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ANNUAL REPORT

E.L. 18/73 - STANLEY RIVER AREA

WESTERN TASMANIA

1980 - 1981

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Prepared by:

*Linda Martin*

L.A. Martin  
EXPLORATION GEOLOGIST

*for* P.A. Roberts  
SENIOR EXPLORATION GEOLOGIST

Copies to:

- C.G.F.A. (1)
- Mines Department (1)
- Renison (2)

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1. SUMMARY

Work carried out in 1980-1981 was restricted to the completion of a one hole diamond drilling program, designed to test a coincident tin and magnetic anomaly in the lower Crimson Creek Formation. The results of the drilling were not encouraging. \$31,838 was expended on this work.

Consideration of all exploration results obtained on this area to date has led to a downgrading of its exploration potential. Further work will only be justified if a diamond drilling program on the adjacent Mt.Lindsay licence area, using new theoretical concepts, is successful. A program comprising one diamond drillhole of 350m and further geological mapping has been proposed on the basis of this assumption. A total of \$48,510 has been budgetted for this work in 1981-82.

2. INTRODUCTION

E.L. 18/73 covers an area of 21 km<sup>2</sup> in a remote location to the north of Renison Bell near Mt.Lindsay as shown in Figure 1. The southerly part of the licence area is accessed by the H.E.C. Pieman Dam Road and four wheel drive tracks, whereas in the more remote northerly part access is possible by helicopter mainly during the summer months of January to March.

Geologically the area consists of the southerly part of the Devonian Meredith Granite which intrudes north-easterly dipping Cambrian and Pre-Cambrian Sediments. This area is considered prospective as it lies between the Cleveland and Renison Deposits and has similar rock units and structures.

Since 1975, as the result of airborne geophysical and reconnaissance ground surveys, exploration activity has

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centred on two main areas:

- 1) The Mt.Lindsay Mine area where a series of carbonate-chert beds within the Middle Cambrian Crimson Creek Formation are contact metamorphosed and mineralized by the Meredith Granite. Potential exists for extension to the stanniferous skarns mined in the old Mt.Lindsay Tin-Tungsten Mine and for further replaced carbonate beds within the Crimson Creek Formation.
- 2) The Lower Cambrian Success Creek Group rocks in the south of the area. These rocks are thought to be the equivalent of the Renison Mine Sequence and hence have some potential for replacement sulphide bodies of the "Renison Type".

### 3. LICENCE TENURE

E.L. 18/73 is held by Renison Limited. It is currently being explored by Renison under a Joint Venture Agreement with Goldfields Exploration Proprietary Limited. Renison is currently increasing its equity in the Joint Venture by bearing all expenditure on the project. The distribution of interest at 30th June 1981 was Renison 73%, Goldfields Exploration 27%.

### 4. WORK COMPLETED AND RESULTS 1980-1981

Work carried out in 1980-1981 was restricted to the completion of a one hole drilling program, combined with compilation of Mines Department and previous Renison Limited mapping. Reassessment of previous geochemical and geophysical work on cut grid lines was also carried out. \$31,838 were spent on this work; itemised expenditure to the end of June 1981 is presented in Appendix I.

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#### 4.1 Drilling

ML DDH 57 was collared just north west of the H.E.C. Hornfels Quarry at 800N on M.L. Line 16, and was completed at 373.5m. It was designed to test a Sn anomaly at 350mN, and a magnetic anomaly at 400mN on M.L. Line 16, which occur close to the inferred Success Creek Group boundary with the Crimson Creek Formation. The Success Creek Group in the Mt.Lindsay Area is thought to be the Renison Mine Sequence Equivalent.

The results of the hole are included as Appendix 3 and are shown on Figure 2.

The hole was collared in lower Crimson Creek Formation rocks and intersected a sequence of cherts, calcareous siltstones and greywackes, which then graded into a sequence of magnetic hornfelsed greywackes and tuffaceous greywackes. Success Creek Group rocks were not intersected.

No significant mineralization was intersected in the hole. An altered, faulted zone with pyrite at 108.4 - 121.6m was analysed but no tin was reported. The Sn anomaly on Line 16 probably originated from a local Sn rich vein or zone.

The rocks in the lower part of the drill hole are quite magnetic and are probably responsible for the magnetic anomaly at 400N on Line 16.

#### 4.2 Geological Mapping

Since the licence was granted, geological mapping has been carried out by Renison Geologists, along established grid lines, creeks, walking and four-wheel drive tracks and later along the H.E.C. Pieman Road. Mapping was

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also carried out by Mines Department personnel from 1974 onwards, as a continuous effort to complete the Corinna 1:25,000 Geology Sheet.

In 1980-1981, this mapping was used to produce a preliminary 1:10,000 geology base map of the Stanley River and Mt.Lindsay Areas, Corinna D3 (Figure 3). It is hoped in 1981-1982 to complete this project.

In the south of the licence area, quartzites and graphitic shales of the Upper Pre-Cambrian Oonah Formation underlie the Lower Cambrian Success Creek Group. The latter sequence of cherts, carbonates and conglomerates is thought to be the Renison Mine Sequence Equivalent. Mines Department mapping suggests that the sequence is faulted in places by a series of N.E. trending faults with throws of up to several hundred metres horizontally. Previously large scale folding was thought to account for large horizontal displacements of the sequence between grid lines.

The Success Creek Group is overlain by a sequence of tuffs, greywackes, minor cherts and carbonates of the Middle Cambrian Crimson Creek Formation. Towards the middle of the unit three continuous carbonate-chert units have been mapped for several kilometres along strike. These units have been metasomatised by Devonian Granite intrusion and show distinct temperature and pressure zoning. In the Stanley River Area only two of these units occur, the No.1 and Main Zone Carbonates, and near the granite these units have been altered to a stanniferous magnetite skarn zone.

The central and northern part of the licence area is covered by the Devonian Meredith Granite which intrudes the Cambrian and Pre-Cambrian rocks. In places the granite contact dips steeply outwards but generally it appears to dip gently beneath the intruded sediments.

#### 4.3 Research Work on the Mt.Lindsay Skarn Zones

Research work on the complex skarn units at Mt.Lindsay has been undertaken by Dr. T. Kwak at La Trobe University and has suggested that the mineralization within these units is temperature zoned. The original cassiterite bearing zone is thought to have formed at approximately 150-400m (true distance) from the granite, and in places to have been altered and the cassiterite removed by subsequent higher temperature solutions from the granite. The portions of the replaced No.1 Anomaly and Main Zone carbonates which occur within the licence area are situated within 160m (true distance) of the granite. The results of the research work therefore suggest that these portions are too close to the granite to have been altered to a cassiterite bearing skarn. In the unlikely situation that this skarn was formed it would probably have been altered by subsequent higher temperature fluids from the granite.

