

ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

Mineral Resources Division

EL 4/61

LETTER
16.12.87
REFERS

PART E.L. 4/61 BATTY JOINT VENTURE

Report on Geochemical Sampling of the Battys Bend Grid

February to June, 1987

E.Z. Report No. T231

I.J. Mathison,
September, 1987

87-2756

1.0 INTRODUCTION

1.1. Location & Access (Fig. 1)

The Battys Bend Grid covers a part of the westernmost section of E.L. 4/61 on the north western side of the Savage River.

Access is by the Corinna Road and logging tracks to near the Savage River. From there all equipment must be carried on foot through the Savage River and along rough walking tracks and cut grid lines. Samples are brought out the same way.

Alternative access is by helicopter from Tullah to a cleared ridge some 600m west north west of the northern end of the base line.

1.2. Previous Exploration

In 1986 (McDonald, 1986) E.Z. completed a grid based programme of geological mapping and deep bedrock sampling of the Battys Bend Grid. This programme was designed to follow-up soil and stream geochemical anomalies detected during earlier exploration by Savage Resources (I.M.I.).

1.3. Results of 1986 Exploration

The original I.M.I. lead anomaly was confirmed but not enhanced. Detailed geological mapping indicated that the anomaly coincided with a faulted contact between dolomites to the west and schists to the east. It probably reflects vein type mineralization of limited extent.

A zone of anomalous Cu and Mn with weakly anomalous Zn was detected along the eastern side of the grid. This zone of anomalous bedrock geochemistry occurs in rock mapped as chemical exhalative sediments. Although the tenor of the anomalies on the Battys Bend Grid do not suggest the presence of mineralization within the grid, the strike extensions of this mineralization were considered to have potential for Besshi-style Cu-Zn(Au) mineralization associated with basic volcanics.

1.4. Aims of 1987 Exploration

The zone of anomalous Cu, Mn, (Zn) bedrock geochemistry had not been closed off either to the north or to the south of the Battys Bend Grid. A short distance to the north the anomalous chemical exhalative unit should intersect a major NE trending fault of regional significance. The aim of E.Z.'s 1987 exploration was to test the exhalative unit at or closer to its intersection with the fault.

833003

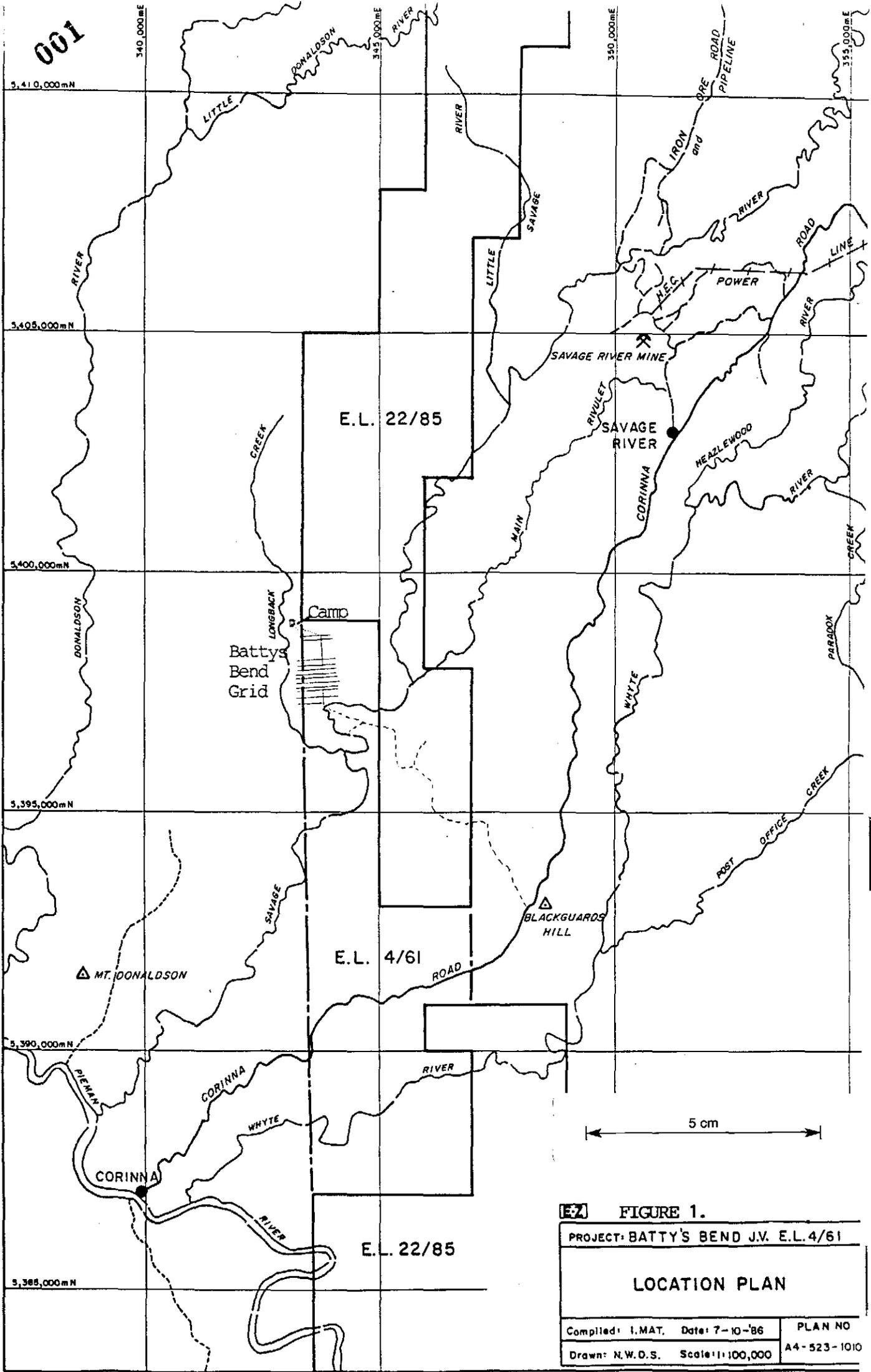


FIGURE 1.

