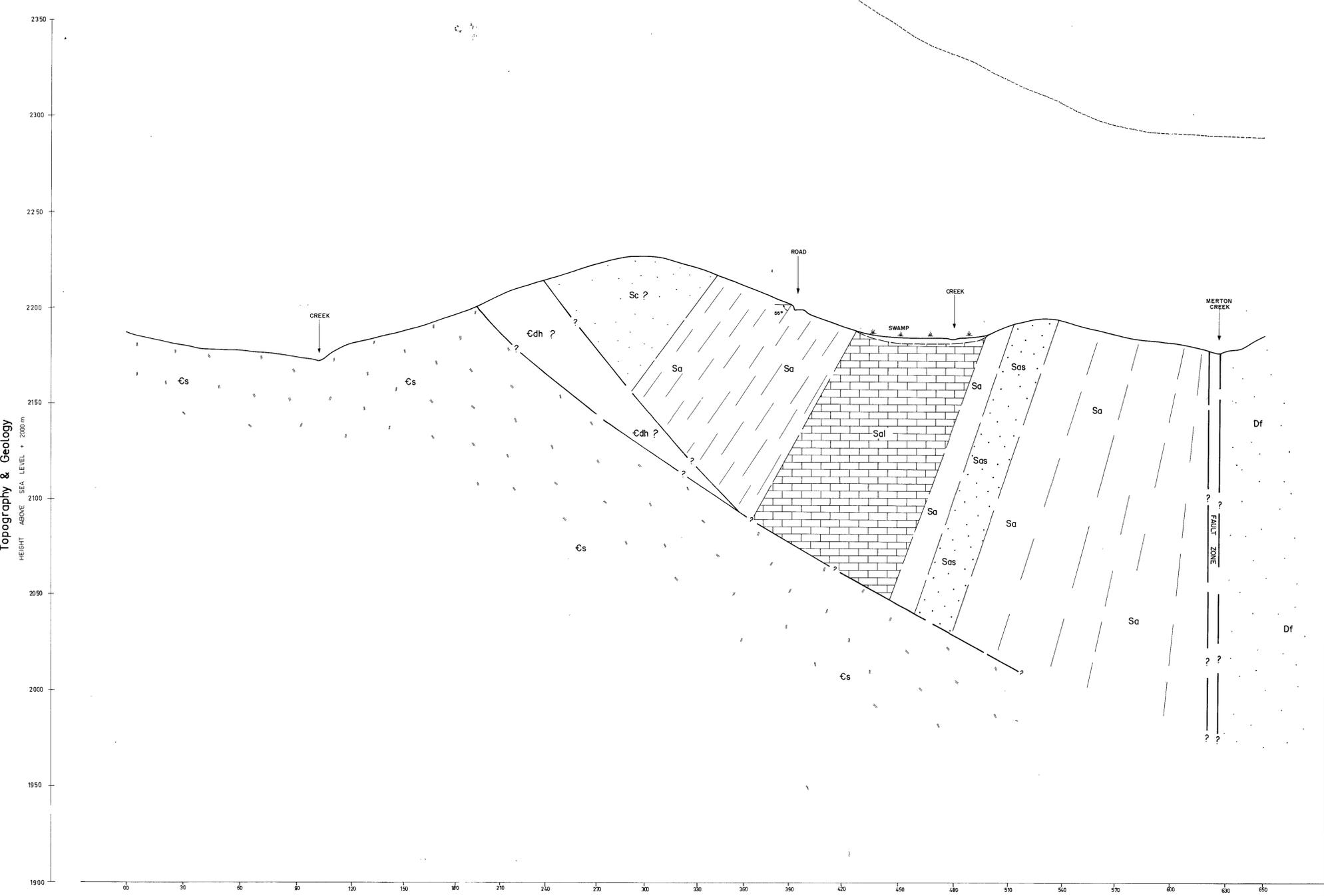
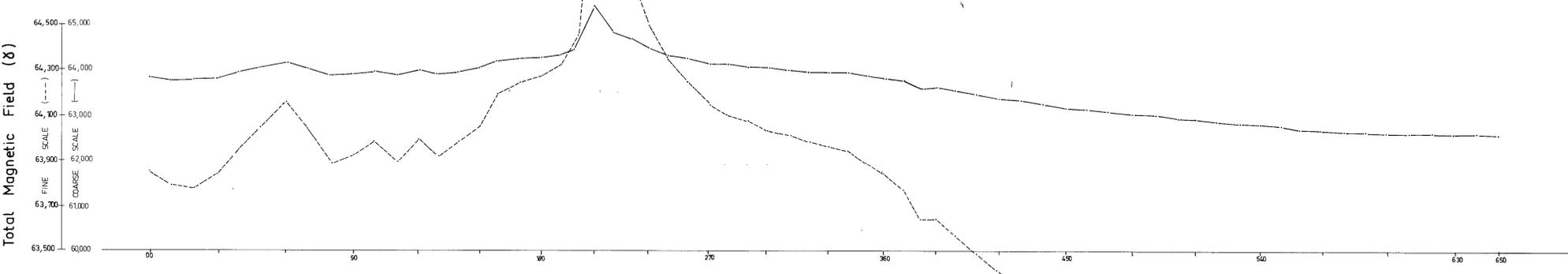
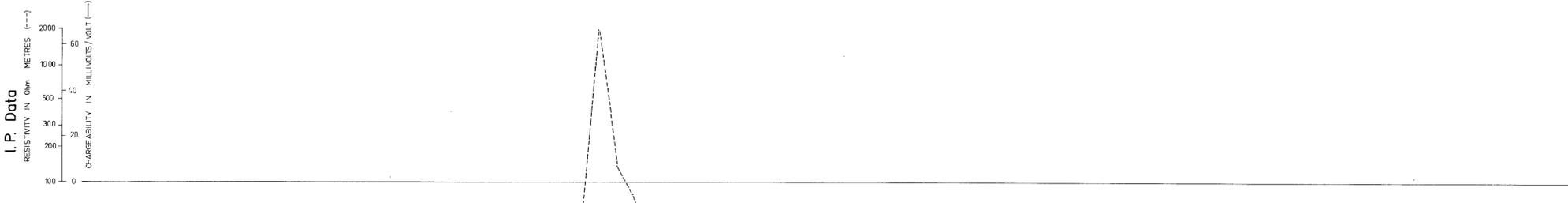
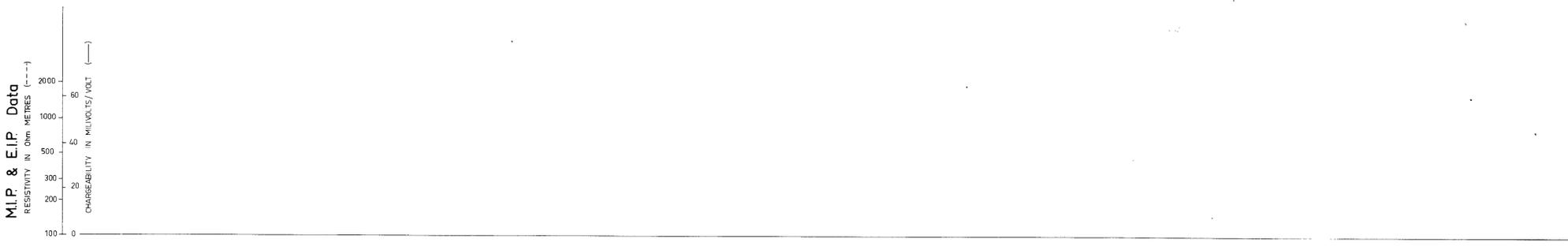
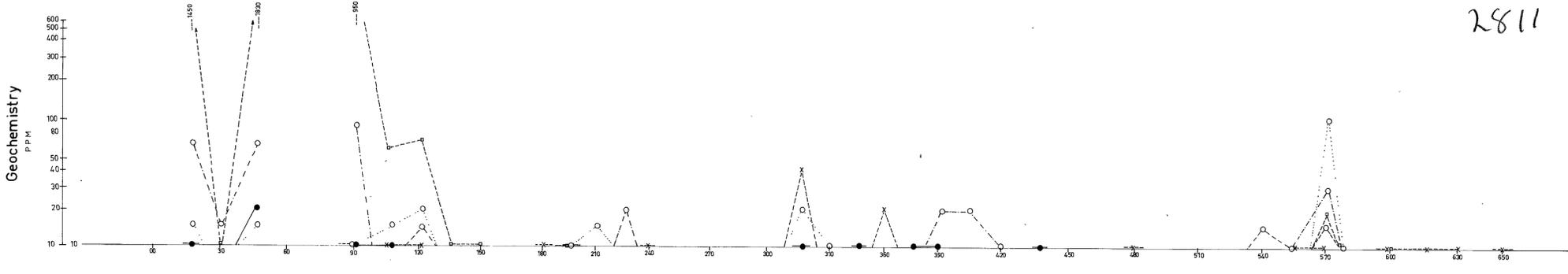
**LEGEND**

TERTIARY	SILURIAN	CAMBRIAN
Ta Grovels	Sa Amber Shale	Edh Upper Dundas Group
Df Devonian	Ss Amber Sandstone Member	Eg Basic or Gabbroic Rocks
Ds Belle Shale	SaL Amber Limestone Member	Ea Serpentines and Ultramafic Rocks
Df Florence Quartzite	Sc Cratty Quartzite	

**LEGEND**

Swamp, transported alluvium?	Basal volcanic & brecciated	Sedimentary Breccia
Quartzite, sandstone, minor siltstones, shales	Shale	Fault Breccia
Ultrabasic rocks, massive serpentinite	Ash Tuff	Siltstone
Limestone	Tuffaceous sandstone	Stratigraphic boundary
		Faulted boundary

5cm



785173

RENISON LIMITED 22-1751 1012

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 1000m E

GEOLOGIST L. MARTIN  
DRAUGHTSMAN T.G.D.S.  
DATE March, 1982

SCALE 1:1000 METRES

REVISIONS 2811 6h

**LEGEND**

<b>TERTIARY</b>	<b>SILURIAN</b>	<b>CAMBRIAN</b>
Tg Gravels	Se Amber Shale	Edh Upper Dundas Group
Ds Belt Shale	Sas Amber Sandstone Member	Eg Basic or Gabbroic Rocks
Df Florence Quartzite	Sal Amber Limestone Member	Es Serpentinized and Ultrabasic Rocks
	Sc Crotty Quartzite	