Results of DDH 48 which was drilled in the No.1 Anomaly on E.L. 18/73, appear to confirm the research work. The small amount of tin which occurs in the No.1 Anomaly intersection is acid soluble and no cassiterite was reported from petrological examinations.

Therefore it appears that the potential for a cassiterite bearing skarn in the Mt.Lindsay skarn units within E.L.18/73 is very limited. However other carbonate units within the Crimson Creek Formation may have portions situated at an optimum distance from the granite and exploration should be directed towards finding these zones.

#### 4.4 Anomaly Re-Assessment

Anomaly re-assessment was carried out on the Mt.Lindsay grid lines which have been established on E.L. 18/73.

Characteristics of interesting anomalies as well as those tested by drill holes are presented in Table I.

A number of anomalies, Nos. 13, 14, 18, 19, 20, 21 and 22, have strong geophysical, geochemical and/or magnetic responses and are associated with the Main Ore Zone or the No.1 Anomaly of the Mt.Lindsay Mine area. However if these anomalies were drilled only a short intersection of skarn would be obtained before intersecting the granite and this skarn, according to Dr. T. Kwak's research work, would not be cassiterite bearing. The tin that may be present would exist in complex forms such as in the crystal lattices of micas and garnets, and may therefore be very difficult to treat metallurgically. Hence these skarn zones in close proximity to the granite appear to have limited economic potential, and anomalous responses over these zones are probably not worthy of extensive follow up work.

However, numerous anomalies of variable importance exist at greater distances from the granite as outlined in Table I. The best choice for follow-up work is thought to be Anomaly 2.

Not drilled  
in EL 18-73

ref.

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STATION	ANOMALY	NO.	CHARACTERISTICS	RATING
Line 10/440-500N	Individual	1	Strong magnetic anomaly; minor Cu response. In lower <sup>1</sup> C.C.F. crystal tuffs.	D
Line 11/850N	Individual	2	Strong I.P. - mod. conductive anomaly; nearby strong mag. anomaly from 800-850N; nearby mod. As and Cu response. In lower C.C.F. hornfels and crystal tuffs.	A
Line 11/675-700N	Individual	3	Minor I.P. response; minor mag. and Cu response nearby. In lower C.C.F. crystal tuffs.	D
Line 11/225-275S	Anomaly 'C'	4	Mod. I.P. - conductive anomaly; nearby strong Cu anomaly. In <sup>2</sup> S.C.G. siltstones and shales.	D
Line 11/600S	Anomaly 'D'	5	Mod. I.P. - conductive anomaly; nearby strong Cu anomaly. In S.C.G. siltstones and shales.	D
Line 12/1125-1175N	Individual	6	Strong mag. and I.P. - conductive anomaly. Mod. As anomaly. In carbonate units in lower C.C.F. rocks.	Drilled ML 39
Line 12/875-925N	Individual	7	Strong mag. anomaly; minor Cu response. No I.P. coverage. In lower C.C.F. hornfels and crystal tuffs.	B
Line 12/175-225S	Anomaly 'C'	8	Strong I.P. - conductive anomaly. In Success Creek Group siltstones and shales	D
Line 12/350-425S	Anomaly 'D'	9	Strong I.P. - conductive anomaly; minor mag. response at 375S. In S.C.G. siltstones and shales.	B
Line 13/1000-1100N	Individual	10	Strong mag. and Sn anomaly; moderate Cu and Minor As response. In lower C.C.F. shales with nearby carbonate units intersected by ML 39.	Drilled ML 53

<sup>1</sup> C.C.F. - Crimson Creek Formation

<sup>2</sup> S.C.G. - Success Creek Group

STATION	ANOMALY	NO.	CHARACTERISTICS	RATING
Line 13/650N	Individual	11	Mod. I.P. anomaly, nearby minor mag. response In lower C.C.F. shales.	D
Line 13/25-100N	Anomaly 'B'	12	Very strong I.P. - conductive anomaly; mod. mag. response. Nearby strong As anomaly. In upper Success Creek Group carbonates, cherts and shales.	Drilled ML 34
Line 13.5/50S	Main Ore Zone	13	Strong mag. anomaly; nearby strong As and Sn anomaly. No I.P. coverage. In middle C.C.F. carbonates and tuffs. Granite contact may be very close.	C
Line 14/1950-2025N	Main Ore Zone	14	Strong mag. and mod. I.P. anomaly; mod. As and Sn response. In middle C.C.F. carbonates and tuffs. Very close to granite contact.	C
Line 14/1725-1775N	No.1 Anomaly	15	Mod. I.P. anomaly, minor magnetic anomaly. Strong As, mod. Sn, minor Cu response. In middle C.C.F. crystal tuffs.	Drilled ML 48
Line 14/125-250S	Anomaly 'B'	16	Strong I.P. - conductive anomaly, nearby mod. As response on northern flank. At lower C.C.F. and S.C.G. boundary.	B
Line 14/650-700S	Anomaly 'C'	17	Strong I.P. - conductive anomaly. In Success Ck. Group siltstones and shales.	D
Line 14.5/0-50S	Main Ore Zone	18	Strong mag. anomaly; strong As and Sn, mod. Cu response. No I.P. coverage. In middle C.C.F. carbonates and crystal tuffs. Very close to granite contact.	C
Line 14.5/275-350S	No.1 Anomaly	19	On southern flank of strong mag. anomaly, strong Sn and As, mod. Cu anomaly. No I.P. coverage. In middle C.C.F. carbonates and crystal tuffs. Close to granite contact.	C
Line 15/2000-2075N	Main Ore Zone	20	Mod. I.P. and strong mag. anomaly; strong Sn, minor Cu anomaly. In middle C.C.F. carbonates and crystal tuffs. Very close to granite contact.	C

