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E.L. 21/86

HOWARDS ROAD AREA

ANNUAL REPORT FOR 1986/87

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E.L. 21/86

HOWARDS ROAD AREA

ANNUAL REPORT FOR 1986/87

  
By: P.A. Roberts

Senior Regional Geologist

Circulation: Mines Department (1)  
R.G.C. (2)

Date: November, 1987.

Report No. T/87/14

SUMMARY

E.L. 21/86, the Howards Road area, was acquired in early 1987 because of its perceived potential for Henty-style gold mineralisation along the possible southern extension of the Rosebery Fault and/or the western extension of the western splay of the Henty Fault.

The following work program was carried out in the first year of the E.L.'s life for a total expenditure of \$18,428:

- (1) Previous explorers' stream sediment geochemical data were compiled onto a series of standard 1:5000 maps.
- (2) Detailed stream sediment geochemical sampling for gold and reconnaissance geological mapping and sampling were carried out by contract geologist, R. Poltock.

The results of Poltock's work were quite disappointing with the highest stream sediment and rock chip values being 20 ppb and 125 ppb respectively.

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## 1. INTRODUCTION

The Howards Road block, E.L. 21/86, covers an area of 22 sq. km south of Rosebery, West Tasmania (Figure 1). This is a rugged, forested area which includes the southern flanks of Mt. Dundas and is dissected by the tributaries of the Farrell Rivulet and the Henty River.

This area was relinquished by C.S.R. in April, 1984. Prior to that time, the block formed part of E.L. 15/76, which then covered 145 sq. km.

The Howards Road section was excised from the licence to meet Mines Department regulations which came into force in 1982 and which have since caused all old E.L.s in the State to be reduced in area to 125 sq. km or less.

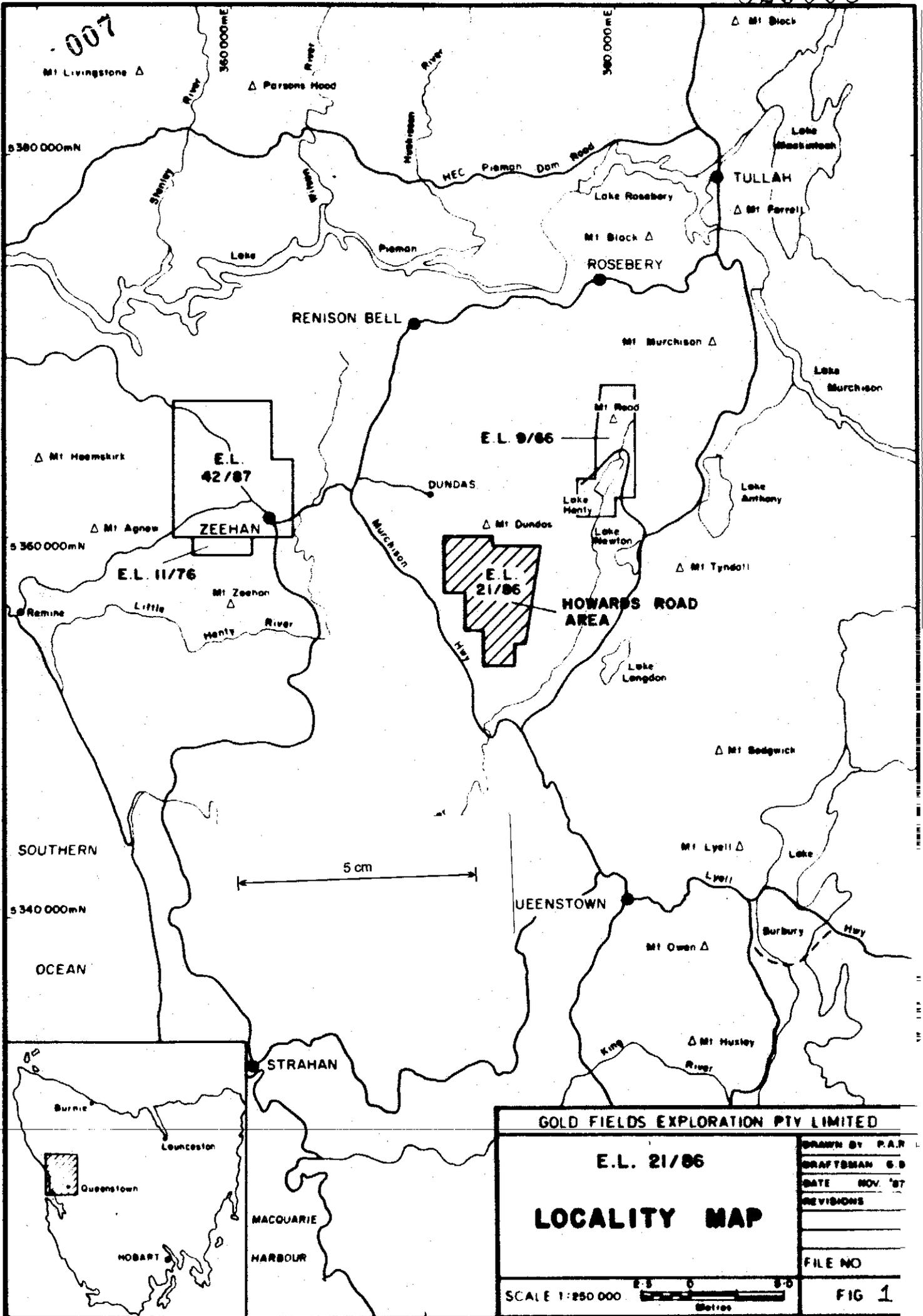
Geologically, this area is underlain by volcanoclastic sediments of the Cambrian Dundas Group in faulted contact with gabbro and andesitic volcanics in the south-east portion of the area.

This E.L. was pegged in September, 1986 for the following reasons:-

- (1) It covers the postulated southern extension of the Rosebery Fault (south of Mt. Dundas) and the south-western extension of the western splay of the Henty Fault. Both structures are known to be associated with primary gold mineralization and therefore the Howards Road block was considered prospective for fault-related gold mineralization.
- (2) C.S.R. had obtained substantial gold values from pan concentrates within the area. Although their follow-up work had suggested that the gold's immediate source lay within glacials they had not shown what the ultimate source of the gold was.

Since the licence was granted in December, 1986, previous explorers' data have been compiled onto a series of standard sheets, and a program of detailed stream sediment sampling (for gold) and reconnaissance geological mapping has been carried out. Total expenditure to date on this work has amounted to \$18,428 (Appendix 1).

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GOLD FIELDS EXPLORATION PTY LIMITED	
E.L. 21/86	
<b>LOCALITY MAP</b>	
SCALE 1:250 000	0 50 100 Metres
DRAWN BY P.A.R.	FILE NO
DRAFTSMAN S.B.	FIG 1
DATE NOV '87	
REVISIONS	

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3. GEOLOGY

The regional geology of the area is illustrated on Figure 2. The Howards Road area is largely underlain by a sequence of volcano-sedimentary rocks now correlated with the Dundas Group. In the past, this sequence was thought to be part of the Western Sequence and hence a distal equivalent of the Central Volcanic Belt. K. Corbett (of the Mines Department) has now shown that this sequence unconformably overlies the Central Volcanic Belt near Hercules.

The Howards Road block is of some exploration interest because two faults known to be associated with the gold and base metal mineralization may strike through the area, viz the Henty and Rosebery Faults:

- (1) Henty Fault: This structure splays into two faults just to the south of the Henty Gold Prospect. The northern of these fault splays strikes south-west into the Howards Road area, where it is apparently offset by several north trending structures. The sequence of rocks found to the east of the northern Henty Fault splay comprises mafic and ultramafic rocks, including andesitic volcanics, gabbro and serpentinite, and sediments consisting of shales with lesser conglomerates, sandstones and limestones. This sequence is similar to the basal Dundas Group found 10 km to the NW in the Razorback to Serpentine Hill area. There is some evidence that the ultramafic rocks at Serpentine Hill may have been enriched in gold and platinoids and hence could have been good gold source rocks.

The Henty Fault is associated with gold and base metals mineralization along much of its length, e.g. silver-lead at Mt. Farrell, gold-arsenic-tin in the Sterling Valley and gold (-silver-base metals) at the Henty Gold Prospect.

- (2) Rosebery Fault: Mapping by K. Corbett has identified this structure only as far south as Moores Pimple, however it is unlikely that such a major thrust fault simply terminates at this point. One possibility is that the fault continues on to the south through Mt. Dundas (as shown on Figure 2).

009

Like the Henty Fault, this structure is associated with gold and base metals mineralization at several points along its length, e.g. gold-silver-base metals at Pinnacles and gold in tourmaline veins near Rosebery.

At Moores Pimple, just to the north of Mt. Dundas, the Rosebery Fault is in contact with a fuchsitic conglomerate; fuchsite is commonly associated with gold mineralization elsewhere in the world and with base metals-gold ore at Que River and Hellyer.

One reason for believing that this structure, or a splay from it, strikes through E.L.21/86 is that base metal soil anomalies reflecting vein mineralization have been identified in a north trending zone virtually along strike of the Rosebery Fault (at "Anomaly 1").

It is conceivable that the Henty and Rosebery Faults (or splays thereof) actually intersect within E.L.21/86. If so, the intersection point would be an obvious place to look for gold mineralization (cf. Henty Gold Prospect which is located where the two Henty Fault splays and the Great Lyell Fault come together).

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2. EXPLORATION HISTORY

The Howards Road area has been held under some kind of mineral licence tenure for nearly all of the last 27 years. Licence holders during that time were Rio Tinto (E.L. 4/59), Costigan Mines (E.L. 5/63), Utah (E.L. 2/67), Pickands Mather (E.L. 12/65), A.R. Dodson (E.L. 6/69), McIntyre Mines (S.P.L.46), Texins Development (E.L. 7/68) and C.S.R. (E.L. 15/76). It appears that the main exploration targets for all of these companies were base metal and tin deposits. The only company to have done any gold exploration was C.S.R.

Work completed by those of the above companies which actually did some work within E.L.21/86 comprised:

- (1) Rio Tinto: Airborne magnetic and EM surveys and photogeological interpretation.
- (2) Comstaff for Costigan Mines: AFMAG survey.
- (3) McIntyre Mines: Detailed stream sediment sampling; silt samples assayed for Cu, Pb, Zn and Sn by AAS. A zone of Pb and Zn anomalies south of the peak of Mt. Dundas was followed up by gridding, soil geochemistry and test I.P., S.P. and E.M. surveys. ("Anomaly 1" grid).
- (4) Geophoto for Texins Development: Turair airborne E.M. which obtained a zone of E.M. anomalies south of the South Comet workings; these were followed up by gridding, ground magnetics, VLF-EM and soil geochemistry for Cu, Pb, Zn and Ni.
- (5) C.S.R.: Selective stream sediment sampling, both pan concentrate and silt samples. Airborne INPUT and DIGHEM EM/magnetics surveys. Anomalous gold values in pan concentrates were followed up by a reconnaissance grid, VLF-EM, ground magnetics, soil geochemistry and the excavation of some pits.

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4. WORK COMPLETED 1986/87

The first stage of work required on this E.L. was to compile the previously obtained data onto a series of maps:

Stream sediment data collected by McIntyre Mines and C.S.R. was plotted onto a series of standard 1:5,000 sheets (Figures 3 to 26). These sheets each measure 4km x 2km and are the same size and designated in the same way as the Lands Department's standard 1:5,000 sheets. All of the plans were drafted using Tasmanian Geological Drafting Services computer aided drafting system.

The results of McIntyre's and C.S.R.'s grid-based work were reviewed and the following conclusions were drawn:

- (1) The substantial elongate base metal anomaly obtained by McIntyre on the Anomaly 1 grid could represent mineralization associated with the Rosebery Fault and might therefore carry some gold values.
- (2) The poor gold soil geochemical results obtained by C.S.R. were questionable because:
  - (a) Some of the sample holes did not reach bedrock or C horizon.
  - (b) All of the gold assays were obtained by A.A.S., which may well underestimate the gold values in this environment (because of the presence of organic carbon in some samples). In fact, when C.S.R. checked some low A.A.S. gold values (all < 5ppb, obtained from pits in the glacials) by fire assay, they recorded values ranging up to 70ppb (Ellis, 1984). Despite this, there is no evidence that C.S.R. re-assayed any of the other soil samples by fire assay.
  - (c) The grid lines were too far apart and probably poorly oriented (east-west lines) to test the gold potential of the western Henty Fault splay.

As a result, a decision was made to carry out further gold geochemical sampling on the E.L. As a first pass, it was decided to carry out detailed geochemical sampling for gold in all of the streams which might drain the southern extension of the Rosebery Fault or the western extension of the Henty Fault. This work was carried out by contract geologist R. Poltock in conjunction with a program of reconnaissance mapping and rock chip sampling. The results of Poltock's work are detailed in Appendix 2 and illustrated on Figures 27 to 38. In summary, Poltock:

- (1) Obtained generally disappointing gold results, the best values being 20 ppb in the stream sediment samples and 125ppb from the rock chip samples.
- (2) Found no evidence for the existence of the Rosebery Fault in the area but did confirm the presence of the Henty Fault.
- (3) Confirmed C.S.R.'s conclusion that the glacials are shedding gold into the modern drainages. (Note: Poltock avoided taking stream sediment silt samples at any locations where there is glacial contamination).
- (4) Concluded that the source of the gold in the alluvials probably lies to the east of the E.L. in Cambrian volcanics and/or ultramafics.

5. REFERENCE

ELLIS, P.D., 1984: Relinquishment Report, Part of E.L. 15/76, Dundas, Tasmania C.S.R. Unpublished Report, EMR 56/84.

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APPENDIX 1

Expenditure to end September, 1987

PERSONNEL	\$ 3,015
TRAVEL AND ACCOMMODATION	83
CONSULTANTS AND CONTRACTORS	12,535
ASSAYING	1,388
STORES AND SUPPLIES	271
VEHICLES	513
LAND ACQUISITION	198
COMPUTING	87
OFFICE	338
TOTAL	<u>18,428</u>

APPENDIX 2

Report by R. Poltock: Stream Sediment Assessment of the North Henty  
and Rosebery Faults for Gold Mineralization, August,  
1987.

016

**ROGER POLTOCK**  
GEOLOGICAL PTY. LTD.

829017

EL 21/86 DUNDAS

STREAM SEDIMENT ASSESSMENT OF THE NORTH HENTY AND ROSEBERY  
FAULTS FOR GOLD MINERALIZATION

AUGUST 1987

ROGER POLTOCK GEOLOGICAL PTY. LTD.  
FOR GOLDFIELDS EXPLORATION PTY. LTD.

017

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CONCLUSIONS AND RECOMMENDATIONS

WORK COMPLETED

DISCUSSION OF RESULTS

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**PLATES**

1. FLUVIOGLACIALS OVERLYING CAMBRIAN SILTSTONES ON HOWARD'S ROAD, 5356.100N 372 850E
2. BOULDER ERATIC OF WEST COAST RANGE CONGLOMERATE 5355.400N 373.700E
3. SILICIFIED AND VEINED VOLCANIC, ASSAY 0.125ppm GOLD, SAMPLE NO. 05914, 5357250N 375.400E

Page 1.

SUMMARY

The North Henty Fault and Rosebery Fault were considered prospective for gold mineralization. Previous exploration by McIntre Mines and C.S.R. defined anomalous base metals in proximity to the Rosebery Fault and anomalous gold in stream panned concentrates in the headwaters of the Farrel Rivulet.

The current licence has been evaluated with -80# stream sediments, rock chips and reconnaissance geology.

All lithologies in the area belong to the Cambrian Dundas Group. Comprising a monotonous sequence of tuffaceous siltstones and greywackes in the north which have been faulted against andesitic volcanics and gabbroic intrusives in the south. Quaternary fluvio-glacial cover is restricted to the floors of stream valleys, gold detected by CSR has been shed from these glacials.

Stream sediments and rock chip samples were barely anomalous in base metals or gold, maximum values Au 0.02ppm in sediments and 0.125ppm in rock chips.

CONCLUSIONS AND RECOMMENDATIONS

The anomalous gold detected by CSR has been found to be directly associated with glacials derived from the West Coast Range. Grains of platinum minerals and chromite occur with the gold indicating a probable hard rock source for all heavy minerals to the east of this licence in Cambrian volcanics and ultramafics.

The glacials containing precious metals are not extensive enough to constitute an alluvial prospect.

The Rosebery and North Henty Faults in this licence are not associated with significant alteration or mineralization.

No further work is warranted.

WORK COMPLETED

In conjunction with geochemical sampling the area has been mapped on a reconnaissance basis. (see Plan 1.)

Sixty stream sediment sites were sampled, the active silt fraction sieved in the field.\* Only three samples assayed above the 0.008ppm detection limit for gold, 0.017 - 0.020ppm.

Twentyfour rockchips were collected, of these 17 were assayed. The maximum value for gold 0.125ppm was from a highgraded sample of veined and silicified volcanoclastics in proximity to the North Henty Fault. (see Plate 3.)

Anomalous CSR panned concentrate sites were resampled at six locations, these samples were only visually assessed in the field. At site 05936 there were 30-40 grains of gold, 3 grains of platinum minerals and abundant chromite. CSR's concentrate assayed 114ppm gold at this location.

A CSR gold soil anomaly of 0.20 ppm on Line 55.050N, 73.300-360E has been resampled. The best assay from seven B/C horizon samples was 0.025 ppm gold, all other samples assayed <0.008ppm gold. No mineralization or alteration was observed in this area.

\* Note: Large samples of the -80 # mesh material were obtained, averaging around 500 gm.

020

DISCUSSION OF RESULTS

The dominant lithology is a wellbedded tuffaceous siltstone and greywacke, which is extensively exposed along Howard's Road and the access track to the McIntyre grid. (see Plan 1.)

In the southern part of the licence this sequence has been cut by an ENE trending fault. South of this fault andesitic volcanics and gabbroic intrusives predominate.

Quaternary glacial cover in the area isn't as extensive as previously mapped and is confined to the valley floors of the Farrel Rivulet and tributaries. The glacials have been derived primarily from the West Coast Range Conglomerate, erratics upto 10 m across aren't uncommon. (see Plate 1 & 2.)

This steeply dipping sequence which strikes NS has been cut by two major EW structures, both probably splays of the North Henty Fault. Only the southern fault has an apparent displacement. The NS trending Rosebery-Montezuma Fault parallels the lithological strike and hasn't been detected, structural deformation and alteration is not associated with this feature in the licence.

Rock and stream geochemistry is barely anomalous for gold or base metals. The maximum -80# stream sample was 0.02 ppm gold from a small stream at the southern end of the McIntyre base metal grid. Two sites with 0.017 ppm are associated with the CSR panned concentrate anomaly of 114 ppm gold in glacials.

Minor silicification and quartz veining is associated with the North Henty Fault in proximity to Howard's Road, a highgraded sample of this rock type assayed 0.125 gold ppm, the highest result from the entire licence. (see Plate 3.)

The stream draining this area has been traversed and sampled in detail with no further significant results.

Anomalous concentrations of gold, platinum minerals and chromite associated with glacials are interpreted to have been derived from Cambrian volcanics and ultramafics to the east of the licence via a palaeo drainage system which predated the Henty River.

It is envisaged that a peneplain of 600m ASL extended from the eastern licence boundary of EL 21/86 to the Tyndall Range. The glacial outwash exited from this plain at a low point at the headwaters of the Farrel Rivulet ( see Plan 1.). Subsequently these gravels have been reworked concentrating the heavy mineral component.

021



PLATE 1. FLUVIOGLACIALS OVERLYING CAMBRIAN SILTSTONES ON  
HOWARD'S ROAD. 5356,100N 372850E

022

PLATE 2. BOULDER ERATIC OF WEST COAST RANGE CONGLOMERATE  
5355,400N 373,700E



023



PLATE 3. SILICIFIED AND VEINED VOLCANIC, ASSAY 0.125PPM GOLD  
SAMPLE NO. 05914 5357.250N, 375400E

APPENDIX 1

ANALYTICAL REPORTS

# ANALABS

A division of MacDonal Hamilton & Co. Pty. Ltd.  
52 Murray Road, Welshpool, W.A. 6106

Telex AAP2860

Phone (09) 458 7999

ANALYTICAL REPORT No. 05 1 00 04130

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

**Gold Fields Exploration Pty. Ltd.**  
P.O. Box 835  
Burnie  
Tasmania 7320

ORDER No. 0414

DATE RECEIVED

RESULTS REQUIRED

08/01/87

ASAP

No. OF PAGES OF RESULTS

DATE REPORTED

No. OF COPIES

TOTAL No. OF SAMPLES

3      28/01/87      1

49

STATE OF SAMPLES	SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS			
		DRY	CRUSH	SPLIT	PULVERISE	WIEVE	OTHER SEE REMARKS	NONE	ASPER TO ANALYSIS SECTION	PREPARATION	METHOD	
Various		SS	Prep: 006,016							Bi/101		
Various		SS								Au/309, As/401		
Various		RC	Prep: 006,009,012,013,016							Cu, Pb, Zn, Ag, Bi/101, As/114		
Various		RC								Au/309		
T 5942, T 5960		PU								Au/309		

RESULTS

TO

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

RESULTS

TO

REMARKS

*Howards Rd*

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Rn	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TIT
water WA	HF under pressure A7	other chemical means OCM
tissue TI	fusion A8	miscellaneous MIS
iron sediment IS		fluorescence FLU
heavy mineral HM		inductively coupled plasma ICP

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## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

SAMPLE PREFIX		REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE				
		06.04150	26/01/87	0414	1 OF 3				
TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Bi	As	Se	Au
1	T 5901	-	-	-	-	-	-	-	<0.008
2	T 5902	-	-	-	-	-	-	-	<0.008
3	T 5903 +	-	-	-	-	<10	-	<2	<0.008
4	T 5904 +	-	-	-	-	<10	-	<2	<0.008
5	T 5606	-	-	-	-	-	-	-	<0.008
6	T 5913	-	-	-	-	-	-	-	0.083
7	T 5914	10	25	45	<5	20	3	-	0.125
8	T 5915	-	-	-	-	-	-	-	0.017
9	T 5916	-	-	-	-	-	-	-	<0.008
10	T 5917 +	-	-	-	-	<10	-	<2	<0.008
11	T 5918 x	-	-	-	-	<10	-	<2	<0.008
12	T 5920 x	-	-	-	-	<10	-	<2	<0.005
13	T 5921 ✓	-	-	-	-	<10	-	<2	<0.008
14	T 5922 /	-	-	-	-	<10	-	<2	<0.008
15	T 5924 x	-	-	-	-	<10	-	<2	<0.008
16	T 5925 x	-	-	-	-	10	-	<2	<0.008
17	T 5926 x	-	-	-	-	<10	-	<2	<0.008
18	T 5927 x	-	-	-	-	<10	-	<2	<0.008
19	T 5928	-	-	-	-	-	-	-	<0.008
20	T 5929 x	-	-	-	-	<10	-	<2	<0.008
21	T 5930	-	-	-	-	-	-	-	<0.008
22	T 5931 x	-	-	-	-	<10	-	<2	0.008
23	T 5932 x	-	-	-	-	<10	-	<2	0.017
24	T 5933 ✓	-	-	-	-	<10	-	<2	<0.008
25	T 5934 x	-	-	-	-	<10	-	<2	<0.008

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

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# ANALABS

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## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.0B.04130

28/01/87

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2. of 3

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Bi	As	Se	Au
1	5935	-	-	-	-	<10	-	<2	0.017
2	5938	-	-	-	-	<10	-	<2	0.008
3	5939	-	-	-	-	-	-	-	0.008
4	5940	-	-	-	-	<10	-	9	0.008
5	5941	-	-	-	-	-	-	-	0.008
6	5942	-	-	-	-	-	-	-	-
7	5943	-	-	-	-	<10	-	4	0.008
8	5944	-	-	-	-	10	-	3	0.008
9	5945	-	-	-	-	<10	-	4	0.008
10	5946	-	-	-	-	<10	-	3	0.008
11	5947	-	-	-	-	<10	-	2	0.008
12	5948	-	-	-	-	<10	-	3	0.008
13	5949	-	-	-	-	<10	-	<2	0.008
14	5950	-	-	-	-	10	-	<2	0.008
15	5951	-	-	-	-	10	-	<2	0.008
16	5952	-	-	-	-	10	-	3	0.008
17	5953	-	-	-	-	20	-	<2	0.008
18	5954	-	-	-	-	-	-	-	0.008
19	5955	-	-	-	-	<10	-	3	0.008
20	5956	-	-	-	-	<10	-	<2	0.008
21	5957	-	-	-	-	<10	-	<2	0.025
22	5958	-	-	-	-	20	-	<2	0.008
23	5959	-	-	-	-	<10	-	<2	0.008
24	5960	-	-	-	-	-	-	-	-
25									

Results in ppm unless otherwise specified  
 - element present, but concentration too low to measure  
 x element concentration is below detection limit  
 - element not determined

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028

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.04130

28/01/87

0414

3 OF 5

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Bi	As	Se	Mo	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22	DETECTION	5	5	5	5	10	1	2	0.008	
23	UNITS	PPM								
24	METHOD	101	101	101	101	101	114	401	309	
25										

Results in ppm unless otherwise specified  
 \* = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER

829029

# ANALABS

029  
Phone (09) 458 7999

A division of MacDonald Hamilton & Co. Pty. Ltd.  
32 Murray Road, Welshpool, W.A. 6106  
T.C. No. 5724

Telex AA92560

ANALYTICAL REPORT No. **95.1.08.04529**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

ORDER No.	PROJECT
0551	
DATE RECEIVED	RESULTS REQUIRED
03/06/87	ASAP

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL No. OF SAMPLES
2	10/06/87	1	23

STATE OF SAMPLES	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
		DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	T5962/63, T5966/85	SS	Prep: 003							Du, Pb, Zn, Bi / 102, As / 114		
	T5962/63, T5966/85, T8878	SS								Au, AuChk / 309		

RESULTS

TO

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

RESULTS

TO

REMARKS

STATE OF SAMPLES	ANALYSIS — PREPARATION	ANALYSIS — METHOD
whole core WC	perchloric acid A1	atomic absorption AAS
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ro	aqua regia A4	colorimetry COL
soil SO	nitric-perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TIT
water WA	HF under pressure A7	other chemical means CHEM
tissue TI	fusion A8	miscellaneous MISG
am sediment SS		fluorescence FLUOR
vy mineral MM		inductively coupled plasma ICP

AUTHORISED OFFICER

*[Signature]*

829030

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No

PAGE

95.1.08.04529

10/06/87

0551

1 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	As	Au	AuChk		
1	T5962 x	25	46	160	1	7	<0.008	<0.008		
2	T5963 x	10	18	71	2	3	<0.008	-		
3	T5966 x	12	24	76	<1	5	<0.008	-		
4	T5967 x	12	21	53	2	4	<0.008	-		
5	T5968 x	12	20	76	3	4	<0.008	-		
6	T5969 x	14	35	87	<1	6	<0.008	<0.008		
7	T5970 x	22	39	106	<1	7	<0.008	-		
8	T5971 x	16	59	104	<1	11	<0.008	-		
9	T5972 x	16	42	66	<1	9	<0.008	-		
10	T5973 x	20	52	148	<1	8	<0.008	-		
11	T5974 x	11	44	54	<1	7	<0.008	-		
12	T5975 +	10	45	50	<1	7	<0.008	-		
13	T5976 +	25	85	184	4	11	<0.008	-		
14	T5977 +	35	157	181	2	9	<0.008	-		
15	T5978 +	25	104	181	<1	8	0.020	-		
16	T5979 +	25	63	145	<1	8	<0.008	-		
17	T5980 +	30	63	145	2	9	<0.008	-		
18	T5981 +	15	39	121	2	6	<0.008	-		
19	T5982 +	15	25	79	3	3	<0.008	-		
20	T5983 +	8	18	55	5	3	<0.008	-		
21	T5984 +	6	12	29	1	2	<0.008	-		
22	T5985 +	7	13	34	5	2	<0.008	<0.008		
23	T8878	-	-	-	-	-	0.680	-		
24										
25										

Results in ppm unless otherwise specified  
 + = element present, but concentration too low to measure  
 x = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



829031

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.04529

10/06/87

0551

2 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	As	Au	ALUM		
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22	DETECTION	1	1	1	1	1	0.008	0.008		
23	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM		
24	METHOD	102	102	102	102	114	309	309		
25										

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER

829032

# ANALABS

A Division of MacDonold Hamilton & Co. Pty. Ltd.