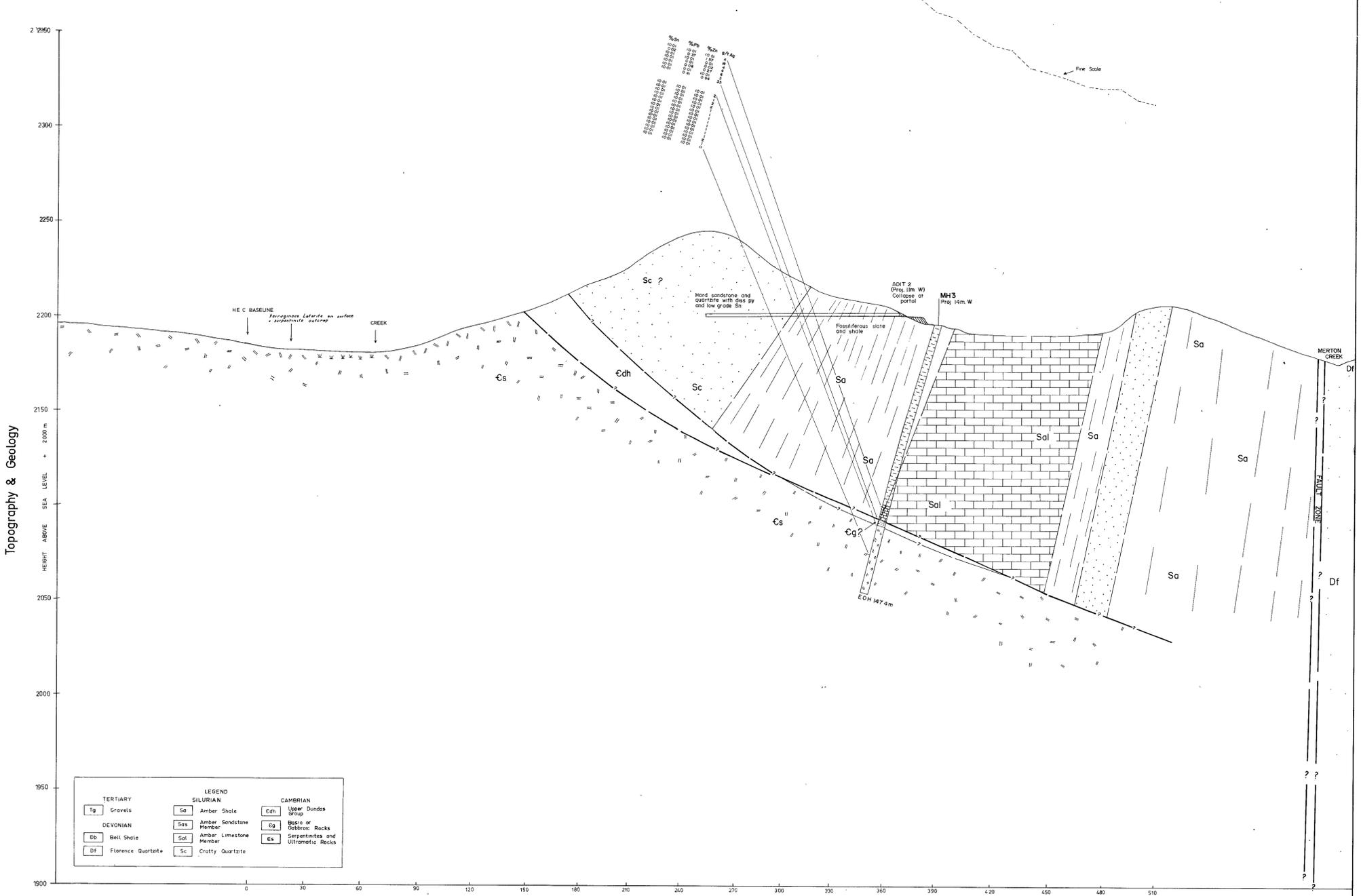
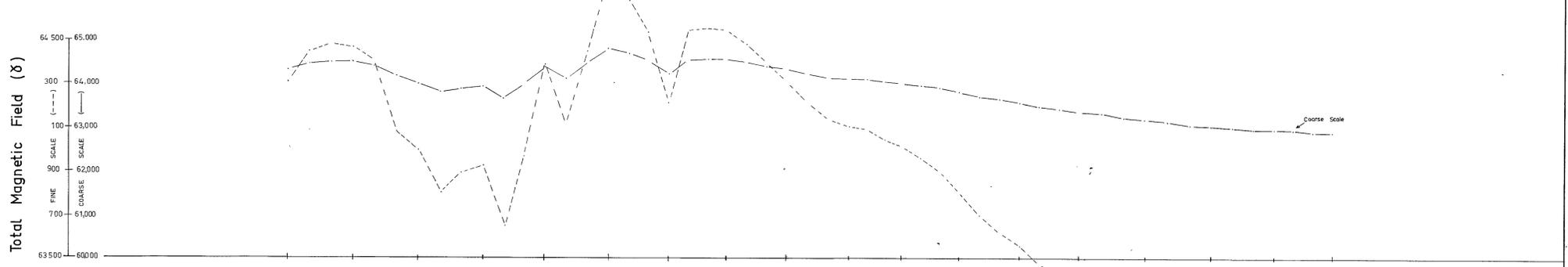
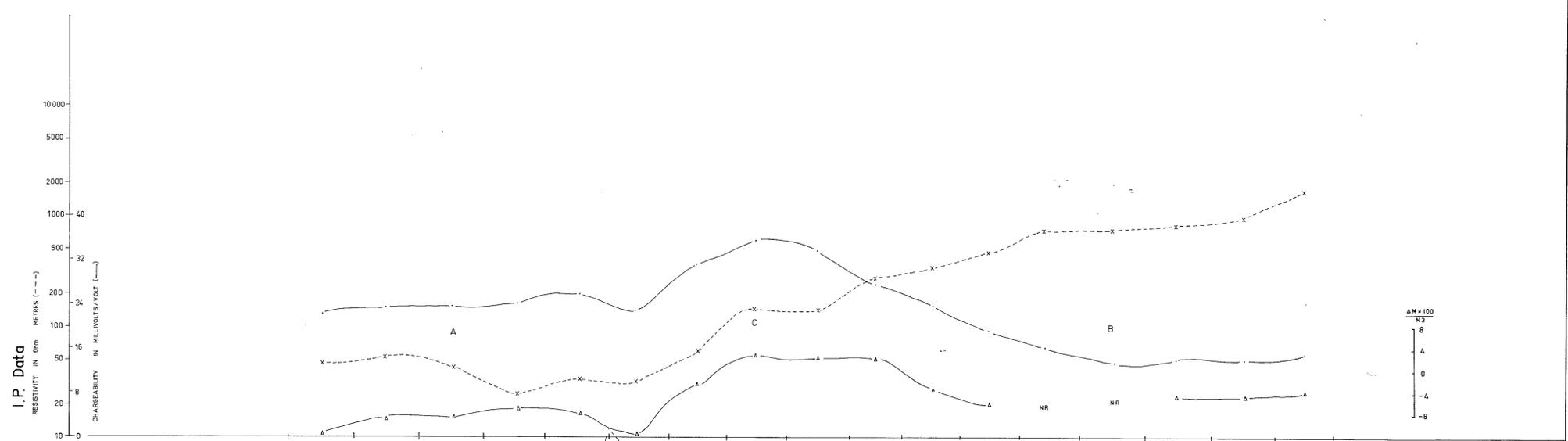
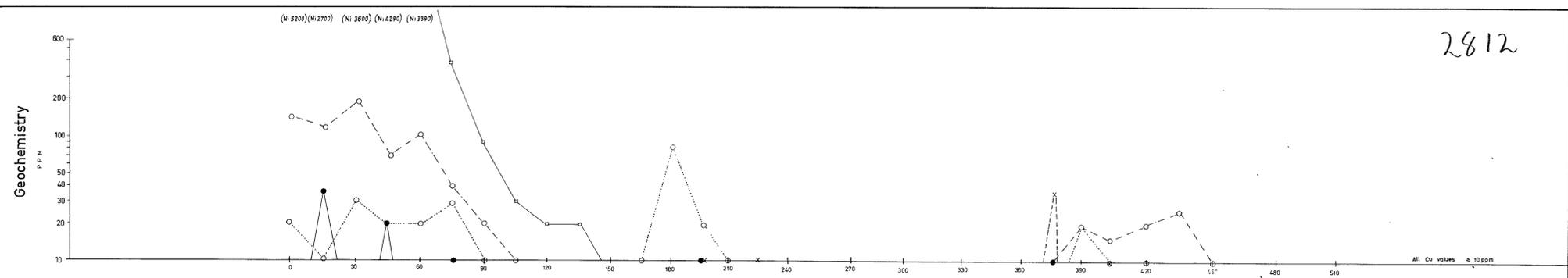
**SOIL GEOCHEMISTRY**

● Sn  
○ Cu  
○ Pb  
○ Zn  
○ As  
○ Ni

**LEGEND**

Swamp, transported alluvium?	Basic volcanic & breccias	Sedimentary Breccia
Quartzite, sandstone, minor siltstones, shales	Shale	Fault Breccia
Ultrabasic rocks, massive serpentinites	Ash Tuff	Siltstone
Limestone	Tuffaceous sandstone	Stratigraphic boundary
		Faulted boundary

50m



LEGEND		
<b>TERTIARY</b>	<b>SILURIAN</b>	<b>CAMBRIAN</b>
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
DEVONIAN	Sas Amber Sandstone Member	Eg Basic or Igneous Rocks
Ds Bell Shale	Sol Amber Limestone Member	Es Serpentine and Ultramafic Rocks
Df Florence Quartzite	Sc Crotty Quartzite	

785174

RENISON LIMITED 82-751 1012

E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 1100m E

GEOLOGIST L. Martin SCALE 1:1000 METRES  
DRAUGHTSMAN J. Matthews  
DATE April 1982