PROJECT: BATTY'S BEND J.V. E.L. 4/61

LOCATION PLAN

Compiled: I.MAT.	Date: 7-10-'86	PLAN NO
Drawn: N.W.O.S.	Scale: 1:100,000	A4-523-1010

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2. WORK COMPLETED

2.1. Camp Establishment

Initially, grid extensions and pegging were carried out using accommodation at Savage River. Access to the grid was by a 1 hour vehicle trip and a 1 hour walk across the Savage River and along cut grid lines. However, the Savage River here is subject to rapid rises in water level following heavy rain locally or upstream. Consequently, field crews often found the Savage River too high to cross safely or were forced to abandon work during periods of heavy rain to ensure a safe return to Savage River.

To overcome this, a camp was established with helicopter assistance on a button grass covered ridge north west of the grid area. A walking track was cut from the camp site to the base line and the remainder of the field work was conducted from this camp.

As both supplies and samples still had to be carried long distances, much time was lost by travelling and back packing. A programme using a larger crew and helicopter support would have been more cost effective.

2.2. Gridding

The north south base line was extended 500m to the north. A short distance north of line 98.2N, the base line intersected a medium sized creek, N.W. Creek of McDonald, 1986, which was followed for most of the rest of the extension.

Two cross lines, 98.7N and 98.6N, each approximately 700m long, were cut.

All lines and the base line were pegged at 20m slope corrected intervals.

2.3. Soil Sampling

74 "C" horizon soil samples were collected using a hand auger. Samples were described in the field and samples which were obviously of transported gravel were so identified. Two samples were collected from each site - one for analysis and one for later reference. Samples, excluding those identified as gravel, were submitted to Analabs, Burnie for analysis. Cu, Pb, Zn, Fe and Mn were determined by A.A.S. after perchloric acid digestion (Method 102). Gold was determined by fire assay with A.A.S. finish (Method 309). All results were transferred to data sheets and plotted base plans.

2.4. Geological Mapping and Other Sampling

Line 98.7N and the base line were mapped. Seven rock chip samples, two stream sediment samples and two panned concentrate samples were collected from the new grid extensions. Rock chip sampling was inhibited by poor outcrop.

3.0. RESULTS RECEIVED

3.1. Soil Geochemistry (See Appendix and Plans 1 - 4)

65 soil samples were analysed. Results of many of these, especially those west of the base line have the depleted characteristics of Tertiary Gravels - either transported gravels or of the angular quartz lag gravels common over Precambrian sandstone-siltstone sequences.

Results of samples collected from areas east of the base line show similar characteristics to the Wacker samples collected further south. These are considered to be valid "C" horizon soil samples.

These show that the Cu-Mn(Zn) anomaly has continued as far as the grid extension. The tenor of results from the soil samples is very similar to that of the bedrock samples.

Peak values obtained from soils were
Cu 230 ppm Pb 40 ppm Zn 145 ppm Mn 6650 ppm.

Only two soil samples reported gold above the detection limit (0.008 ppm). These values, 0.016 and 0.017, are not considered significant.

3.2. Rock Chip Samples (See Appendix)

None of the seven rock chip samples analysed was significantly anomalous. However, weakly elevated Cu values from slates-mudstones along the base line correspond to similar soil sample values from this area.

Because of poor outcrop, no samples of the exhalative sediment horizon were collected.

3.3. Stream Sediment Samples (See Appendix)

The two stream sediment samples reported no anomalous base metal or gold values. A value of 130 ppm Zn is slightly elevated, but would require additional support before warranting follow-up.

Gold values in the stream sediment and panned concentrates were below the level of detection.

3.4. Geology

As little outcrop occurs along the grid lines and as the creeks have not yet been mapped, little useful geological information was collected. The outcrops that were mapped, suggest that the contact between the dolomites and the schists follows the creek along the base line of the extended grid.

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4.0. CONCLUSIONS

Results of 1986 and 1987 gold sampling give no encouragement for continuing gold exploration in this area.

Additional soil sampling has extended the zone of anomalous Cu-Mn(Zn) further to the north. No indication of an improvement in tenor closer to the N.E. trending fault was detected although no indications of the fault can be seen in either the geology or the geochemical results.

5.0. RECOMMENDATIONS

No further exploration for gold mineralization should be conducted at the Battys Bend Grid. Any exploration in this area should concentrate on the search for Besshi type or similar stratabound Cu-Zn deposits within the basic volcanics.

Exploration in remote and difficult areas such as this where climatic conditions can delay or prevent exploration should be carried out with helicopter support and field crews that are experienced in these conditions. A minimum field crew of two geologists and two field assistants with the back up of a four man track cutting crew is suggested.