52 Murray Road, Welshpool, W.A. 6106

TEL: 08 3424

Telex AA92540

Phone (09) 458 7999

**ANALYTICAL REPORT No. 75.1.08.04574**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

ORDER NO.

PROJECT

0554

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

DATE RECEIVED

RESULTS REQUIRED

24/06/87

ASAP

No. OF PAGES OF RESULTS

DATE REPORTED

No. OF COPIES

TOTAL No. OF SAMPLES

1

02/07/87

1

10

STATE OF SAMPLES	REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT						ANALYSIS				
			DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
		4947		PU							Au/309		
		5965, T 5987, T5992/94		RC	Prep: 001						Cu, Pb, Zn, Bi/102, As/114		
		5965, T 5987, T5992/94		RC							Au, AuChk/309		
		5988/91		SS	Prep: 003						Cu, Pb, Zn, Bi/102, As/114		
		5988/91		SS							Au, AuChk/309		

RESULTS

TO

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

RESULTS

TO

REMARKS

STATE OF SAMPLES		ANALYSIS - PREPARATION					ANALYSIS - METHOD	
whole core	WC	perchloric acid	A1	cold acid	CA	atomic absorption	AAS	
split core	SC	hydrochloric acid	A2	specific sulphide	SS	x-ray fluorescence	XRF	
cutting	CU	nitric acid	A3	other mixed acids	MA	spectrophotometry	SPEC	
rock	Ro	aqueous regia	A4	alkaline attack	AA	colorimetry	COL	
soil	SO	nitric/perchloric	A5	volatilization	VO	chromatography	CHR	
pulp	PU	HF mixture	A6	ignition	IO	titration	TIT	
water	WA	HF under pressure	A7	pressed powder (XRF)	PP	other chemical methods	CHM	
sludge	TI	fusion	A8	glass fusion (XRF)	GF	microchemical	MIC	
sedimentary mineral	SM					fluorescence	FLU	
						radioactively coupled plasma	RCP	

AUTHORISED OFFICER

829033

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

033

95.1.08.04574

02/07/87

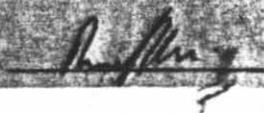
0554

1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Ag	Au			
1	T 4947	-	-	-	-	-	0.110			
2	T 5965	20	14	60	<1	2	<0.008			
3	T 5987	139	28	256	<1	17	<0.008			
4	T 5988 x	17	35	61	4	7	<0.008			
5	T 5989 x	24	58	143	3	6	<0.008			
6	T 5990 x	17	27	79	3	4	<0.008			
7	T 5991 x	19	33	110	1	5	<0.008			
8	T 5992	17	<1	9	1	2	<0.008			
9	T 5993	16	<1	10	2	2	<0.008			
10	T 5994	7	<1	5	1	1	<0.008			
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	1	1	1	1	1	0.008			
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM			
25	METHOD	102	102	102	102	114	309			

Results in ppm unless otherwise specified  
 T = element present, but concentration too low to measure  
 X = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER



829034

# ANALABS

A division of MacDonald Hamilton & Co. Pty. Ltd.  
52 Murray Road, Welshpool, W.A. 6106  
T.L.I. No. 59224

Telex AA92560

Phone (09) 458 7999

**ANALYTICAL REPORT No. 75.1.08.04660**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

0555

DATE RECEIVED

RESULTS REQUIRED

05/08/87

ASAP

No. OF PAGES OF RESULTS

DATE REPORTED

No. OF COPIES

TOTAL No. OF SAMPLES

1

14/08/87

1

6

STATE OF SAMPLES REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS				
		DRY	CRUSH	SPLIT	PULVERISE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD		
	5995/6,T 5998/9,T 6000	SS	Prep: 003								Cu,Pb,Zn,Bi/102,As/114		
	5995/6,T 5998/9,T 6000	SS									Au,AuChk/309		
	5997	RC	Prep: 001								Cu,Pb,Zn,Bi/102,As/114		
	5997	RC									Au/309		

RESULTS

TO

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

RESULTS

TO

REMARKS

*Howards assays - last batch*

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AAAS
split core SC	hydrochloric acid A2	large fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry ITC
rock R	aqua regia A4	colorimetry CA
soil SO	nitric-perchloric A5	titrimetry TR
slip PU	HF mixture A6	titrimetry TR
water WA	HF under pressure A7	titrimetry TR
slime S	fusion A8	titrimetry TR
core sediment SS		titrimetry TR
ry mineral MM		titrimetry TR

829035

# ANALABS

A Division of Macdonald Hamilton & Co. Pty Ltd

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.04660

14/08/87

0555

1 OF 1

.UBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	As	Au	AuChk		
1	5995 *	30	60	306	<1	14	<0.008	-		
2	5996 *	34	40	232	<1	6	<0.008	-		
3	5997	82	17	90	<1	9	<0.008	-		
4	5998 *	29	41	260	<1	9	<0.008	-		
5	5999 *	83	26	248	<1	6	<0.008	<0.008		
6	6000 *	27	40	250	<1	7	<0.008	<0.008		
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	1	1	1	1	1	0.008	0.008		
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM		
25	METHOD	102	102	102	102	114	309	309		

Results in ppm unless otherwise specified  
 \* = element present, but concentration too low to measure  
 x = element concentration is below detection limit  
 - = element not determined

AUTHORISED OFFICER *[Signature]*

829036

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.  
52 Murray Road, Welshpool, W.A. 6106  
TEL 38 39224

Telex AA92560

Phone (09) 458 7999

ANALYTICAL REPORT No. **75.1.08.04660**

THIS REPORT MUST BE READ IN CONJUNCTION WITH THE ACCOMPANYING ANALYTICAL DATA

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

ORDER NO. **0555**  
DATE RECEIVED **05/08/87**  
PROJECT  
RESULTS REQUIRED **ASAP**

No. OF PAGES OF RESULTS	DATE REPORTED	No. OF COPIES	TOTAL NO. OF SAMPLES
1	14/08/87	1	6

SAMPLES REFER BELOW	SAMPLE NUMBERS	PRE-TREATMENT							ANALYSIS			
		DRY	CRUSH	SPLIT	RE-VERSE	SIEVE	OTHER SEE REMARKS	NONE	REFER TO ANALYSIS SECTION	PREPARATION	METHOD	
	5995/6,T 5998/9,T 6000	SS	Prep: 003							Cu,Pb,Zn,Bi/102,As/114		
	5995/6,T 5998/9,T 6000	SS								Au,AuChk/309		
	5997	RC	Prep: 001							Cu,Pb,Zn,Bi/102,As/114		
	5997	RC								Au/309		

RESULTS TO

Gold Fields Exploration Pty. Ltd.  
P.O. Box 835  
Burnie  
Tasmania 7320

RESULTS TO

(Empty box for results to)

REMARKS

*Howards assays - last batch*

STATE OF SAMPLES	ANALYSIS - PREPARATION	ANALYSIS - METHOD
whole core WC	perchloric acid A1	atomic absorption AA5
split core SC	hydrochloric acid A2	x-ray fluorescence XRF
cutting CU	nitric acid A3	spectrophotometry SPEC
rock Ro	aqueous regia A4	colorimetry COL
soil SO	nitric perchloric A5	chromatography CHR
pulp PU	HF mixture A6	titration TIT
water WA	HF under pressure A7	other chemical means CHEM
sea sediment SE	fusion A8	miscellaneous MISG
heavy mineral HM		fluorescence FLUC
		inductively coupled plasma ICP

AUTHORISED OFFICER

*[Signature]*

# ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

## ANALYTICAL DATA

SAMPLE PREFIX

REPORT NUMBER

REPORT DATE

CLIENT ORDER No.

PAGE

95.1.08.04660

14/08/87

0555

1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Bi	Ag	Au	AuChk	
1	5995	30	60	306	<1	14	<0.008	-	
2	5996	34	40	232	<1	6	<0.008	-	
3	5997	82	17	90	<1	9	<0.008	-	
4	5998	29	41	260	<1	9	<0.008	-	
5	5999	83	26	248	<1	6	<0.008	<0.008	
6	6000	27	40	250	<1	7	<0.008	<0.008	
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23	DETECTION	1	1	1	1	1	0.008	0.008	
24	UNITS	PPM	PPM	PPM	PPM	PPM	PPM	PPM	
25	METHOD	102	102	102	102	114	309	309	

Results in ppm unless otherwise specified  
 \* - element present, but concentration too low to measure  
 \* - element concentration is below detection limit  
 \* - element not determined

AUTHORISED OFFICER

038

829039

**APPENDIX 11**

**SAMPLE RECORD AND ANALYTICAL DATA SHEETS**



GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: R. Pothock  
 DATE DISPATCHED:  
 DATE RECEIVED:

PROJECT EL 21/66  
 1:250,000 SHEET

PROSPECT HOWARDS ROAD  
 TYPE OF SAMPLE - 80#

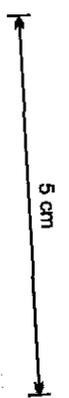
SAMPLE STORAGE REQ'D  
 SAMPLE PREP. REQ'D

LABORATORY ANALYSIS  
 ANALYSIS REQ'D

A19982

040

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES									
			Cu	Pb	Zn	Ag	Bi	As	Au			
T05942	STANDARD											
05943		Gravel albton, qtz vein					<10	4	<0.008			
05944		quartzose silt, black calc volcaniclastic					10	3	<0.008			
05945		Gravel albton, coarse vol'clastic, qtz					<10	4	<0.008			
05946		vol'clastic, qtz, silt, minor conglom					<10	3	<0.008			
05947		silt, qtz, Jurassic dolomite					<10	2	<0.008			
05948		dolomite, volc silt, fossil Perm micrit.					<10	3	<0.008			
05949		silt, vol'clastic, qtz.					<10	<2	<0.008			
05950	REPEAT 05949						10	<2	<0.008			
05951		Gravel silt, qtz vein					10	<2	<0.008			
05952		" " "					10	3	<0.008			
05962		" " "	25	46	160		1	7	<0.008			
05963		" " "	10	18	71		2	3	<0.008			
05966		" " "	12	24	76		<1	5	<0.008			
05967		Gravel conglomerate erratic	12	21	53		2	4	<0.008			
05968		silt, minor qtz	12	20	76		3	4	<0.008			
05969		silt, conglom boulders	14	35	87		<1	6	<0.008			
05970		silt, qtz vein	22	39	106		<1	7	<0.008			
05971		silt, qtz vein, minor vol'clastic	16	59	104		<1	11	<0.008			
05972		" " conglom, dolomite	16	42	66		<1	9	<0.008			



829041

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY R. Poltak

PROJECT EL 2/86

PROSPECT Howards Run

SAMPLE STORAGE REQ'D

LABORATORY ANALYSIS

DATE DISPATCHED

1250.000 SHEET

TYPE OF SAMPLE - Ro #

SAMPLE PREP. REQ'D

ANALYSIS REQ'D

DATE RECEIVED

041  
A199

SAMPLE NUMBER	LOCATION	DESCRIPTION	ANALYSES							
			Cu	Pb	Zn	Ag	Bi	As	Au	
105973		Gravel albt, qtz vein	20	52	148		<1	8	<0.008	
05974		" " dolerite, vlc.	11	44	54		<1	7	<0.008	
05975		" " "	10	45	50		<1	7	<0.008	
05976		" " "	25	85	184		4	11	<0.008	
05977		" " "	35	157	181		2	9	<0.008	
05978		" siltsone	25	104	181		<1	8	0.020	
05979		" " fine vlc clastic	25	63	145		<1	8	<0.008	
05980		" " "	30	63	145		2	9	<0.008	
05981		" " "	15	39	121		2	6	<0.008	
05982		" " qtz vein, conglom	15	25	79		3	3	<0.008	
05983		" " "	8	18	55		5	3	<0.008	
05984		" " conglom.	6	12	29		1	2	<0.008	
05985		" conglom glacial	7	13	34		5	2	<0.008	
05988		" albt, qtz vein	17	35	61		4	7	<0.008	
05989		" " "	24	58	143		3	6	<0.008	
05990		" " "	17	27	79		3	4	<0.008	
05991		" " "	19	33	110		1	5	<0.008	
05995		" Silts/ash, feldsp, andesitic vlc /clastic	50	60	36		<1	14	<0.008	
05996		" Silic ash? Andesitic plug porphy, basalt?	34	40	232		<1	6	<0.008	
05998		" plug porph andesite, qtz wealth feldsp?	29	41	260		<1	9	<0.008	
05999		" Med. local fine vlc clastics intermed compl	83	26	2480		<1	6	<0.008	
06000		" " "	27	40	250			7	<0.008	

5 cm

829042

GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY R. PULTEK

PROJECT EL 2/26

PROSPECT HOWARDS ROAD

SAMPLE STORAGE REQ'D

LABORATORY ANALYSIS

DATE DISPATCHED

1:250,000 SHEET

TYPE OF SAMPLE Rock

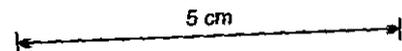
SAMPLE PREP. REQ'D

ANALYSIS REQ'D

DATE RECEIVED:

043  
A102

SAMPLE NUMBER	LOCATION		DESCRIPTION	ANALYSES								
				Cu	Pb	Zn	Ag	Bi	As	Au		
05901	373675E <del>373600E</del>	S353 100W	Cryolite hill, pink, med grnd, < sericitized								<0.008	
05902	"	"	Fine siliceous, red vlc ash, fine chert pg.								<0.008	
05905	373 925E	S353 225N	Volcanic, intermediate, vesicular.									
05906	373 925 E	S353 300N	Andesitic volcanic								<0.008	
05907	374000E	S353 940N	Anti brecciated lava?, Andesitic?, blocks 50cm									
05908	374000E	S354 250N	Ash, conchoidal frakt.									
05909	374 000E	S354 375N	Gabbro									
05910	374000E	S354 675N	Sediment, fine grained, cream.									
05911	373 800E	S355 050N	Gabbro and basic volcanic with pg.									
05912	373 425E	S355 050N	Light grey, altered + med grnd feld + qtz volcanic									
05913	375 150 E	S357 250N	Greywacke - alt, slightly silicified.								0.083	
05914	375 200E	S357 250N	Volcanic fine-med grnd, silicified? + qtz veins.	10	25	45	<5	20	3		0.125	
05915	77000E	S357 600 N	Vlc and ash, sericitized and qtz veined								0.017	
05916	73520E	S5500 N									<0.008	
05918	374 100 E	S355 400N	Gabbro with cobbles and qtz epid veining								<0.008	
05930	374 200 E	"	Mica greywacke, qtz chert veining and fine pg								<0.008	
05939	374 000 E	S356 300N	Other sediment fine-med grnd, qtz veined								<0.008	
05941	373 975E	S356 250N	Siltstone, conchoidal frakt (hornfelsed?) minor pg								<0.008	
05944	374 400E	S357 600N	Siltst and med grnd volcanic									
05965	"	"	Floak - Volcanic with minor pg	20	14	60		<1	2		<0.008	
05997	372 050E	S357 600N	Floak - qtz leucite veining	139	28	256		<1	17		<0.008	



829043





GOLD FIELDS EXPLORATION PTY. LTD.

SAMPLE RECORD AND ANALYTICAL DATA SHEET

COLLECTED BY: R. Powlock.

PROJECT: EL 2/86  
1:250,000 SHEET

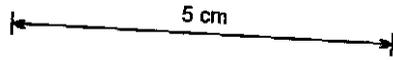
PROSPECT: HOWARDS ROAD  
TYPE OF SAMPLE: Soil Bk  
SAMPLE STORAGE REQ'D:  
SAMPLE PREP. REQ'D:

LABORATORY: ANALABS  
ANALYSIS REQ'D:

DATE DISPATCHED:  
DATE RECEIVED:

045  
A19962

SAMPLE NUMBER	LOCATION		Depth	DESCRIPTION	ANALYSES								
					Cu	Pb	Zn	Ag	Bi	As	Au		
05953	SS050N	73300E	0.7m	clayey yel/brn soil - silt					20	<2	0.008		
05954		310E		Siltsone dk limonitic fract fillips							<0.008		
05955		320E	0.7m	clayey yel brn silt bedrock.					<10	3	<0.008		
05956		330E		" "					<10	<2	<0.008		
05957		340E		" " , allt, frk, g/vened					<10	<2	0.025		
05958		350E		" "					20	<2	0.008		
05959		360E	0.6m	" " , allt frgs.					<10	<2	0.008		
05960	STANDARD												

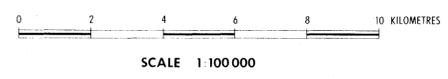


829046



# GEOLOGICAL COMPILATION MAP OF THE MOUNT READ VOLCANICS QUE RIVER TO MT. DARWIN

Compiled by K. D. Corbett B.Sc Ph.D  
1984



### REFERENCE

TERTIARY - QUATERNARY	
Tb	Tertiary basalt (Tb), Tertiary sediments (Ts)
Op	Pleistocene moraine (Op)
Unconformity	
LATE CARBONIFEROUS - JURASSIC	
P-J	Permian Supergroup, Jurassic dolerite
Unconformity	
LATE DEVONIAN	
Dg	Granite
SILURIAN - EARLY DEVONIAN	
S-D	Eldon Group undifferentiated
Conformity, ?disconformity	
ORDOVICIAN	
Og	Gordon Limestone Subgroup
Unconformity, disconformity, conformity	
LATE CAMBRIAN - EARLY ORDOVICIAN	
Oc	Owen Conglomerate and correlates
Unconformity, disconformity	

### CAMBRIAN - ?EOCAMBRIAN

NORTH AND WEST OF HENTY FAULT ZONE		SOUTH AND EAST OF HENTY FAULT ZONE	
Edg	Dundas Group and correlates, including Rosebery Group (Middle to Late Cambrian)-greywacke, siltstone, mudstone, conglomerate, tuff	Etg	Tyndall Group and correlates-late Middle to Late Cambrian-mainly quartz-feldspar-phryc volcanics and volcanoclastic conglomerates
Edh	Major felsic tuff unit		
Edq	Quartzwacke-quartzite-mudstone	Esr	Sicht Range Beds-quartzwacke, siltstone, siliclastic conglomerate
Edc	Conglomerate		Unconformity, ?disconformity
Edb	Basaltic volcanics	CV	Central Volcanic Sequence-rhyolitic to dacitic volcanics, mainly feldspar-phryc
Eda	Andesitic volcanics	CVa	Andesitic volcanics and intrusives
Evs	Lower volcano-sedimentary sequence, Howards Road area	Cvs	Shale-siltstone horizons
Evt	Major felsic tuff unit		
	Disconformity, ?unconformity	VS	Volcano-Sedimentary Sequence-greywacke, siltstone felsic tuff
CV	Central Volcanic Sequence-rhyolitic to dacitic volcanics, mainly feldspar-phryc	VSt	Mainly felsic tuff
CVa	Andesitic volcanics	VSb	Basaltic volcanics (tholeiitic variety VSbt)
CVq	Quartz-phryc volcanics	Ysq	Quartzwacke-siltstone
Cvs	Shale-siltstone horizons		
Ecc	Crimson Creek Formation-mafic lithicwacke, mudstone-ufossiliferous		
Eic	Success Creek Group-mudstone, quartzite, dolomite, mixite (?Eocambrian)		
		UNASSIGNED CAMBRIAN UNITS	
		Evu	Felsic volcanics
		Esu	Sedimentary units, including Farrell Slate
		Evsu	Volcano-sedimentary sequence

### CAMBRIAN INTRUSIVE ROCKS

Egr	Granite
Efp	Felsic porphyry - mostly quartz-feldspar-phryc
Ega	Gabbro
Eu	Ultramafic rocks and serpentinite
Unconformity	

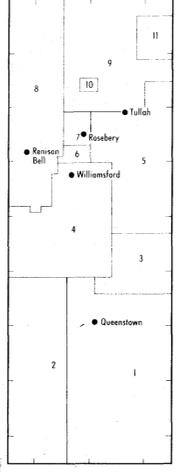
### PRECAMBRIAN

Pco	Oonah Formation correlate
Pcs	Concert Schist
Pcm	Metamorphosed Precambrian of Tyennan region

- Geological boundary - approximate
- Fault - approximate
- Bedding - facing known, overturned
- Trace of anticline, syncline
- Cambrian fossil locality
- Mine, Prospect

