ASARCO (AUSTRALIA) PTY. LTD.

PROGRESS REPORT - GOG RANGE PROSPECT

E.L. 7/73

PARADISE, TASMANIA.

July-August 1975

Collated by H.C. Williamson
from Monthly Reports by R.G. Barker

August 1975

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INTRODUCTION

This prospect at Gog Range was located as a result of 1973 stream sediment sampling programme of E.L. 7/73 covering an area of 166 square miles (429 square km) of northern Tasmania. The location of the prospect and the E.L. is shown on Plan 5200.

This report describes the work carried out since 1973 on the Gog Range Prospect.

STREAM SEDIMENT SAMPLING

The initial and follow-up stream sediment results on the prospect are recorded on Plan 5201.

The significant initial results are recorded below:

Sample No.	Grid. Ref.	Cu	Pb	Zn	Ag	CxCu	CxZn	Mo
28504	P485070	28	38	260	0.2	IS	IS	0.5
21805	P454064	4	64	350	0.4	1	72	0.5
21810	P474069	32	20	70	0.4	13	21	0.25
21814	P485067	20	38	200	0.6	6	50	0.5
21816	P484066	22	36	280	0.4	7	84	0.5
21820	P475056	38	50	330	0.4	12	82	0.5
21821	P479058	18	36	260	0.2	5	68	0.25
21822	P480058	60	64	290	0.4	15	54	0.5
21823	MC43458892	62	46	68	0.4	22	16	0.5
21824	MC43478892	150	180	490	0.8	54	140	IS
21835	MC43308893	24	54	520	0.8	6	200	IS
21836	MC43318892	26	160	1600	-	10	980	IS
21837	MC43398894	72	92	520		24	200	11
21838	MC43358892	260	260	620	0.8	104	330	IS
21842	MC43188889	140	50	430	1.0	32	160	4
21843	P438060	10	22	160	0.4	4	80	2
21844	P439060	22	52	270	0.4	8	60	2
21845	P437059	28	20	200	0.4	12	75	8
21846	P437059	14	14	98	0.2	6	52	3
21847	P443059	36	48	390	0.4	16	140	8

GRIDDING

A total of 18 grid lines spaced 200 metres apart were cut off an east trending base line. The backbone of the grid is shown on the soil sampling plans 5211 to 5215.

GEOLOGY

Although the prospect is rugged, outcrop is limited to isolated tors of bedrock projecting through a mantle of decaying vegetable matter on scree slopes containing a mixture of Ordovician conglomerate and bedrock fragments.

A cliff face marking the unconformity between the overlying Ordovician conglomerates and Cambrian rocks marks the southern boundary of the prospect. The underlying favourable

Cambrian rocks consist of interbedded siltstones, rhyolitic tuffs, carbonaceous and pyritic shales and porphyritic rhyolites. The rocks strike easterly but outcrop is too poor or massive to enable further structural information to be determined.

The geology is depicted on Plan 5216.

Results of bed rock sampling are recorded on Plan 5220.

SOIL SAMPLING

Soil sampling was carried out along the traverse lines at 25 metre intervals. The samples were collected by hand augering to 9 inches or deeper through the overburden to oxidised bedrock. Samples were assayed by AAS for copper, lead, zinc, cold extractable copper and cold extractable zinc. After extraction by perchloric acid. Results are recorded on attached plans 5211, 5212, 5213, 5214 and 5215. A total of four anomalies was recognised and these are discussed below:

Anomaly 1: 4800E/4750N to 4750N/5000E.

An additional line was sampled between lines 4800E and 5000E. No outcrop was seen between the two lines. The existence of a narrow, strong copper and lead anomaly here was confirmed by the resampling. The anomaly occurs along a saddle. Lithic tuff crops out to the north and southwest of the anomaly, with Ordovician conglomerate outcrop about 150 metres to the south. No evidence of mineralisation was seen in the field though it is apparent that the soil is at least 1-2 metres thick over the anomalous zone.

Anomaly 2: Line 4000E from 5100N to 5225N.

Follow-up sampling here confirms that the cause of this anomaly is localised stream sediment contamination and seepage enrichment of the soil. The additional lines to both the east and west of the anomaly gave near background soil values for copper, lead and zinc. Stream sediment sample results for the creek flowing into the area are included on the soil maps and for each of the three elements the soil values are similar to the stream sediment values obtained nearby. The source of the anomalous values is probably soil anomaly 3 which occurs about 300 m up the slope to the south.

Anomaly 3: 4825N/3600E to 4825N/4000E.

Follow-up sampling here shows strong anomalies for copper, lead and zinc. Outcrop occurs over the southern part of the area shown on the map (south of about 4800N). No mineralisation was seen in outcrop and analytical results from peak outcrop samples are too low to account for the soil anomalies. A gossan boulder on line 3600N assayed 520 ppm Cu, 800 ppm Pb, 520 ppm Zn and 22 ppm Ag. Another gossanous boulder at 3870E, 4800N gave 220 ppm Cu, 600 ppm Pb, 2400 ppm Zn and 4 ppm Ag.

Anomaly 4: 4675N/2580E to 2200E/4875N.

Results for anomaly 4 show a copper anomaly with values >320 ppm at least 200 metres long. The high value of 1800 ppm

Cu on resampling gave 1600 ppm Cu. The adjacent outcrop only about 50 cm from the soil sample location gave 30 ppm Cu. Slopes here are very steep (about 30°) and the anomaly could be dispersed some distance from its sources. The broad area of >160 ppm Cu to the south of the main anomalous zone is probably the result of down slope dispersion. The highest rock sample copper value was obtained for strongly iron stained fine grained tuff with narrow limonitic veinlets. An outcrop of this rock at 2475E, 4825N gave 280 ppm Cu. Lead and zinc soil values for anomaly 4 show scattered anomalies that coincide with the copper anomaly. Two samples of weathered rock float on line 2580E (one of fine grained tuff with limonite veinlets and another of gossanous grey siltstone) gave 1120 ppm Pb and 1320 ppm Pb respectively though the highest soil lead value in the area is 390 ppm Pb. A soil copper anomaly along the baseline has been resampled and the results plotted as part of anomaly 4.

TRENCHING

An attempt was made to trench anomalies 1 and 3 in May. The greasy conditions caused by heavy rain prevented the bulldozer from gaining access to any of the trench sites. Another attempt will be made if the area dries out but this appears unlikely before December as heavy winter rain is normal.