REFERENCES

1986 McDONALD, I.R.

Reports on Exploration Activity, Battys Bend Grid.

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APPENDIX

007

E.Z. Co. of A'Asia Ltd.,
ROSEBERY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: ..BOTTLS..BEND...
LOCALITY: ..SAVAGE..RIVER...
GRID NAME:
NOMINAL GRID AZIMUTH:

MATERIAL: ..SAIL...G...HORIZON
SAMPLE METHOD: ..SAIL...AUGER...
SAMPLED BY: B-TAYLOR IN RUBENS.
DATE:JUNE...1987....

SIZE FRACTION ANALYSED: ...-80#.....
ANALYSED BY: ..ANALABS.....
METHOD: Cu, Pb, Zn, Fe, Mn A.A.S.
Au - Fire Assay

SAMPLE NUMBER	SAMPLE LOCATION DATA				SAMPLE COMPOSITION DATA						Geology	METAL CONTENT (ppm unless specified)							
	GRID LINE NO.	A.M.G. CO-ORDINATES			DEPTH	COLOUR	Clay	Sand Silt	Rock Fraigs	Organic		CONTAM.	Cu	Pb	Zn	Ag	ppb Au	Fe %	Mn
	GRID EASTING	NORTHING	EASTING																
617540	344120				8093			6040				<5	5	35		x	023	50	
617541	344110				6091			4060											
617542	344080				9091		10	1080				<5	<5	5		x	040	110	
617543	344060				6091		10	5040				<5	<5	10		x	040	5	
617544	344040				4091		50	7030				<5	<5	10		x	028	5	
617545	344020				8041	1910	60	3010				5	5	60		x	390	1170	
617546	344010				1106	1910	30	70				5	<5	115		x	535	630	
617547	343980				9091	1610	10	90				5	<5	110		x	535	475	
617548	343960				6001	1910	80	520				20	<5	70		x	540	405	
617549	343940				6501	1910	80	1010				200	5	100		x	1140	225	
617550	343920				5001	1910	40	1050				1170	5	110		x	615	430	
617551	343900				5001	1910	20	3050				70	5	105		x	600	640	
617552	343880				5001	1910	50	2020				75	10	110		x	620	485	
617553	343860				1000	1910	60	2020				125	5	145		x	1230	515	
617554	343840				5001	1910	10	5020				90	5	125		x	735	565	
617555	343820				5001	1910	60	2020				60	15	65		x	540	230	
617556	343800				5001	1910		4060											
617557	343780				5091			595											
617559	343780				7091		10	190				5	<5	<5		x	040	5	
617559	343500				1000	1910	10	90	Fr			5	10	110		x	014	15	
617560	343520				9001	1910	30	1930	30			5	<5	25		x	010	10	
617561	343540				1301	1610	1910	40	60										
617562	343560				7001	1910		7030				5	<5	110		x	010	15	
617563	343580				7001	1910	10	7020				5	<5	<5		x	040	<5	
617564	343600				6001	1910	10	4020	10			5	<5	<5		x	010	<5	
617565	343620				1200	1910	10	6020				5	<5	<5		x	010	<5	
617566	343640				6091	1910	10	8020				5	<5	<5		x	010	<5	
617567	343660				7091	1910	10	4020				5	<5	<5		x	010	<5	
617568	343680				7091	1910	10	6010	10			5	<5	<5		x	010	<5	
617569	343700				6091	1910	20	7010	10	Fr		<5	<5	<5		x	010	<5	

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E.Z. Co. of A'Asia Ltd.,
ROSEBERY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: *BATTLES BEND*
LOCALITY: *SAVAGE RIVER*
GRID NAME:
NOMINAL GRID AZIMUTH:

MATERIAL: *SOIL C. HORIZON*
SAMPLE METHOD: *SOIL AUGER*
SAMPLED BY: *B. TAYLOR / N. RUBENS*
DATE: *JUNE 1987*

SIZE FRACTION ANALYSED: *-80#*
ANALYSED BY: *ANALABS*
METHOD: *Cu, Pb, Zn, Fe, Mn A.A.S.*
Au - Fire Assay

SAMPLE NUMBER	SAMPLE LOCATION DATA				SAMPLE COMPOSITION DATA							Geology	METAL CONTENT (ppm unless specified)							
	GRID LINE NO.	A.M.G. CO-ORDINATES			DEPTH	COLOUR	Clay	Sand	Rock Frags.	Organic	CONTAM.		Cu	Pb	Zn	Ag	ppb Au	Fe %	Mn	
	9 8 -16 1 N	GRID EASTING	NORTHING	EASTING																
6175711	343740				50	b119197	108	010				<5	<5	<5		x	0101	<5		
6175712	343760				70	b119197	3	070				5	<5	<5		x	0102	<5		
6175713	343780				40	b119197	20	200				5	5	10		17	0103	<5		

833010

009

E.Z. Co. of A'Asia Ltd.,
ROSEBERY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: .. BATTYS BEND ..
LOCALITY: .. SAVAGE RIVER ..
GRID NAME:
NOMINAL GRID AZIMUTH:

MATERIAL: .. SOIL C. HORIZON ..
SAMPLE METHOD: .. SOIL AUGER ..
SAMPLED BY: .. B. TAYLOR / N. RUBENS ..
DATE: .. JUNE 1987 ..