STATION	ANOMALY	NO.	CHARACTERISTICS	RATING
Line 15/1725-1775N	No.1 Anomaly	21	Strong I.P. - conductive anomaly, mod. mag. response. Strong As and Cu, mod. Sn. In middle C.C.F. carbonates and crystal tuffs. Close to granite contact.	C
Line 16/1850N	No.1 Anomaly	22	Strong mag. As, Sn, and mod Cu anomaly. No I.P. coverage. In middle C.C.F. carbonates and crystal tuffs. Close to granite contact.	C
Line 16/1125-1175N	No.4 Anomaly Extension?	23	Mod. mag. and Cu anomaly. No I.P. coverage. In lower C.C.F. crystal tuffs.	D
Line 16/375-475N	Individual	24	Strong mag. anomaly. Mod. Sn anomaly at 350N. No I.P. coverage. In lower C.C.F. crystal tuffs.	Drilled ML 57
Line 16/525S	Anomaly 'C'	25	Minor mag. and Sn anomaly. No I.P. coverage. In lower S.C.G. siltstones and shales.	D
Line 17/225-275N	Individual	26	Strong IP - conductive anomaly, mod. mag. anomaly at 200N. Strong Zn anomaly from 0-500N. In lower C.C.F. crystal tuffs.	B
Line 17/175-250S	Anomaly 'B'	27	Mod. I.P. and magnetic anomaly. Mod. As anomaly at 150-200S. In S.C.G. rocks, stratigraphically below the Red Rock Member equivalent.	Drilled ML 56
Line 18/50-125S	Anomaly 'B'	28	Strong Sn anomaly. No I.P. coverage. In S.C.G. rocks, stratigraphically below the Red Rock Member equivalent.	D

Rating:

- A - Drilling target.
- B - Anomaly worthy of further work to upgrade or not to drilling target.
- C - Good anomaly but not worthy of drilling or possibly extensive further work due to close proximity of granite.
- D - Minor anomaly.

Drilled - Anomalies drilled in past years and reported in previous Annual Reports.

5. DISCUSSION (by P. Roberts)

The Stanley River licence area has been systematically explored for stanniferous skarns and Renison-style, sulphide-rich mineralization. Since 1973, the following exploration work has been carried out:

- (1) Turair airborne EM-magnetics. The licence area was covered by a helicopter-borne Turair survey in 1973.
- (2) Ground-based methods were used to follow-up the airborne work. These consisted of geological mapping, soil geochemistry, proton magnetics and I.P. along cut grid lines.
- (3) The area was covered by a photogeological study, with particular emphasis placed on the Meredith Granite.
- (4) Six diamond drillholes were completed; two (ML 34,56) testing Success Creek Group rocks, three (ML 39,53,57) testing Crimson Creek Formation rocks south of the Mt.Lindsay skarn zones, and one (ML 48) testing the Mt.Lindsay No.1 Anomaly.

The first two parts of this program revealed numerous geophysical and geochemical anomalies. Results from diamond drilling on the better anomalies were disappointing, however. Reasons for this include:

- (1) Non-carbonate sediments of the Crimson Creek Formation and Upper Success Creek Group have been variably impregnated with magnetite and sulfides within several kilometres of the Meredith Granite contact. This has resulted in the presence of substantial magnetic and I.P. anomalies unrelated to stanniferous carbonate-replacement bodies.
- (2) Crimson Creek Formation rocks in this area contain high background levels of base metals. In this region of

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iron-enriched soils, scavenging by iron (and possibly manganese) oxides has probably given rise to spurious base metal soil geochemical anomalies.

- (3) Anomalous levels of Sn in soil samples may be derived from alluvial or colluvial cassiterite derived from the Meredith Granite or eroded cassiterite-bearing skarns

None of the geophysical and geochemical anomalies within the licence area combine as strongly as those over the outcropping magnetite mineralization of the Mt.Lindsay skarn zones. In the light of the above discussion, it seems unlikely that a significant body of magnetite skarn either outcrops or is shallowly hidden within the gridded area of E.L. 18/73. Nevertheless the Crimson Creek Formation south of the Mt.Lindsay skarn zones is known to contain carbonate horizons (e.g. ML 34). Therefore stanniferous magnetite skarns may exist at depth with either relatively subtle or no surface expression.

The exploration potential of E.L. 18/73 rests largely on the economic attractiveness of the entire Mt.Lindsay skarn area. This, in turn, is dependent on the results of a diamond drilling program designed to test for cassiterite mineralization according to Dr. T. Kwak's concept of skarn zonation, and due to commence shortly. If the diamond drill holes intersect significant mineralization, further drilling is justified to test for cassiterite-bearing skarn within EL 18/73. In that case, the initial approach should be to test the best remaining anomalies; even if such drill holes fail to intersect mineralization, they should give a better indication of carbonate distribution within the Crimson Creek Formation south of the Mt.Lindsay skarns. Subsequent drilling could then test for more deeply hidden mineralization according to the theoretical model of skarn zonation.

6. RECOMMENDATIONS

Continuation of exploration on EL 18/73 is dependent on the results of the diamond drilling program due to commence shortly on E.L. 2/63. If the results are favourable, the following program is recommended for the remainder of 1981-82:

6.1 Diamond Drilling

One drill hole, 350m deep, dipping  $-50^{\circ}$  along  $205^{\circ}$  (AMG) is proposed to test anomaly 2 (Table I) on Mt. Lindsay grid line 11 (see Figure 4).

6.2 Geological Mapping

Further geological mapping is recommended to permit completion of the 1:10,000 Corinna D3 Geological Map.

A total of \$48,510 has been budgetted to carry out this program. Itemised expenditure is presented in Appendix 2. In summary:

Drilling	\$31,398
Salaries	\$ 9,138
Consumables	\$ 3,116
Renison Services	\$ 2,575
Bulldozing	\$ 2,283
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TOTAL	\$48,510
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- ✓ (62) E.L. 2/63 Mt.Lindsay Area Annual Report 1980-1981 by L.A. Martin. June 1981. Renison Limited Unpubl. Report.
- 81-1568 ✓ (63) Detection of Carbonate Strata by Soil Geochemistry, by Colin Cannard. June 1981. Renison Limited Unpubl. Report.