H.C. WILLIAMSON

146°00'

146°10'

146°20'

146°30'

RAZORBACK RIDGE

WILMOT

Wilmot

Sheffield

River Lower Barrington

LAKE BARRINGTON

Roland

Lake

STAVERTON

MT. ROLAND

Mt Roland

Paradise

Beulah

Lower Beulah

River Forest

CETHANA

MT. CLAUDE

Mt Claude

Cethana

41°30'

MT. OLIVER

Lake

GOG RANGE

EAST GOG RANGE

41°30'

146°00'

146°10'

146°20'

146°30'

SCALE 1:100,000

2 1 0 2 4 6 8 10 12 km

REFERENCE

Exploration Licence Boundary

Prospect Location

502007

5 cm

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EL 7 73 PARADISE TASMANIA

PROSPECT LOCATIONS

034

COMPILED RGB	FILE	PLAN Nº
DRAFTED RGB		5200
CHECKED	DATE March 1975	

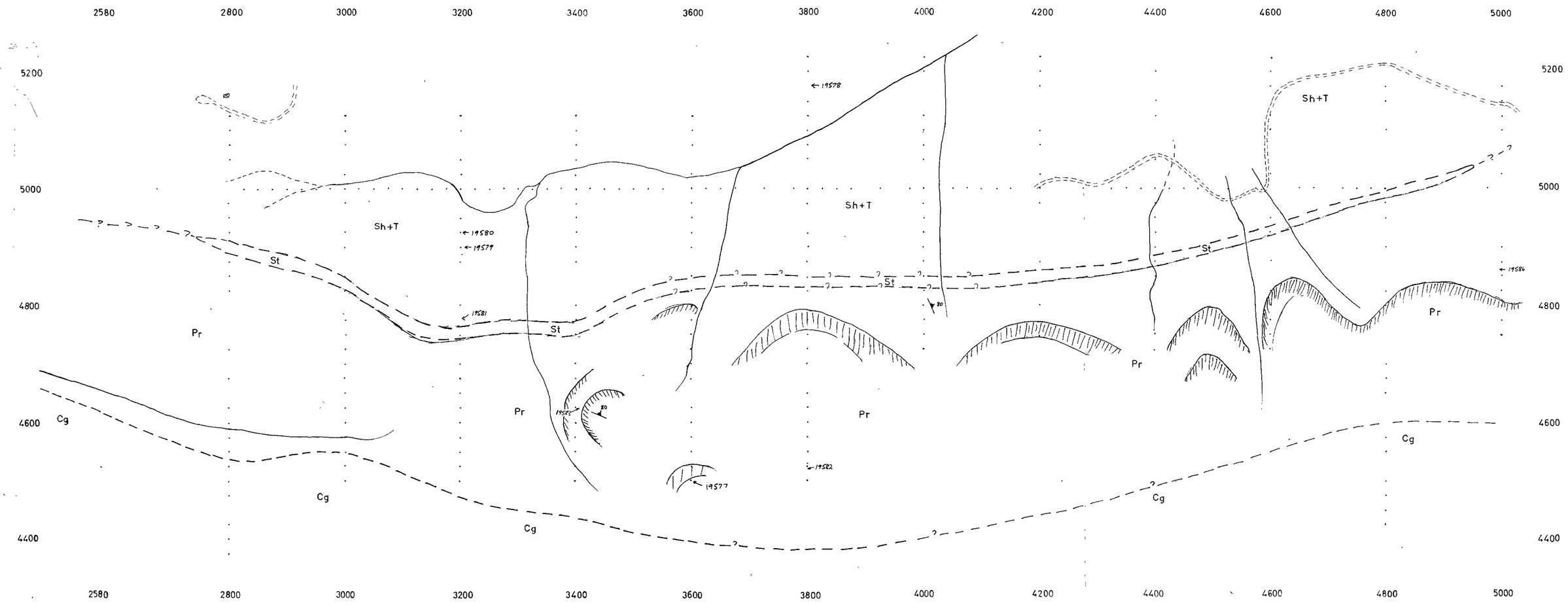
GN TN MN

LEGEND

Cg	Massive siliceous conglomerate
	? unconformity ?
Pr	Porphyritic rhyolite with minor fine grained tuff and siltstone
St	Carbonaceous pyritic siltstone and silty shale
Sh+T	Siltstone, shale, tuffaceous sandstone, lithic crystal tuff, rhyolitic tuff. Tuffaceous rocks predominate west of line 3400E

Cliffs of massive porphyritic rhyolite

Foliation



SCALE 1 5000

0 25 50 100 200 400 600 800 1000 metres

5 cm

502008 FIG 12f

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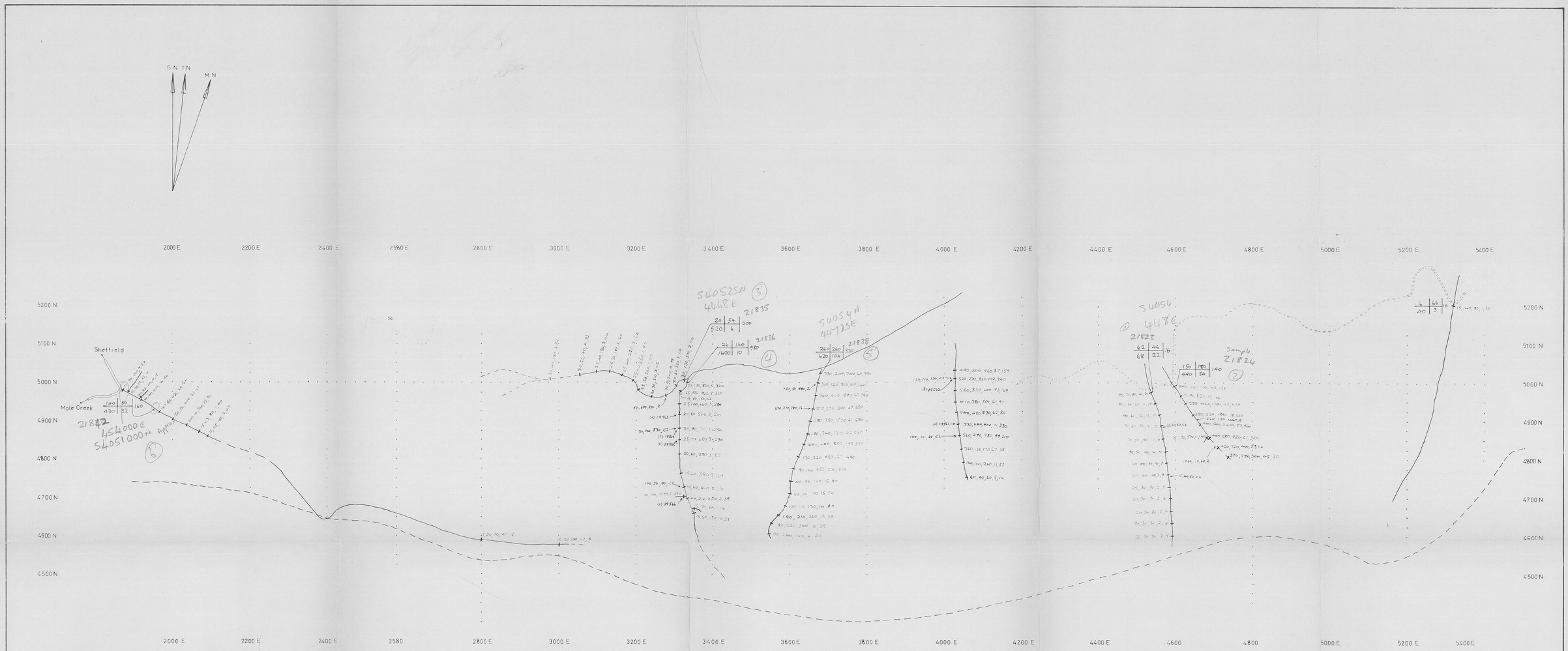
EL 7/73 PARADISE TASMANIA: GOG RANGE PROSPECT

GEOLOGY

035

COMPILED RB and		FILE	PLAN No
DRAFTED			5216
CHECKED	AW	DATE JAN 1975	

A1 SIZE



SCALE 1:5000

0 25 50 100 200 400 600 800 1000 metres

REFERENCE

- Cu | Pb | Cu x Zn / Zn | Cu/Cu — Reconnaissance stream sediment sample result (ppm)
- Cu, Pb, Zn, Cu/Cu, Cu x Zn — Follow up stream sediment sample result (ppm)
- Cu, Pb, Zn, Ag — Rock sample result (ppm)
- 19561 — (a) Outcrop; (f) Float; Photographic sample location