SIZE FRACTION ANALYSED: .. -80# ..
ANALYSED BY: .. ANALABS ..
METHOD: .. Cu, Pb, Zn, Fe, Mn A.A.S. ..
Au - Fire Assay

SAMPLE NUMBER	SAMPLE LOCATION DATA				SAMPLE COMPOSITION DATA							METAL CONTENT (ppm unless specified)											
	GRID LINE NO.		A.M.G. CO-ORDINATES		DEPTH	COLOUR	Clay	Sand	Rock Frags	Organic	CONTAM.	Geology	Cu	Pb	Zn	Ag	ppb Au	Fe %	Mn				
	GRID EASTING	NORTHING	EASTING	NORTHING																			
675132	343500				50611194			2080															
675133	343480				906794		10	90															
675134	343460				7094			1090															
675135	343440				1006494		40	2020				5	5	110		X	0.03		110				
675136	343420				502670		10	8010				<5	<5	5		X	0.05		5				
675137	343400				6094dk60			1090tr				<5	<5	110		X	0.06		5				
675138	343380				5094			1090															
675139	343360				6094dk		10	1080tr															
675174	344040				700rbn		80	1010				360	<5	140		X	1000		11300				

833011

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E.Z. Co. of A'Asia Ltd., ROSEBERY, Tasmania		GEOCHEMICAL SAMPLE DATA SHEET	
PROJECT:	. BATTY'S... BEND...	MATERIAL:	. SP. G. HOR. 22M...
LOCALITY:	. SAVAGE... RIVER...	SAMPLE METHOD:	. SP. AUGER...
GRID NAME:	SAMPLED BY:	. R. TAYLOR, M. BURGESS
NOMINAL GRID AZIMUTH:	DATE: JAN. 1987.....
		SIZE FRACTION ANALYSED:	..-80#.....
		ANALYSED BY:	..ANALABS.....
		METHOD:	. Cu, Pb, Zn, Fe, Mn A.A.S. Au - Fire Assay

SAMPLE NUMBER	SAMPLE LOCATION DATA				SAMPLE COMPOSITION DATA						Geology	METAL CONTENT (ppm unless specified)						
	GRID LINE NO.	A.M.G. CO-ORDINATES		DEPTH	COLOUR	Clay	Sand Silt	Knock Fraggs.	Organic	CONTAM.		Cu	Pb	Zn	Ag	Au (ppb)	Fe %	Mn
	GRID EASTING	NORTHING	EASTING															
6175101	344120				50 or bn	90	10	tr			40	40	90		116	4475	610	
6175102	344110				70 bn or	50	40	id			25	20	55		X	445	510	
6175103	344030				80 or bn	90	tr	10	tr		110	15	60			11160	85	
6175104	344060				75 or bn	60	40				230	<5	110		X	1210	1350	
6175105	344040				80 or bn	60	40				225	<5	110		X	1270	5250	
6175106	344020				80 or bn	50	50				200	<5	125		X	965	6650	
6175107	344000				100 or bn	60	10	20			150	<5	105		X	810	1500	
6175108	343980				80 or bn	60	10	40			210	5	130		X	825	1600	
6175109	343900				90 or bn	60	10	20			95	10	95		X	950	440	
6175110	343940				50 or bn	40	40	20			100	15	130		X	955	595	
6175111	343920				40 or bn	90	15				65	15	90		X	665	235	
6175112	343900				50 or bn	20	50	30			80	15	85		X	585	340	
6175113	343880				60 or bn	70	130				65	10	100		X	635	445	
6175114	343860				60 or bn	90	10				95	10	105		X	745	460	
6175115	343840				55 or bn	80	20				100	10	75		X	620	180	
6175116	343820				80 or bn	80	15	5			65	15	105		X	585	225	
6175117	343800				80 or bn	50	20	tr			60	15	50		X	530	90	
6175118	343780				95 or bn	80	10	10	tr		35	35	15		X	340	15	
6175119	343760				75 or bn	70	15	15			30	10	15		X	205	15	
617520	343740				40 bn	90	15	70			<5	<5	<5		X	1011	<5	
617521	343720				50 dn	90	10	90	tr		<5	<5	10		X	1009	<5	
617522	343700				50 bn	90	20	80			<5	<5	5		X	1003	<5	
617523	343680				90 gn	90	10	65	15		<5	<5	<5		X	1003	<5	
617524	343660				90	11	50	19	10	90	<5	<5	<5		X	1002	<5	
617525	343640				70 br	90	40	20	40		<5	<5	15		X	1002	<5	
617526	343620				80 br		15	20	40	40	<5	<5	<5		X	1002	<5	
617527	343600				40 gn	bn	20	40	10	10	<5	<5	<5		X	1002	<5	
617528	343580				80 gn	11	tr	bn	40	50	20	20	<5		X	1002	<5	
617529	343560				80 br		10	80	20		5	5	5		X	1017	15	
617530	343540				70 br	19	10	19	10		<5	<5	5		X	1003	<5	

833012

111

E.Z. Co. of A'Asia Ltd.,
ROSEBERY, Tasmania

GEOCHEMICAL SAMPLE DATA SHEET

PROJECT: BATTY'S BEND
LOCALITY: SAYAGE RIVER
GRID NAME:
NOMINAL GRID AZIMUTH:

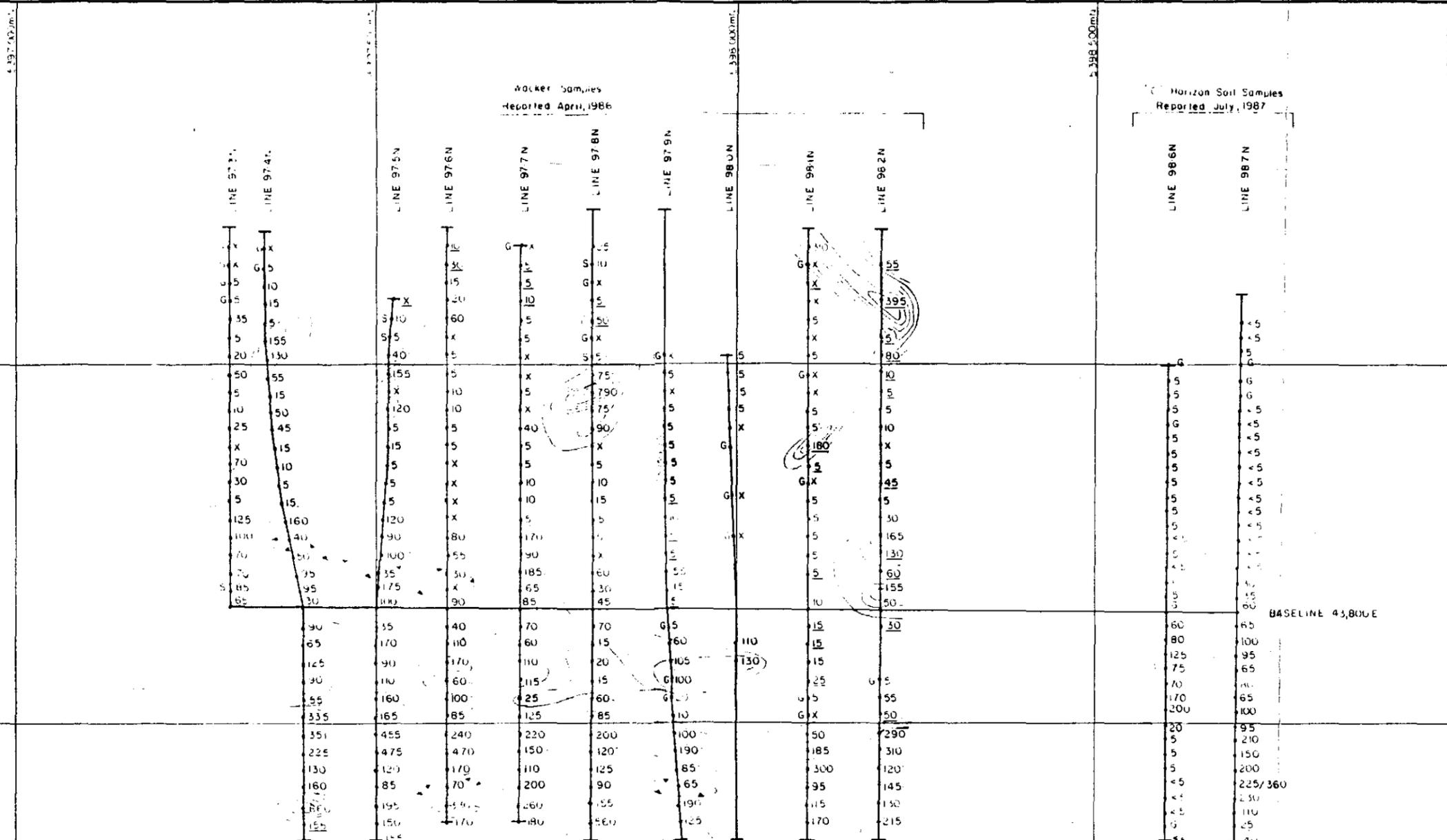
MATERIAL: Stream Sediments
SAMPLE METHOD: Sieved to - 2mm
SAMPLED BY: M.A.T.
DATE:

SIZE FRACTION ANALYSED: 7.80#
ANALYSED BY: ANALABS
METHOD: AAS (03) Cu, Pb, Zn, Fe, Mn
Fire Assay (309) Au

PAN CONS HEAVY FRACTION

SAMPLE NUMBER	SAMPLE LOCATION DATA			STREAM DATA			COMPOSITION DATA					METAL CONTENT (ppm unless specified)							
	GRID LINE NO.	LOCAL CO-ORDINATES		Site Order Direction of Flow	Width (m)	Active Stream Load	Clay	Sand	Rock Fragments	Organic	CONTAM.	Geology	Cu	Pb	Zn	Ag	Au	Fe %	Mn
	GRID EASTING	NORTHING	EASTING																
57747		98600	43805	175	7		✓	✓	✓	✓			15	5	50	1.0	0.008	0.06	95
57748		98240	43575	195	6.5		✓	✓	✓	✓			30	35	130	10.5	0.008	2.30	10.50
PANMED CONCENTRATE SAMPLES																			
57745		98600	43805	175	7														<0.005
57749		98240	43575	195	6.5														<0.008