REVISIONS

2812 DRAWING No 61

**I.P.**  
CHARGEABILITY  
RESISTIVITY

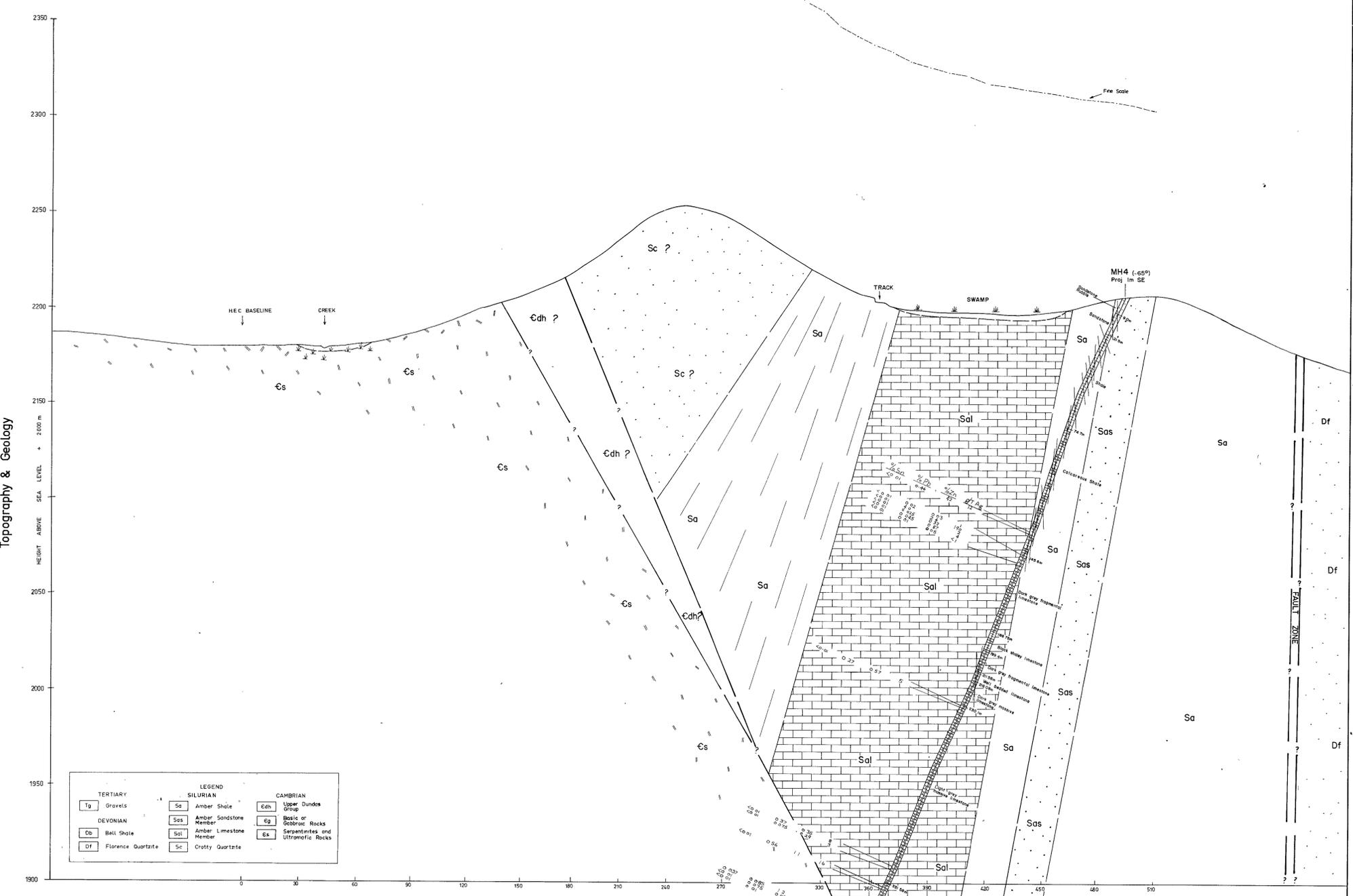
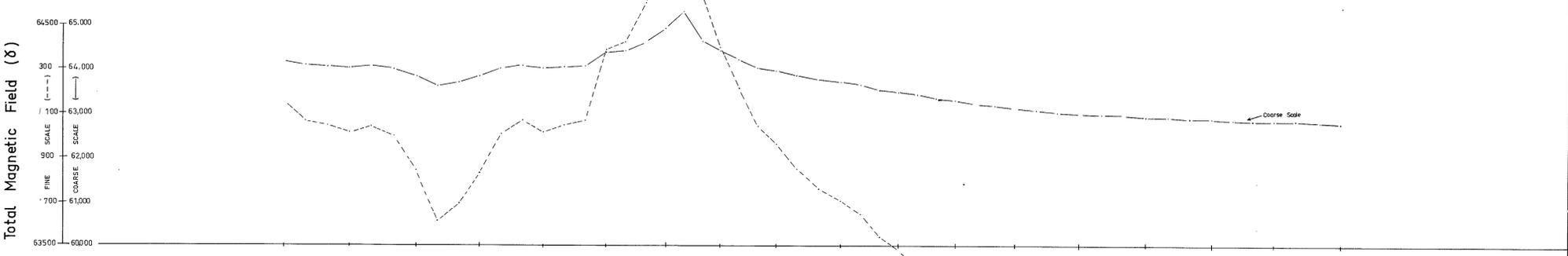
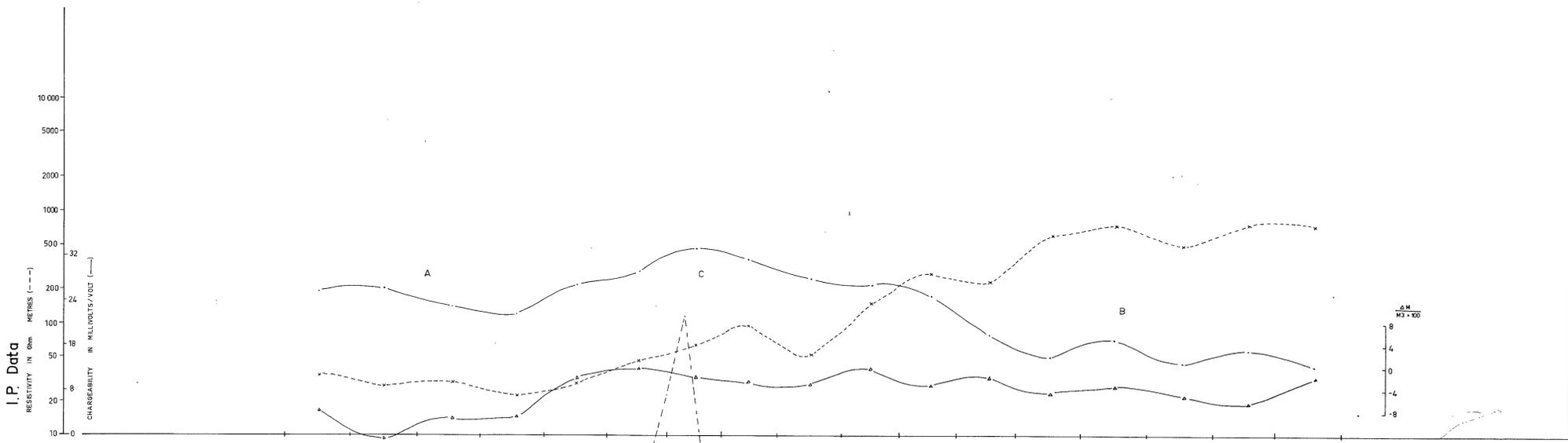
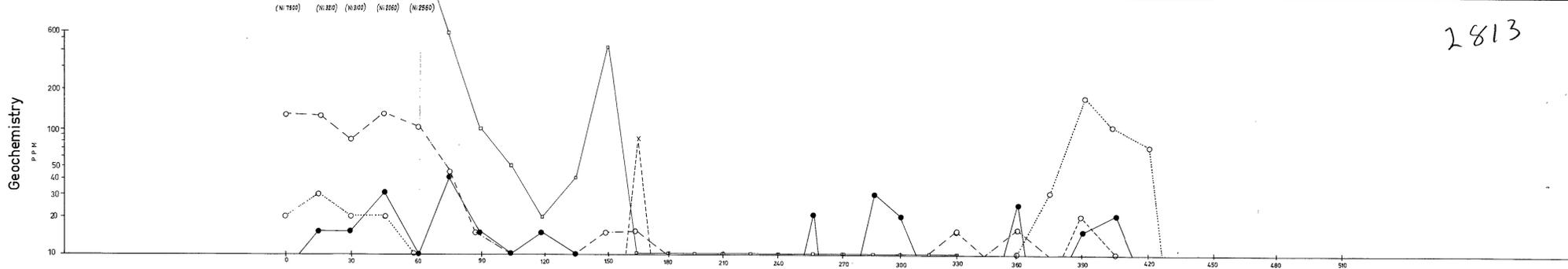
**MAGNETICS**  
5000 δ SCALE  
1000 δ SCALE

**GEOCHEMISTRY**  
Sn  
Cu  
Pb  
Zn  
As  
Ni

**LEGEND**

- Swamp, transported alluvium P
- Quartzite sandstone, minor siltstone, shales
- Ultrabasic rocks, massive serpentinite
- Limestone
- Basic volcanic & brecciated
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic Boundary
- Fault Boundary

5 cm



LEGEND		
<b>TERTIARY</b>	<b>SILURIAN</b>	<b>CAMBRIAN</b>
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
DEVONIAN	Sas Amber Sandstone Member	Eg Basic or Gabbroic Rocks
Db Belt Shale	Sal Amber Limestone Member	Ea Serpentinized and Ultramafic Rocks
Df Florence Quartzite	Sc Crusty Quartzite	

785175

RENISON LIMITED  
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 1200mE

GEOLOGIST : L. Martin  
DRAUGHTSMAN : J. Matthews  
DATE : March 1982

REVISIONS:

SCALE 1:1000 METRES

DRAWING No 6j

**I.P.**

CHARGEABILITY (—) 5000  $\delta$  SCALE

RESISTIVITY (- - -) 1000  $\delta$  SCALE

**MAGNETICS**

5000  $\delta$  SCALE

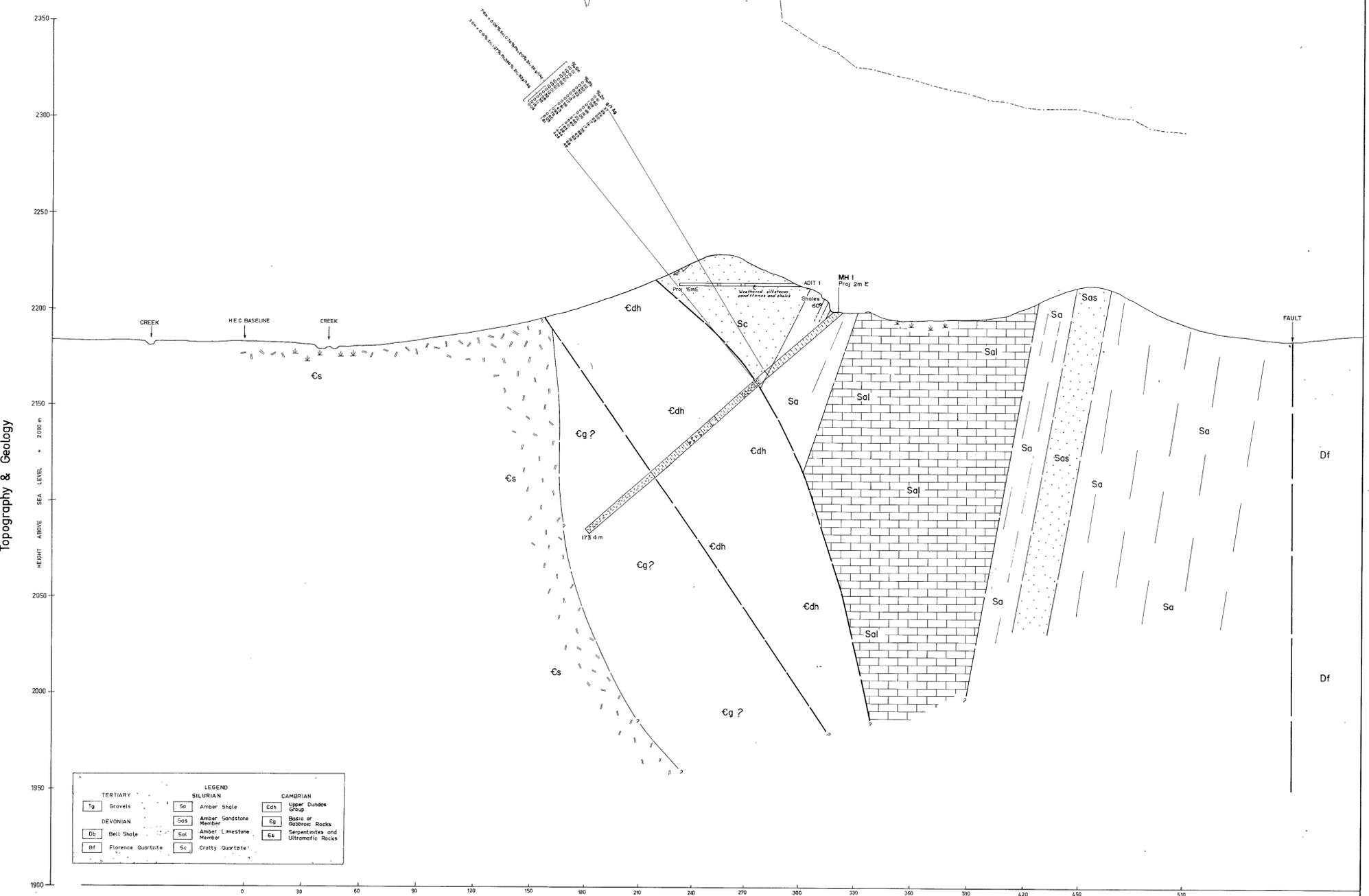
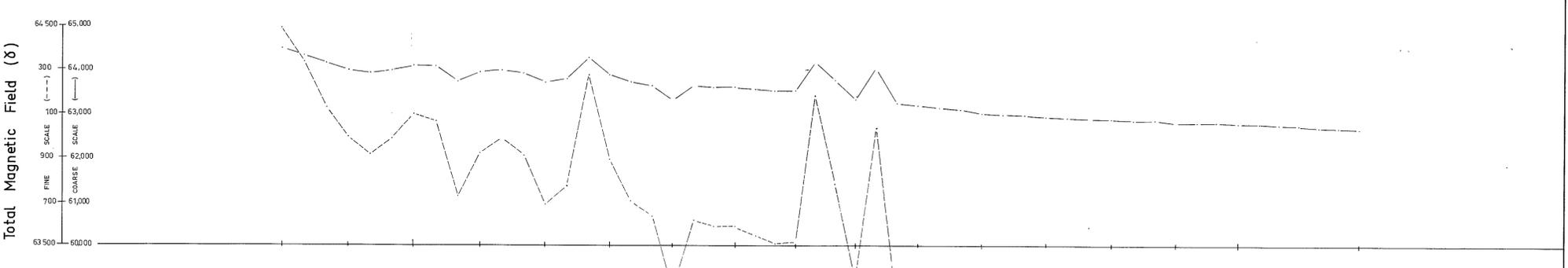
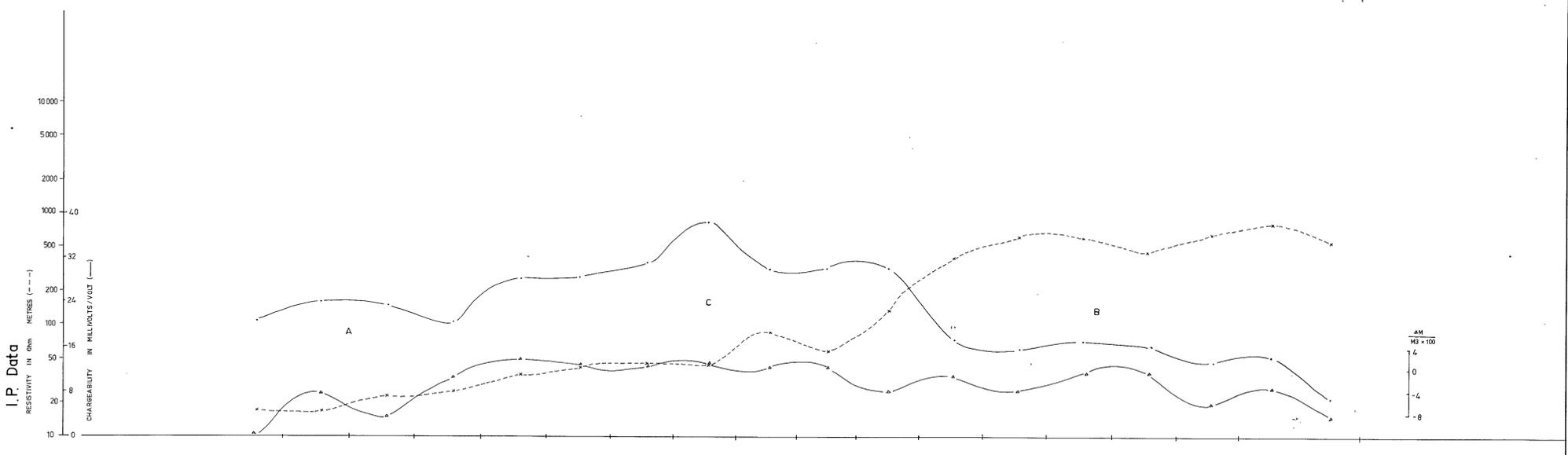
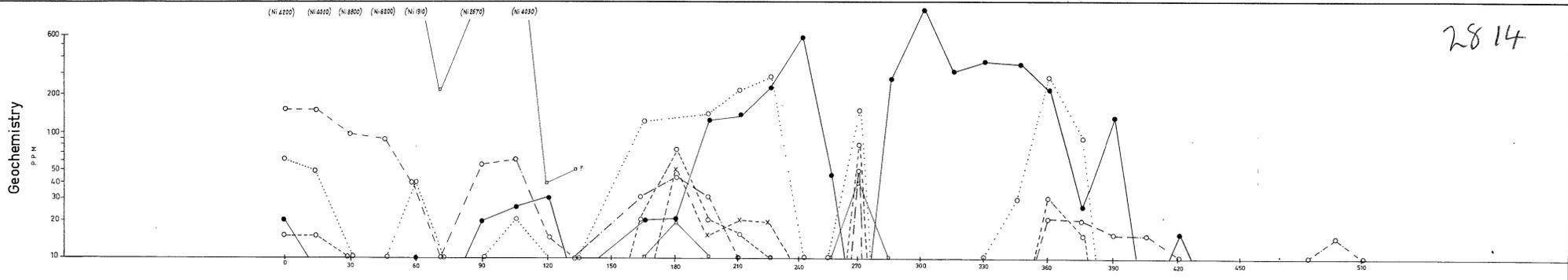
1000  $\delta$  SCALE

**GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- As
- Ni

5 cm

LEGEND  
GEOLOGY AS FOR OTHER  
LINE PROFILES.



LEGEND		
<b>TERTIARY</b>	<b>SILURIAN</b>	<b>CAMBRIAN</b>
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
DEVONIAN	Sas Amber Sandstone Member	Eg Basic or Gabbroic Rocks
Dd Bell Shale	Sal Amber Limestone Member	Es Serpentinites and Ultramafic Rocks
Bf Florence Quartzite	Sc Crouty Quartzite	

785176

RENISON LIMITED  
E.L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
LINE M.H. 1300mE

GEOLOGIST L. Martin  
DRAUGHTSMAN J. Matthews  
DATE April 1982

SCALE 1:1000 METRES

REVISIONS  
2814  
DRAWING No 6k.