502009

5 cm

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E.L. 7/73 PARADISE, TASMANIA GOG RANGE PROSPECT

STREAM SEDIMENT SAMPLE RESULTS

COMPILED		FILE	PLAN No.
DRAFTED			5201
CHECKED		DATE Dec 1974	

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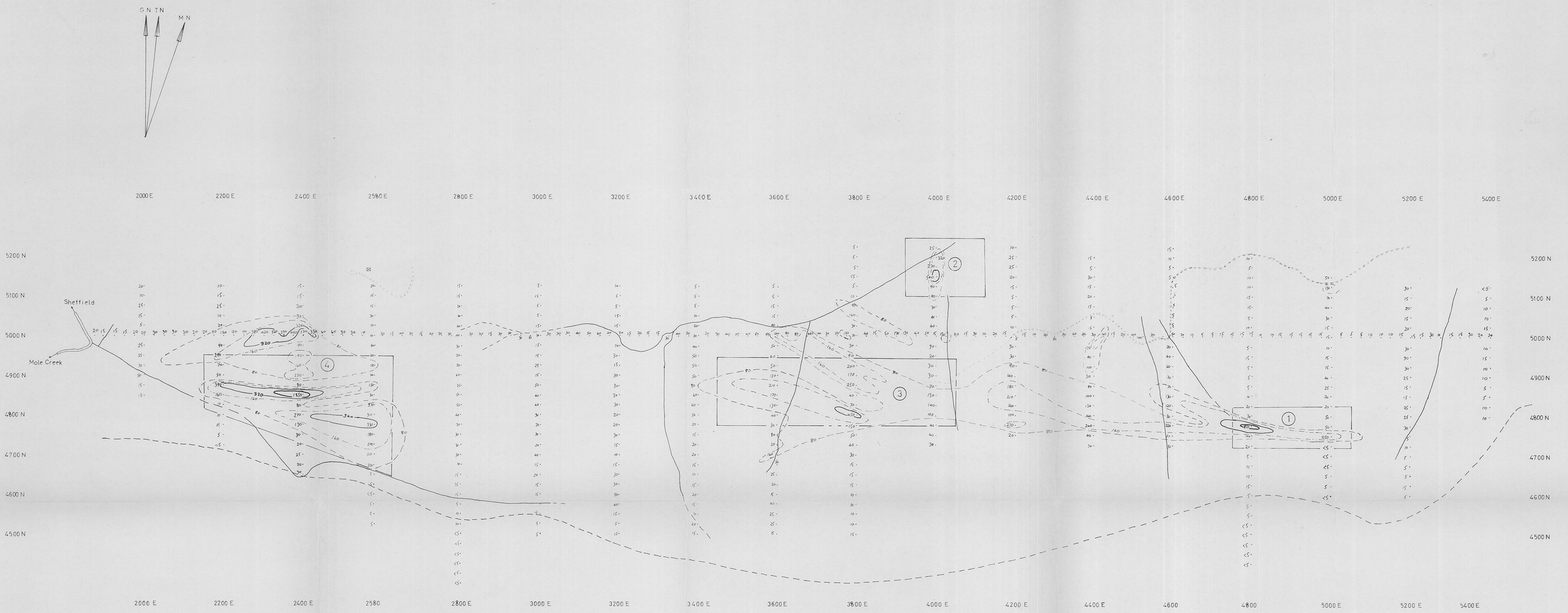

SCALE 1:5000

0 25 50 100 200 400 600 800 1000 metres

502010

5 cm

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E.L. 7/73 PARADISE, TASMANIA. GOG RANGE PROSPECT

SOIL SAMPLE RESULTS

COPPER

COMPILED RCB	FILE	PLAN No.
DRAFTED		5211
CHECKED	DATE	

A1 SIZE

2000 E 2200 E 2400 E 2580 2800 E 3000 E 3200 E 3400 E 3600 E 3800 E 4000 E 4200 E 4400 E 4600 E 4800 E 5000 E 5200 E 5400 E

5200 N
5100 N
5000 N
4900 N
4800 N
4700 N
4600 N
4500 N

Sheffield
Mole Creek

1
2
3
4

SCALE 1:5000

0 25 50 100 200 400 600 800 1000 metres

502011

5 cm

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E.L. 7/73 PARADISE, TASMANIA GOG RANGE PROSPECT

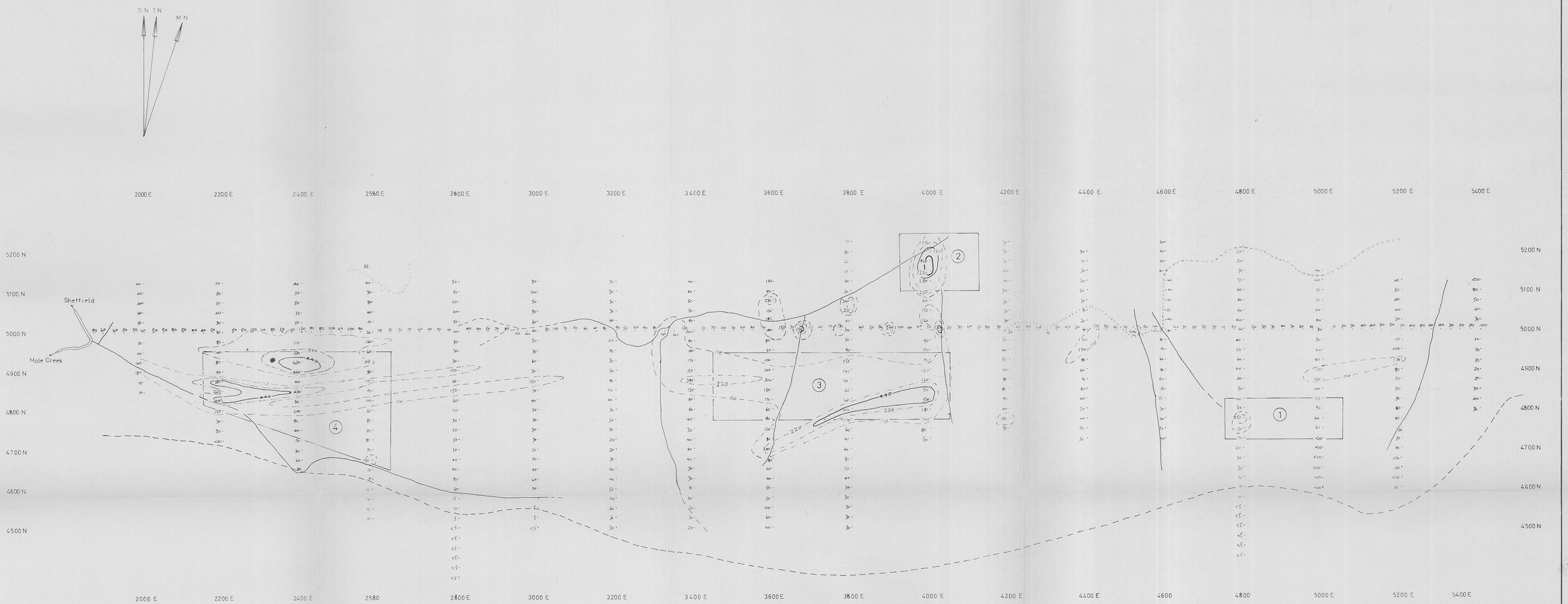
SOIL SAMPLE RESULTS

LEAD

COMPILED R.C.B.	FILE	PLAN No.
DRAFTED		5212
CHECKED	DATE	

038

A1 SIZE



SCALE 1:5000

0 25 50 100 200 400 600 800 1000 metres

502012

5 cm

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E.L. 7/73 PARADISE, TASMANIA. GOG RANGE PROSPECT