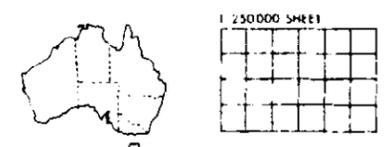
833013



LEGEND

- Walker Sample Point, Bedrock Reached.
- G• Sample in Gravel, Bedrock Not Reached.
- S• Sample in Soil, Bedrock Not Reached
Some uncertainty about Nature of Sample
- X• Bedrock Possibly Not Reached

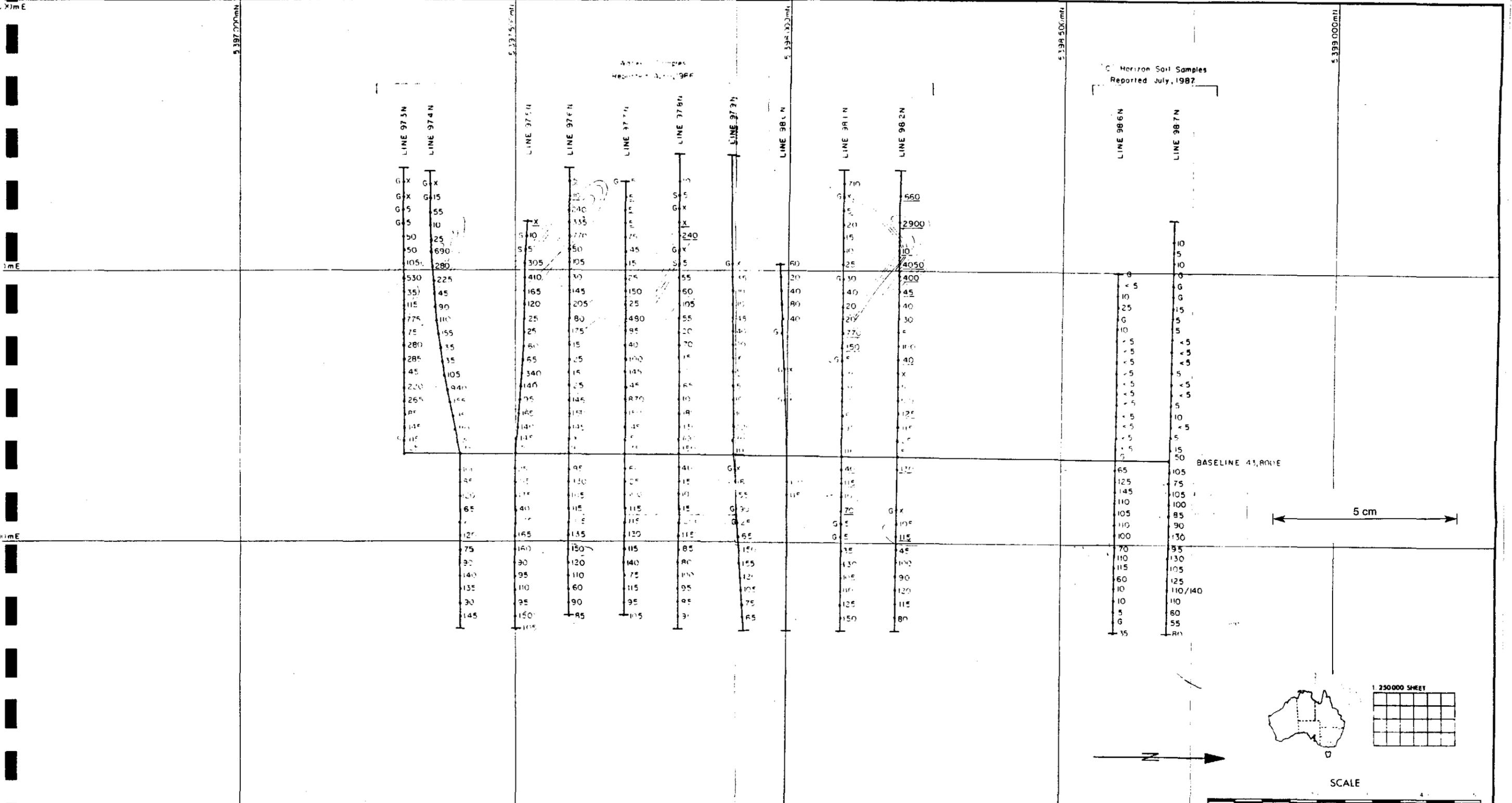
□	> 700 ppm	□	140 - 210 ppm
□	375 - 700 ppm	□	78 - 140 ppm
□	275 - 375 ppm	□	48 - 78 ppm
□	210 - 275 ppm	□	< 48 ppm



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ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED
MINERAL RESOURCES DIVISION

PROJECT	BATTY'S BEND J.V. E.L. 4/61	
SOIL GEOCHEMISTRY		
'C' HORIZON		
Cu		
Compiled: LMD/I.MAT.	Date: 24-8-87	Scale: 1:5000
AMC:	Latitude:	Longitude:
Drawn: N W D S	File No: A3-523-0007	PLAN NO: 1