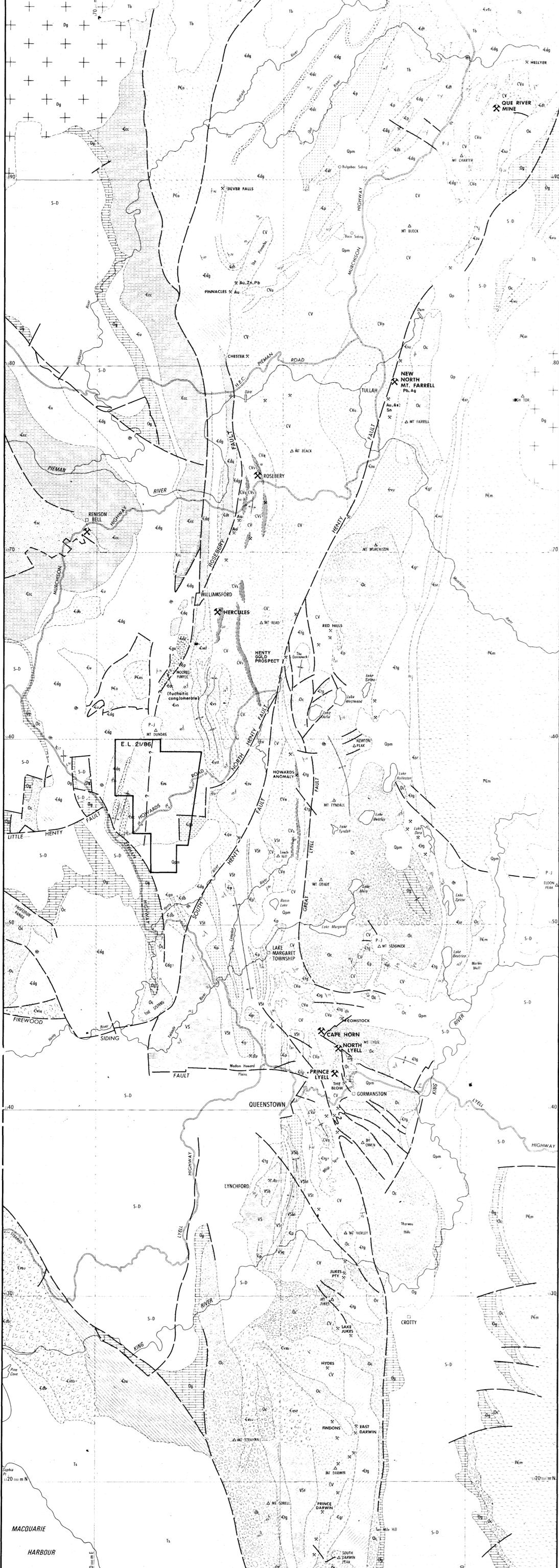
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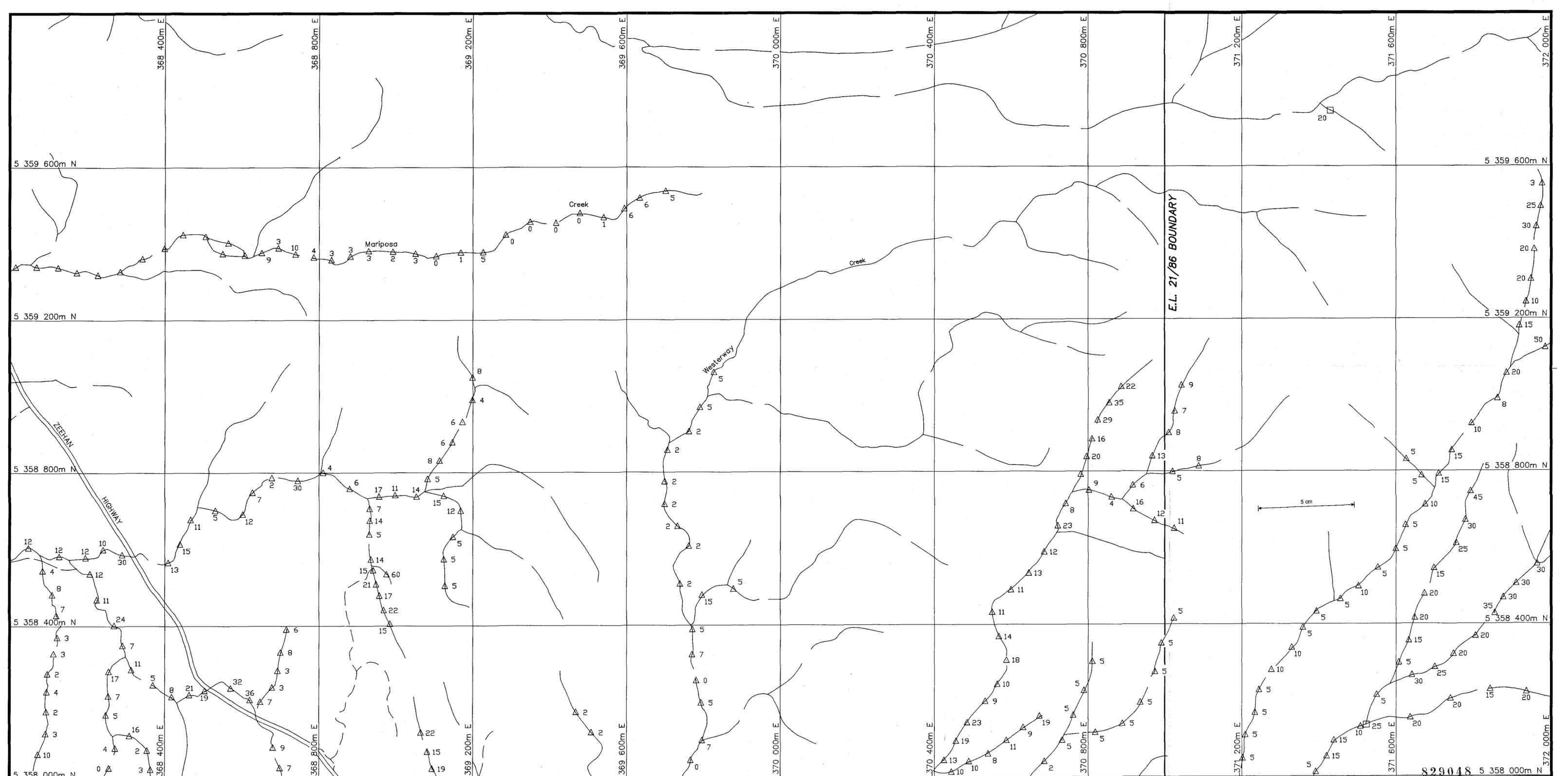
- Corbett K. D. 1979. Stratigraphy correlation and evolution of the Mt. Read Volcanics in the Queenstown, Jukes Darwin and Mt. Sedgwick areas. Bull. geol. Surv. Tasm. 58.
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- Aberfoyle Exploration Pty Ltd. mapping.



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88-2760

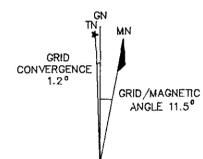
GOLD FIELDS EXPLORATION PTY. LIMITED	
HOWARDS ROAD AREA LOCALITY MAP AND REGIONAL GEOLOGY	
SCALE 1:100 000	FIG. 2
DRAWN BY: P.A.R.	DRAFTSMAN:
DATE: NOV. 87	REVISIONS:
FILE NO.:	





**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING



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1-2	1-3	1-4
2-2	2-3	2-4

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GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY  
Cu p.p.m.

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DRAFTSMAN: T.G.D.S.  
DATE: Dec.'87  
REVISIONS:  
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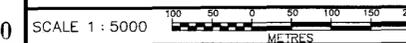
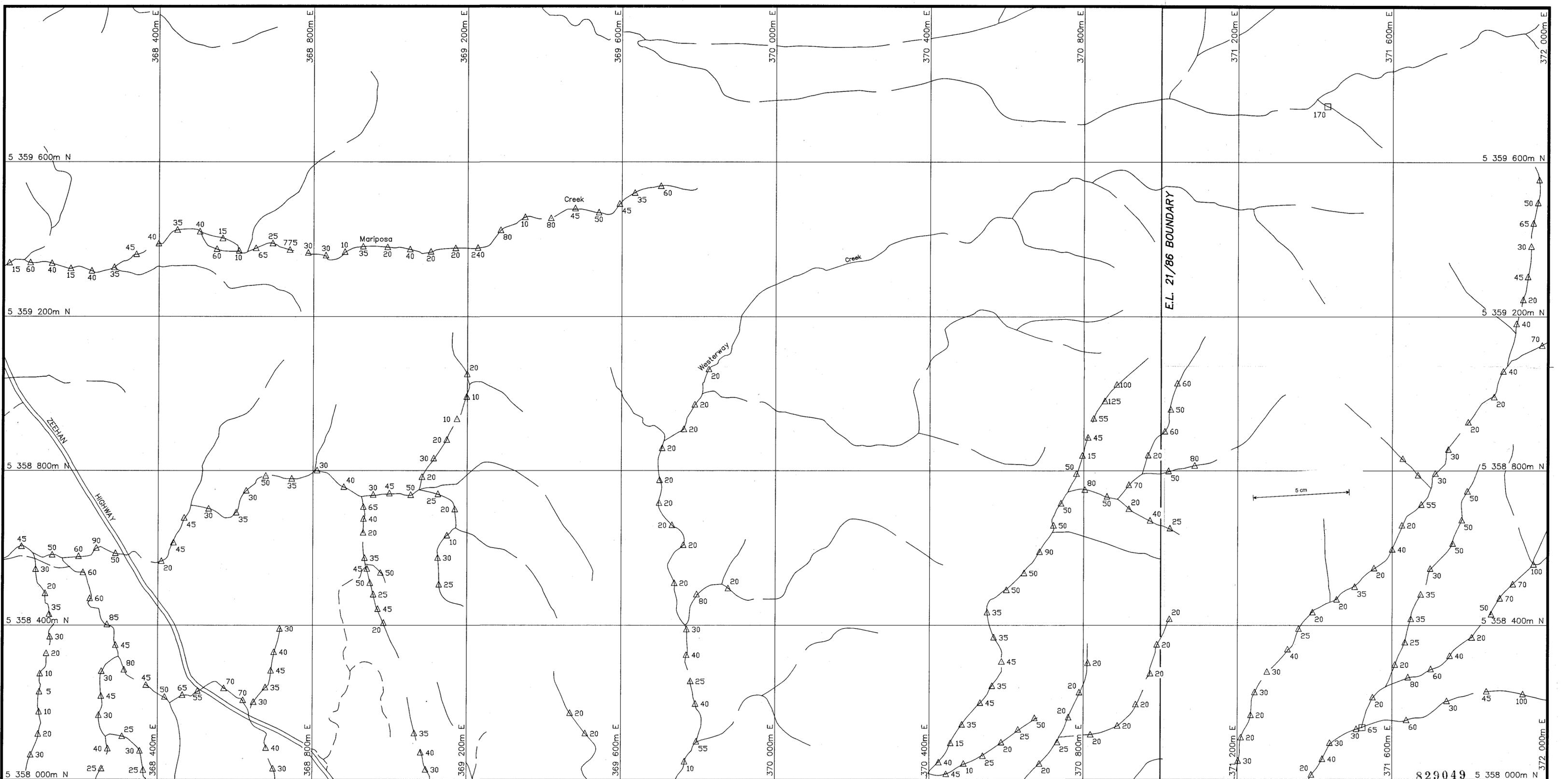
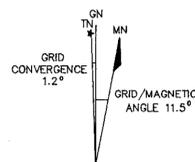


FIG. 3



**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING



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1-2	1-3	1-4
2-2	2-3	2-4

**88-2760**

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY

Pb p.p.m.

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 DRAFTSMAN : T.G.D.S.  
 DATE : Dec '87  
 REVISIONS :  
 FILE No.

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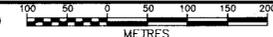
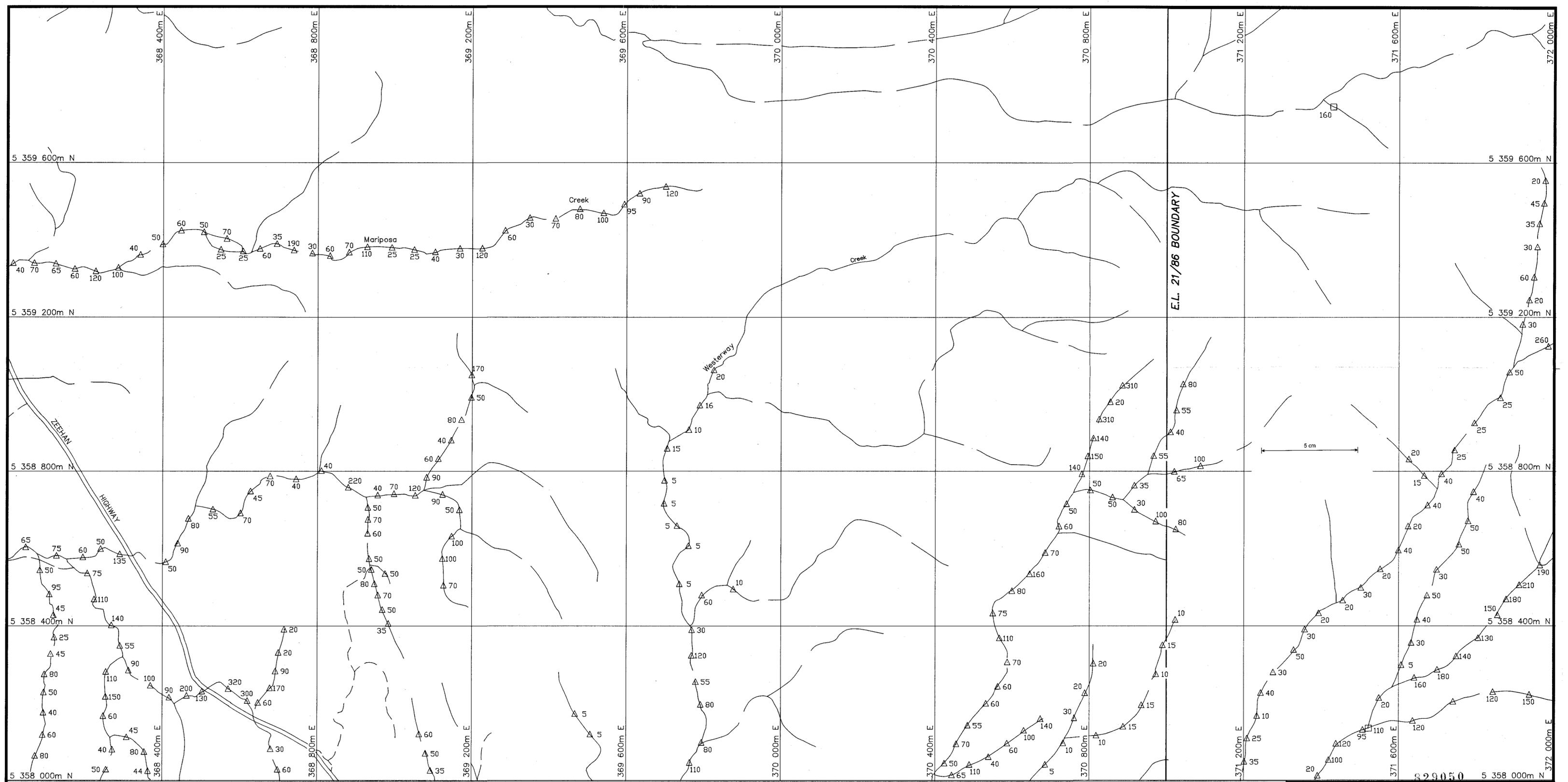
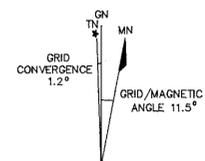


FIG. 4



**LEGEND**

- △ M<sup>o</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING



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2-2	2-3	2-4

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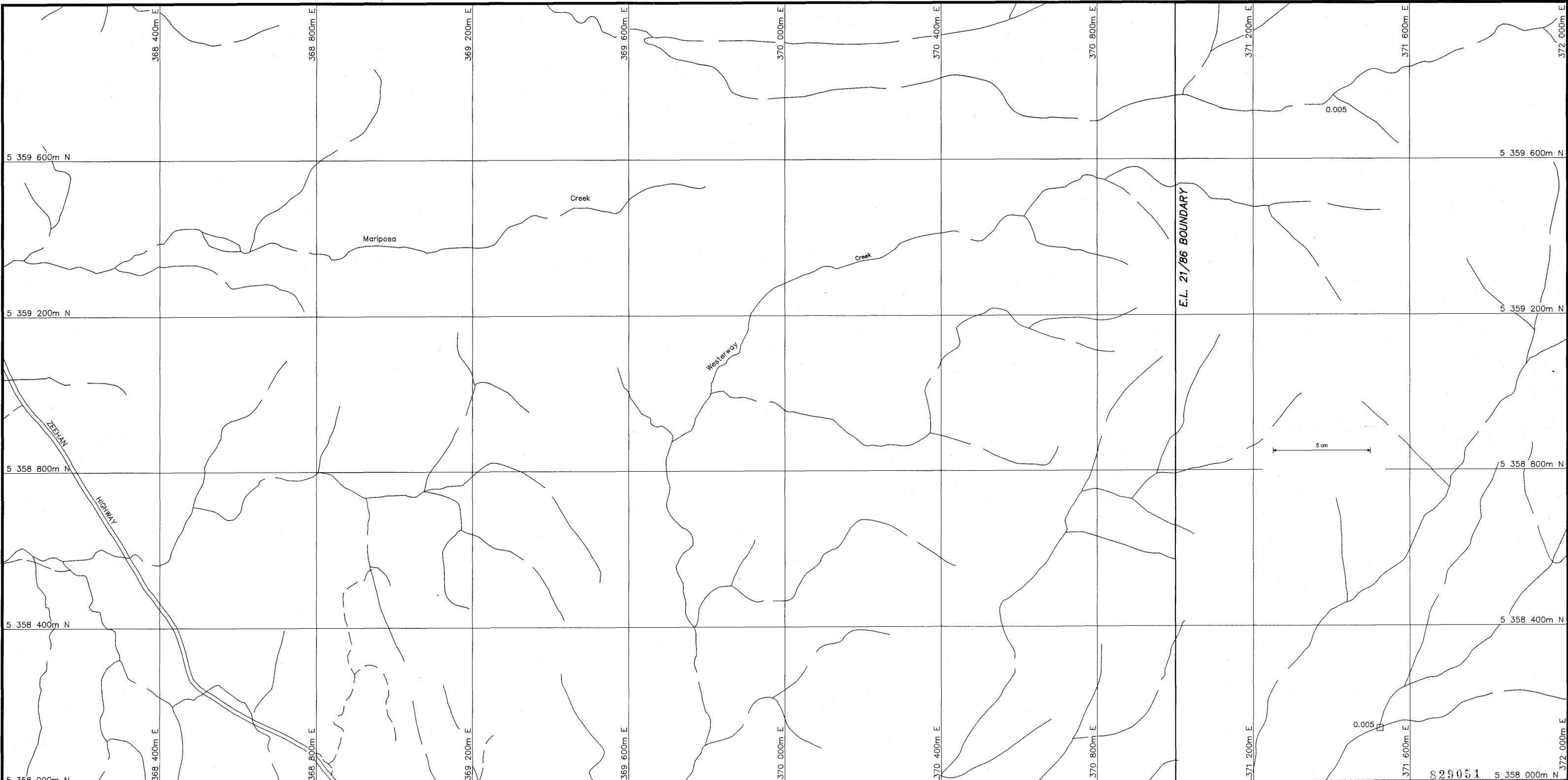
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Zn p.p.m.

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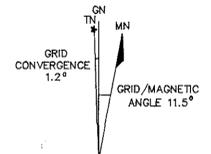
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FIG. 5



88-2760

**LEGEND**  
 □ C.S.R. SAMPLING    ■ Panned Concentrates



INDEX TO ADJOINING MAPS

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1-2	1-3	1-4
2-2	2-3	2-4

829051

5 358 000m N

372 000m E

88-2760

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OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY

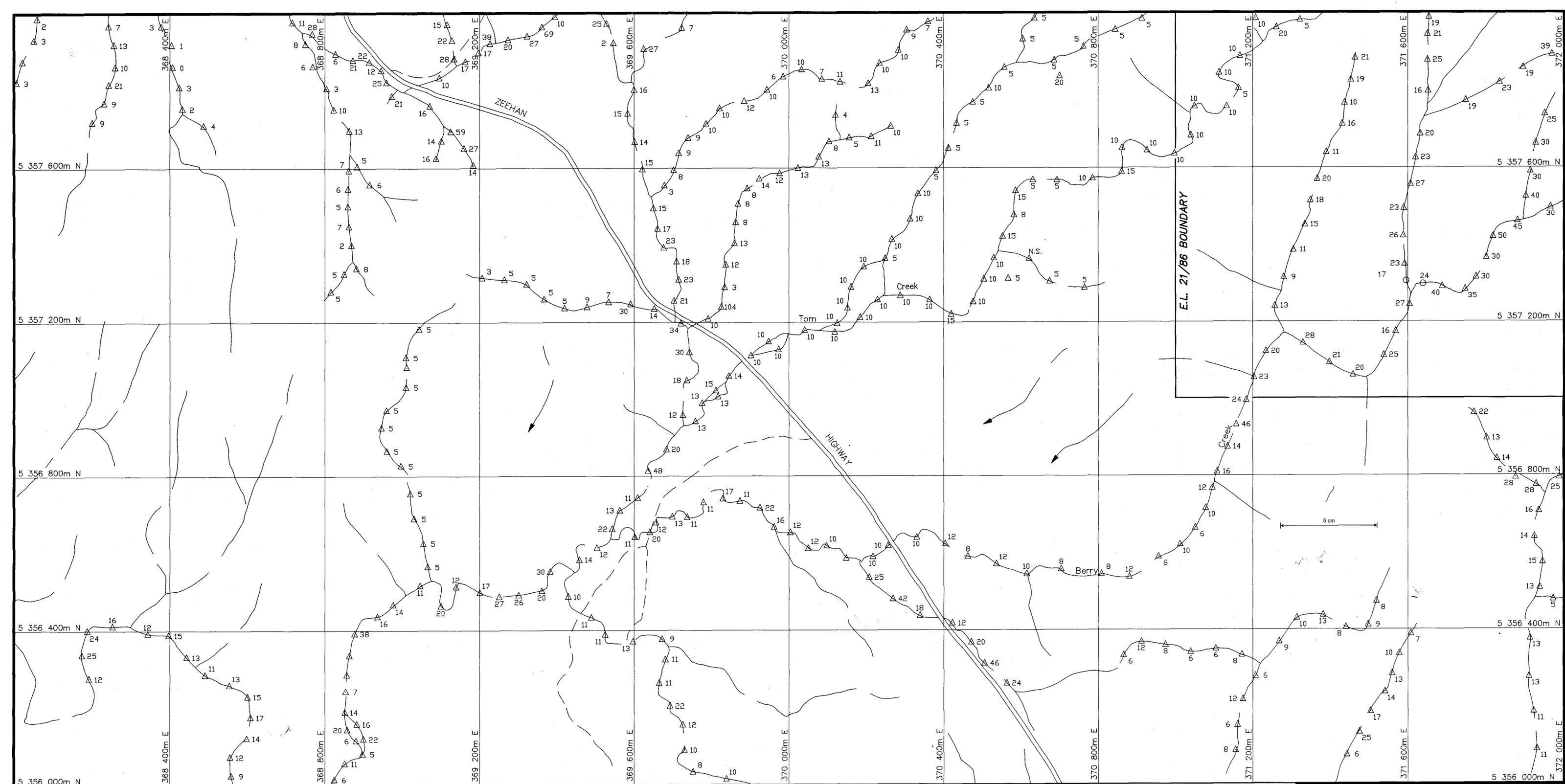
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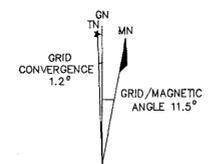
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FIG. 6



**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



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2-2	2-3	2-4
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829052

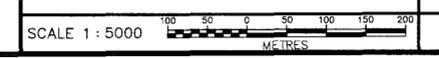
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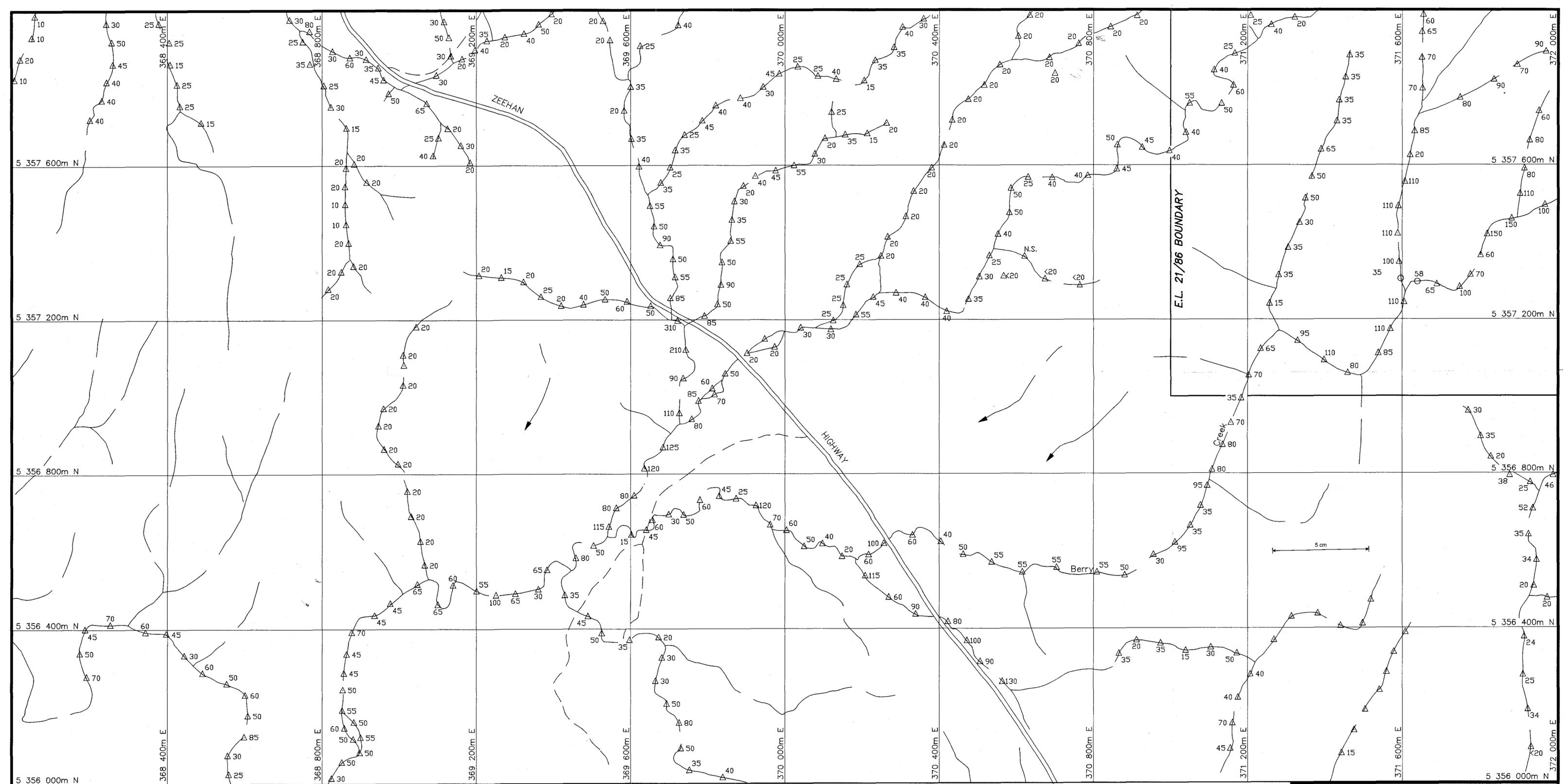
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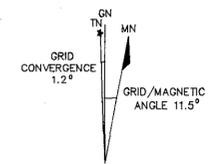
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DRAFTSMAN :	T.G.D.S.
DATE :	Dec. '87
REVISIONS :	
FILE No.	