SOIL SAMPLE RESULTS

ZINC

COMPILED R.J.B.	FILE	PLAN No.
DRAFTED		5213
CHECKED	DATE	

039

A1 SIZE

2000 E 2200 E 2400 E 2580 E 2800 E 3000 E 3200 E 3400 E 3600 E 3800 E 4000 E 4200 E 4400 E 4600 E 4800 E 5000 E 5200 E 5400 E

5200 N
5100 N
5000 N
4900 N
4800 N
4700 N
4600 N
4500 N

Sheffield
Mole Creek

① ② ③ ④

SCALE 1:5000

0 25 50 100 200 400 500 800 1000 metres

502013

5 cm

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E.L. 7/73 PARADISE, TASMANIA GOG RANGE PROSPECT

SOIL SAMPLE RESULTS

CX COPPER

COMPILED RCB	FILE	PLAN No.
DRAFTED		5214
CHECKED	DATE	

040

A1 SIZE

G.N.
T.N.
M.N.

2000 E 2200 E 2400 E 2580 2800 E 3000 E 3200 E 3400 E 3600 E 3800 E 4000 E 4200 E 4400 E 4600 E 4800 E 5000 E 5200 E 5400 E

5200 N
5100 N
5000 N
4900 N
4800 N
4700 N
4600 N
4500 N

Sheffield
Mole Creek

1
2
3
4

SCALE 1:5000

0 25 50 100 200 400 600 800 1000 metres

502014

5 cm

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E.L. 7/73 PARADISE, TASMANIA GOG RANGE PROSPECT

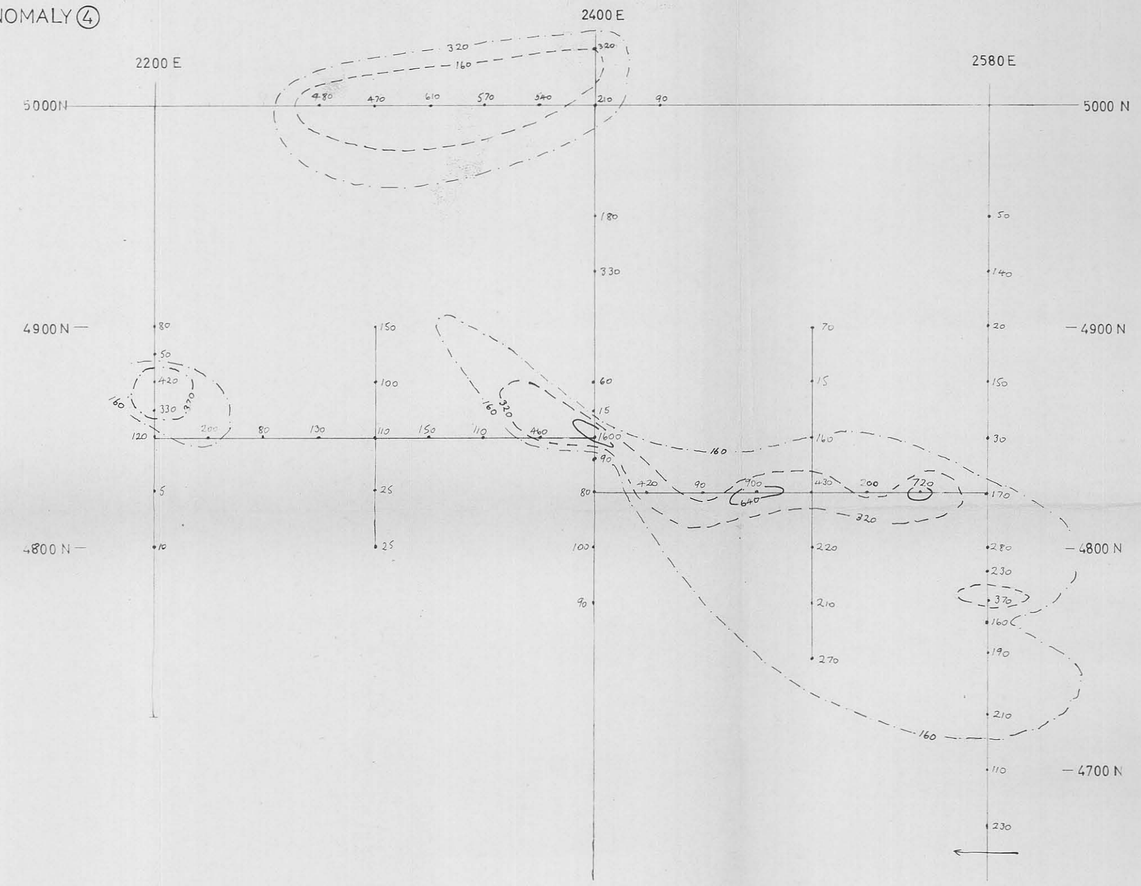
SOIL SAMPLE RESULTS

CX ZINC

COMPILED RCB	FILE	PLAN No.
DRAFTED		5215
CHECKED	DATE	

041

ANOMALY ④



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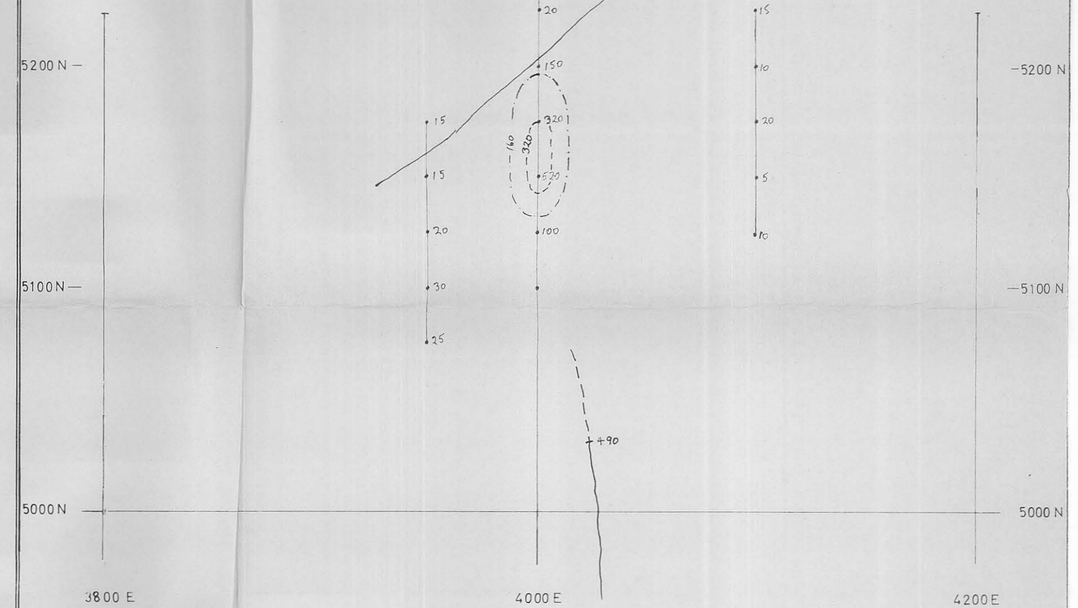