APPENDIX 1

EXPENDITURE 1980-81

848023

EL 18/73 STANLEY AREA RESPONSIBILITY 077

P/E 30/ 6/81

ACCOUNT NUMBER	ACCOUNT NAME	PERIOD TO DATE		YEAR TO DATE	
		ACTUAL	VARIANCE	ACTUAL	VARIANCE
010770702	SALARIES		382 G	2542	3842 G
010770703	SALARY LOADING		71 G	300	887 G
010770705	CONSUMABLES		83 G	858	283 G
010770708	VEHICLES		119 G	100	928 G
010770710	TRAVEL & ACCOMMODATION				
010770720	RENISON SERVICES - SURVEY			96	96 L
010770721	RENISON SERVICES - ASSAY				788 G
010770722	RENISON SERVICES - RESEARCH				290 G
010770723	RENISON SERVICES - OTHER				
010770730	OUTSIDE SERVICES - GEOLOGICAL			14	14 L
010770731	OUTSIDE SERVICES - GEOPHYSICAL				
010770732	OUTSIDE SERVICES - GEOCHEMICAL				
010770733	OUTSIDE SERVICES - TRK CUTTING				
010770735	OUTSIDE SERVICES - SITE ACC DEV			5099	5099 L
010770736	OUTSIDE SERVICES - DIAMOND DRING			22518	22518 L
010770737	OUTSIDE SERVICES - OTHER				4923 G
010770740	LEASE PAYMENTS			311	24 G
	ROUNDING				
10779999	TOTAL EL 18/73 STANLEY AREA		655 G	31838	15762 L

APPENDIX 2

BUDGETTED EXPENDITURE 1981-82

024

ITEM	REF.	P#01.	P#02.	P#03.	P#04.	P#05.	P#06.	P#07.	P#08.	P#09.	P#10.	P#11.	P#12.	TOTAL
GEOLOGY - EL18/73 STANLEY AREA														
SALARIES	L770702	277	277	277	287	860	1145	593	297	1186	1220	305	306	7030
SALARY LOADING	L770703	83	83	83	86	258	344	178	89	356	366	91	91	2108
CONSULARS	C770705				56	56	675	116	116	695				1714
VEHICLES	C770708				56	169	169			174	59			627
TRAVEL & ACCOMMODATION	C770710		109						116					225
PHINSON SERVICES-SURVEY	C770720							259						259
-ASSAY	C770721						360	297		1019				1676
-RESEARCH	C770722				84			556						640
OUTSIDE SERVICES-GEOLOGICAL	C770730													
-GEOPHYSICAL	C770731													
-GEOCHEMICAL	C770732													
-TRK CUTTING	C770733													
SITE & ACCESS DEV'MENT	C770735					1125				1158				2283
-DIAMOND DRILLING	C770736						15182			16216				31398
LEASE PAYMENTS	F770740	300						250						550
SECTION TOTAL		660	469	360	485	2552	17875	2249	618	20804	1645	396	397	48510

848025

025

APPENDIX 3

LOG OF D.D.H ML 57





848029

## DIAMOND DRILL RECORD

HOLE NUMBER :

ML 57

LOGGED BY :

L.MARTIN

NWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM.	% Sn.										
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g/t Ag
				of sulphide - actinolite alteration usually conformable to bedding.												
83.6	106.05	22.45	100	<b>BEDDED CHERT</b> Light brown to medium grey, with minor coarser grained bands, and some dark grey-chocolate bands of fine grained greywacke. Shows slumping and brecciation in places. B.C.A. 45°. Minor spots of pyrrhotite and pyrite. Gradational upper and lower boundaries.												
106.05	121.15	13.59	90	<b>GREYWACKE</b> Dark grey to black, fine grained, well bedded. In places grades into bands of light grey chert up to 50cm wide. Core is very fractured with irregular veins of sulphide and needle-like actinolite. The sulphide is often leached out leaving a dark brown iron oxide 'gossan'.												
121.15	140.3	19.15	100	<b>BANDED CALCAREOUS SILTSTONE</b> Medium green, with some more calcareous bands. Minor veins and irregular patches of white calcite associated in places with red-brown garnet and minor pea-green epidote. BCA at 133.5m - 41°; at 140.0m - 60°.												
140.3	283.45	143.15	100	<b>HORNFELSED GREYWACKE</b> Dark brown to grey, medium to fine grained. Massive, grading in places to well bedded greywacke, with minor soft-sediment slumping and brecciation. BCA 40-45°. Minor light grey-green patches and bands of chert. Towards base of unit 'clasts' or patches of calcareous material has been altered to calcite-garnet-epidote patches. Minor pyrrhotite disseminations from top of unit to approx. 180m. Very minor carbonate veins and veins of pink stilbite at 40° T.C.A. with minor alteration halo. At 280.4m irregular quartz veins and patches enclose fragments of greywacke country rock. Oriented at 40°, 6cm wide zone with specks of pyrrhotite.												
283.45	290.25	6.8	100	<b>TUFFACEOUS GREYWACKE</b> Medium to coarse grained cream feldspar fragments in a fine grained dark brown to chocolate matrix. Massive, with faulted (?) lower contact at quartz vein. At 290.25m white quartz vein with minor pyrite specks at 40°, approx 4cm wide.												

028



848031

DIAMOND DRILL RECORD

HOLE NUMBER : ML 57

LOGGED BY : L.MARTIN

U30

MWPS

INTERVAL (m)		RECOVERY		DESCRIPTION	FORM	% Sn.											
FROM	TO	m	%			FROM	TO	TOTAL	ACID SOL.	% Cu.	% As.	% S.	% Pb.	% Zn.	% Bi.	g t Ag	% WO <sub>3</sub>
				372.45m: Quartz-chlorite-actinolite vein with chalcopyrite, pyrrhotite and minor arsenopyrite, 3cm wide at 30°.													
				372.72m: Quartz-chlorite-actinolite minor pyrrhotite and chalcopyrite 1cm wide at 35°.													
				END OF HOLE													
MAGNETIC SUSCEPTIBILITY 10 <sup>-6</sup> CGS UNITS																	
				DEPTH	M.S.	DEPTH	M.S.	DEPTH	M.S.	DEPTH	M.S.	DEPTH	M.S.	DEPTH	M.S.		
				0-175.5	<100	213.5	7000	237.5	1000	5300	285.5	2800		4800		4700	100
				175.9	3800	214.5	11000	238.5	400	5500		400	310.5	500		3100	200
				184.7	<100	215.5	4500	239.5	5300	3500		3300		400	335.5	3400	3100
				185.5	3500	216.5	5300	240.5	4700	3100		500		500		5000	365.5
				186.5	3200	217.5	4700		2900	265.5	1800		400		3100	800	400
				187.5	3600	218.5	3800		8200	2200	290.5	2500		3000		1400	100
				188.5	5300	219.5	2900		3200	5300		1100	315.5	800		500	368.5
				189.5	5000	220.5	3200		3600	3800		2200		2800	340.5	400	370.5
				190.5	4700	221.5	800	245.5	2900	4200		400		900	346.5	<100	700
				191.5	600	222.5	1000		5200	270.5	3300		400		4000	300	372.5
				192.5	200	223.5	5900		5000	3500	295.5	400		2700		2100	373.5
				200.5	<100	224.5	5800		8800	4600		1700	320.5	1300		8300	
				201.5	3200	225.5	300		6800	5100		2700		4000	350.5	4900	
				202.5	500	226.5	600	250.5	5400	5500		4900		600		2600	
				203.5	1700	227.5	2500		3400	275.5	2100		3500		1200		<100
				204.5	8100	228.5	4900		5900	5500	300.5	10000		900		2400	
				205.5	7800	229.5	3000		3000	4900		3200	325.5	1700		3500	
				206.5	10000	230.5	3500		8900	4100		9700		2700	255.5	3600	
				207.5	9800	231.5	4400	255.5	3600	3400		8700		500		7600	
				208.5	1600	232.5	5100		6100	280.5	1400		8500		500		4100
				209.5	3400	233.5	3100		4800	300	305.5	6100		500		2200	
				210.5	11000	234.5	4800		2900	5000		2200	330.5	2100		4000	
				211.5	4700	235.5	3300		2900	400		3500		2900	360.5	400	
				212.5	2500	236.5	4800	260.5	6000	1700		6600		3200		3700	