FIG. 7



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



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2-2	2-3	2-4
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**88-2760**

829053

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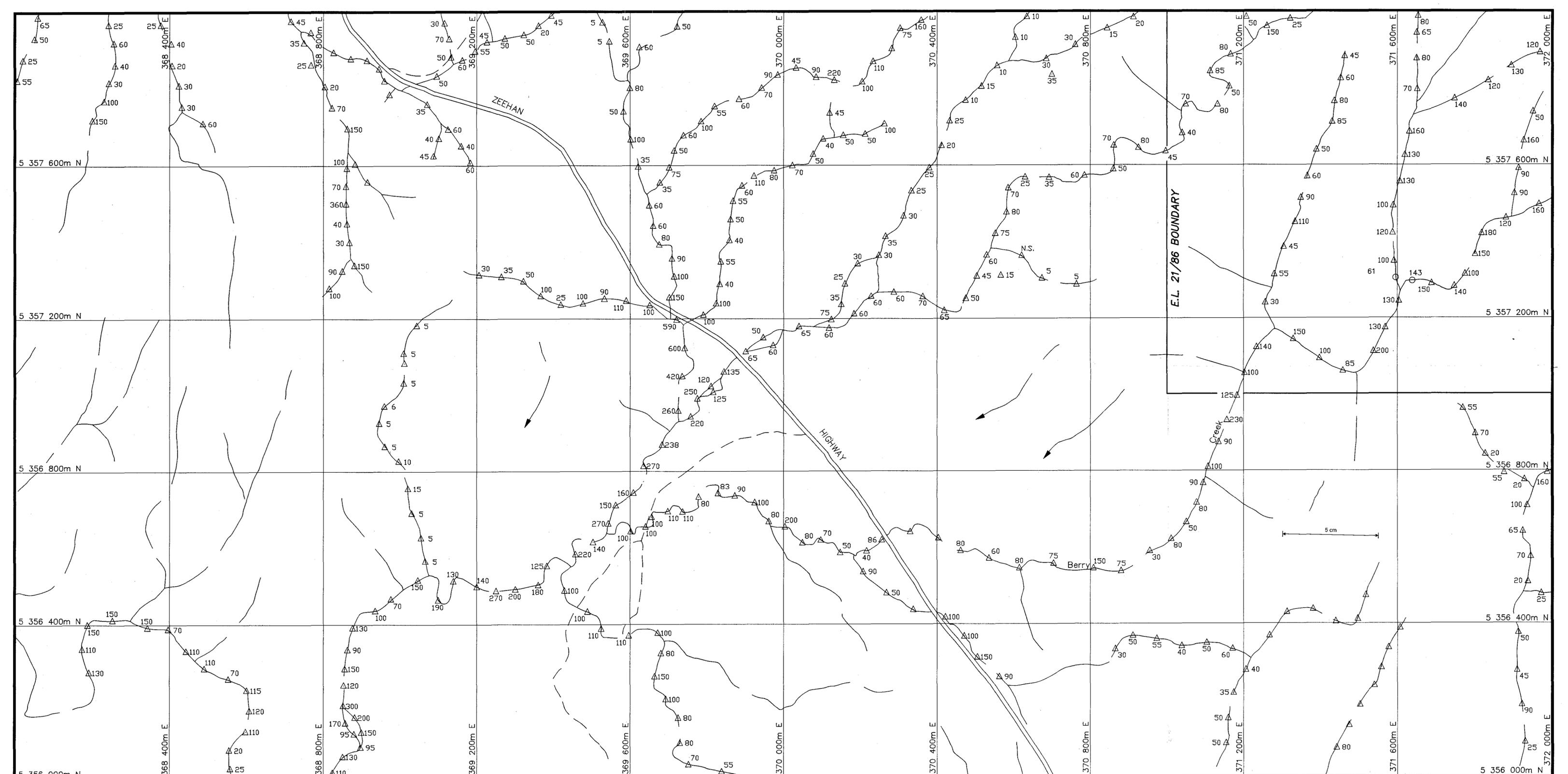
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STREAM SEDIMENT GEOCHEMISTRY  
Pb p.p.m.

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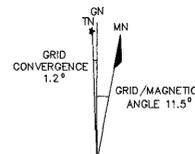
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FIG. 8



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



INDEX TO ADJOINING MAPS

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2-2	2-3	2-4
3-2	3-3	3-4

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829054

6216

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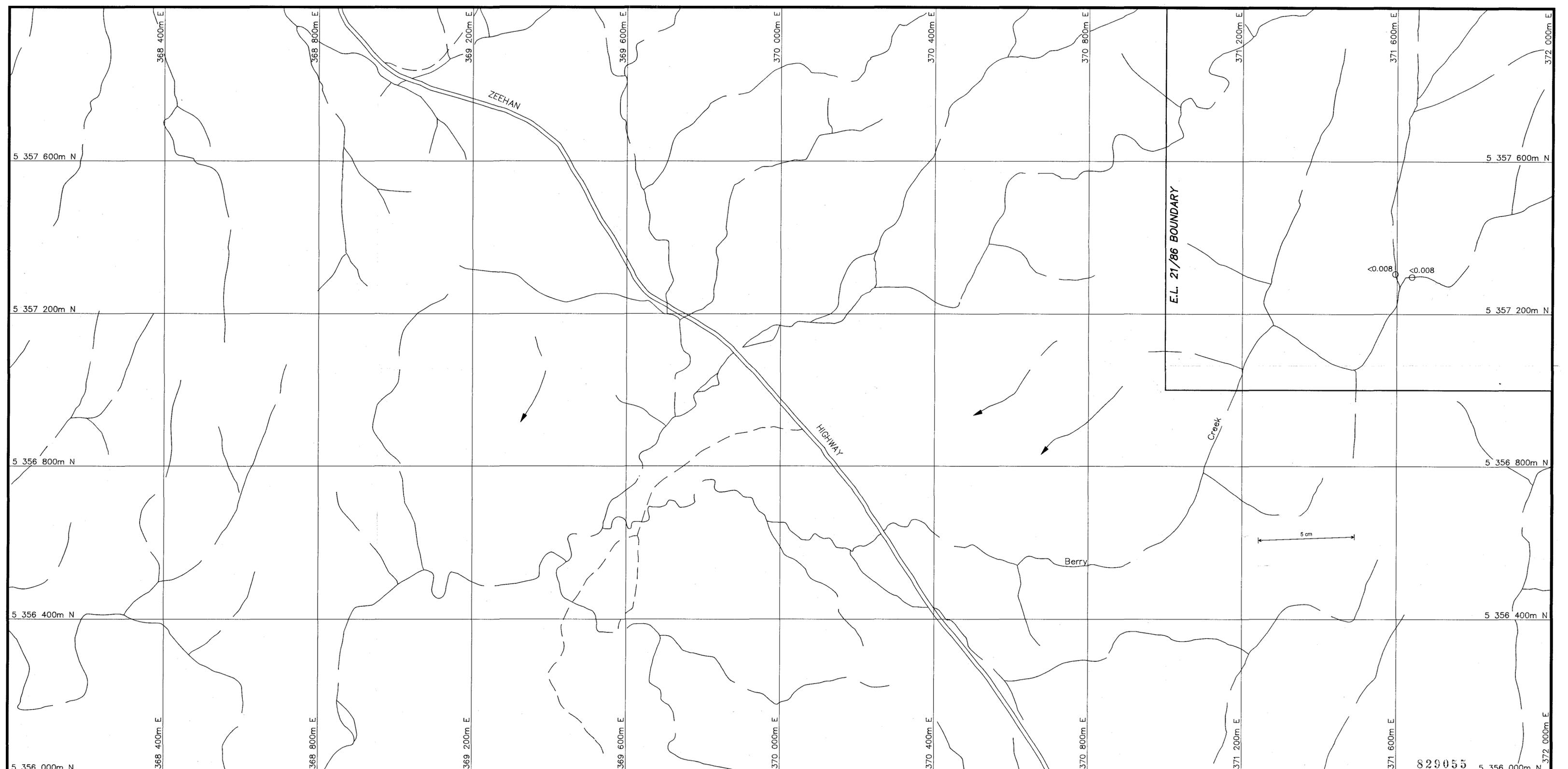
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STREAM SEDIMENT GEOCHEMISTRY  
Zn p.p.m.

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REVISIONS :	
FILE No.	

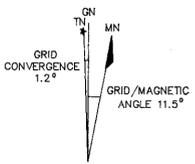
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FIG. 9



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING (■ Panned Concentrates)
- G.F.E.L. SAMPLING (● Panned Concentrates)



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2-2	2-3	2-4
3-2	3-3	3-4

**88-2760**

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY

Au p.p.m.

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DATE :	Dec.'87
REVISIONS :	
FILE No. :	

6217

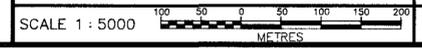
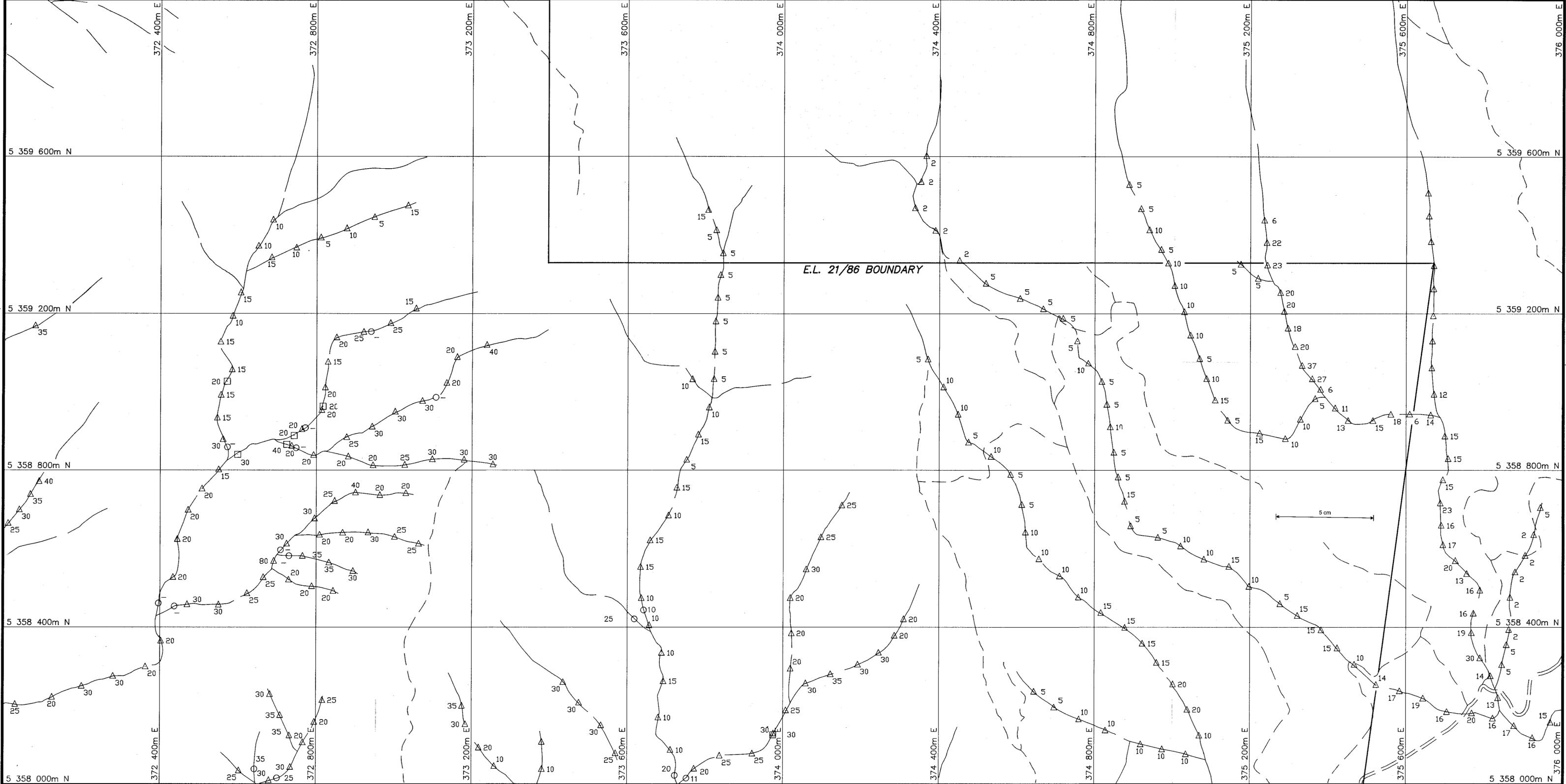


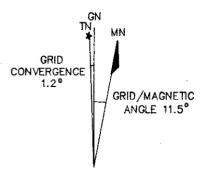
FIG. 10

829055



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



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1-3	1-4	1-5
2-3	2-4	2-5

**88-2760**

GOLDFIELDS EXPLORATION PTY. LIMITED

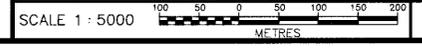
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STREAM SEDIMENT GEOCHEMISTRY

Cu p.p.m.

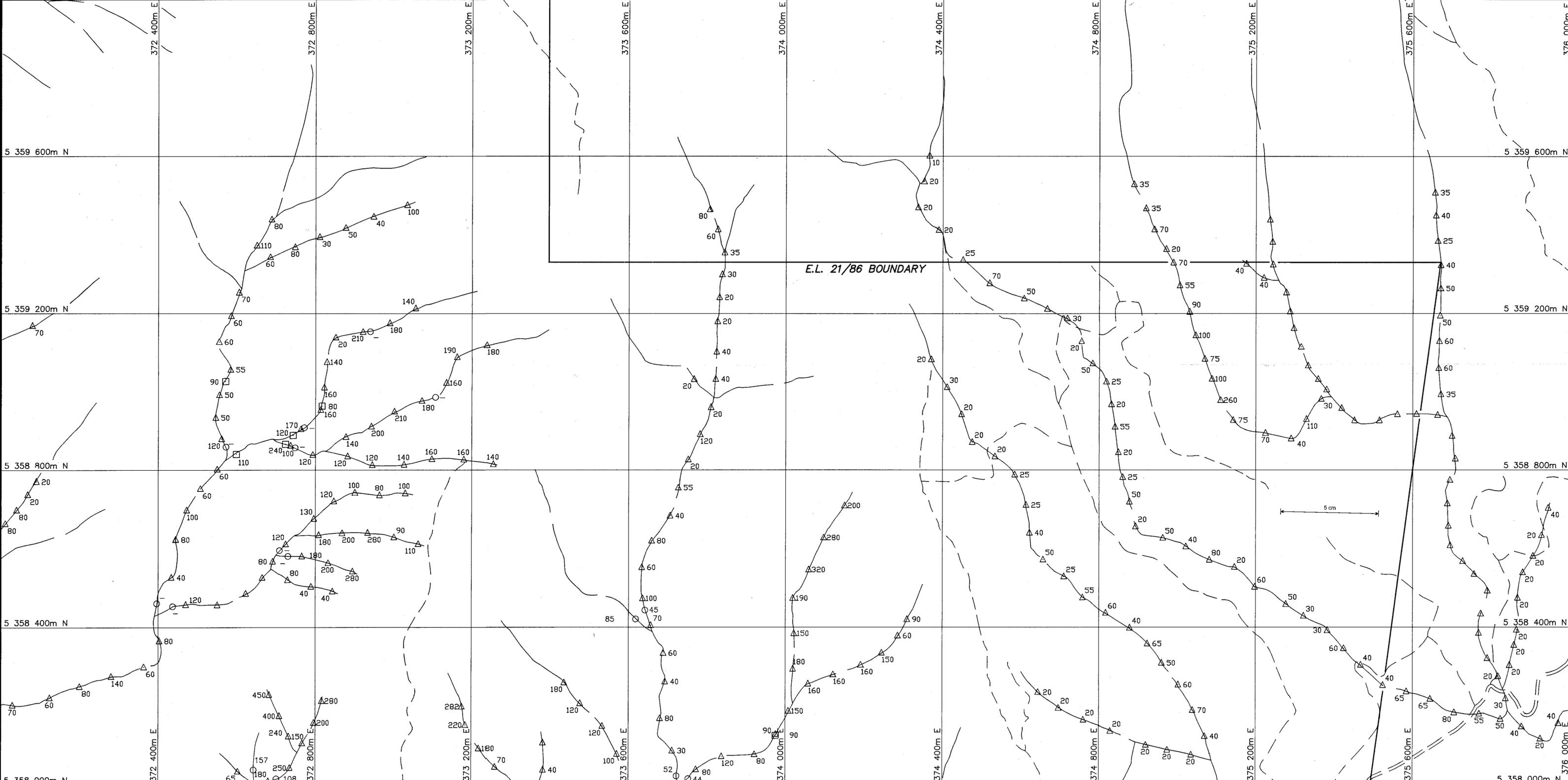
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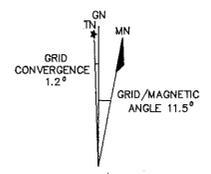
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DRAFTSMAN :	T.G.D.S.
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REVISIONS :	
FILE No.	

FIG. II



**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



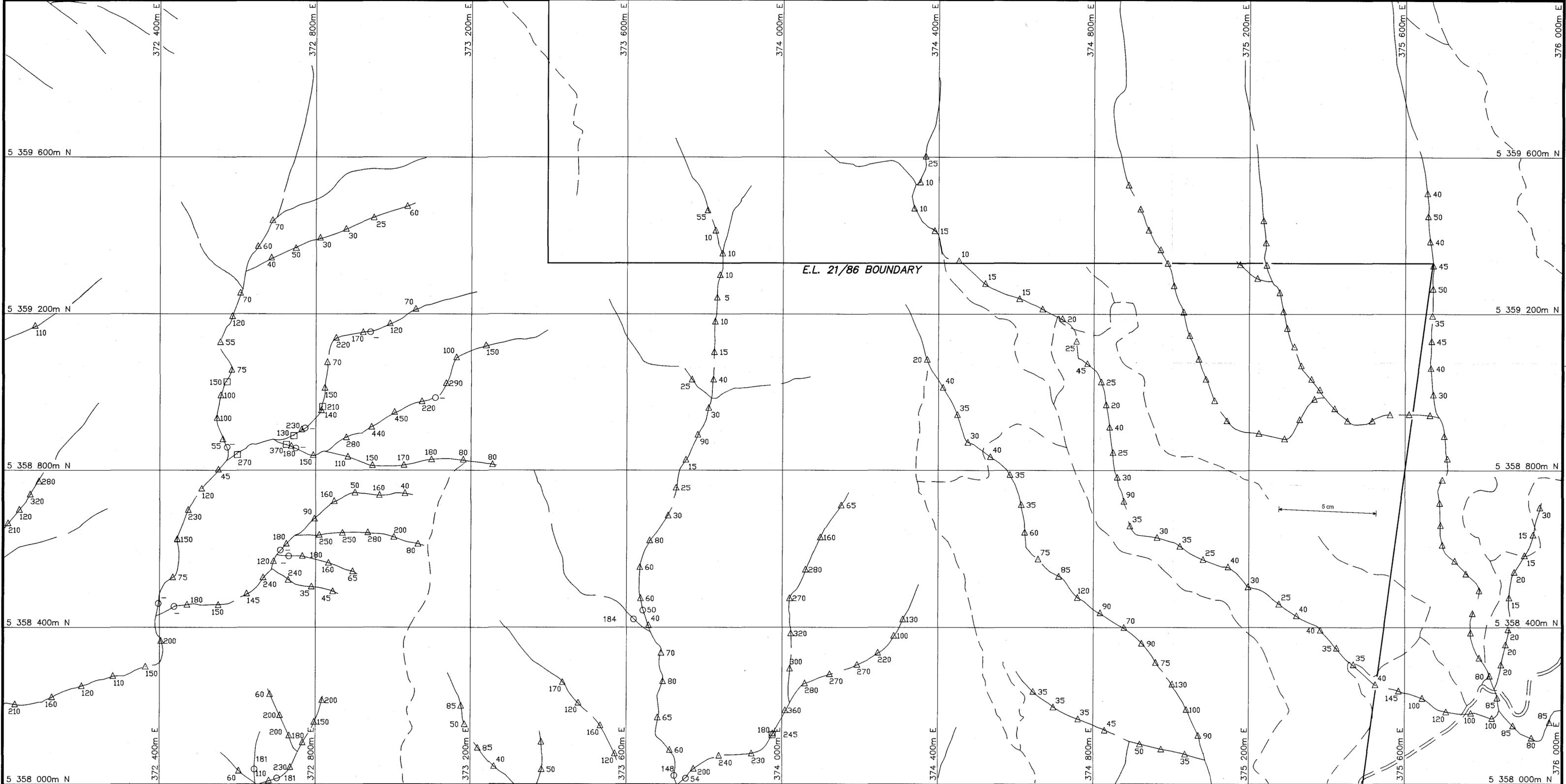
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5-3	5-4	5-5
1-3		1-5
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**88-2760**

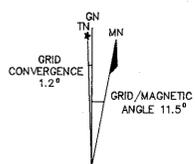
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6219

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Pb p.p.m.	
SCALE 1:5000	
DRAWN BY : R.P.	DATE : Dec.'87
DRAFTSMAN : T.G.D.S.	REVISIONS :
FILE No.	FIG. 12



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



INDEX TO ADJOINING MAPS

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1-3	1-4	1-5
2-3	2-4	2-5

**88-2760**

829058

6220

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY

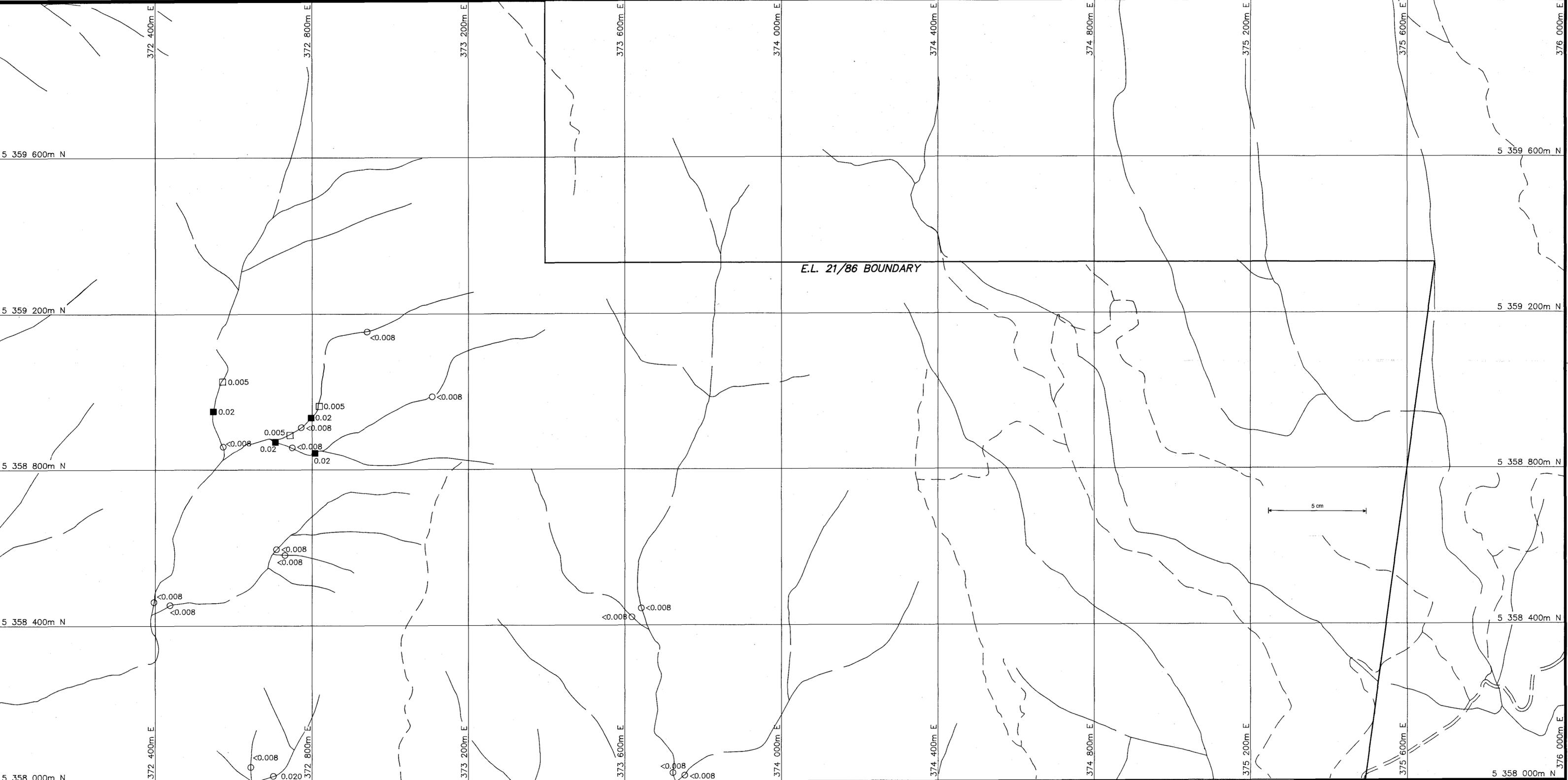
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DRAWN BY : R.P.  
DRAFTSMAN : T.G.D.S.  
DATE : Dec '87  
REVISIONS :  
FILE No.