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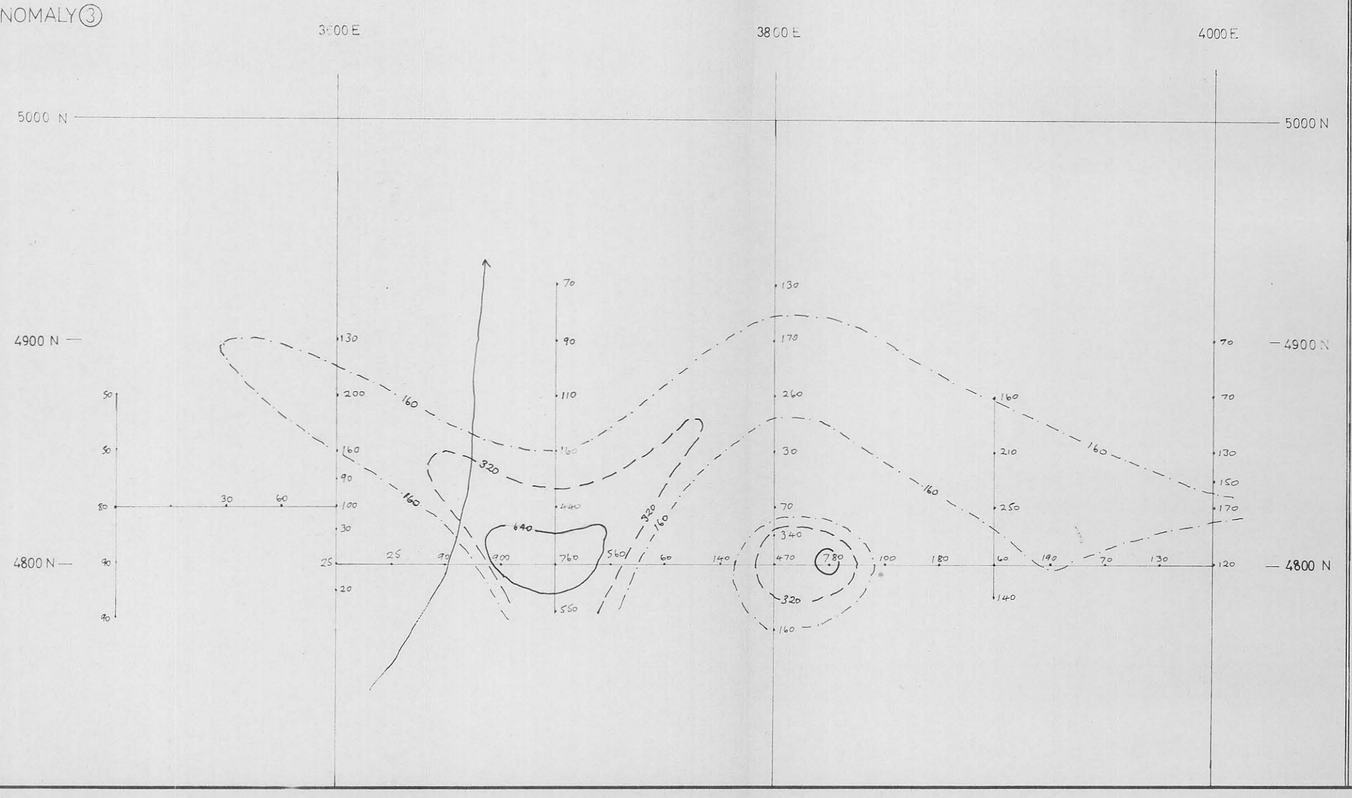

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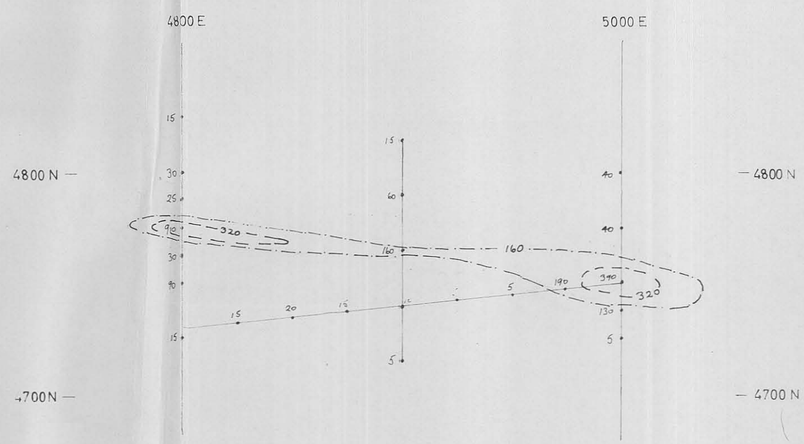

SCALE 1: 2000

0 25 50 100 200 metres

5 cm

502015

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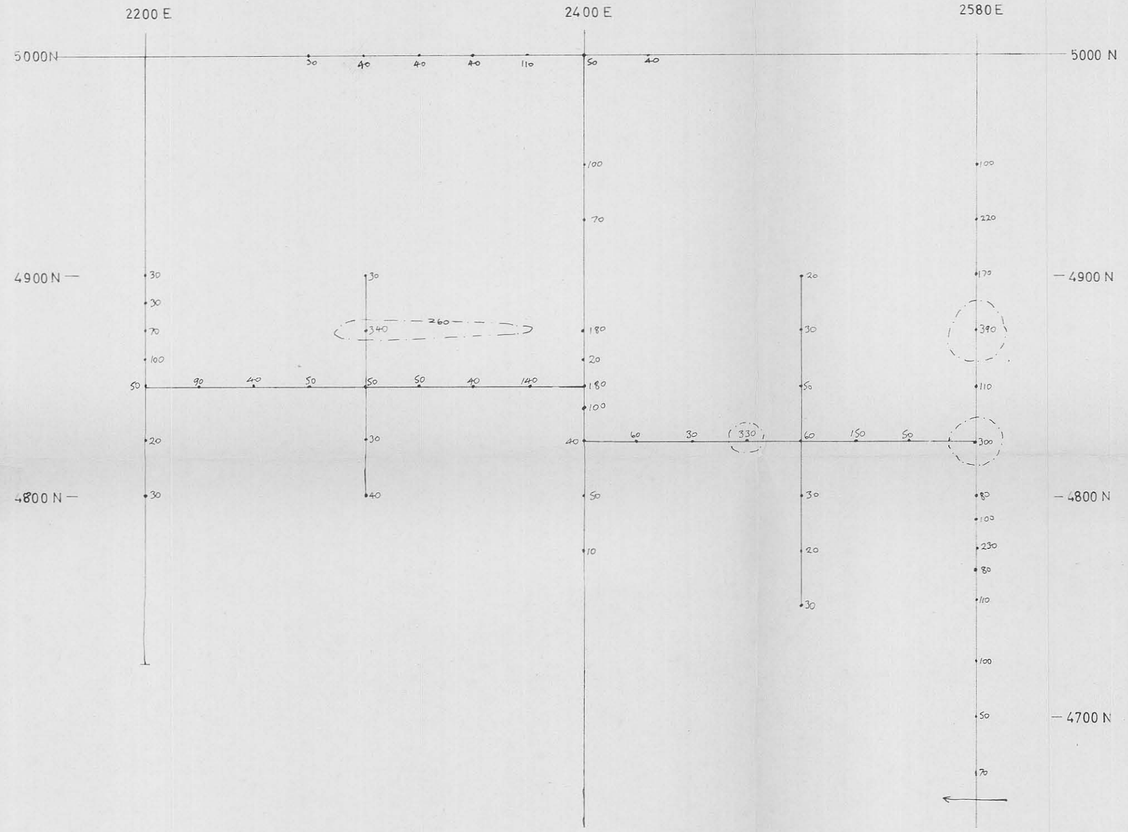
E L 7/73 PARADISE, TASMANIA: GOG RANGE PROSPECT