012



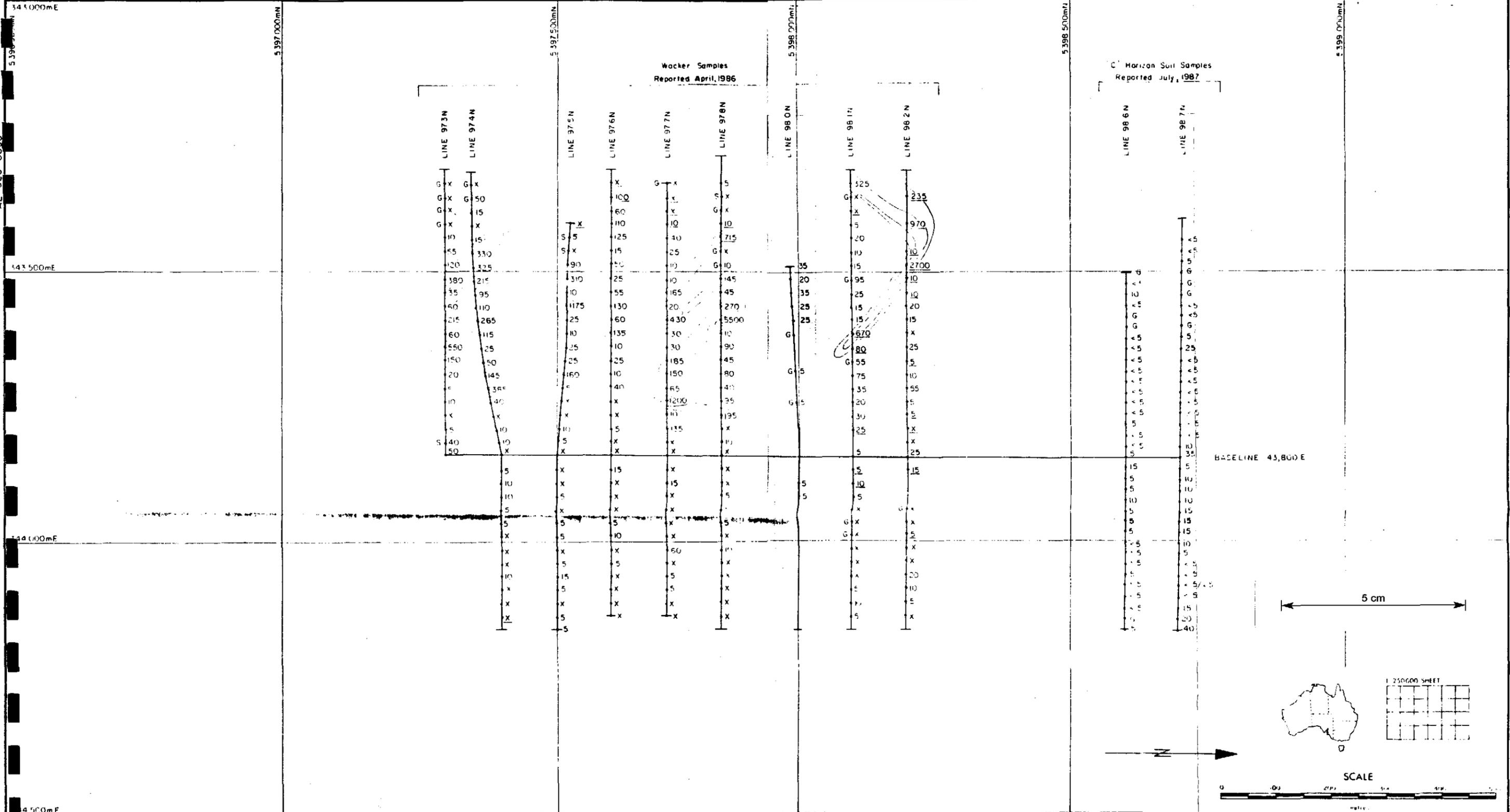
LEGEND

- Wicker Sample Point, Bedrock Reached
 - G Sample in Gravel Bedrock Not Reached
 - G Sample in Silt Bedrock Not Reached
 - Some uncertainty about Nature of Sample
 - Bedrock Possibly Not Reached
- > 2000 ppm
 - 500 - 2000 ppm
 - 190 - 600 ppm
 - 14R - 170 ppm
 - 79 - 14R ppm
 - < 78 ppm

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 ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED
 MINERAL RESOURCES DIVISION

PROJECT:	BATTY'S BEND J.V. E.L. 4/6I	
SOIL GEOCHEMISTRY		
'C' HORIZON		
Zn		
Compiled I.McD/I.MAT. Date: 21-8-87	Scale: 1:5000	
AMG:	Latitude:	Longitude:
Drawn: N.W.D.S.	File No: A3-523-0008	PLAN NO: 2

810



341000mE
5397000mN
5397500mN
5398000mN
5398500mN
5399000mN

Wacker Samples
Reported April, 1986

'C' Horizon Soil Samples
Reported July, 1987

LINE 973N
LINE 974N

LINE 975N
LINE 976N

LINE 977N
LINE 978N

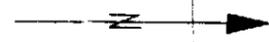
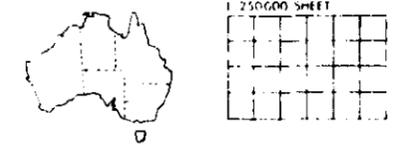
LINE 980N
LINE 981N

LINE 982N

LINE 986N
LINE 987N

BASELINE 43,800 E

5 cm



LEGEND

- Wacker Sample Point, Bedrock Reported
- Sample Level, Bedrock Not Reported
- Sample Point, Bedrock Not Reported, Some Uncertainty about Nature of Point
- Bedrock Possibly Not Reported