SCALE 1 : 5000

METRES

FIG. 13

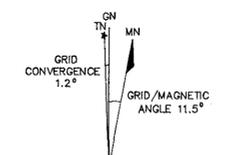


**LEGEND**

△ M<sup>c</sup>INTYRE MINES SAMPLING

□ C.S.R. SAMPLING (■ Panned Concentrates)

○ G.F.E.L. SAMPLING (● Panned Concentrates)



INDEX TO ADJOINING MAPS

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1-3	1-4	1-5
2-3	2-4	2-5

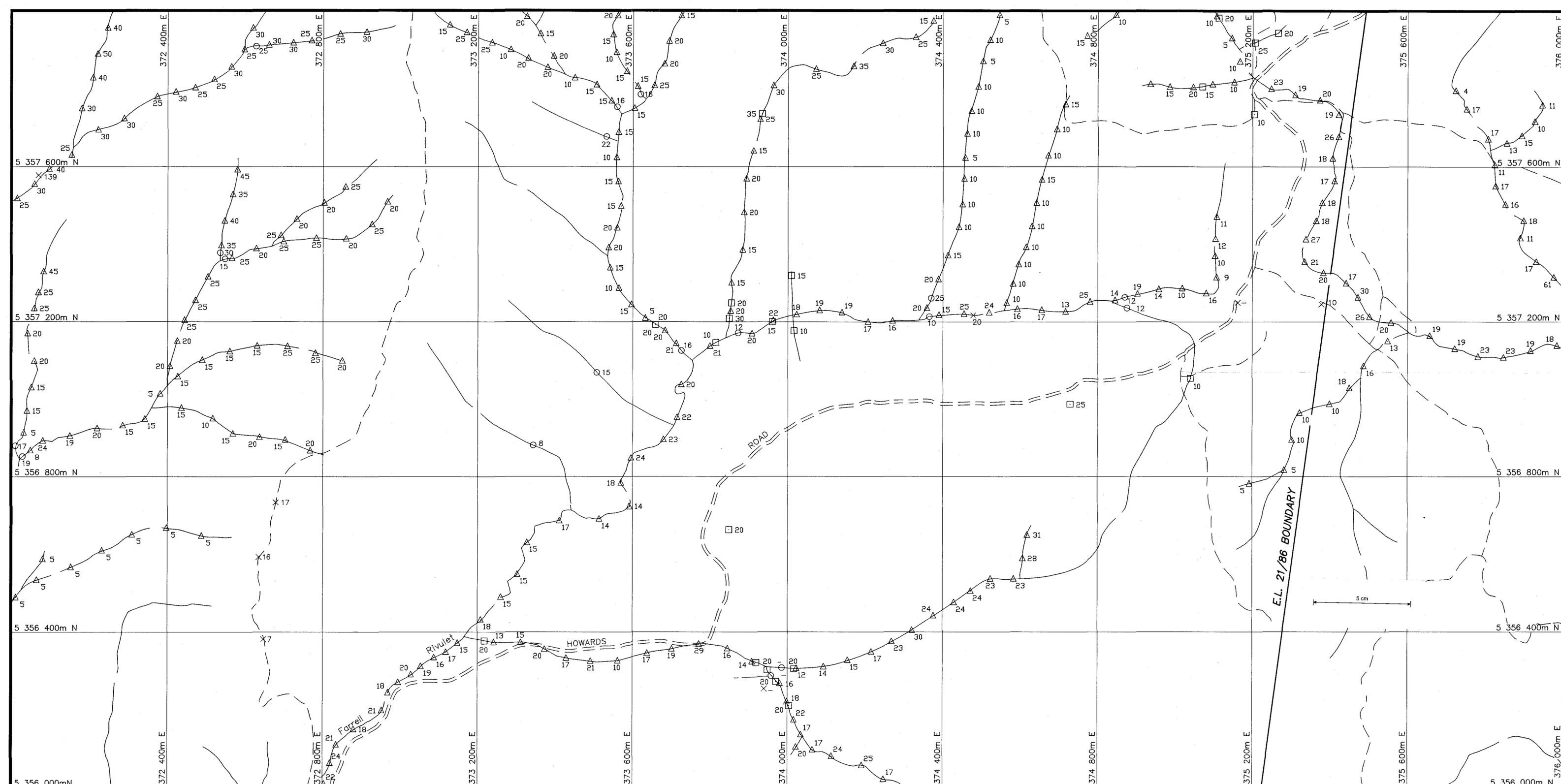
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829059

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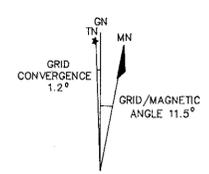
GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Au p.p.m.	
DRAWN BY : R.P.	REVISIONS :
DRAFTSMAN : T.G.D.S.	FILE No.
DATE : Dec.'87	FIG. 14

SCALE 1 : 5000



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



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**88-2760**

829060

6222

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

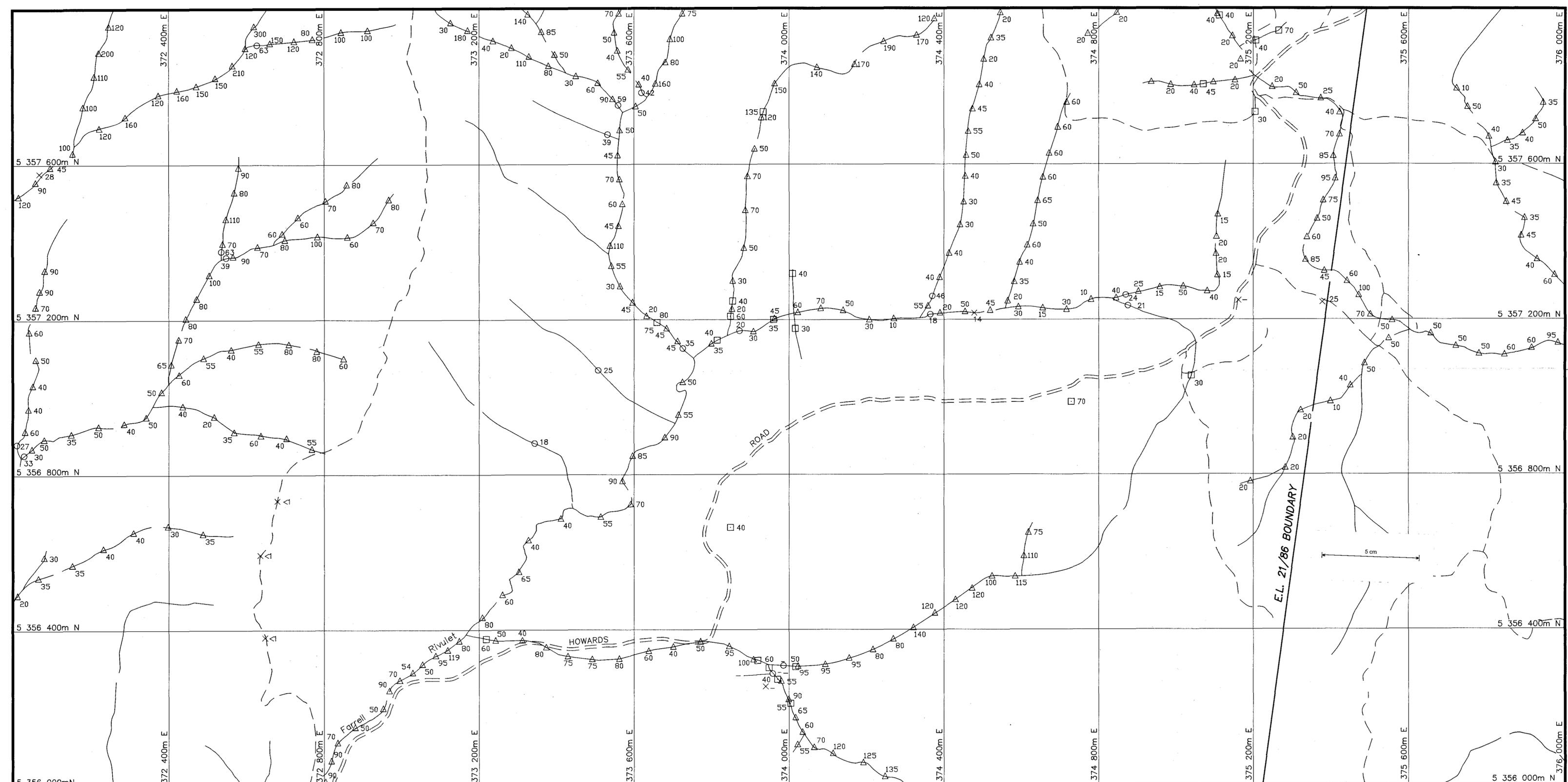
STREAM SEDIMENT GEOCHEMISTRY

Cu p.p.m.

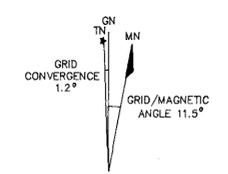
DRAWN BY : R.P.  
 DRAFTSMAN : T.G.D.S.  
 DATE : Dec.'87  
 REVISIONS :  
 FILE No.

SCALE 1 : 5000

FIG. 15



- LEGEND**
- △ M<sup>C</sup>INTYRE MINES SAMPLING
  - C.S.R. SAMPLING
  - G.F.E.L. SAMPLING (X Rock Chip)



INDEX TO ADJOINING MAPS

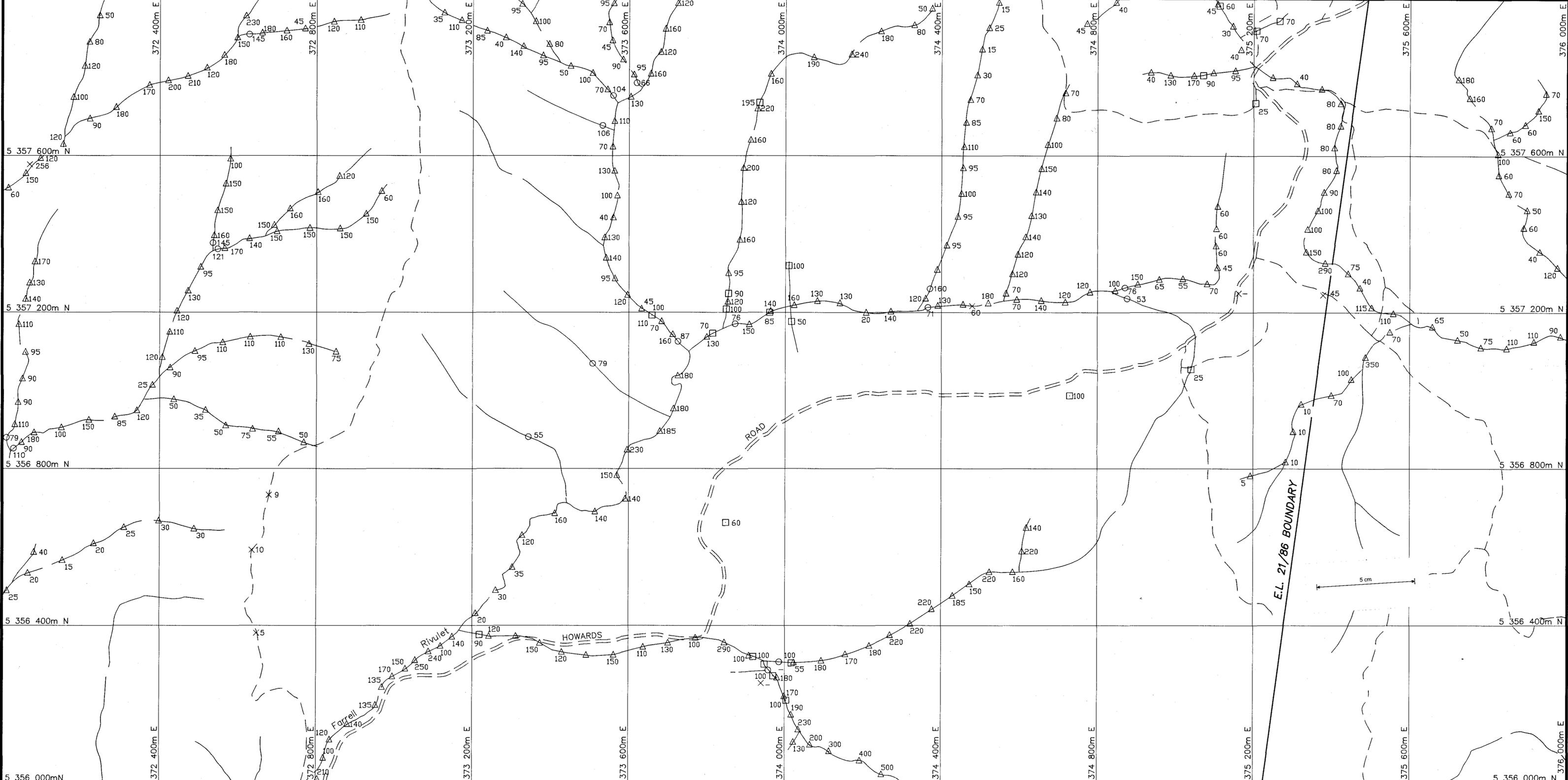
1-3	1-4	1-5
2-3	2-4	2-5
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829061

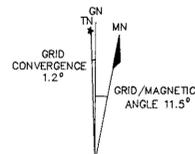
6223

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA -- E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Pb p.p.m.	
DRAWN BY : R.P.	REVISIONS :
DRAFTSMAN : T.G.D.S.	
DATE : Dec.'87	
FILE No.	
SCALE 1 : 5000	
FIG. 16	



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



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**88-2760**

829062

6224

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

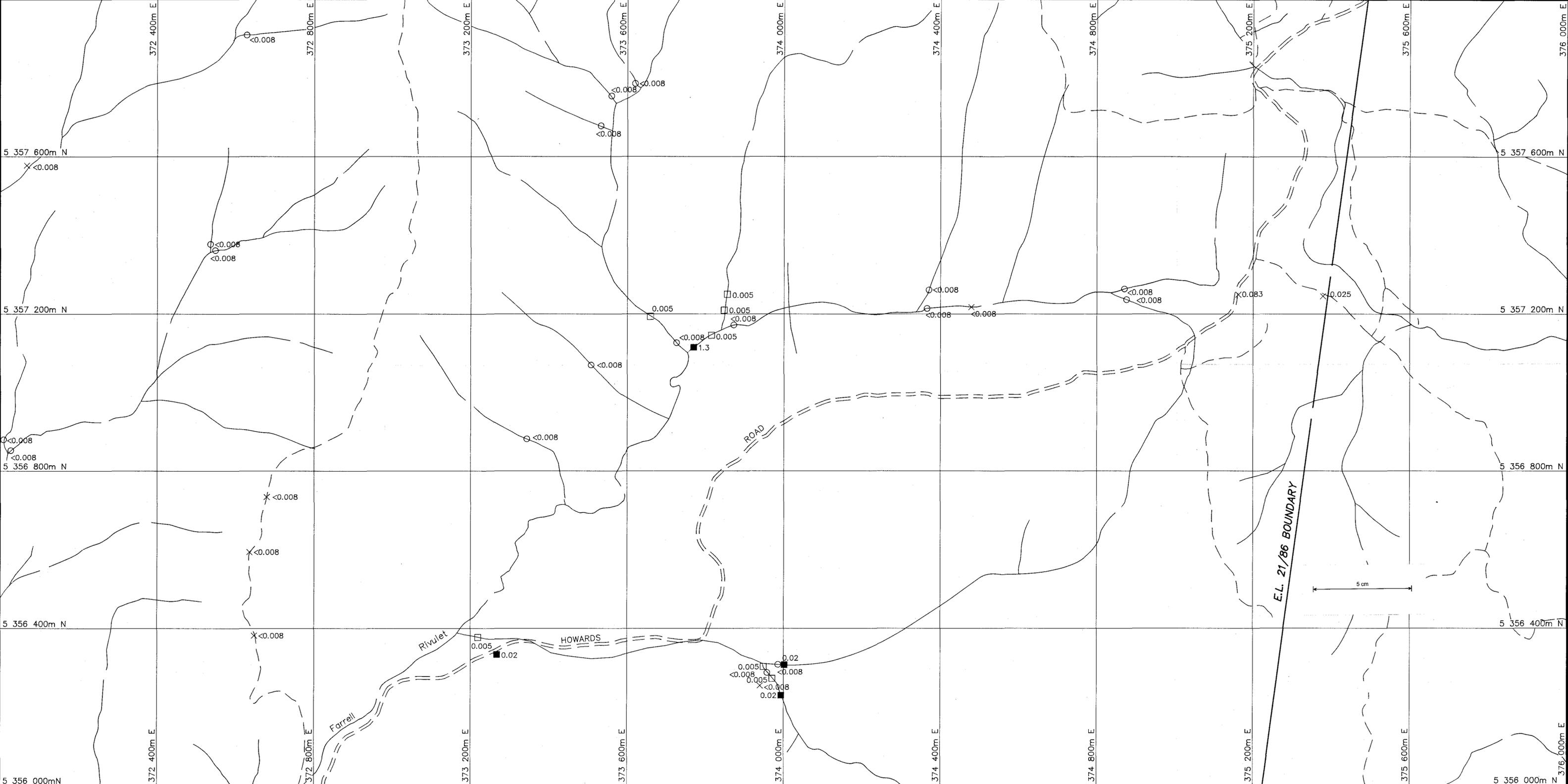
STREAM SEDIMENT GEOCHEMISTRY

Zn p.p.m.

DRAWN BY :	R.P.
DRAFTSMAN :	T.G.D.S.
DATE :	Dec. '87
REVISIONS :	
FILE No.	

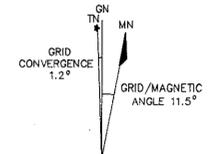
SCALE 1 : 5000

FIG. 17



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING
- Panned Concentrates
- Panned Concentrates
- × Rock Chip



INDEX TO ADJOINING MAPS

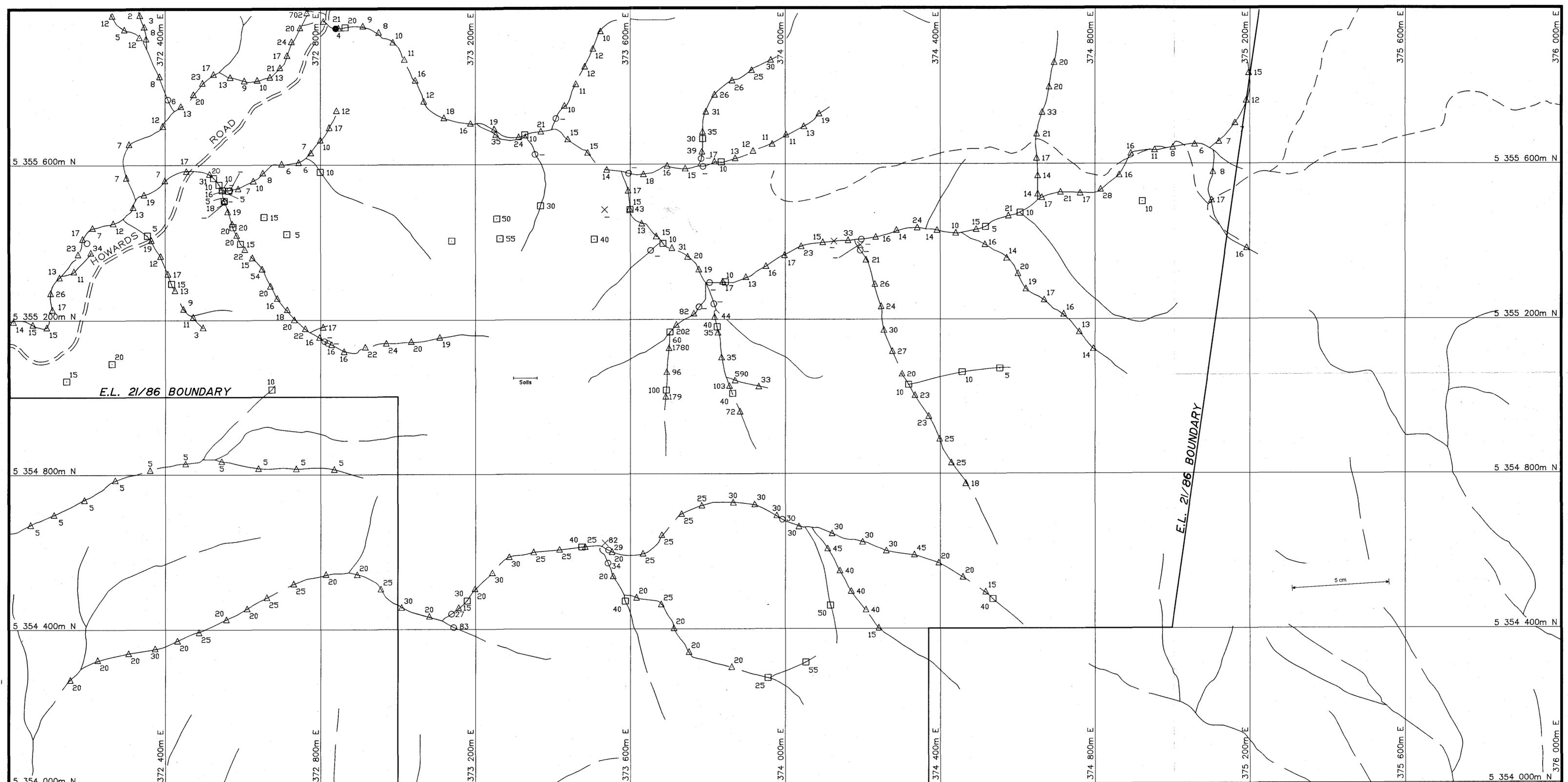
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2-3	2-4	2-5
3-3	3-4	3-5

**88-2760**

829063

6225

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Au p.p.m.	
DRAWN BY : R.P.	REVISIONS :
DRAFTSMAN : T.G.D.S.	
DATE : Dec.'87	
FILE No.	
SCALE 1 : 5000	
FIG. 18	



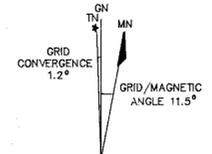
88-2760

**LEGEND**

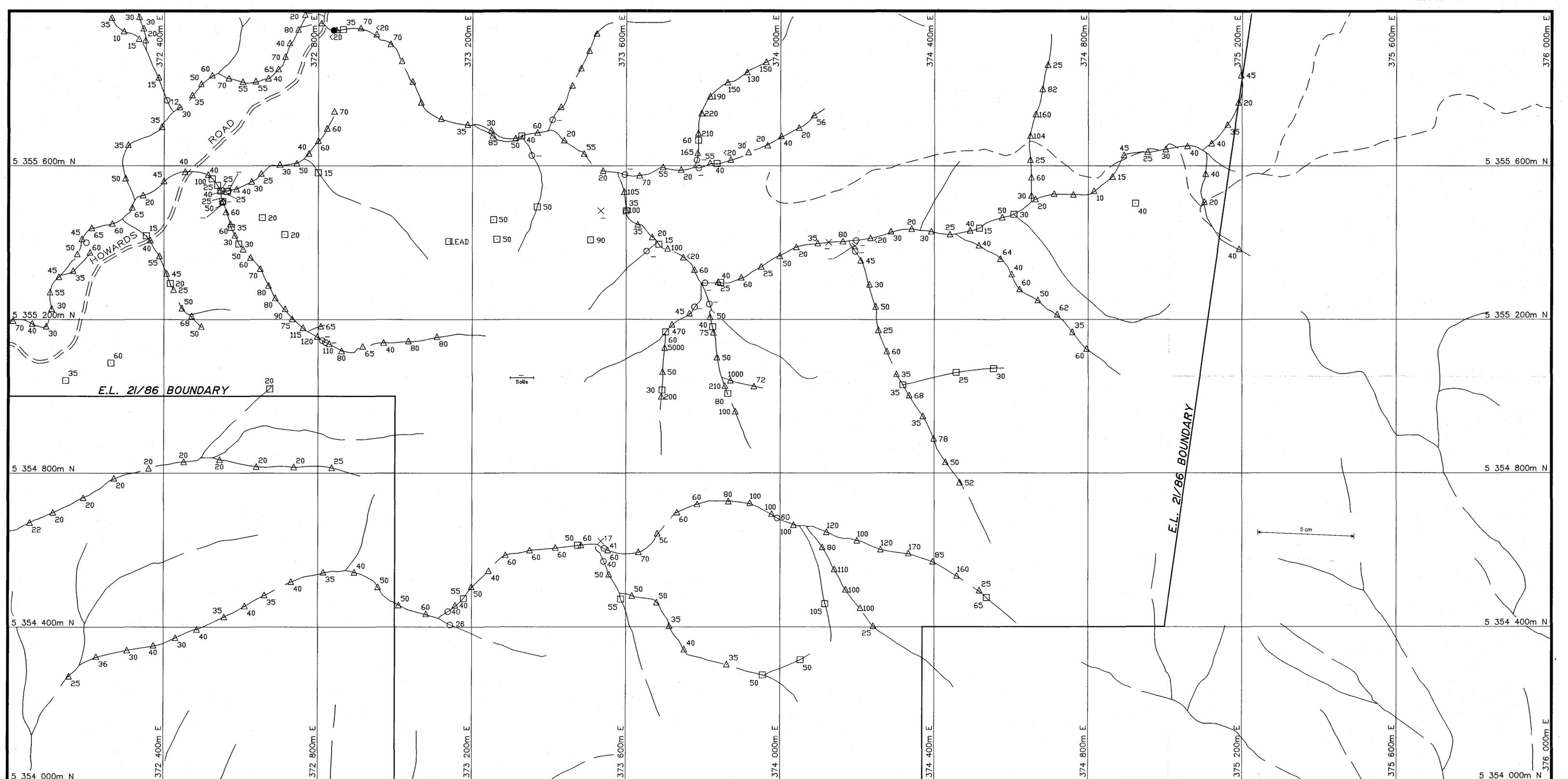
- △ M<sup>o</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)

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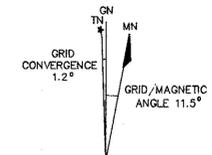
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OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Cu p.p.m.	
DRAWN BY : R.P.	REVISIONS :
DRAFTSMAN : T.G.D.S.	DATE : Dec.'87
FILE No.	
829064	
6226 SCALE 1 : 5000	
FIG. 19	