FOLLOW-UP SOIL SAMPLE RESULTS COPPER

COMPILED RGB	FILE	PLAN No
DRAFTED		5217
CHECKED	DATE MAY, 1975	

042

ANOMALY ④



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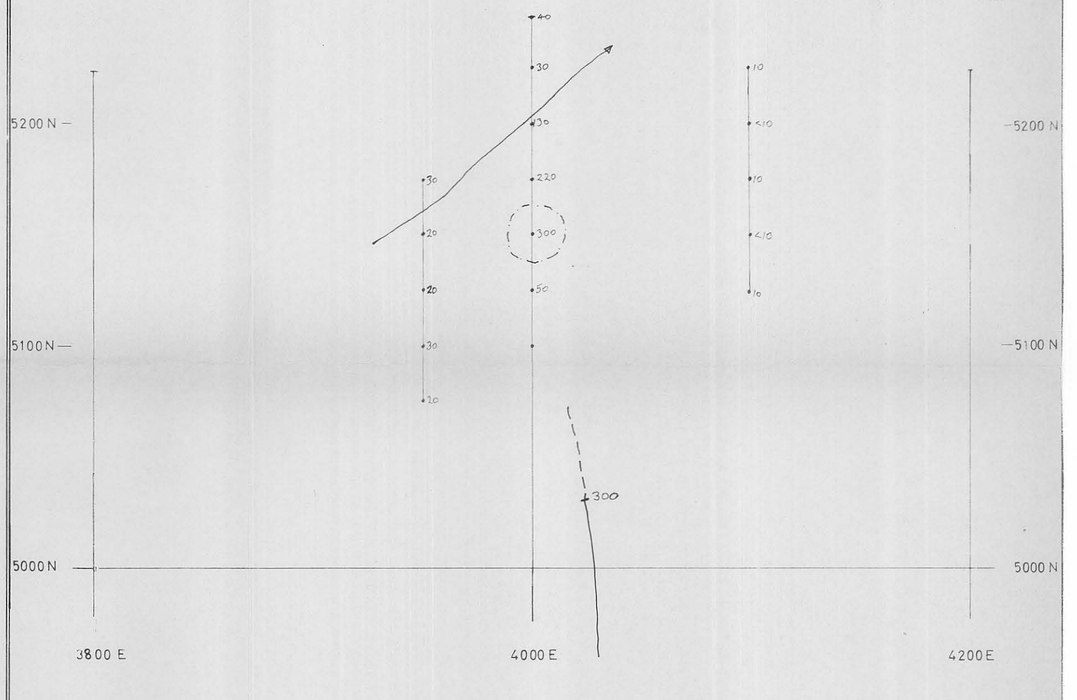

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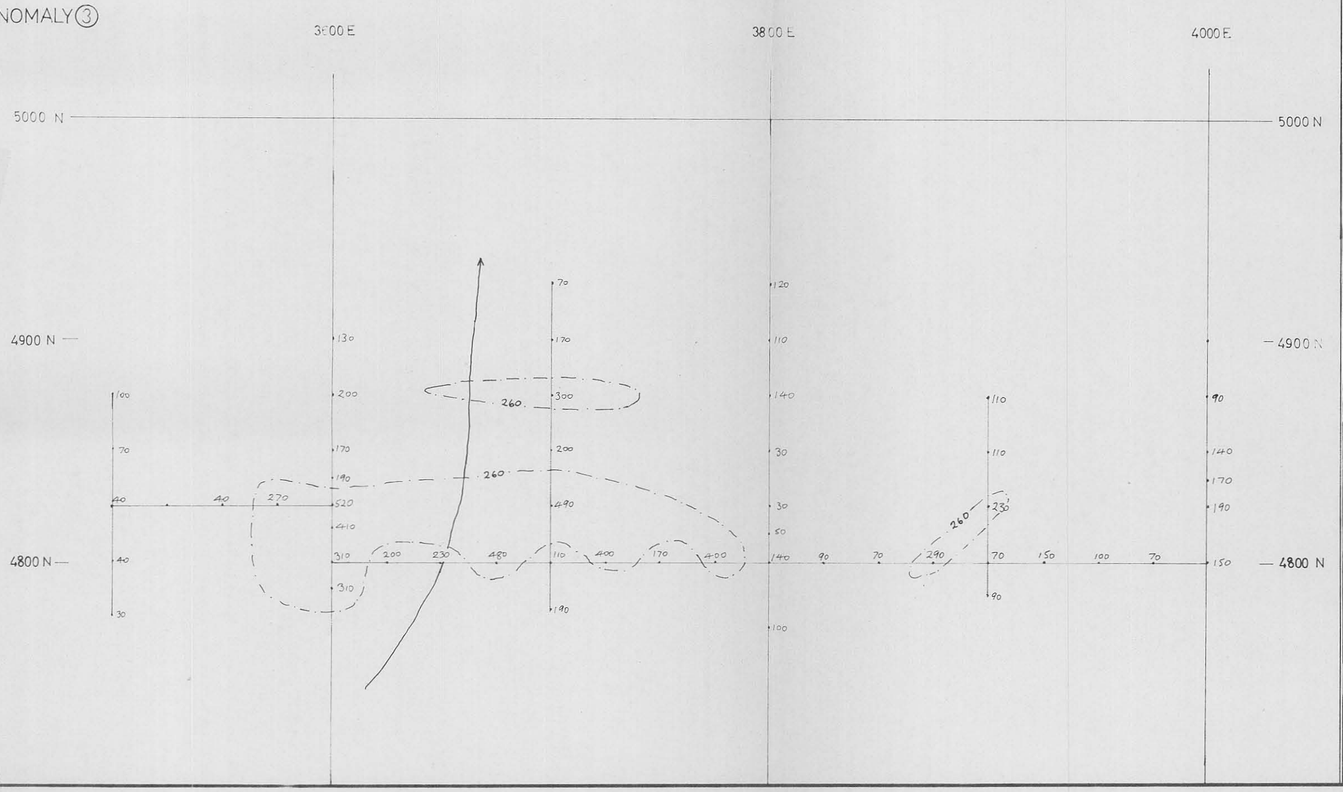

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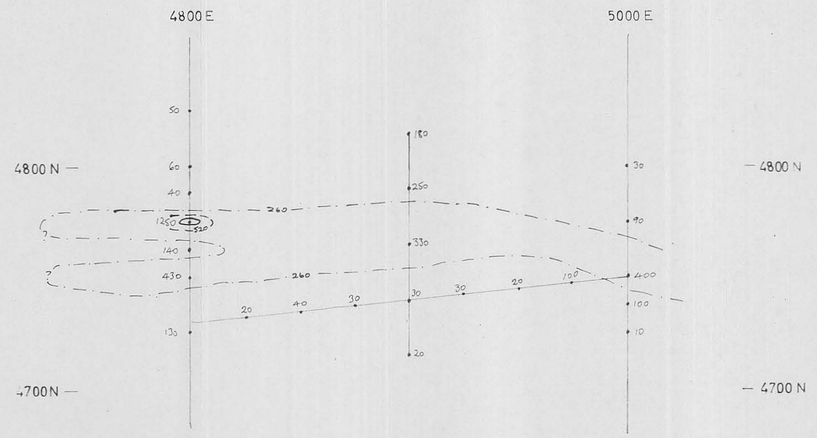