**LP**  
CHARGEABILITY  
RESISTIVITY

**MAGNETICS**  
5000  $\delta$  SCALE  
1000  $\delta$  SCALE

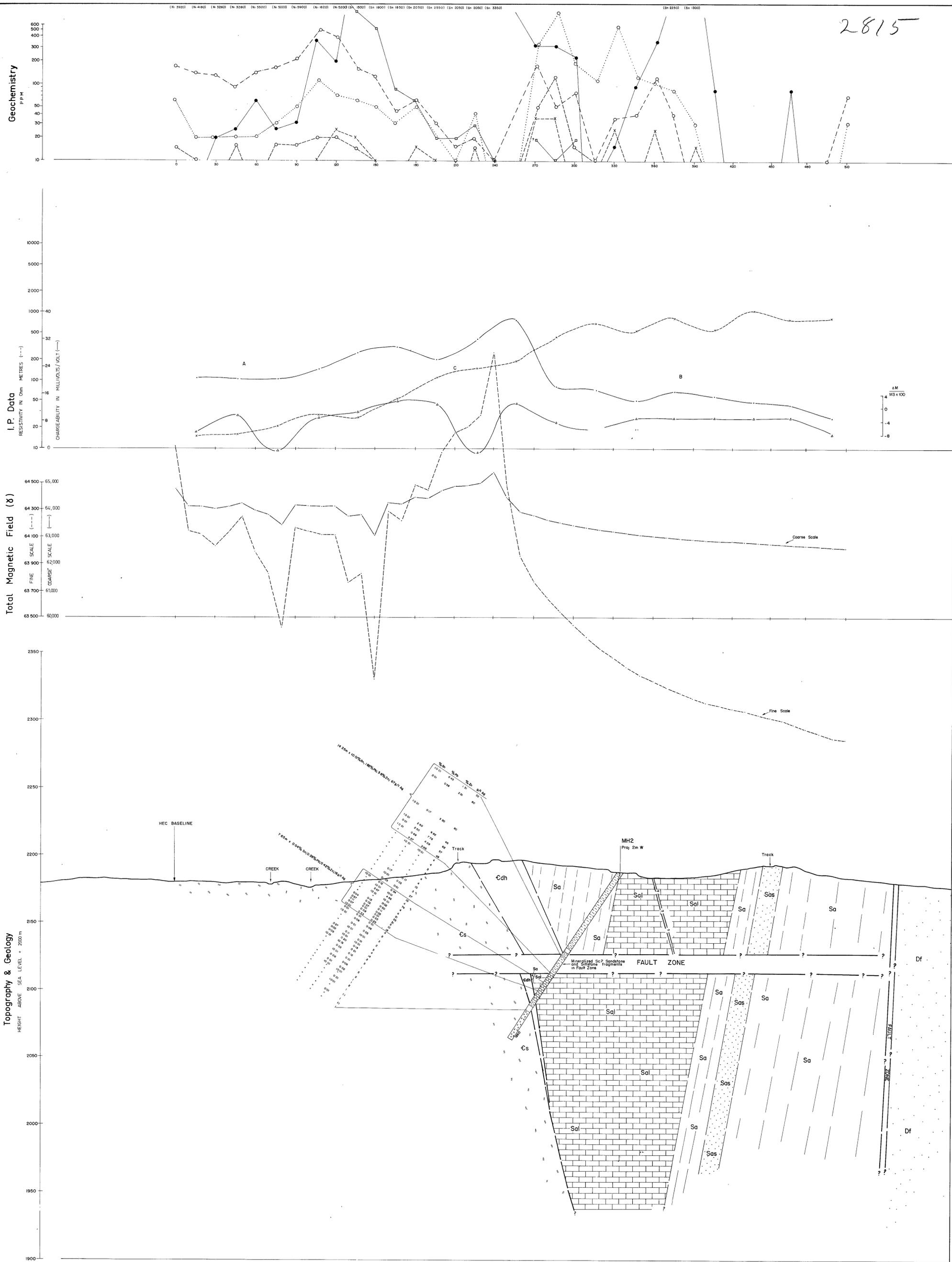
**GEOCHEMISTRY**  
Sn  
Cu  
Pb  
Zn  
As  
Ni

**LEGEND**

- Swamp, transported alluvium
- Quartzite, sandstone, minor siltstones, shales
- Ultrabasic rocks, massive serpentinite
- Limestone
- Block, volcanic & brecciated
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic Boundary
- Fault Boundary

5cm

2815



785177  
**RENISON LIMITED**  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 LINE M.H. 1400mE

GEOLOGIST: L. Martin  
 DRAUGHTSMAN: T.G.D.S.  
 DATE: April 1982

SCALE 1:1000 METRES

REVISIONS: 61

**I.P. DATA**  
 --- Chargeability  
 --- Resistivity

**MAGNETICS**  
 --- 5000 f Scale  
 --- 1000 f Scale

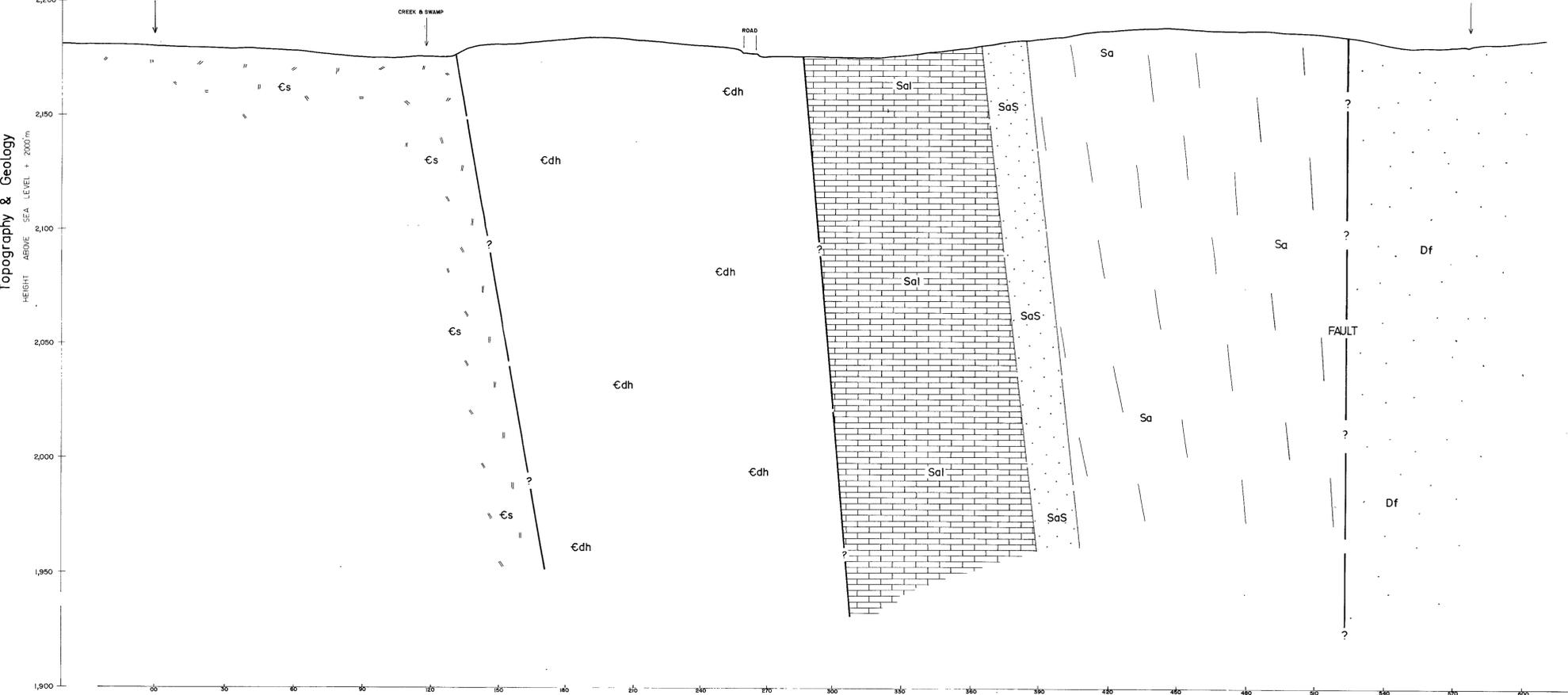
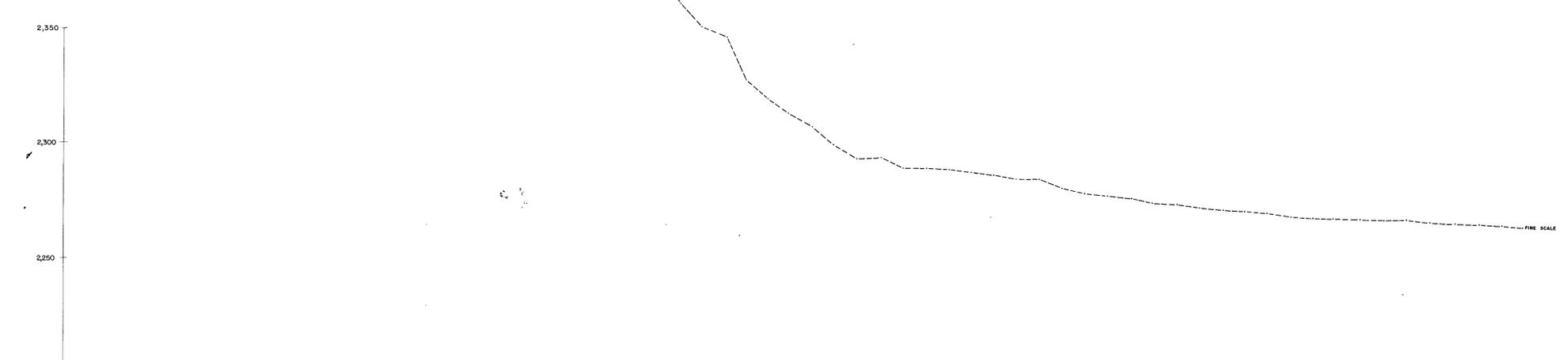
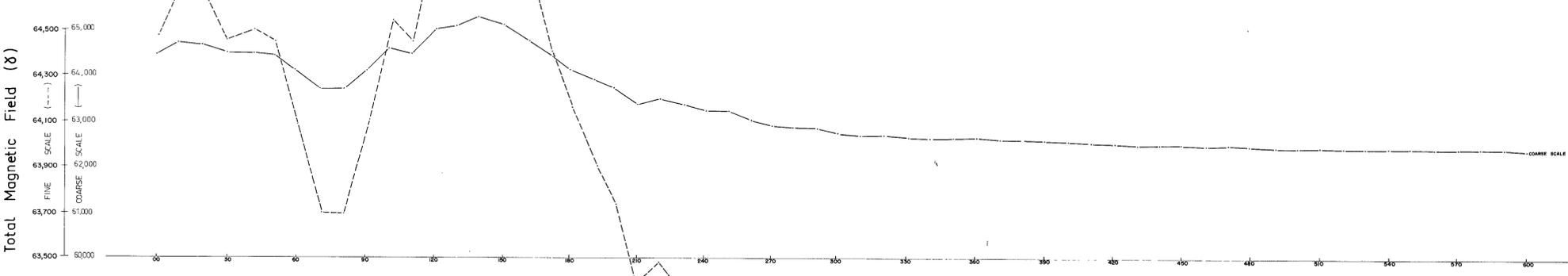
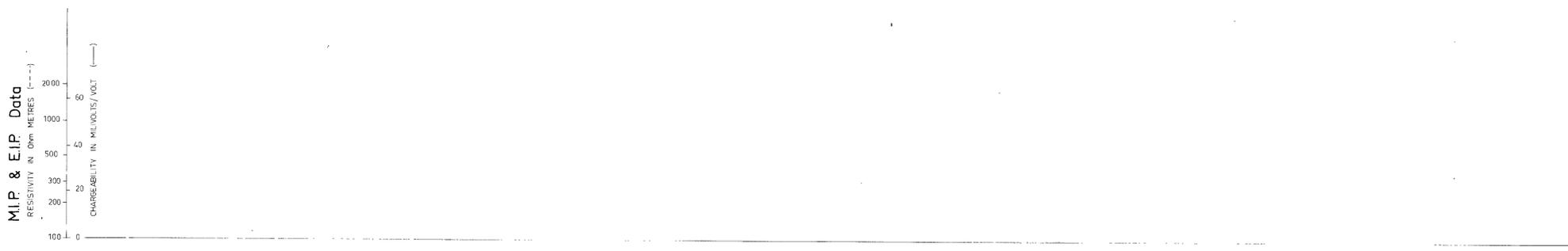
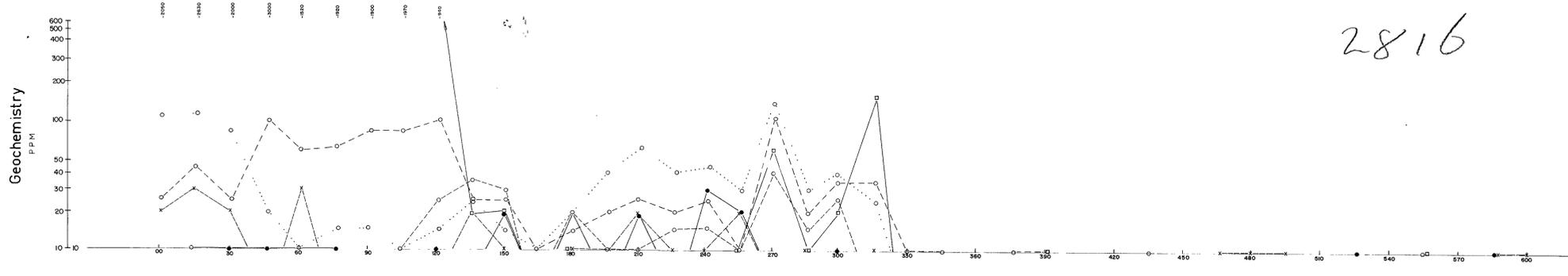
**SOIL GEOCHEMISTRY**  
 ● Sn  
 ○ Cu  
 ○ Pb  
 ○ Zn  
 ○ As  
 ○ W  
 ○ Ni