- 100 - 300 ppm
- 320 - 3000 ppm
- 140 - 1000 ppm
- 1 - 4 ppm

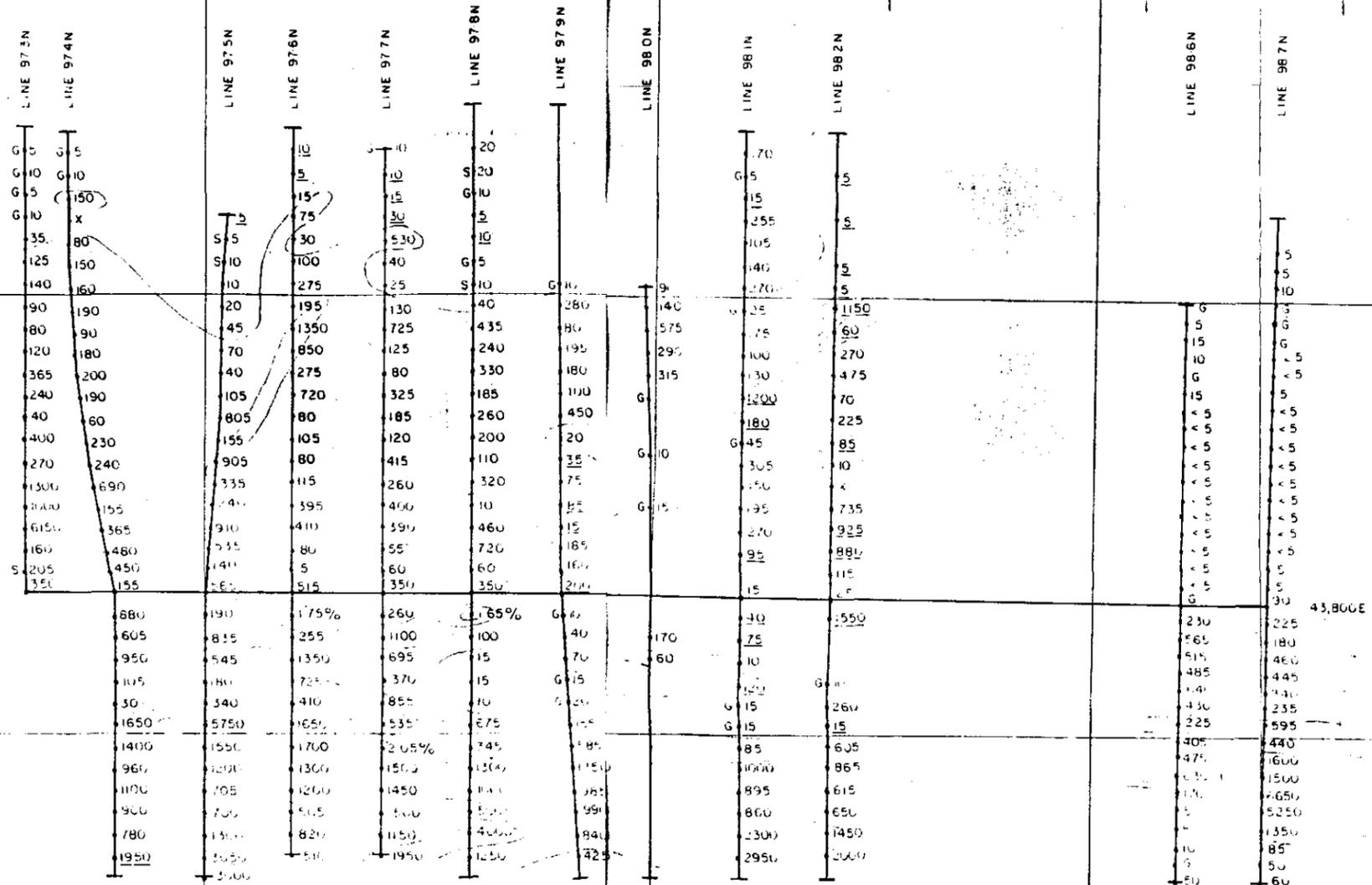


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MINERAL RESOURCES DIVISION

PROJECT BATTY'S BEND J.V. E.L. 4/61		
SOIL GEOCHEMISTRY		
'C' HORIZON		
Pb		
Compiled: I.McD/I.MAT	Date: 18-8-'87	Scale: 1:5000
AMG:	Latitude:	Longitude:
Drawn: N.W.D.S.	File No: A3-523 0006	PLAN NO: 7

PTO

Wacker Samples
Reported April, 1986



LEGEND

- Wacker Sample Point, Bedrock Reached
- G • Sample in Gravel, Bedrock Not Reached
- S • Sample in Soil, Bedrock Not Reached
Some uncertainty about Nature of Sample
- Bedrock Possibly Not Reached

- 1800 ppm - 100%
- 840 - 1800 ppm
- 65 - 840 ppm
- < 65 ppm

EZ
ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED
MINERAL RESOURCES DIVISION

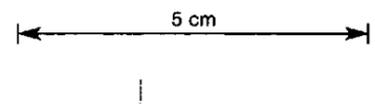
PROJECT **BATTY'S BEND J.V. E.L. 4/61**

SOIL GEOCHEMISTRY
'C' HORIZON
Mn

Completed: I. McD./I. MAT Date: 23-8-'87 Scale: 1:5000

AMG: Latitude: Longitude:

Drawn: N.W.D.S. File No: A3-523-0009 PLAN NO: **4**



510