SCALE 1: 2000

0 25 50 100 200 metres

5 cm

502016

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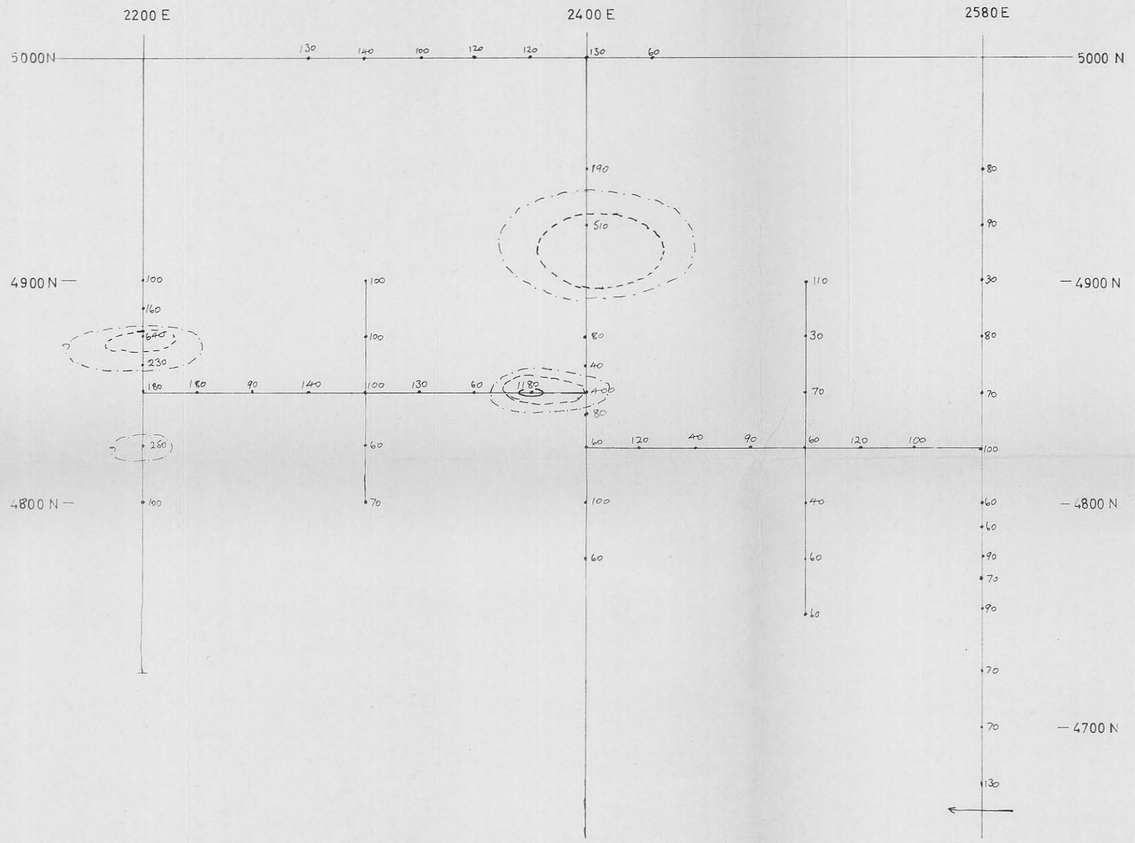
EL 7/73 PARADISE, TASMANIA: GOG RANGE PROSPECT

FOLLOW-UP SOIL SAMPLE RESULTS LEAD

COMPILED: RGB	FILE	PLAN N°
DRAFTED:		5218
CHECKED:	DATE MAY, 1975.	

ANOMALY ④



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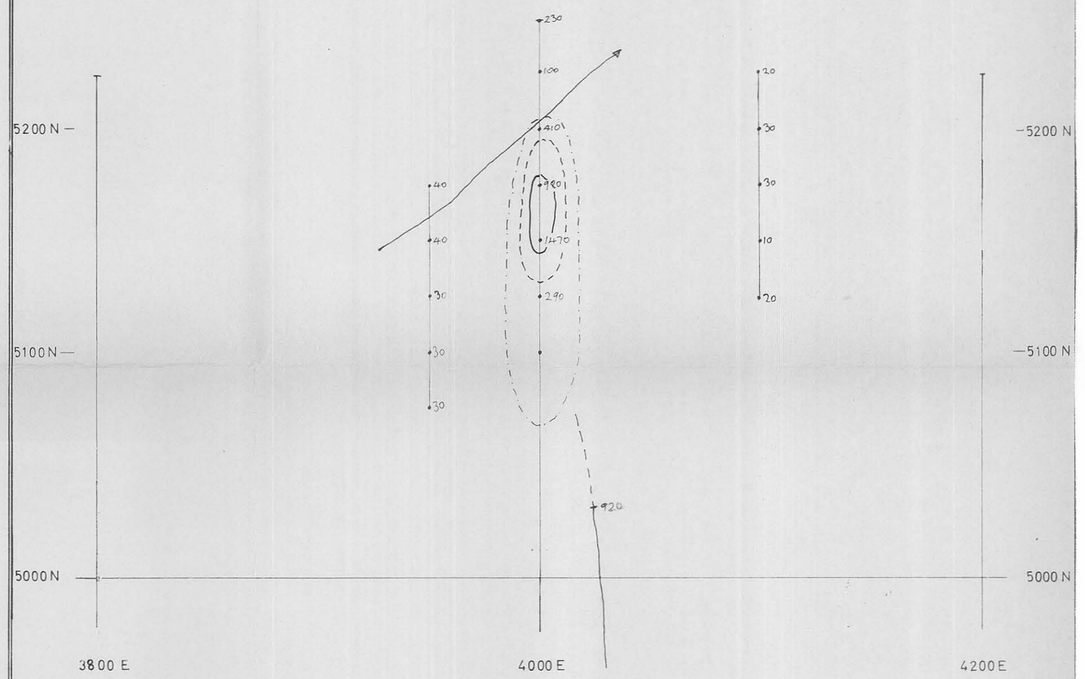