**LEGEND**

Swamp, transported alluvium ?	Basic volcanic & igneous	Sedimentary Basins
Quartzite, sandstone, minor siltstones, shales	Shale	Fault Basins
Ultrabasic rocks, massive serpentinite	Ash Tuff	Siltstone
Limestone	Tuffaceous sandstone	Stratigraphic Boundary
		Fault Boundary

5 cm

2816



**RENISON LIMITED**  
**E.L. 2/63 MT. LINDSAY AREA**  
**MERTON HILL GRID**  
**LINE M.H. 1700mE**

785178  
 82-1751 10/2

GEOLOGIST: L. Martin  
 DRAUGHTSMAN: T.G.D.S.  
 DATE: February 1982  
 REVISIONS:

SCALE 1:1000 METRES  
 6m

**LEGEND**

<b>TERTIARY</b>	<b>SILURIAN</b>	<b>CAMBRIAN</b>
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
Db Belt Shale	Sas Amber Sandstone Member	Es Basic or Gabbroic Rocks
Df Florence Quartzite	Sc Amber Limestone Member	Es Serpentinites and Ultramafic Rocks
	Sc Crotty Quartzite	

**SOIL GEOCHEMISTRY**

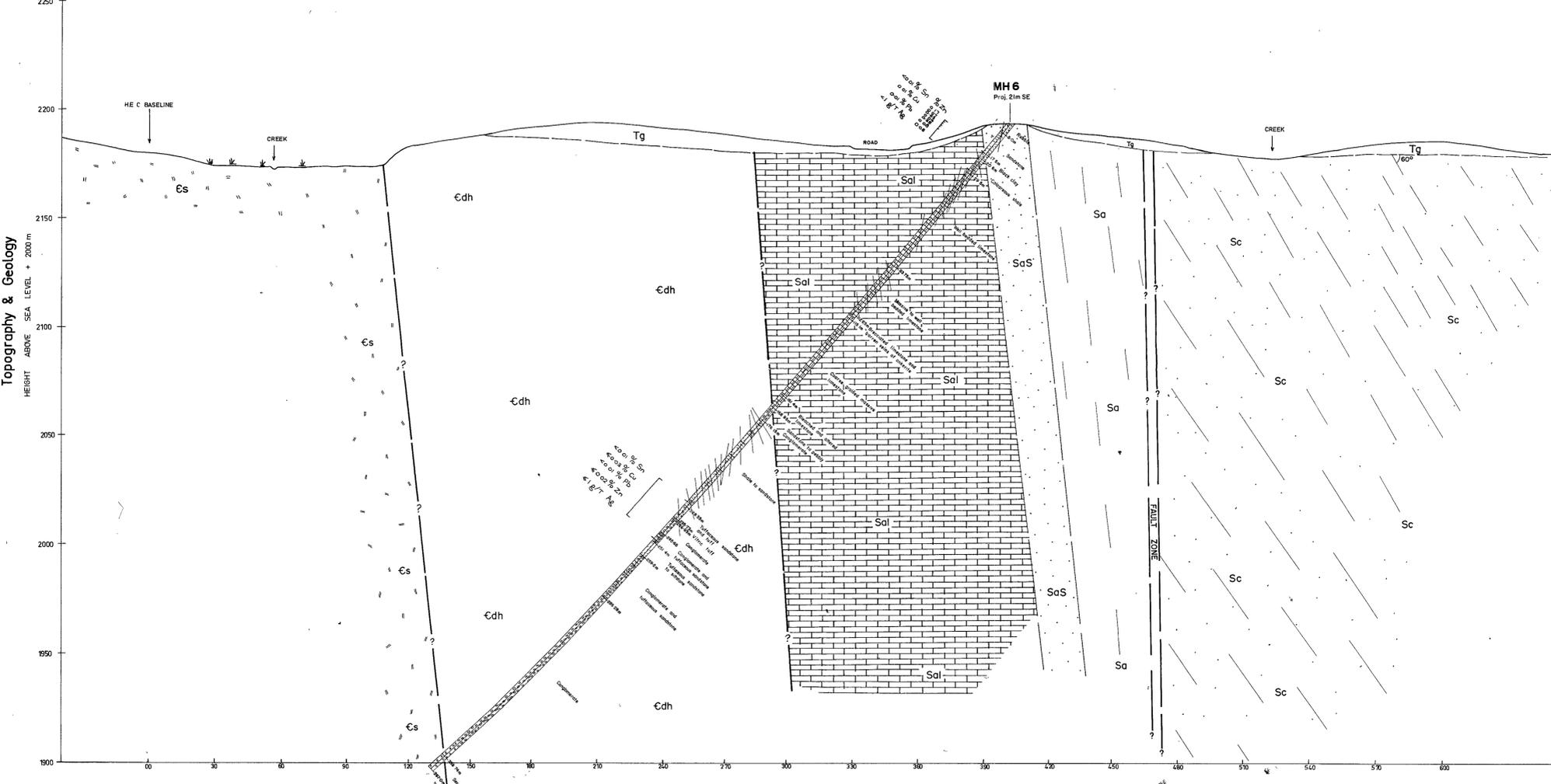
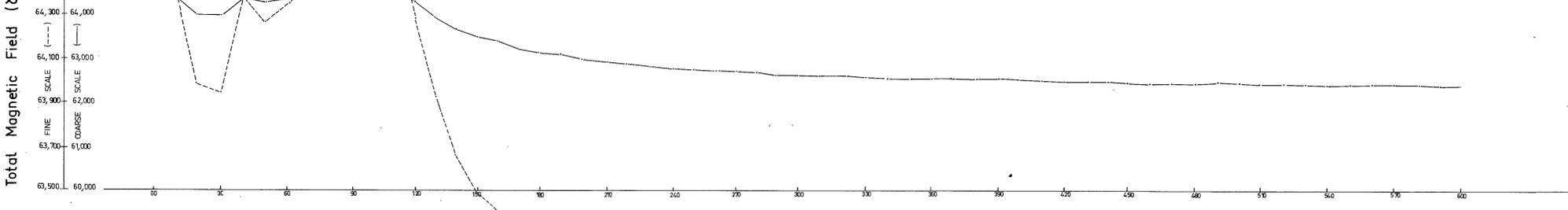
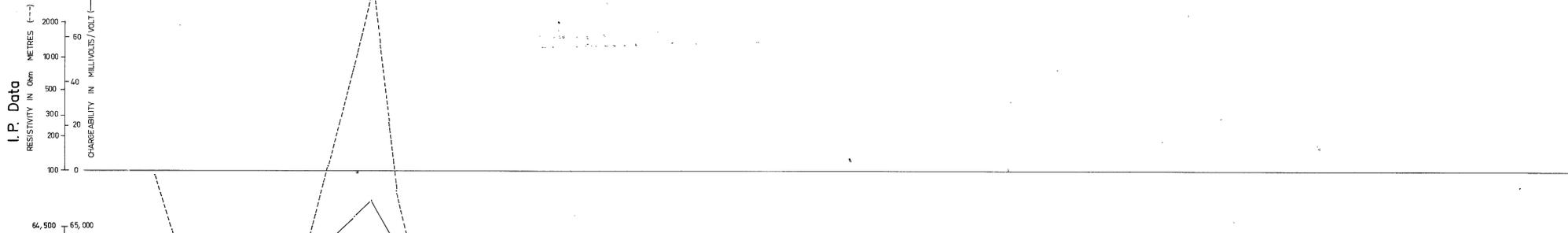
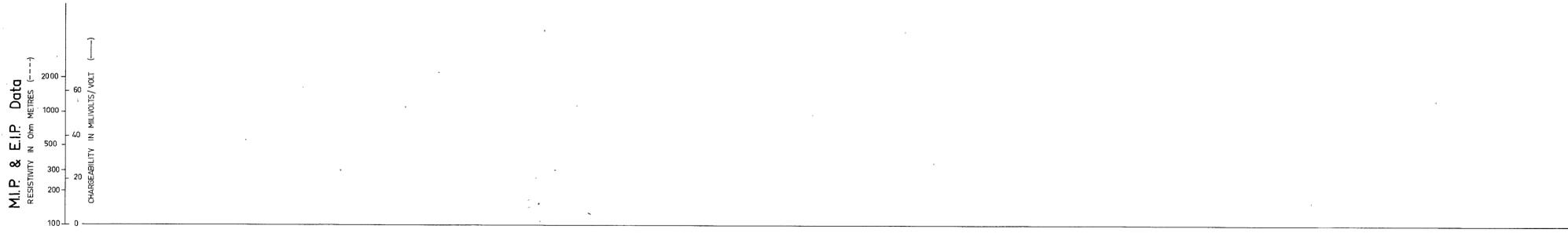
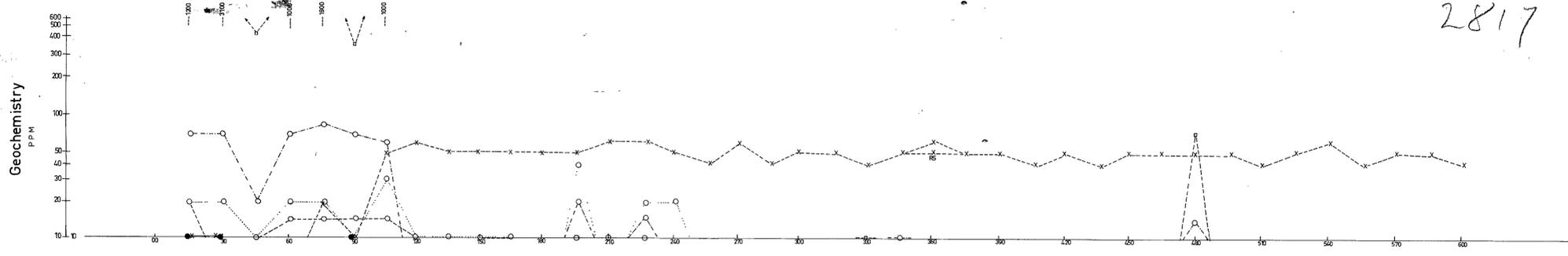
- Sn
- Cu
- Pb
- Zn
- AS
- W