031-A

81-1655 31-B

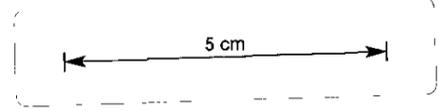
HOLE No ML 57

SCALE



RENISON LIMITED  
DIAMOND DRILL HOLE PLOT

848032



31661 90 N  
9241 10 E

31652 0 N 9235 4 E  
31649 7 N 9234 8 E  
31647 5 N 9233 2 E

31640 0 N 9228 8 E  
31639 3 N 9228 7 E

31633 7 N 9225 3 E  
31633 0 N 9225 1 E

31615 0 N 9215 2 E

31601 7 N 9208 2 E

31593 0 N 9203 6 E

31600 N  
9190 E

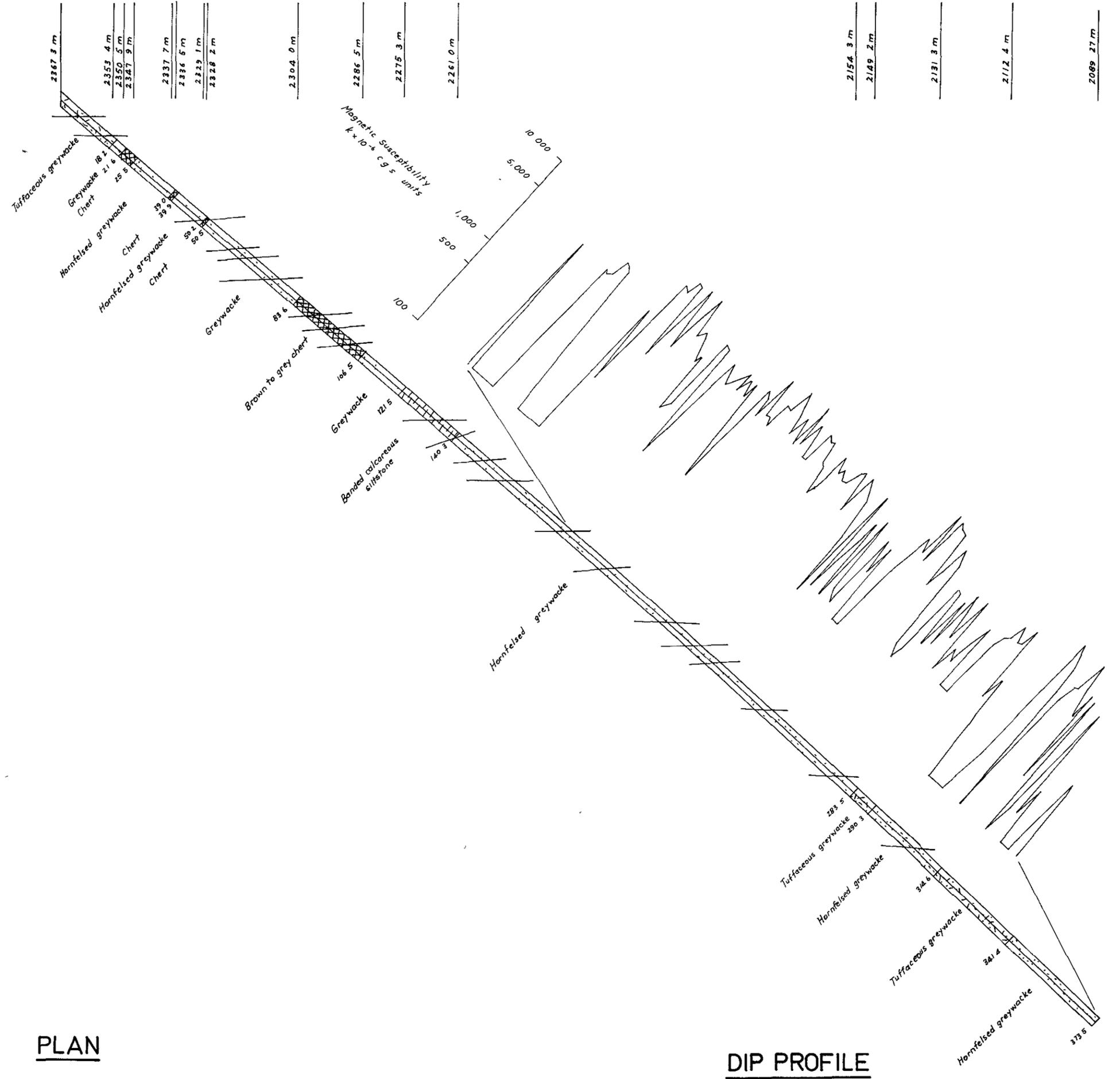