88-2760

**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (× Rock Chip)



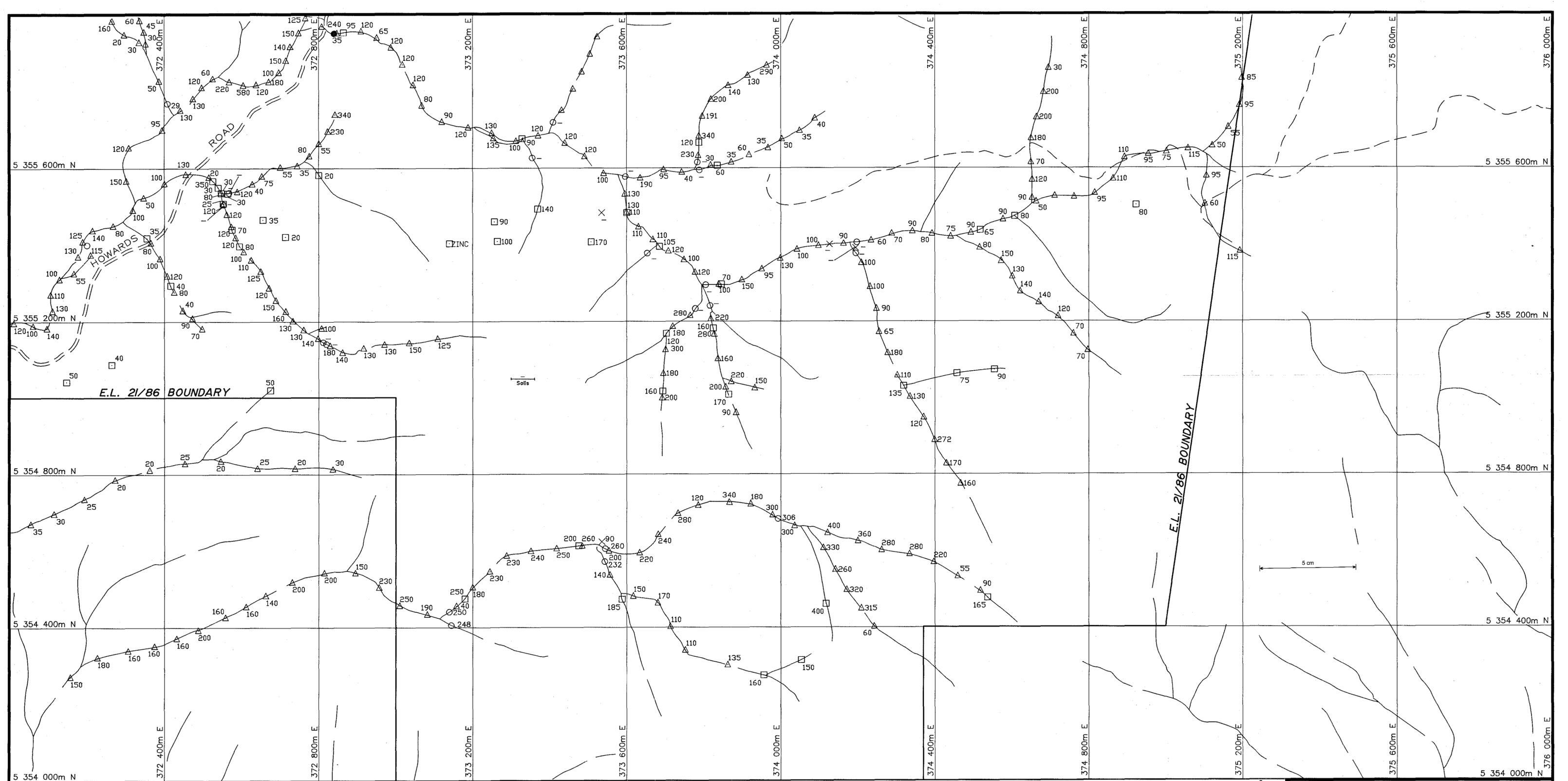
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829065

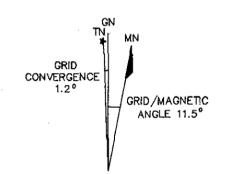
6227

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Pb p.p.m.	
SCALE 1 : 5000	
DRAWN BY : R.P.	FILE No.
DRAFTSMAN : T.G.D.S.	FIG. 20
DATE : Dec.'87	
REVISIONS :	



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



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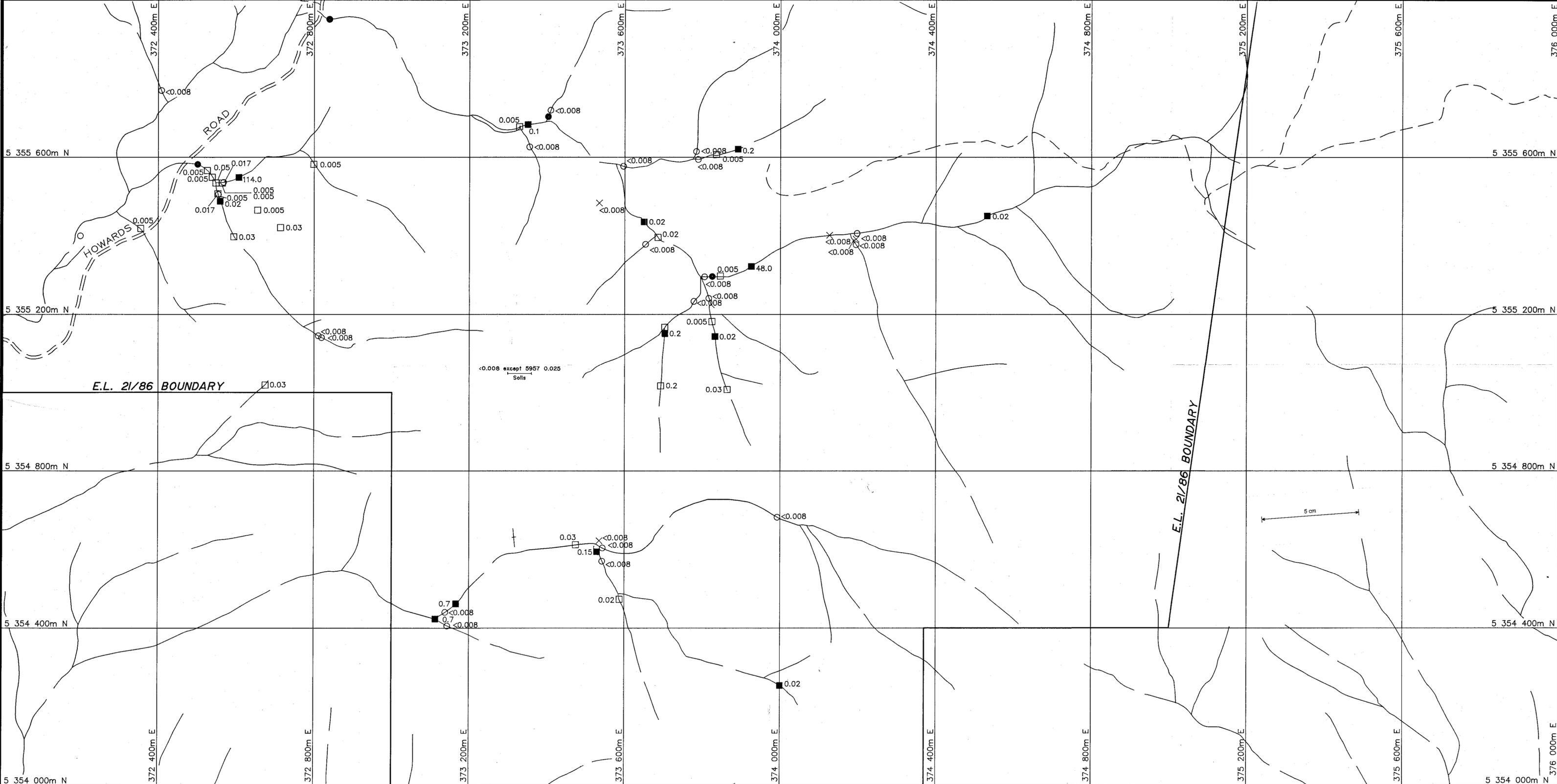
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3-3	3-4	3-5
4-3	4-4	4-5

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829066

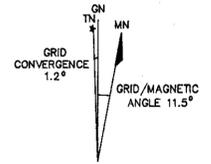
6228

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Zn p.p.m.	
DRAWN BY : R.P.	DRAFTSMAN : T.G.D.S.
DATE : Dec.'87	
REVISIONS :	
FILE No.	
SCALE 1 : 5000	
FIG. 2I	



**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING
- Panned Concentrates
- Panned Concentrates
- × Rock Chip



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829067

6229

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

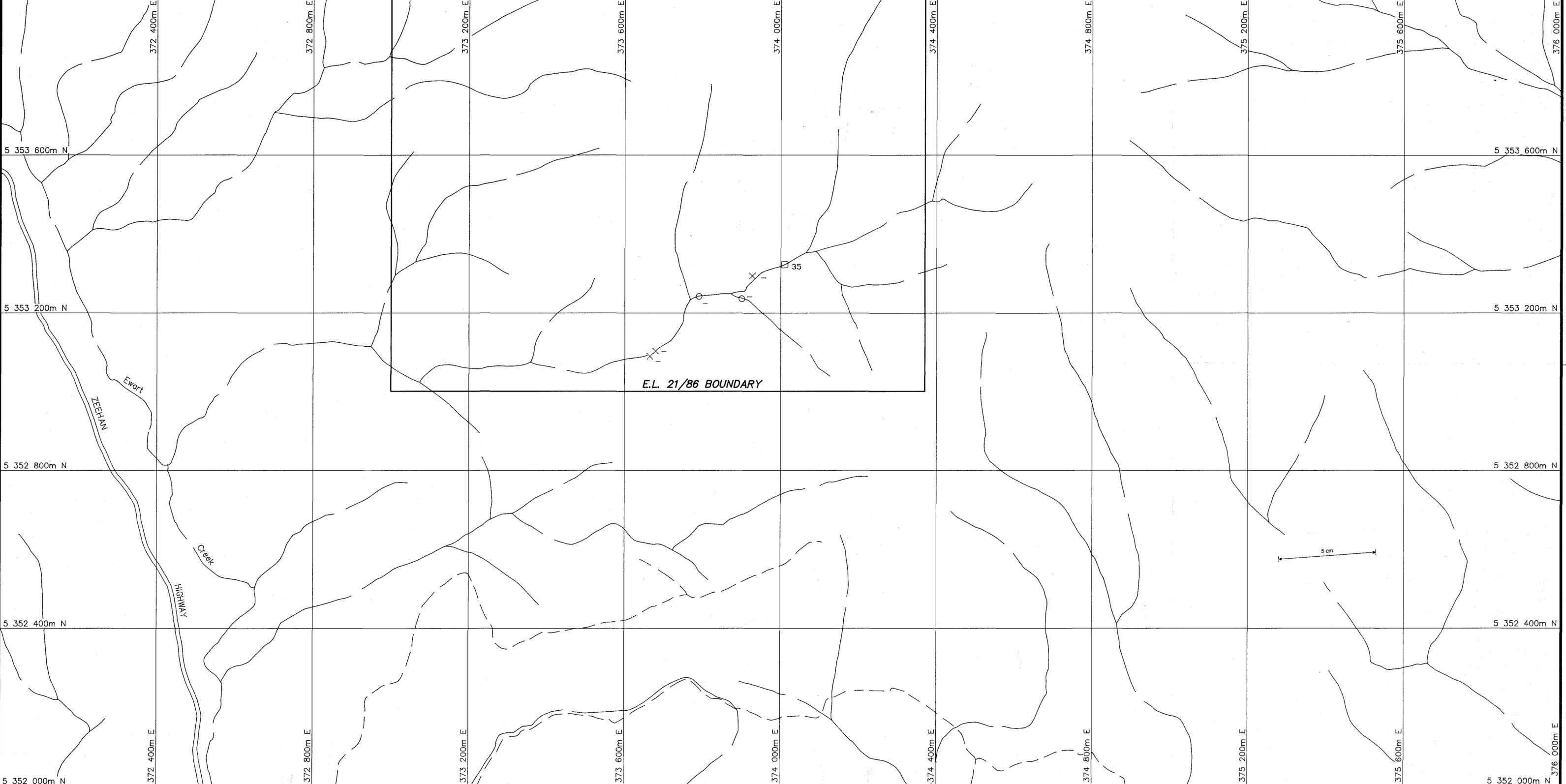
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Au p.p.m.

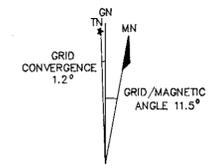
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DRAWN BY :	R.P.
DRAFTSMAN :	T.G.D.S.
DATE :	Dec.'87
REVISIONS :	
FILE No.	

FIG. 22



- LEGEND**
- △ MCINTYRE MINES SAMPLING
  - C.S.R. SAMPLING
  - G.F.E.L. SAMPLING (X Rock Chip)



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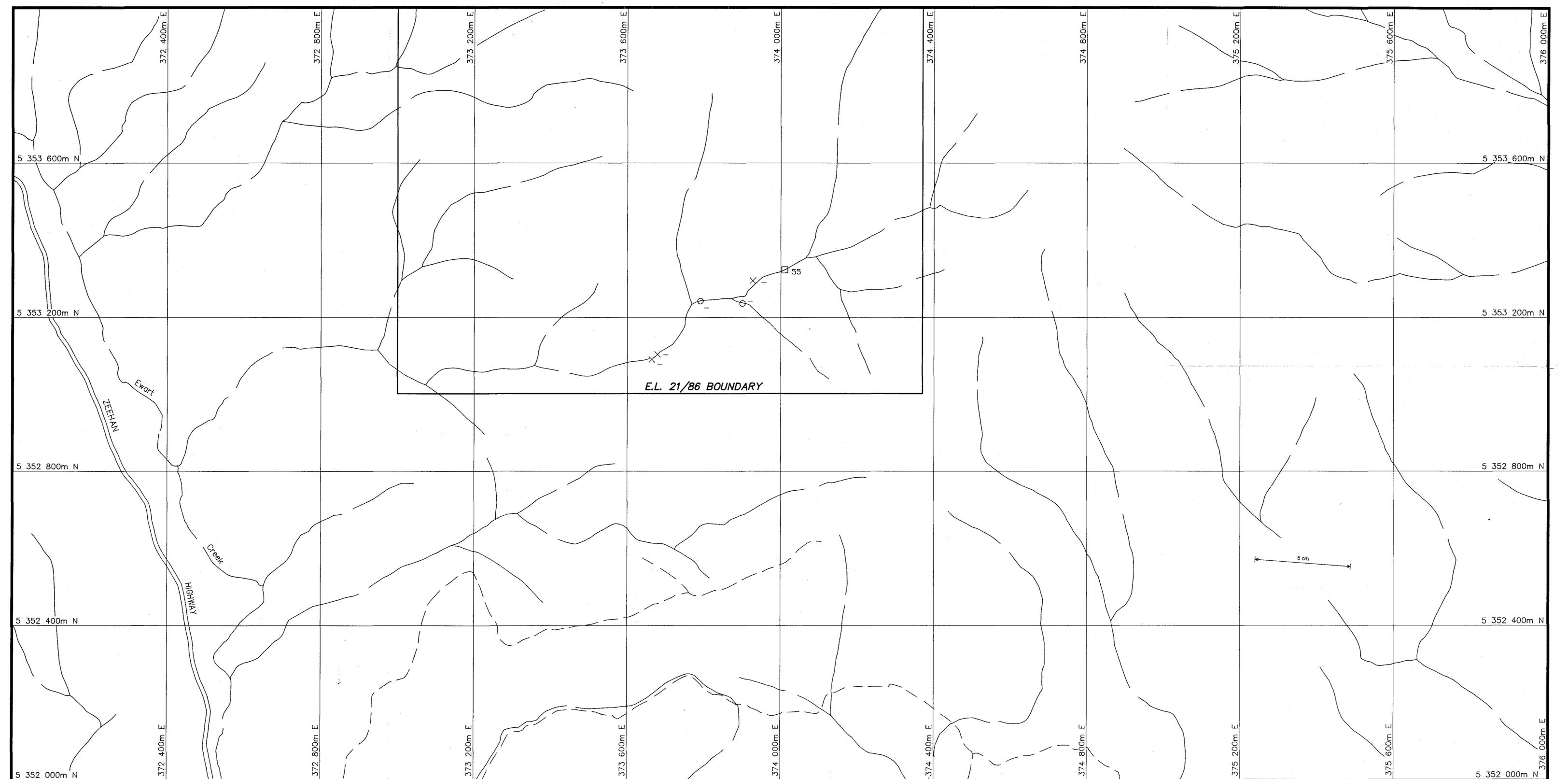
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4-3	4-4	4-5
5-3	5-4	5-5

**88-2760**

829068

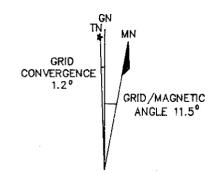
6230

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Cu p.p.m.	
DRAWN BY : R.P.	FILE No.
DRAFTSMAN : T.G.D.S.	
DATE : Dec.'87	
REVISIONS :	
SCALE 1 : 5000	
FIG. 23	



**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



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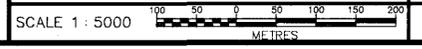
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4-3	4-4	4-5
5-3	5-4	5-5

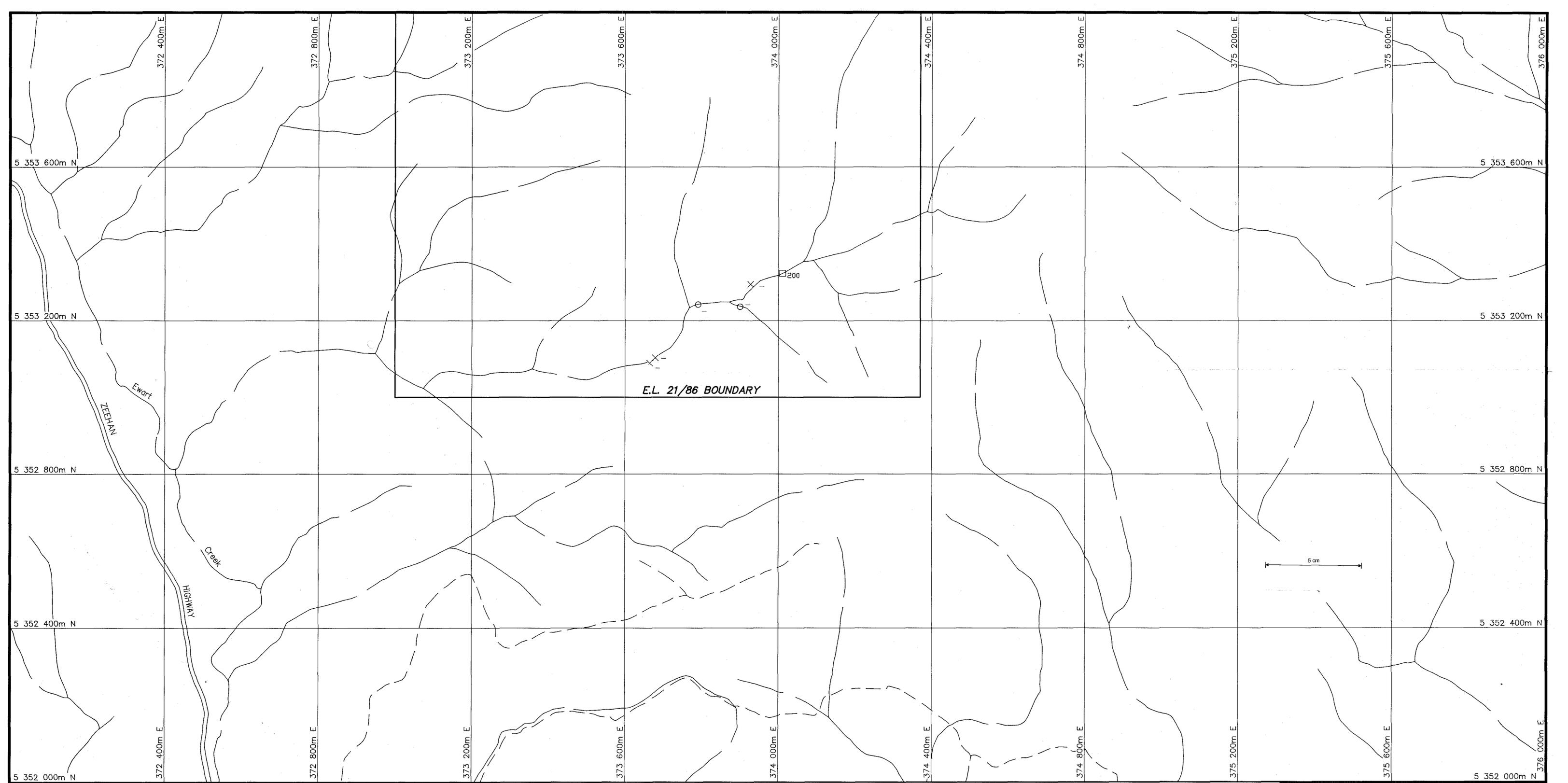
88-2760

829069

6231

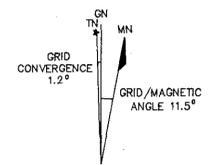
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OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Pb p.p.m.	
DRAWN BY: R.P.	DATE: Dec '87
DRAFTSMAN: T.G.D.S.	REVISIONS:
FILE No.	FIG. 24





**LEGEND**

- △ M<sup>o</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



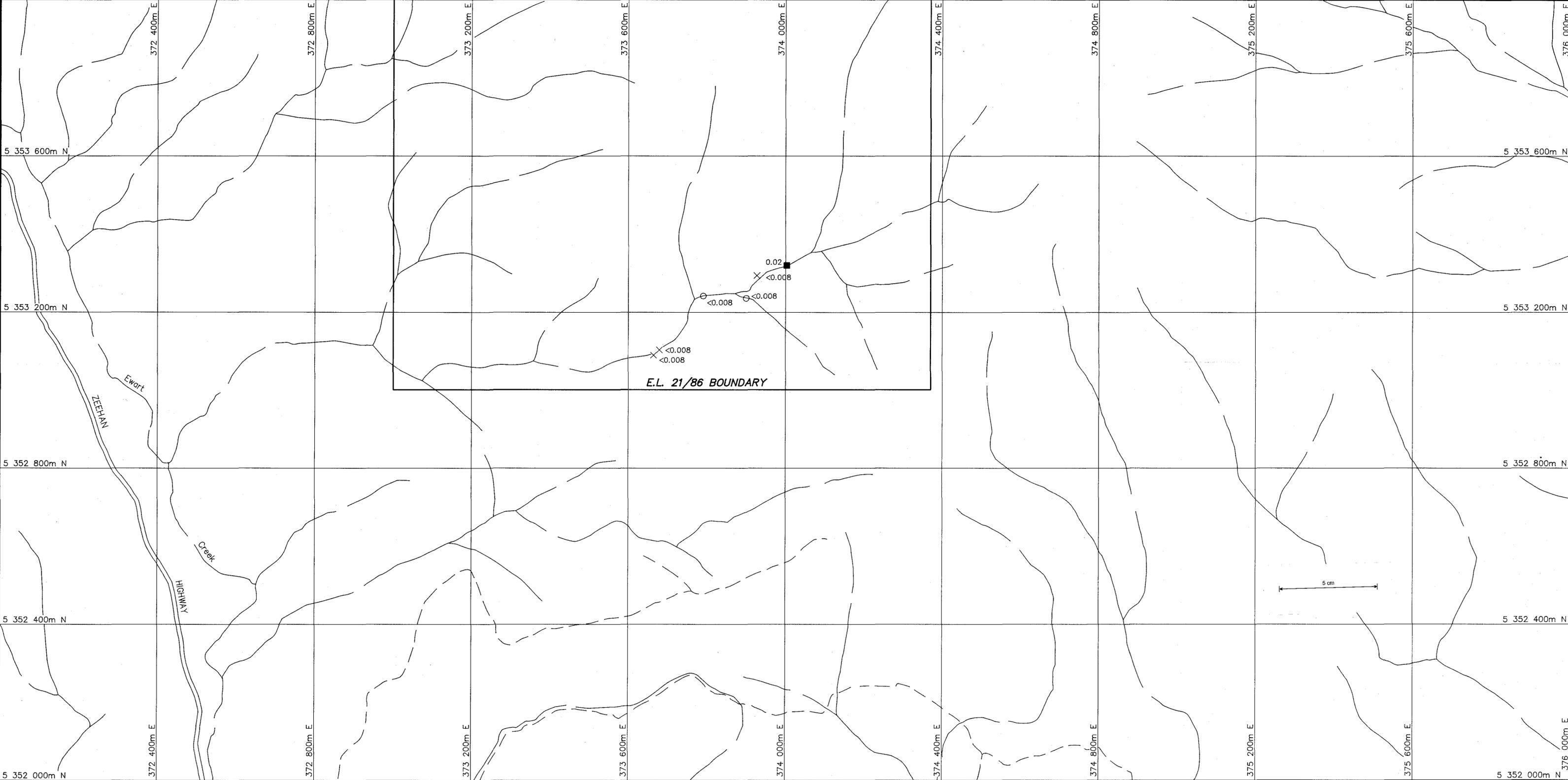
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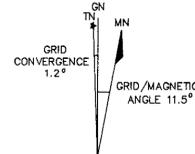
**88-2760**

829070  
6232

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY	
Zn p.p.m.	
DRAWN BY: R.P.	DATE: Dec '87
REVISIONS:	
FILE No.	
SCALE 1:5000	
FIG. 25	