**LEGEND**

- ★ Swamp, transported alluvium?
- Basic volcanic & Breccia
- Shale
- Quartzite, sandstone, minor siltstones, shales
- Ultrabasic rocks, massive serpentinite
- Limestone
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic boundary
- Faulted boundary

5cm

2817



RENISON LIMITED 82-1751 10/12  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
 LINE M.H. 1800mE

GEOLOGIST : L. Martin  
 DRAUGHTSMAN : T.G.D.S.  
 DATE : March 1982  
 REVISIONS

SCALE: 1:1000 METRES

2817 DRAWING No. 6n

TERTIARY	SILURIAN	CAMBRIAN
Tg Gravels	Sa Amber Shale	Cdh Upper Dundas Group
Db Bell Shale	Sas Amber Sandstone Member	Es Basic or Gabbroic Rocks
Df Florence Quartzite	Sal Amber Limestone Member	U Ultrabasic Rocks and Ultramafic Rocks
	Sc Crotty Quartzite	

SOIL GEOCHEMISTRY
● Sn
○ Cu
○ Zn
○ Pb
○ Ni
○ As
○ N

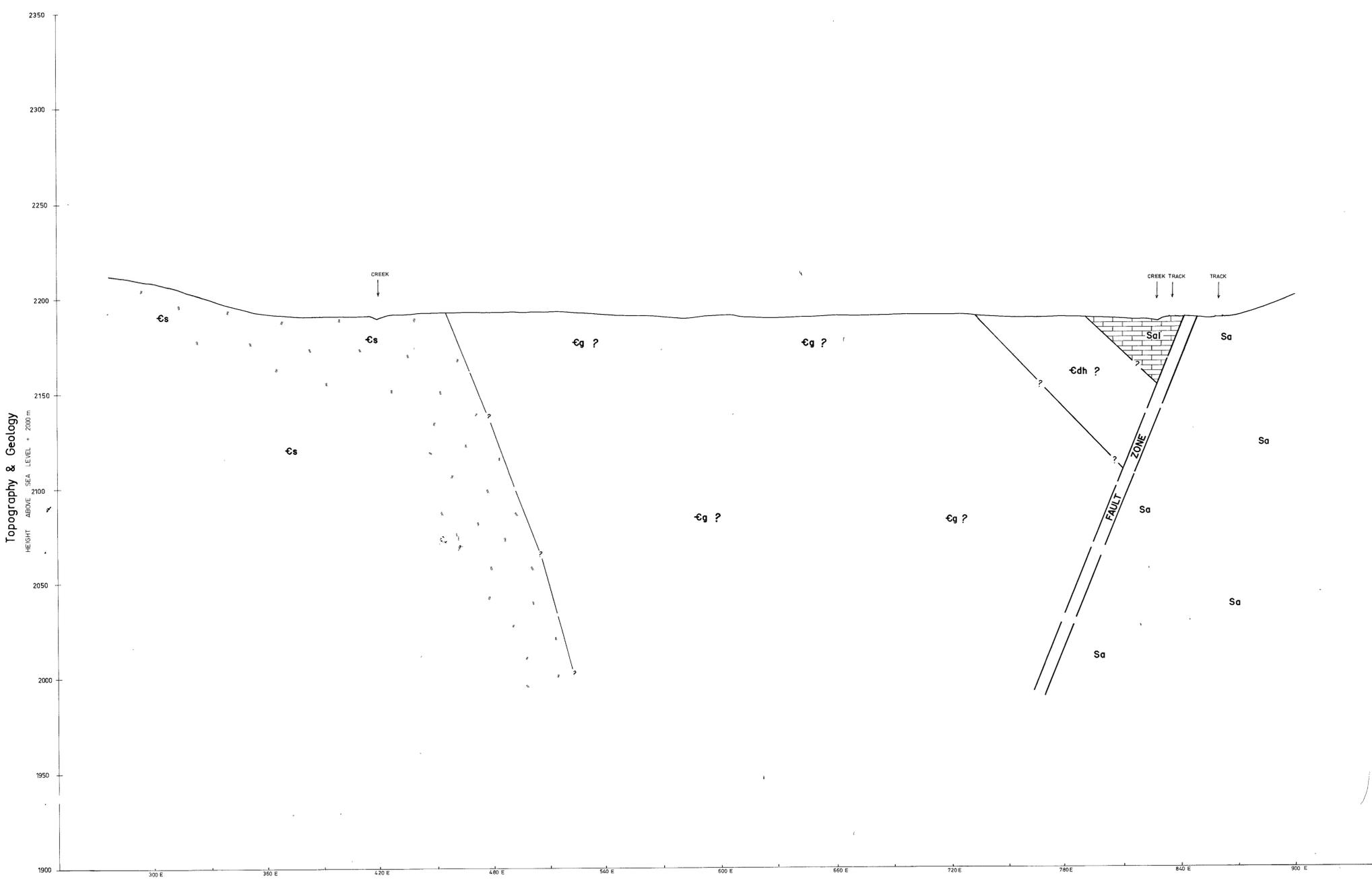
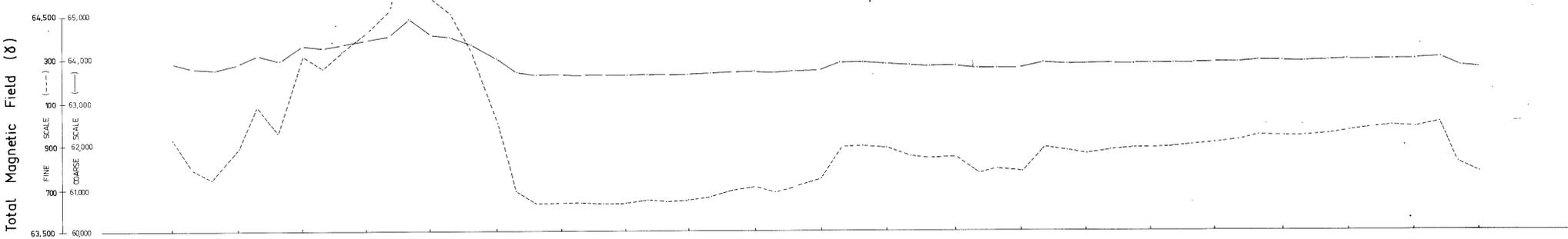
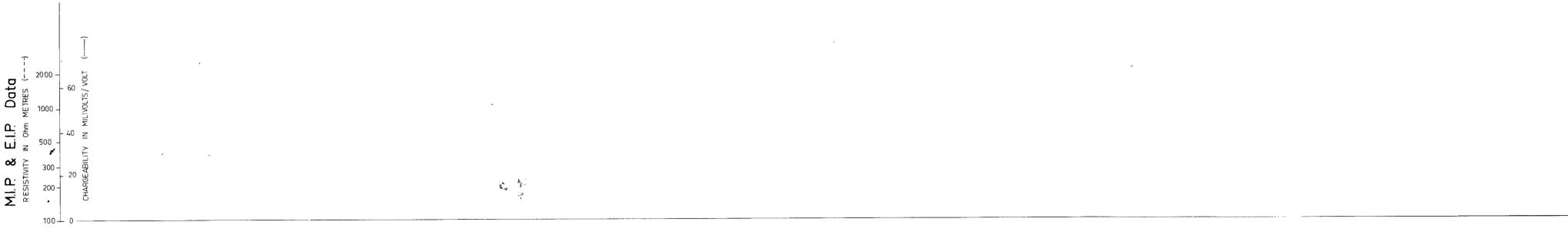
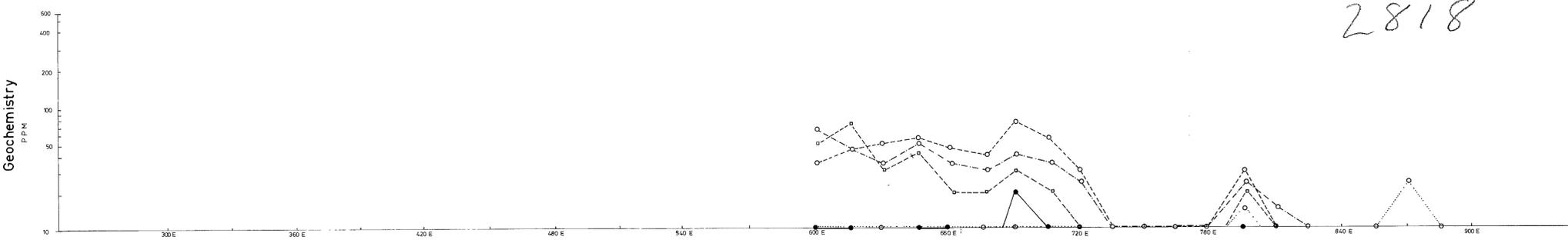
NOTE: HIGH ARSENIC VALUES (>20 PPM) ARE PROBABLY DUE TO UNRELIABLE READINGS FROM A FAULTY XRF MACHINE.