31582 4 N 9197 2 E

31503 2 N 9144 8 E  
31499 4 N 9142 0 E

31486 1 N 9132 1 E

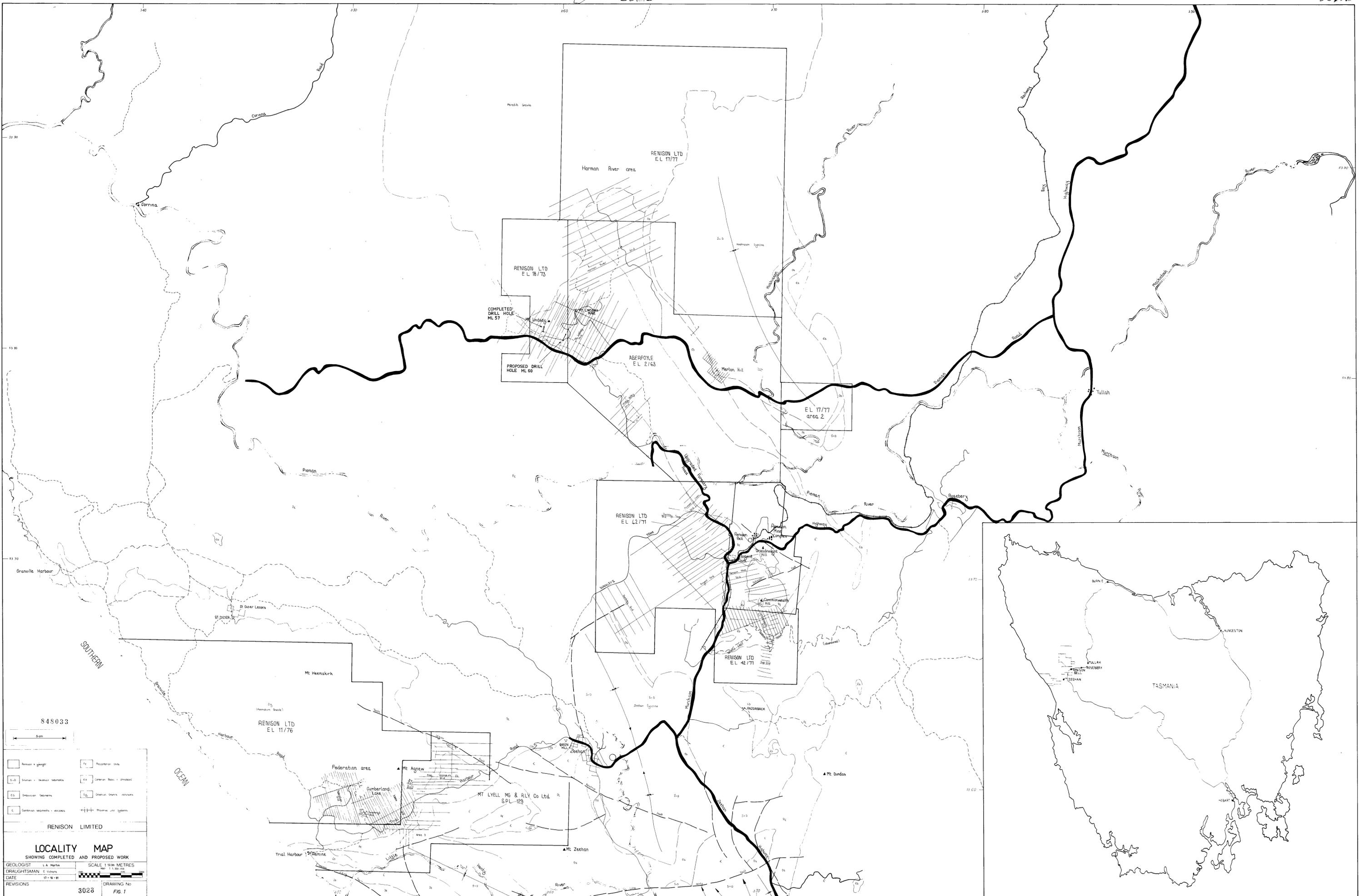
31471 4 N 9120 9 E

31455 37 N  
9103 41 E



PLAN

DIP PROFILE



848033

5km

□ Renison granite	□ Recreation units
□ S.O. Strata - distinct beds	□ Strata - basic - igneous
□ S.O. Devonian sediments	□ Devonian igneous intrusions
□ Cambrian sediments - shales	□ Pleistocene till systems