- LEGEND**
- △ M<sup>c</sup>INTYRE MINES SAMPLING
  - C.S.R. SAMPLING
  - G.F.E.L. SAMPLING
  - Panned Concentrates
  - Panned Concentrates
  - ⊗ Rock Chip



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5-3	5-4	5-5

88-2760

829071

6233

GOLDFIELDS EXPLORATION PTY. LIMITED

**OCEANA - E.L. 21/86**

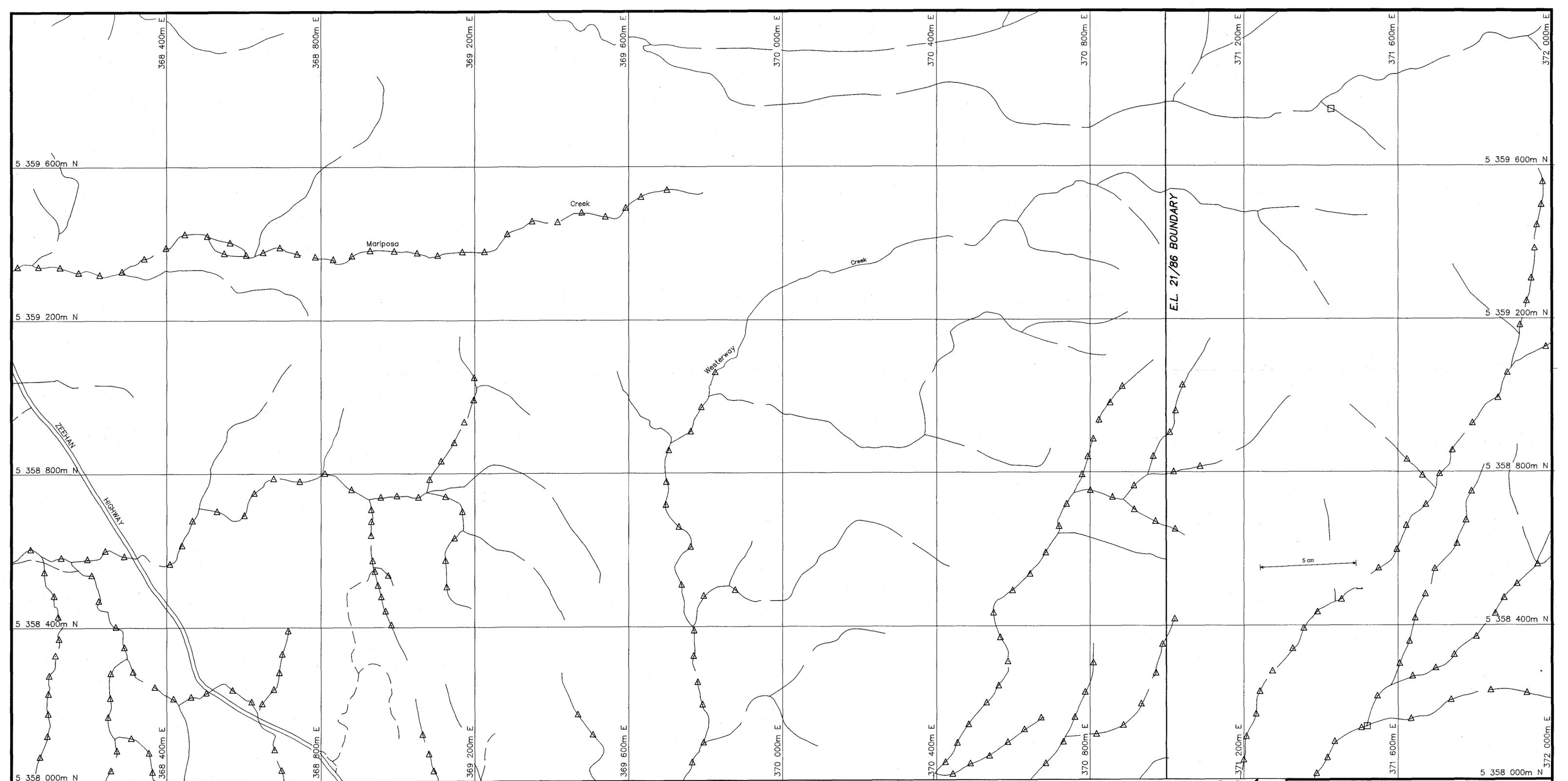
**STREAM SEDIMENT GEOCHEMISTRY**

Au p.p.m.

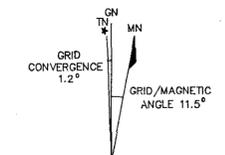
DRAWN BY : R.P.  
DRAFTSMAN : T.G.D.S.  
DATE : Dec.'87  
REVISIONS :  
FILE No.

SCALE 1 : 5000

FIG. 26



**LEGEND**  
 ▲ MCINTYRE MINES SAMPLING  
 □ C.S.R. SAMPLING



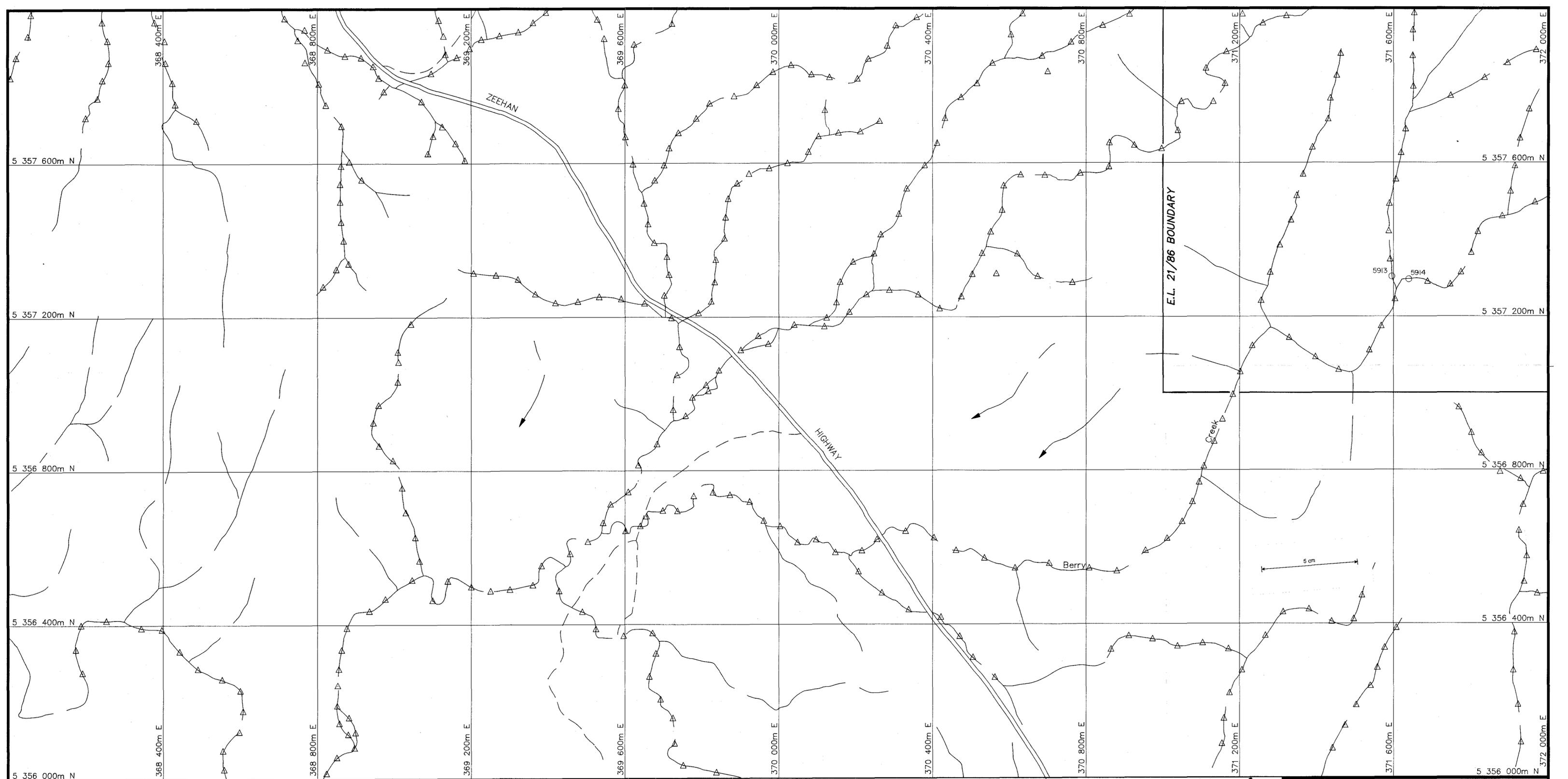
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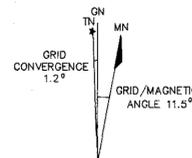
829072  
6234

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
STREAM SEDIMENT GEOCHEMISTRY SAMPLE LOCATIONS	
DRAWN BY : R.P.	DRAFTSMAN : T.G.D.S.
DATE : Dec.'87	REVISIONS :
FILE No.	
SCALE 1 : 5000	
	FIG. 27



**LEGEND**

- △ MCINTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING



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3-2	3-3	3-4

**88-2760**

Oceana

**829073**

**6235**

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

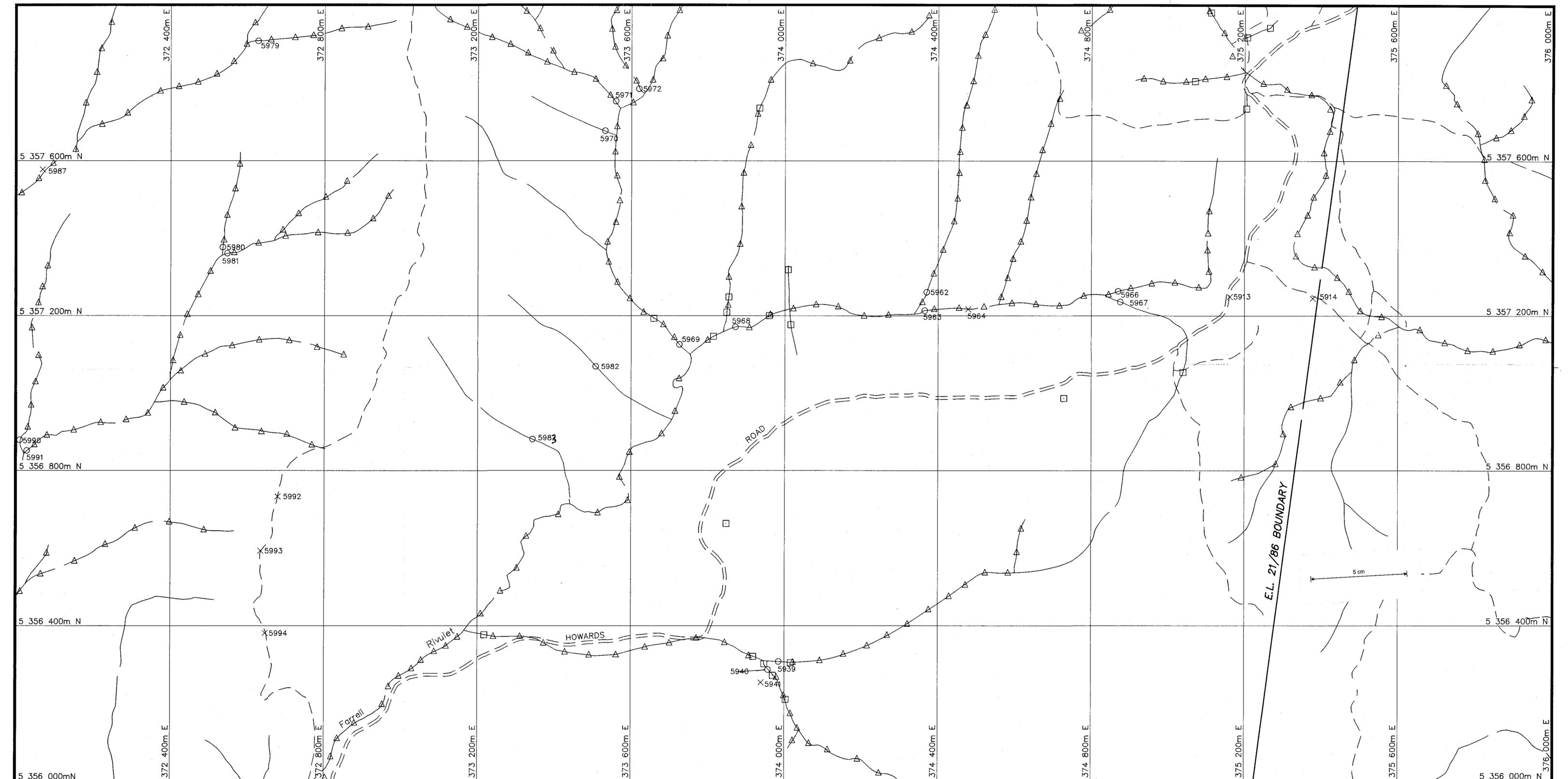
**STREAM SEDIMENT GEOCHEMISTRY  
SAMPLE LOCATIONS**

DRAWN BY : R.P.  
DRAFTSMAN : T.G.D.S.  
DATE : Dec.'87  
REVISIONS :  
FILE No.

SCALE 1 : 5000 METRES

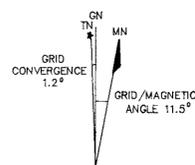
**FIG. 28**





**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING (X Rock Chip)



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88-2760

Oceana

829075

6237

GOLDFIELDS EXPLORATION PTY. LIMITED

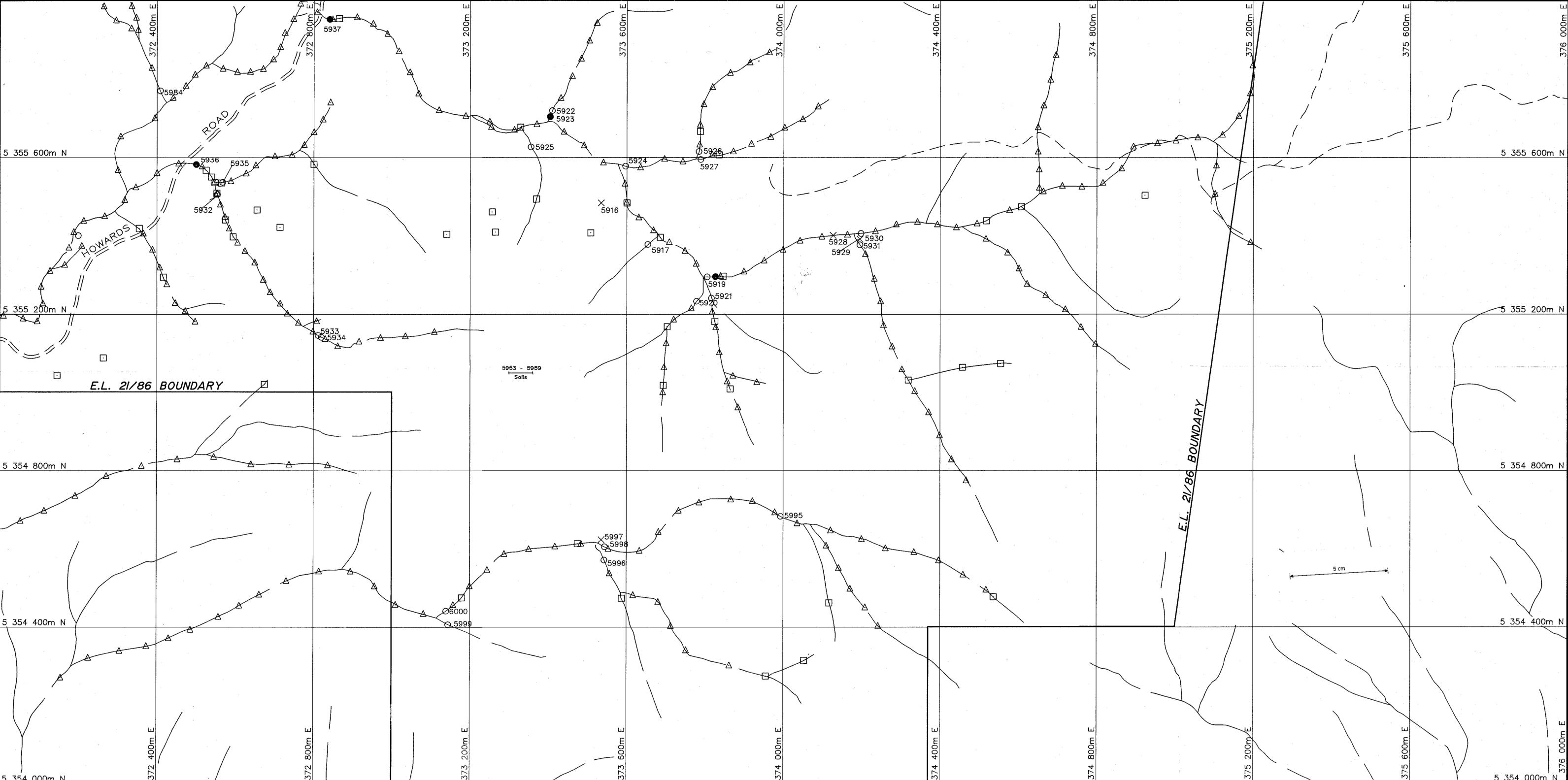
OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY  
SAMPLE LOCATIONS

DRAWN BY: R.P.  
DRAFTSMAN: T.G.D.S.  
DATE: Dec.'87  
REVISIONS:  
FILE No.



FIG. 30



**LEGEND**

- △ M<sup>o</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING (■ Panned Concentrates)
- G.F.E.L. SAMPLING (● Panned Concentrates)
- (X) Rock Chip

5953 - 5959  
Soils

5953 - 5959  
Soils

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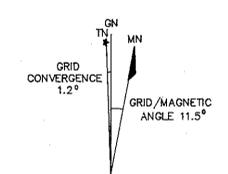
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4-3	4-4	4-5

88-2760

Oceana

829076

6238



GOLDFIELDS EXPLORATION PTY. LIMITED

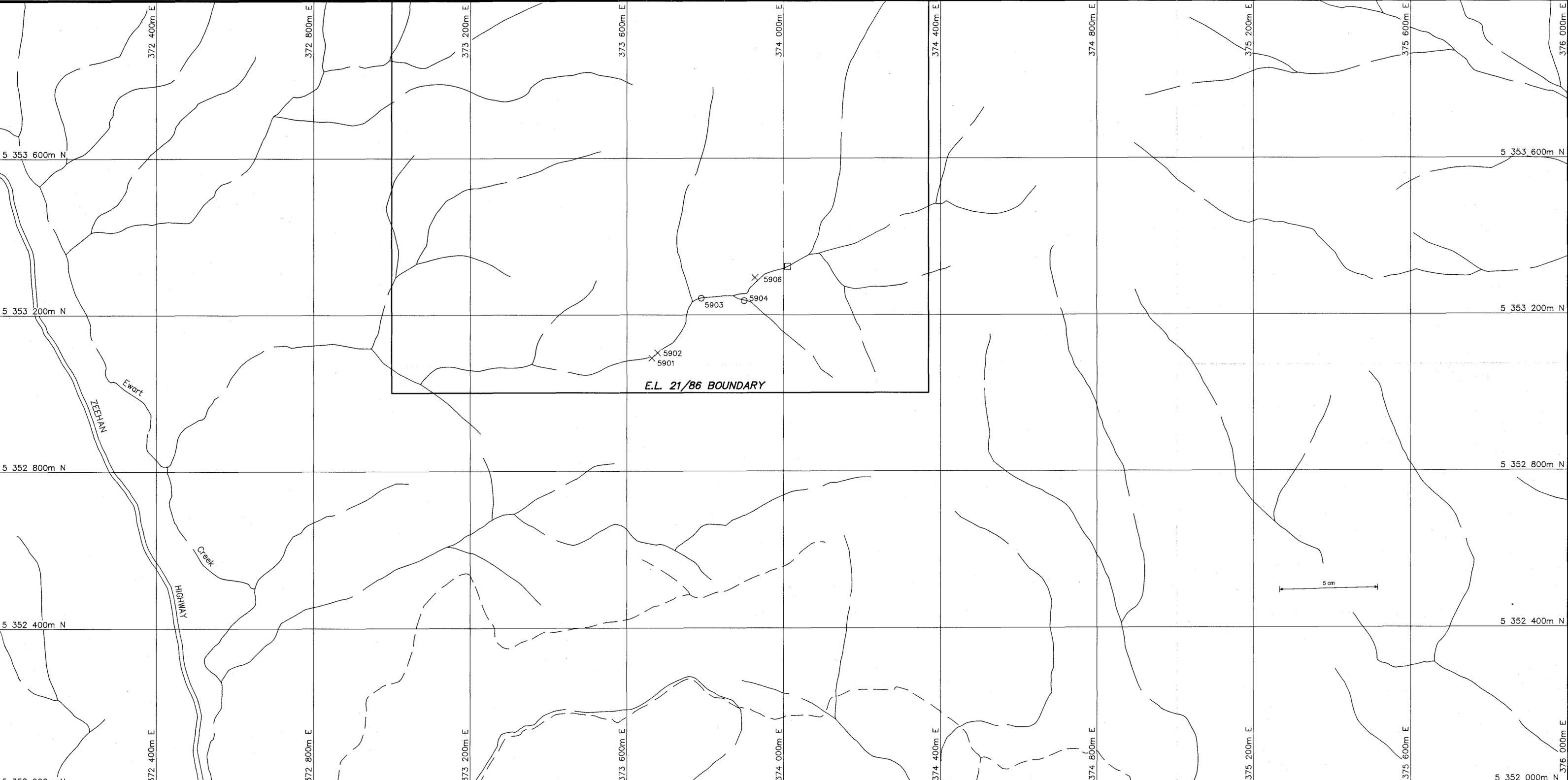
OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY  
SAMPLE LOCATIONS

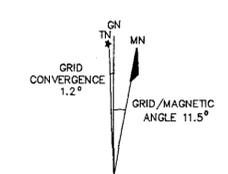
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DRAFTSMAN : T.G.D.S.  
DATE : Dec.'87  
REVISIONS :  
FILE No.

SCALE 1 : 5000

FIG. 31



- LEGEND**
- △ M<sup>C</sup>INTYRE MINES SAMPLING
  - C.S.R. SAMPLING
  - G.F.E.L. SAMPLING (X Rock Chip)



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88-2760

Oceana

829077

6239

GOLDFIELDS EXPLORATION PTY. LIMITED

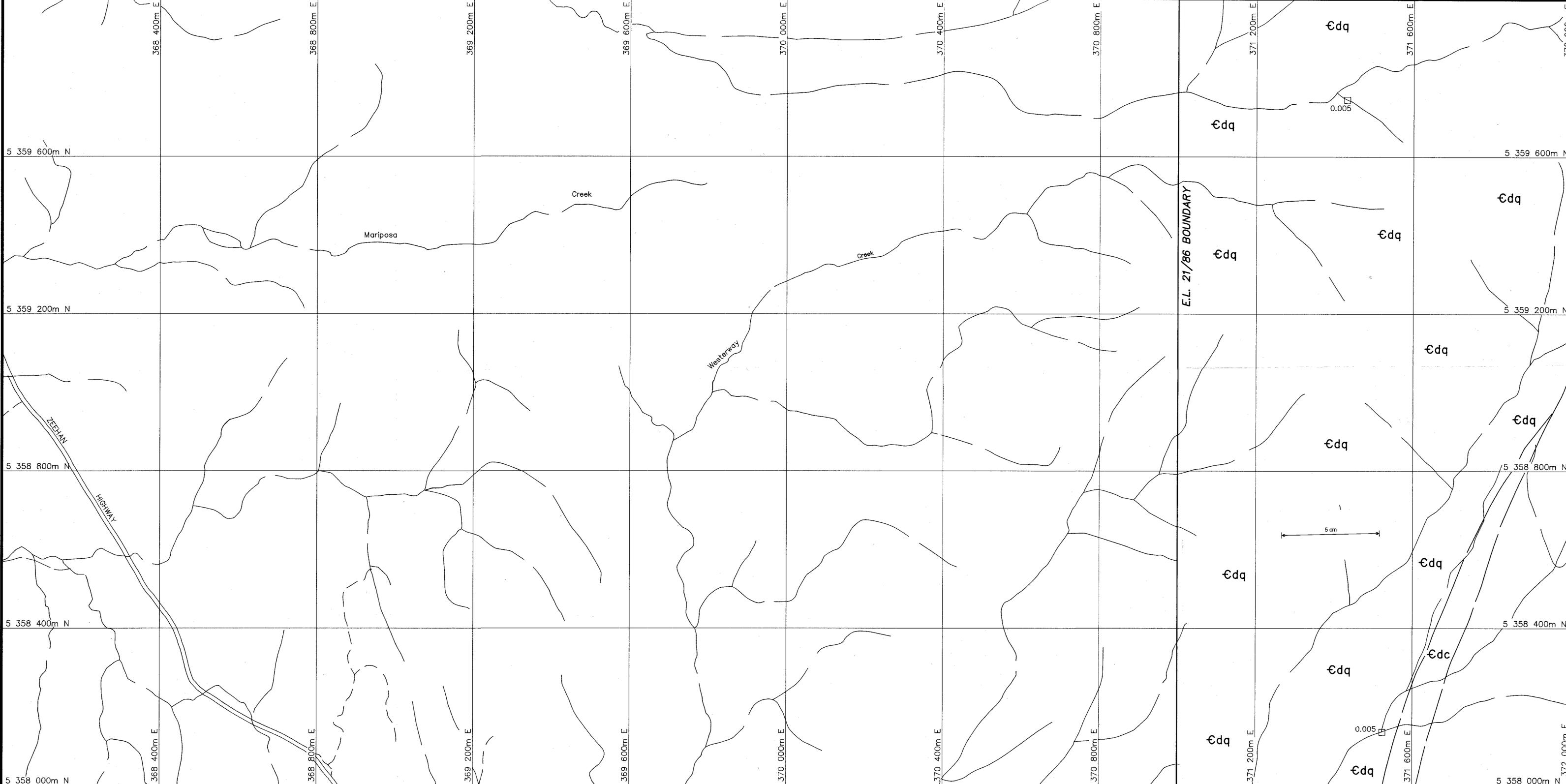
OCEANA - E.L. 21/86

STREAM SEDIMENT GEOCHEMISTRY  
SAMPLE LOCATIONS

SCALE 1:5000  
100 50 0 50 100 150 200  
METRES

DRAWN BY :	R.P.
DRAFTSMAN :	T.G.D.S.
DATE :	Dec.'87
REVISIONS :	
FILE No.	