LEGEND
Swamp, transported alluvium
Quartzite, sandstone, minor siltstones, shales
Ultrabasic rocks, massive serpginite
Limestone

Basic volcanic & brecciated	Sedimentary Breccia
Shale	Fault Breccia
Ash Tuff	Siltstone
Tuffaceous sandstone	Stratigraphic boundary
	Faulted boundary



2818



785180

RENISON LIMITED 82-1751 10/12

E. L. 2/63 MT. LINDSAY AREA  
MERTON HILL GRID  
SUB-BASELINE — 360 m N

GEOLOGIST I. Martin  
DRAUGHTSMAN J. Matthews  
DATE March 1982

SCALE 1:1000 METRES

REVISIONS 2813 DRAWING No. 60

TERTIARY	SILURIAN	CAMBRIAN
Tg Gravels	Sa Amber Shale	Edh Upper Dundas Group
Db Bell Shale	Sas Amber Sandstone Member	Eg Basic or Gabbroic Rocks
Df Florence Quartzite	Ssl Amber Limestone Member	Es Serpentinites and Ultrabasic Rocks
	Sc Cratty Quartzite	

**LEGEND**

- Swamp, transported alluvium?
- Quartzite, sandstone, minor siltstone, shales
- Ultrabasic rocks, massive serpentinite
- Limestone
- Basic volcanic breccias
- Shale
- Ash Tuff
- Tuffaceous sandstone
- Sedimentary Breccia
- Fault Breccia
- Siltstone
- Stratigraphic boundary
- Faulted boundary

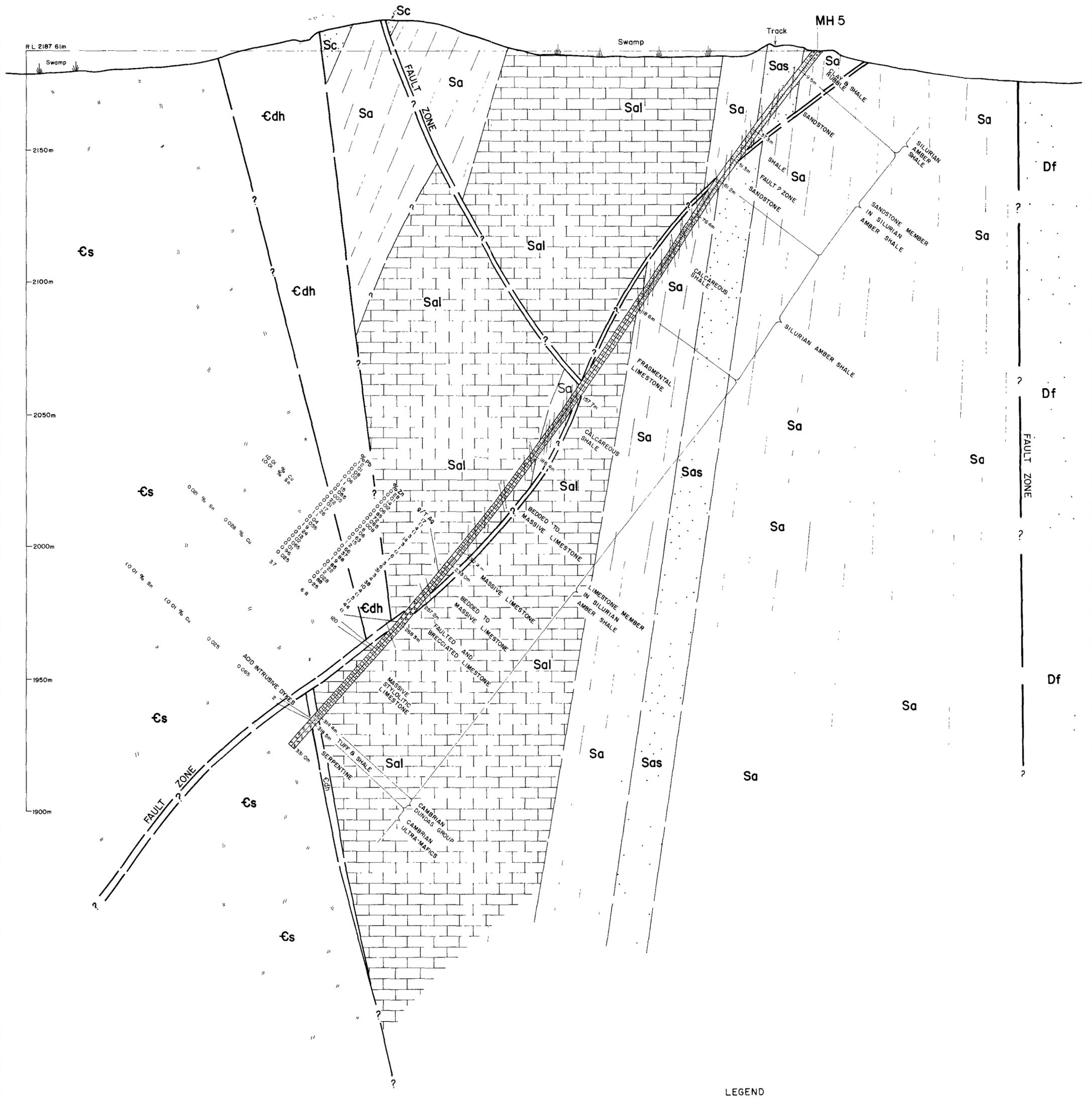
**SOIL GEOCHEMISTRY**

- Sn
- Cu
- Pb
- Zn
- As
- Ni

**MAGNETICS**

- Chargeability
- Resistivity
- 5000 f Scale
- 1000 f Scale

5 cm



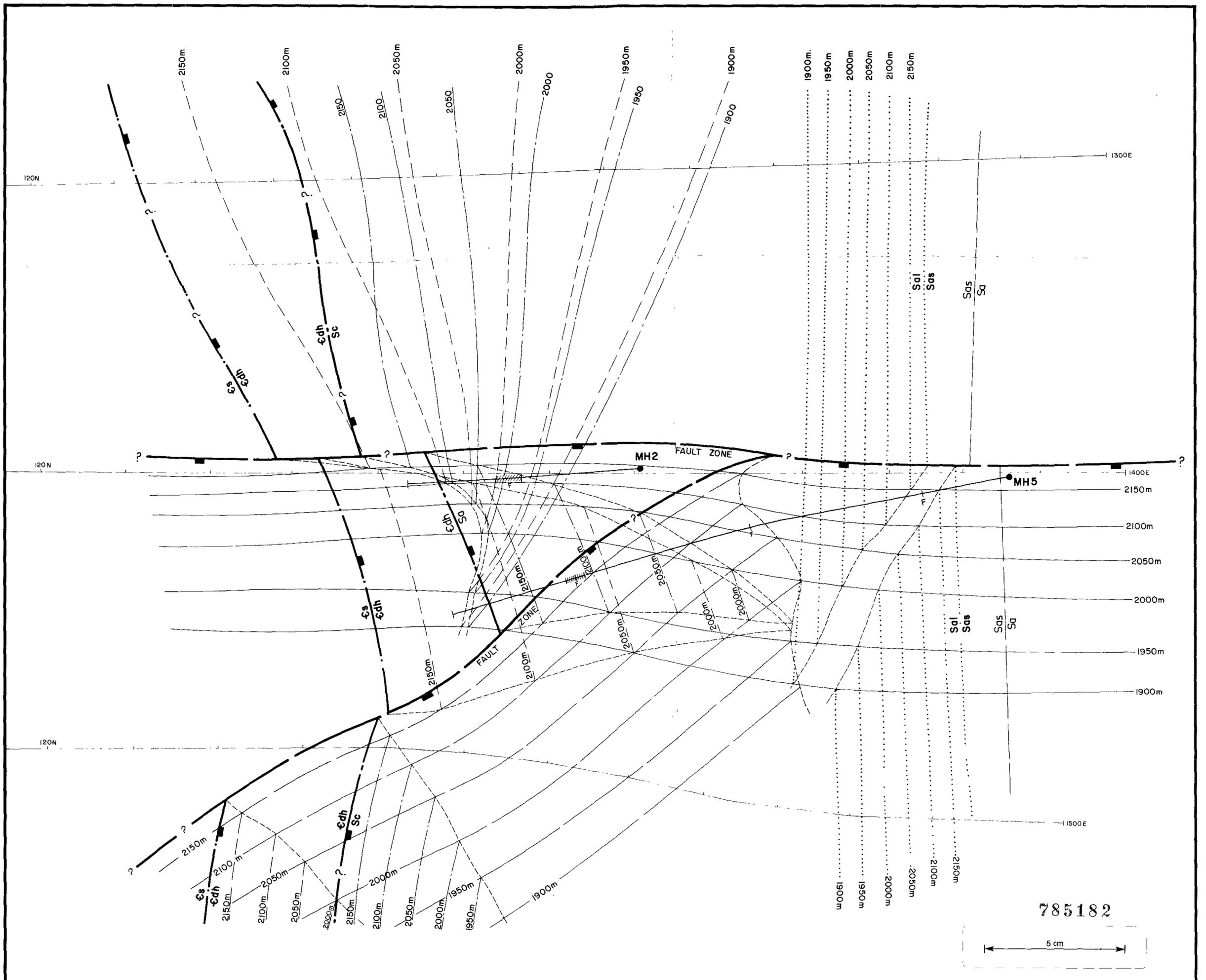
RENISON LIMITED 82-1751 U612  
 E.L. 2/63 MT. LINDSAY AREA  
 MERTON HILL GRID  
**SECTION THROUGH MH5**  
 TRENDING NORTH-EAST

GEOLOGIST L. MARTIN  
 DRAUGHTSMAN T.G.D.S.  
 DATE April 1982  
 REVISIONS

SCALE 1:1000 Metres  
 10 5 0 10 20 30  
 DRAWING No. FIGURE 7j

785181  
 5 cm

TERTIARY		SILURIAN		CAMBRIAN	
Tg	Gravels	Sa	Amber Shale	Edh	Upper Dundas Group
		Sas	Amber Sandstone Member	Eg	Basic or Gabbroic Rocks
		Sal	Amber Limestone Member	Es	Serpentinites and Ultramafic Rocks
		Sc	Crofty Quartzite		
DEVONIAN					
Db	Bell Shale				
Df	Florence Quartzite				



Es Cambrian Serpentine (Es) / Cambrian  
Edh Dundas Group (Edh) Boundary  
  
Edh Cambrian Dundas Group / Silurian  
Sc or Sa Crotty Quartzite (Sc) or Amber Shale  
(Sa) Boundary

Sal Silurian Amber Limestone Member (Sal) /  
Sas Silurian Amber Sandstone Member  
(Sas) Boundary  
  
Sas Silurian Amber Sandstone Member /  
Sa Silurian Amber Shale Boundary

——— Fault trace on surface  
 - - - - - Trace of rock unit boundary on fault plane  
 F- Fault in drill hole

RENISON LIMITED 82-1751 vol 2	
E.L. 2/63 MT. LINDSAY AREA	
MERTON HILL GRID	
CONTOURED STRUCTURAL PLAN OF FAULTS	
AND ROCK UNITS IN THE VICINITY OF	
MH2 & MH5	
GEOLOGIST L. MARTIN	SCALE 1:1000 Metres
DRAUGHTSMAN TGDS	10 5 0 10 20 30
DATE April 1982	DRAWING No
REVISIONS	8