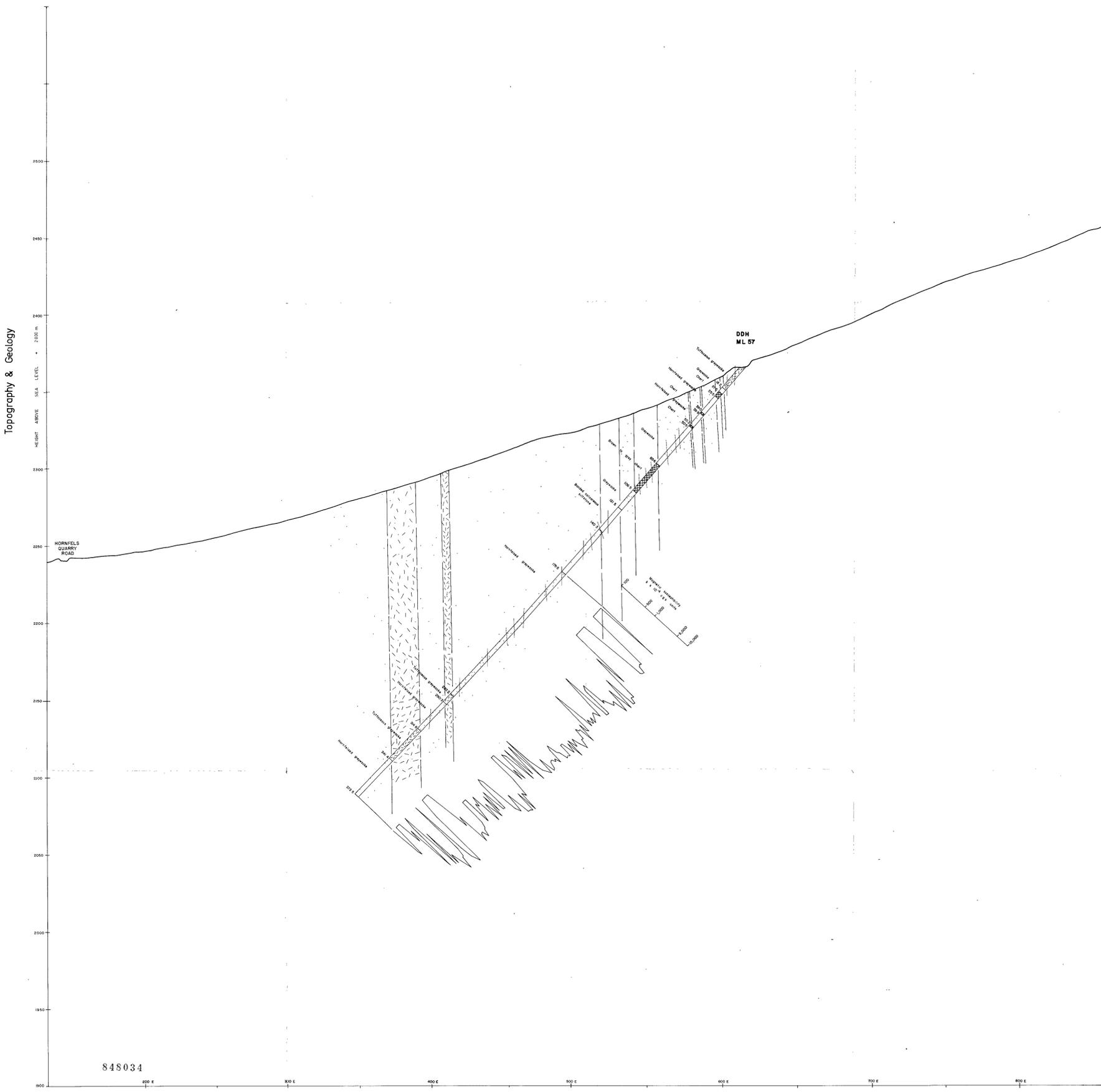
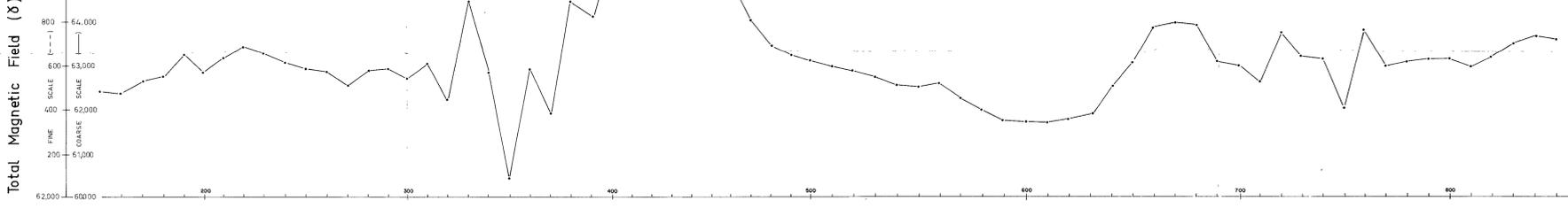
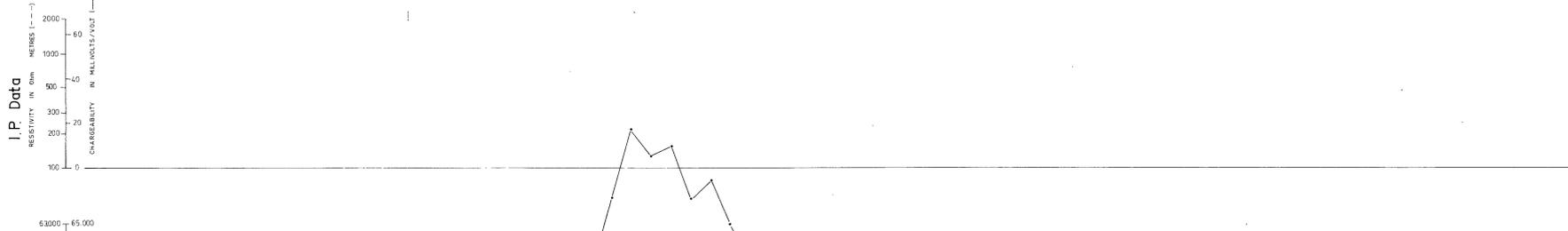
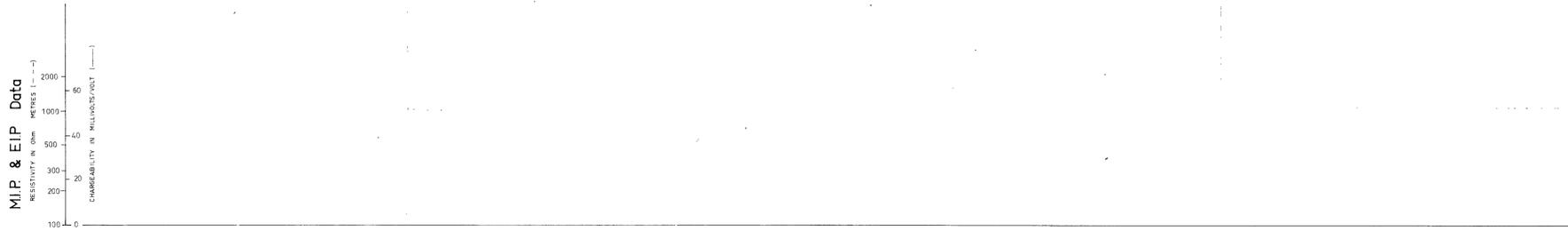
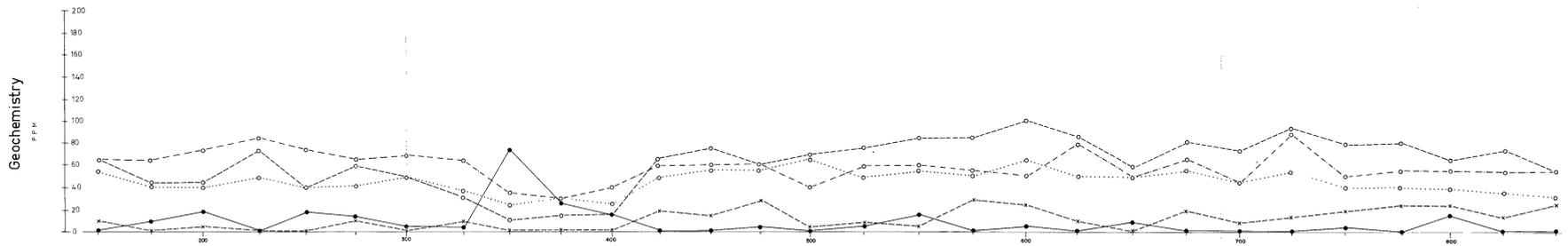
RENISON LIMITED

**LOCALITY MAP**  
SHOWING COMPLETED AND PROPOSED WORK

GEOLOGIST: A. Martin  
DRAUGHTSMAN: C. Moore  
DATE: 12-10-81  
REVISIONS:

SCALE: 1:50,000 METRES

DRAWING NO: 3028  
FIG. 1

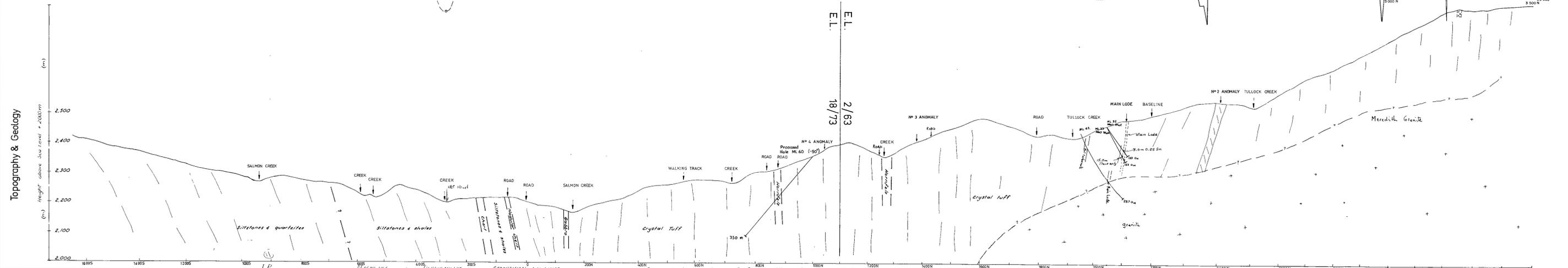
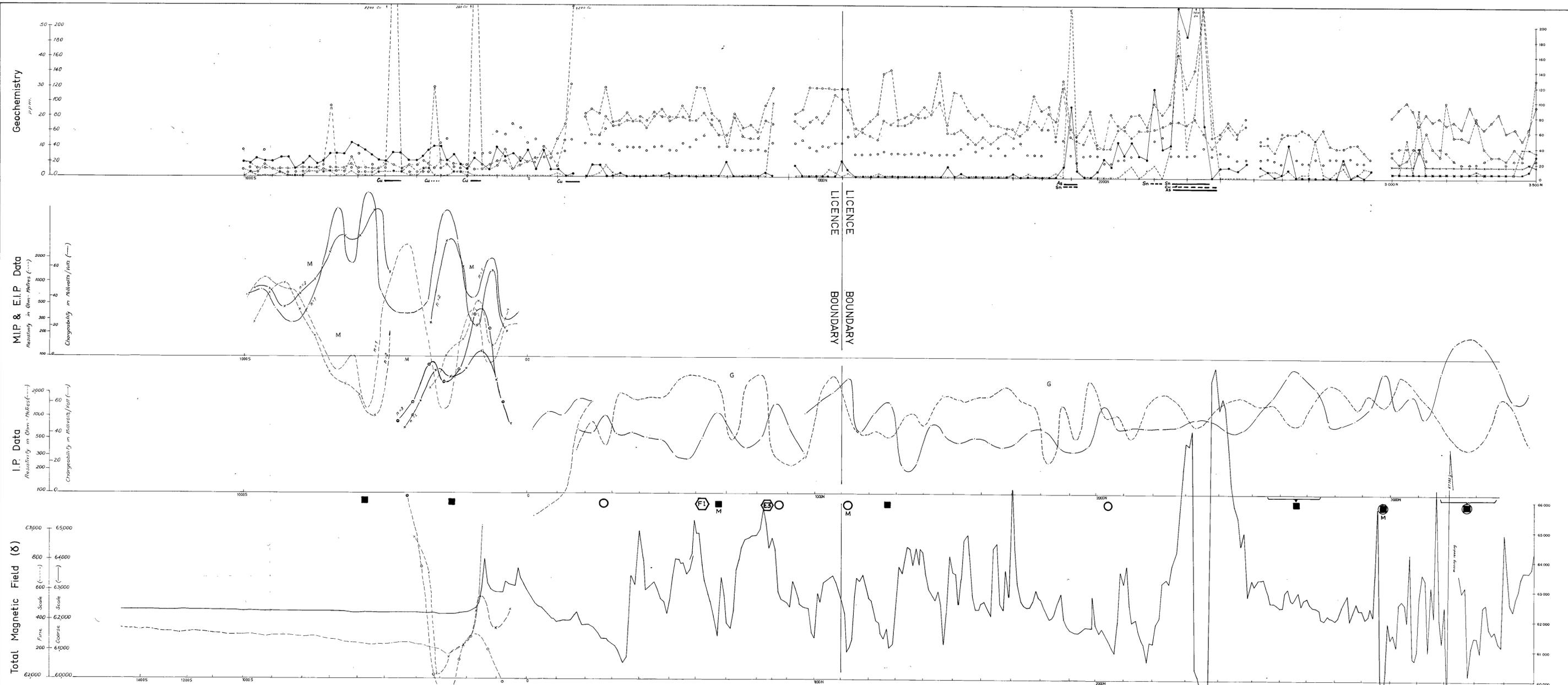


<p>RENISON LIMITED E.L. 18/73 MT. LINDSAY GRID LINE M.L. 16 DDH ML 57</p>		<p>SCALE 1:1000 METRES</p>	
<p>GEOLOGIST L. Martin DRAUGHTSMAN T.G.D.S. DATE 11-9-1981</p>	<p>REVISIONS</p>	<p>FIG. 2</p>	<p>3029</p>

<p><b>I.P. DATA</b></p> <p>— Chargeability - - - Resistivity</p>	<p><b>MAGNETICS</b></p> <p>— 500 # Scale - - - 1000 # Scale</p>	<p><b>SOIL GEOCHEMISTRY</b></p> <p>● Sn ○ Cu ○ Pb ○ Zn x As x W</p>	<p><b>LEGEND</b></p> <p>VOLCANIClastic SEDIMENTS Strongly magnetic zones Non magnetic zones</p> <p>CLAY Weathered carbonate and/or calc-silicates</p> <p>CHERT</p> <p>MOTTLED ZONES</p> <p>CARBONATE ZONE Minor chert and calc-silicates</p> <p>CALC SILICATES</p> <p>SKARN MINERALISATION Magnetite, pyrrhotite and phlogopite</p> <p>FAULT ZONE</p> <p>HEREDITH GRANITE</p>
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Section looking N.W.  
NOTE: Distances slope, not horizontal.



RENISON LIMITED		DRAWN	R.R.S.
E.L. 18/73		TRACED	
MT. LINDSAY GRID		DATE	APRIL '76
LINE ML 11 3030		SCALE	1:5000
PROPOSED HOLE ML 60		DRAWING No.	
SCALE: 1:5000 METRES		MLP 15	
848035 81-1655		FIG. 3	

**LEGEND:**

- Chargability: Solid line (5000 & scale), Dashed line (1000 & scale)
- Resistivity: Solid line (5000 & scale), Dashed line (1000 & scale)
- G = Gradient, M = Moving Source
- Geochemical Anomalies: Sn (Strong), Sn (Medium), Sn (Weak)
- Significant Anomalies Defined by J. Deane (July 1976):
  - Strong: Solid circle
  - Medium: Solid square
  - Weak: Open circle

**NOTES:** Anomalies defined by J. Deane (July 1976) as being in high geological areas because of scattered magnetic, IP and conductivity response. All data are near vertical and close to surface.