FIG. 32



**LEGEND**

□ C.S.R. SAMPLING    ■ Panned Concentrates

**QUATERNARY**

Qg Glacial gravels

**CAMBRIAN**

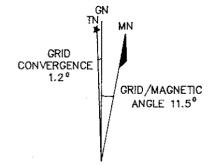
Edq Quartzwacke, quartzite, mudstone

Edc Conglomerate

Evs Lower volcanosedimentary sequence - siltstones and tuffaceous greywacke

Eva Andesitic volcanics and sediments

Eg Gabbro



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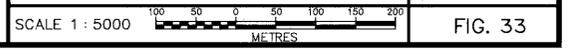
5-2	5-3	5-4
1-2	1-3	1-4
2-2	2-3	2-4

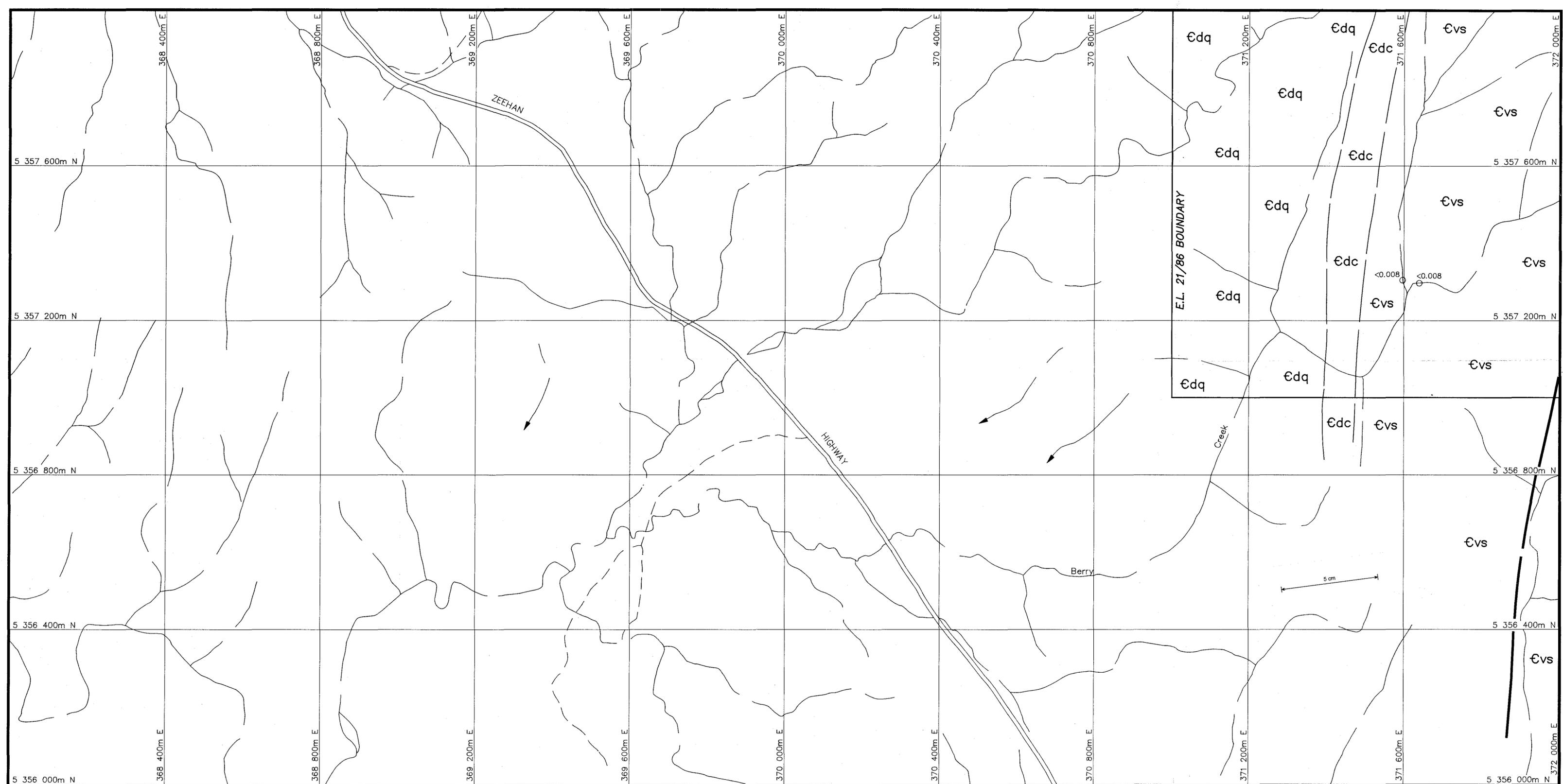
88-2760

829078

6240

GOLDFIELDS EXPLORATION PTY. LIMITED	
OCEANA - E.L. 21/86	
INTERPRETIVE GEOLOGY AND GOLD VALUES	
DRAWN BY : R.P.	FILE No.
DRAFTSMAN : T.G.D.S.	FIG. 33
DATE : Dec. '87	
REVISIONS :	





**LEGEND**

- △ M<sup>c</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING
- Panned Concentrates
- Panned Concentrates

**QUATERNARY**

Qg Glacial gravels

**CAMBRIAN**

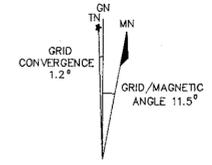
Edq Quartzwacke, quartzite, mudstone

Edc Conglomerate

Evs Lower volcanosedimentary sequence - siltstones and tuffaceous greywacke

Eva Andesitic volcanics and sediments

Eg Gabbro



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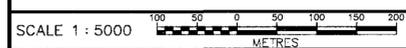
**88-2760**

829079

6241

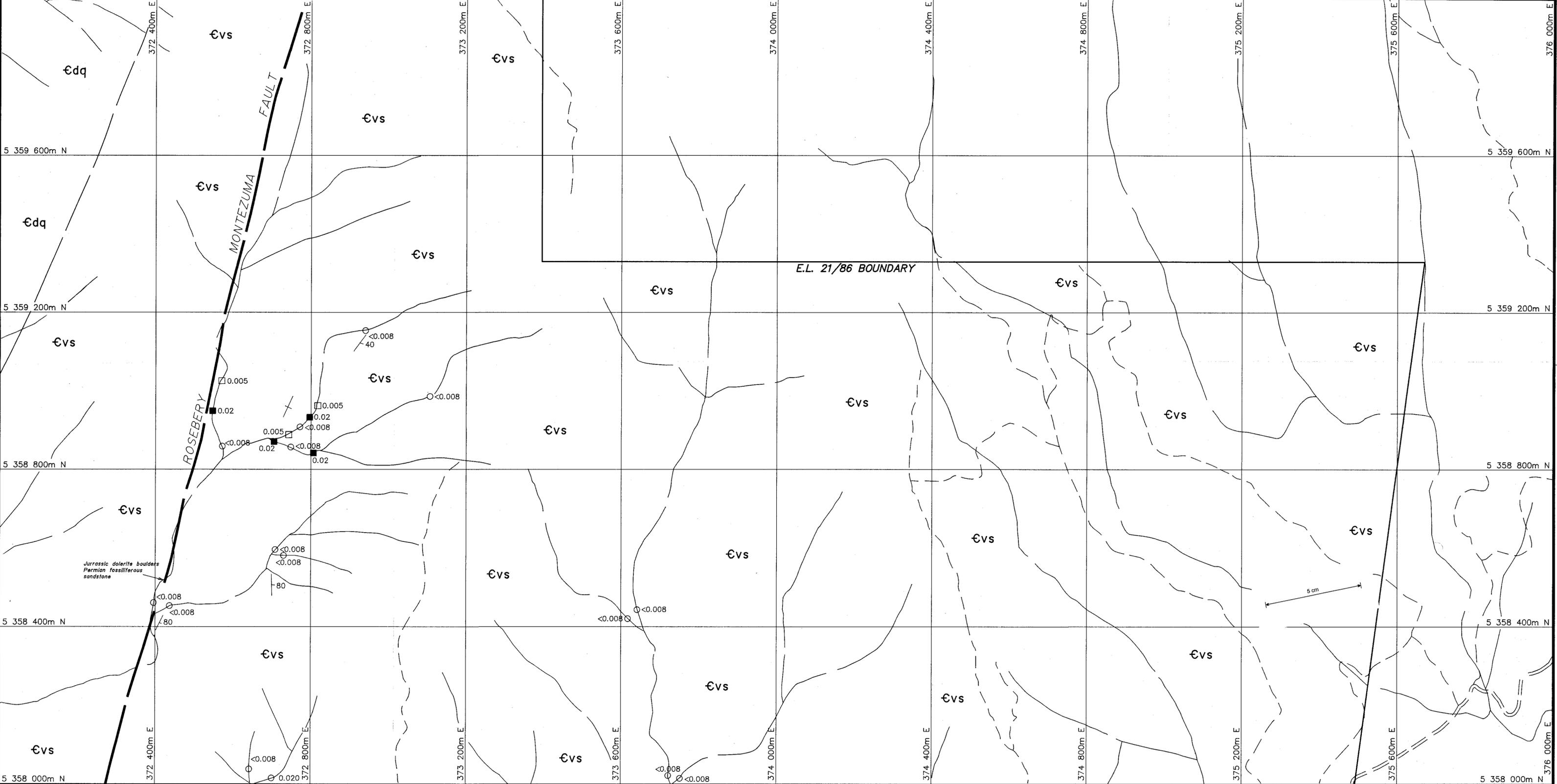
GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86  
 INTERPRETIVE GEOLOGY  
 AND  
 GOLD VALUES



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DRAFTSMAN :	T.G.D.S.
DATE :	Dec.'87
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FIG. 34



**LEGEND**

△ MINTYRE MINES SAMPLING

□ C.S.R. SAMPLING (■ Panned Concentrates)

○ G.F.E.L. SAMPLING (● Panned Concentrates)

**QUATERNARY**

Qg Glacial gravels

**CAMBRIAN**

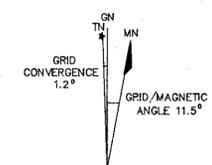
Cdq Quartzwacke, quartzite, mudstone

Edc Conglomerate

Evs Lower volcanosedimentary sequence - siltstones and tuffaceous greywacke

Eva Andesitic volcanics and sediments

Eg Gabbro



INDEX TO ADJOINING MAPS

5-3	5-4	5-5
1-3	1-4	1-5
2-3	2-4	2-5

**88-2760**

829080

6242

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

INTERPRETIVE GEOLOGY AND GOLD VALUES

SCALE 1 : 5000

100 50 0 50 100 150 200 METRES

FIG. 35

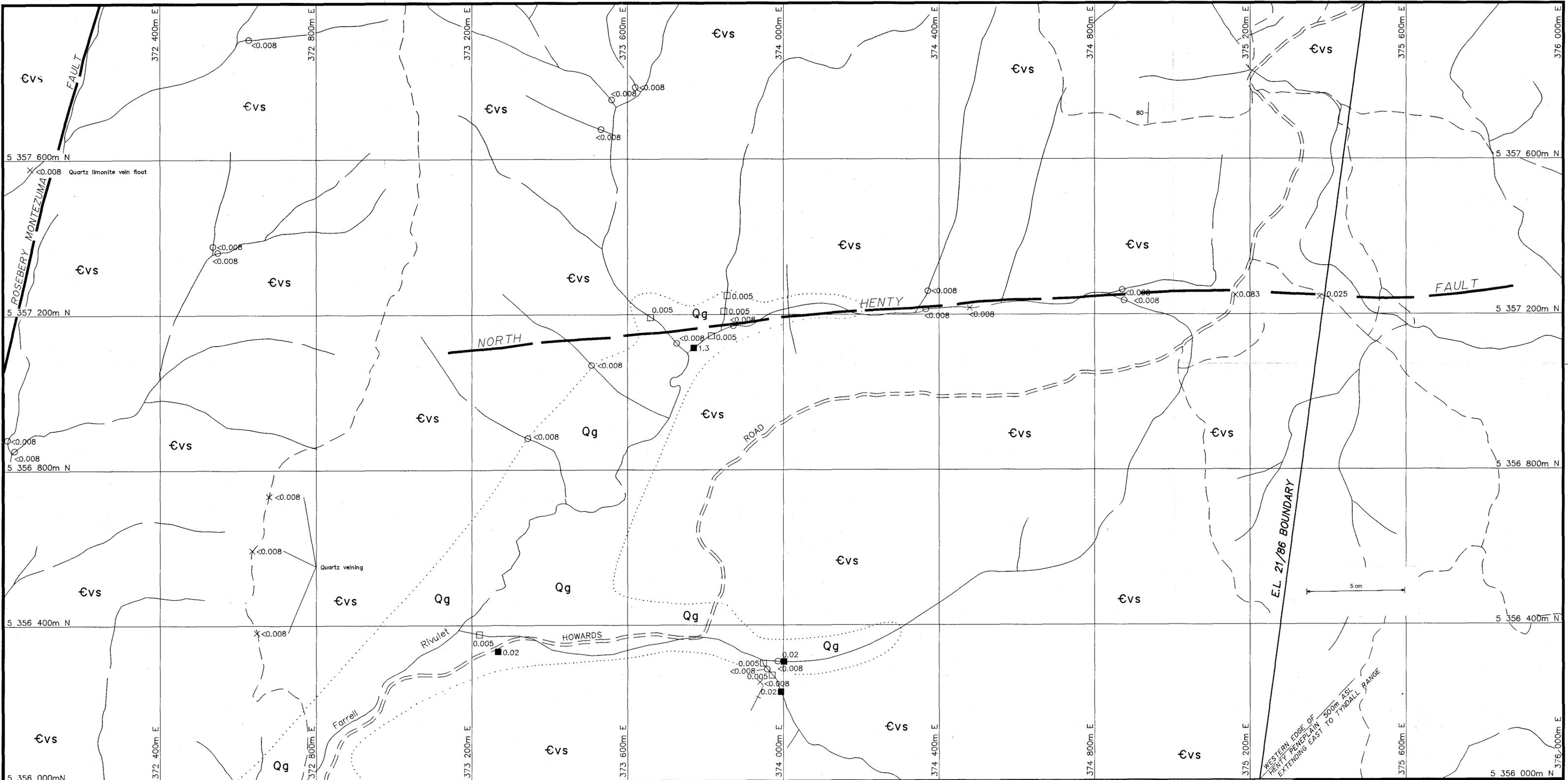
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DATE : Dec '87

REVISIONS :

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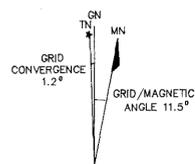


**LEGEND**

△ M<sup>c</sup>INTYRE MINES SAMPLING  
 □ C.S.R. SAMPLING (■ Panned Concentrates)  
 ○ G.F.E.L. SAMPLING (● Panned Concentrates) (X Rock Chip)

**QUATERNARY**  
 Qg Glacial gravels

**CAMBRIAN**  
 €dq Quartzwacke, quartzite, mudstone  
 €dc Conglomerate  
 €vs Lower volcanosedimentary sequence - siltstones and tuffaceous greywacke  
 €va Andesitic volcanics and sediments  
 €g Gaboro



INDEX TO ADJOINING MAPS

1-3	1-4	1-5
2-3	2-4	2-5
3-3	3-4	3-5

**88-2760**

829081  
6243

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

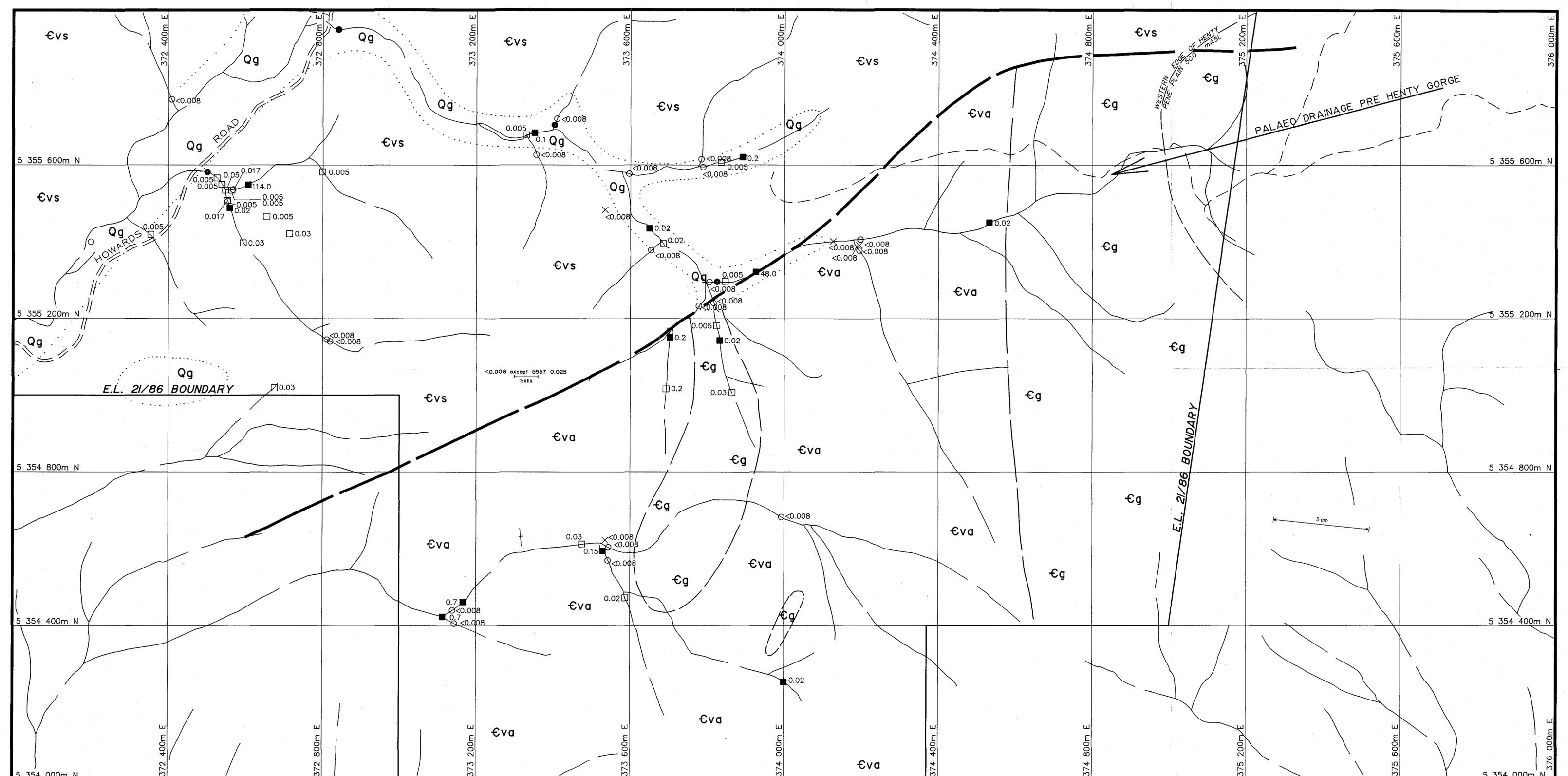
INTERPRETIVE GEOLOGY  
AND  
GOLD VALUES

SCALE 1 : 5000

100 50 0 50 100 200 METRES

FIG. 36

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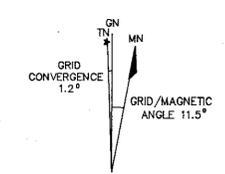


**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING
- Panned Concentrates
- Panned Concentrates
- × Rock Chip

**QUATERNARY**

- Qg Glacial gravels
- Edq Quartzwacke, quartzite, mudstone
- Edc Conglomerate
- Evs Lower volcanosedimentary sequence - siltstones and tuffaceous graywacke
- Eva Andesitic volcanics and sediments
- Eg Gabbro



**INDEX TO ADJOINING MAPS**

2-3	2-4	2-5
3-3	3-4	3-5
4-3	4-4	4-5

88-2760

829082

6244

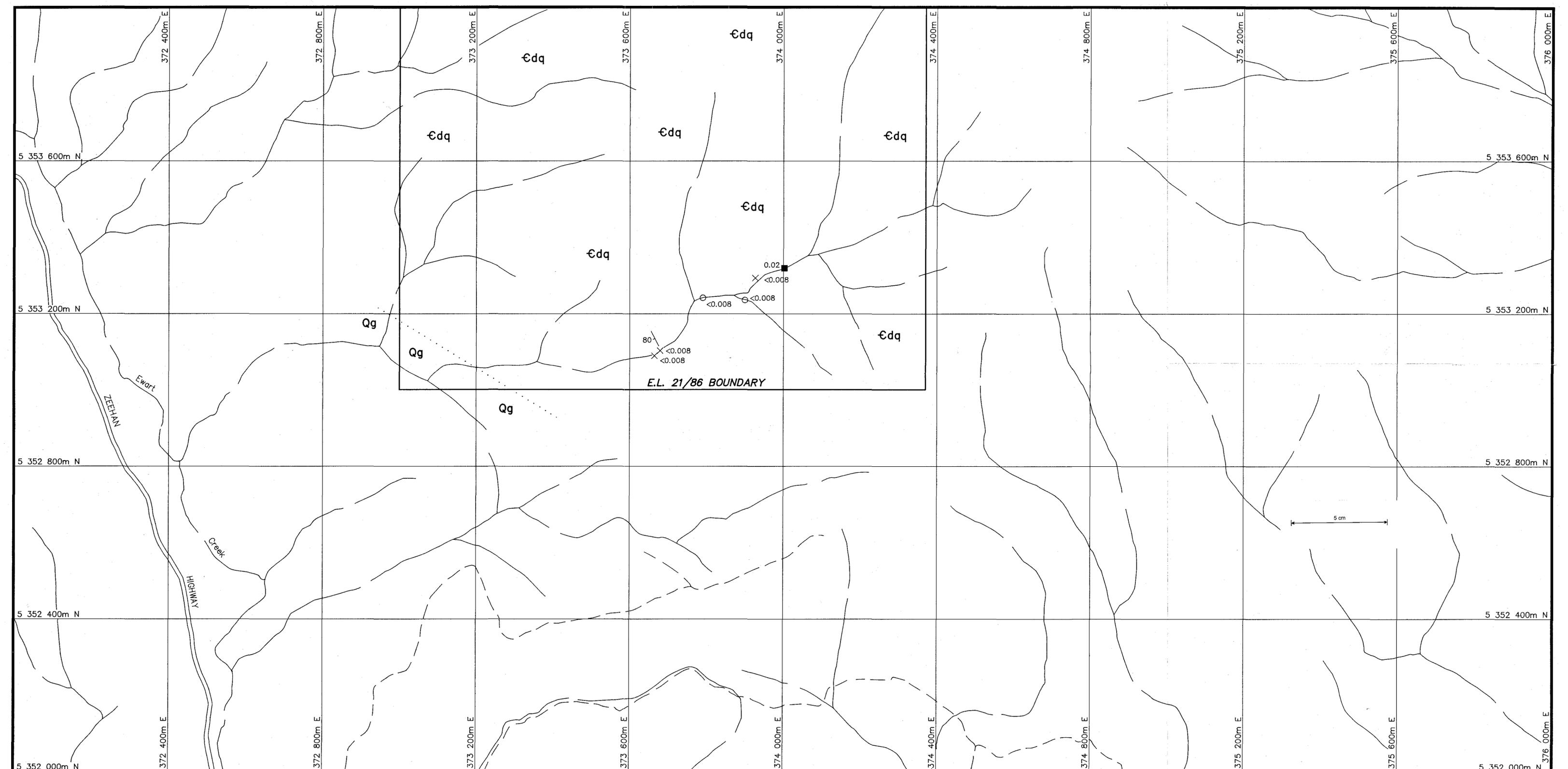
GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86  
 INTERPRETIVE GEOLOGY  
 AND  
 GOLD VALUES

SCALE 1 : 5000

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 DATE : Dec.'87  
 REVISIONS :  
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FIG. 37



**LEGEND**

- △ M<sup>C</sup>INTYRE MINES SAMPLING
- C.S.R. SAMPLING
- G.F.E.L. SAMPLING
- Panned Concentrates
- ⊗ Rock Chip

**QUATERNARY**

Qg Glacial gravels

**CAMBRIAN**

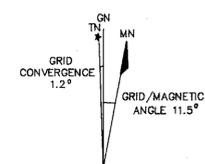
€dq Quartzwacke, quartzite, mudstone

€dc Conglomerate

€vs Lower volcanosedimentary sequence - siltstones and lutaceous greywacke

€va Andesitic volcanics and sediments

€g Gabbro



**INDEX TO ADJOINING MAPS**

3-3	3-4	3-5
4-3	4-4	4-5
5-3	5-4	5-5

88-2760

829083

6245

GOLDFIELDS EXPLORATION PTY. LIMITED

OCEANA - E.L. 21/86

INTERPRETIVE GEOLOGY

AND

GOLD VALUES

SCALE 1 : 5000

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FIG. 38