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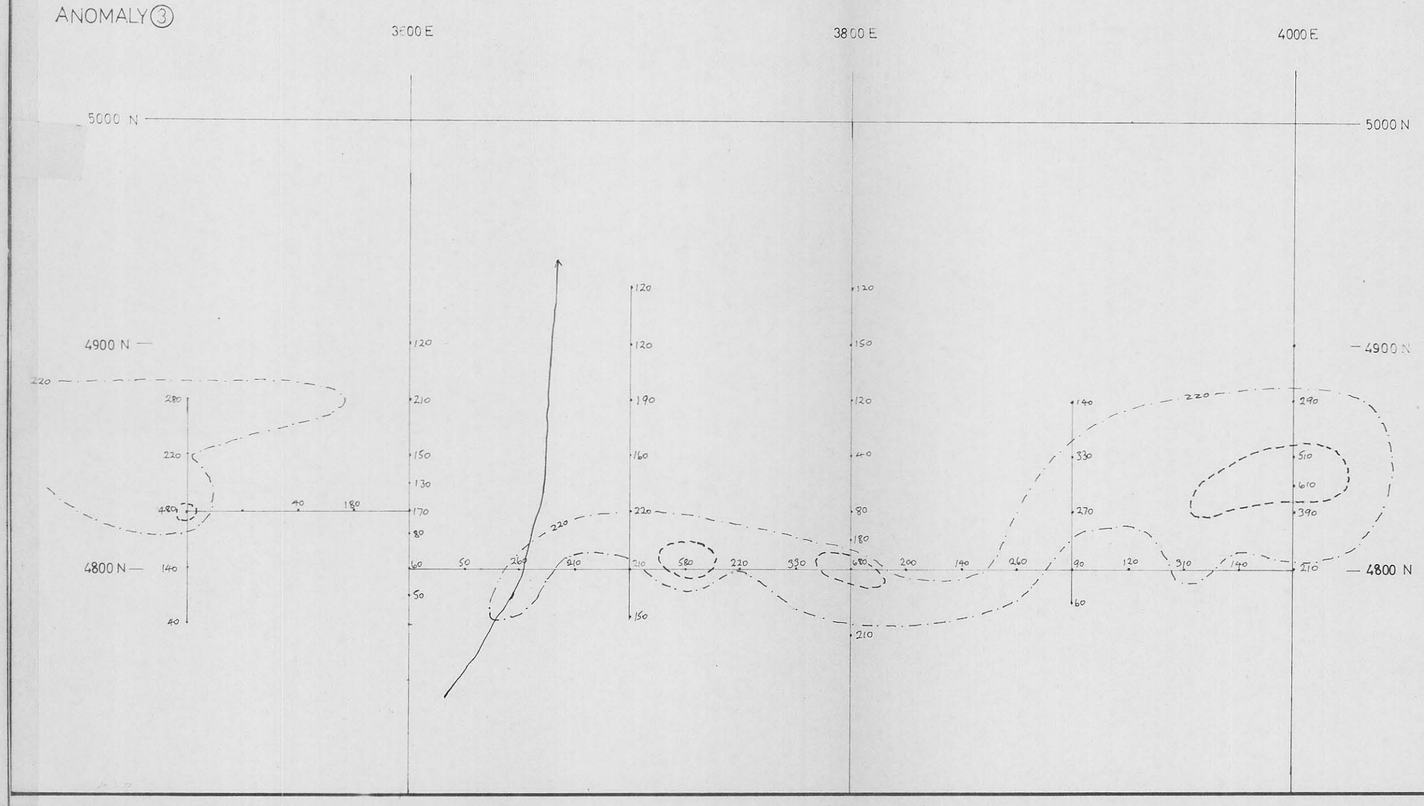

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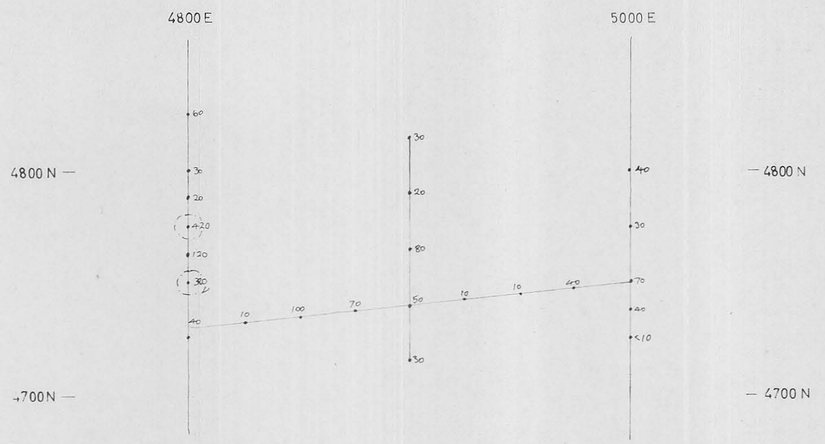

SCALE 1: 2000

0 25 50 100 200 metres

5 cm

502017

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EL 7/73 PARADISE, TASMANIA: GOG RANGE PROSPECT

FOLLOW-UP SOIL SAMPLE RESULTS ZINC

COMPILED RGB	FILE	PLAN No
DRAFTED		5219
CHECKED	DATE MAY, 1975	

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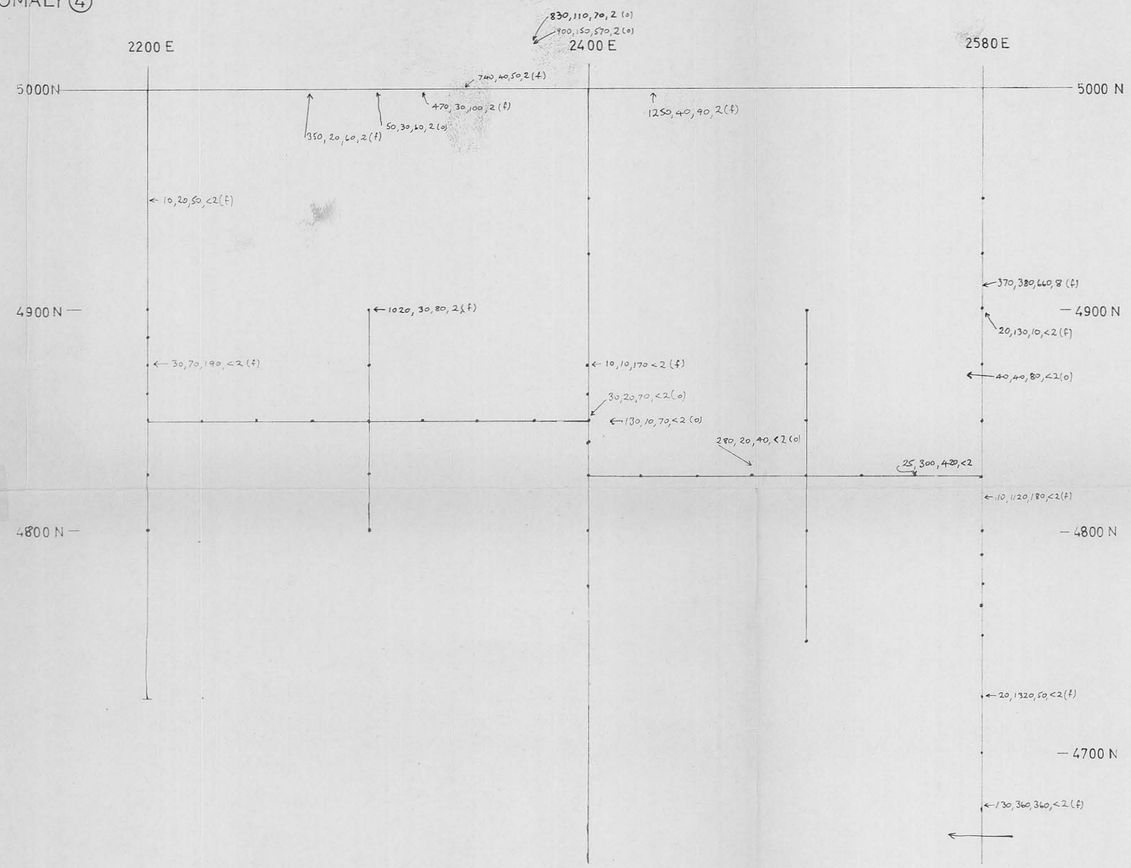

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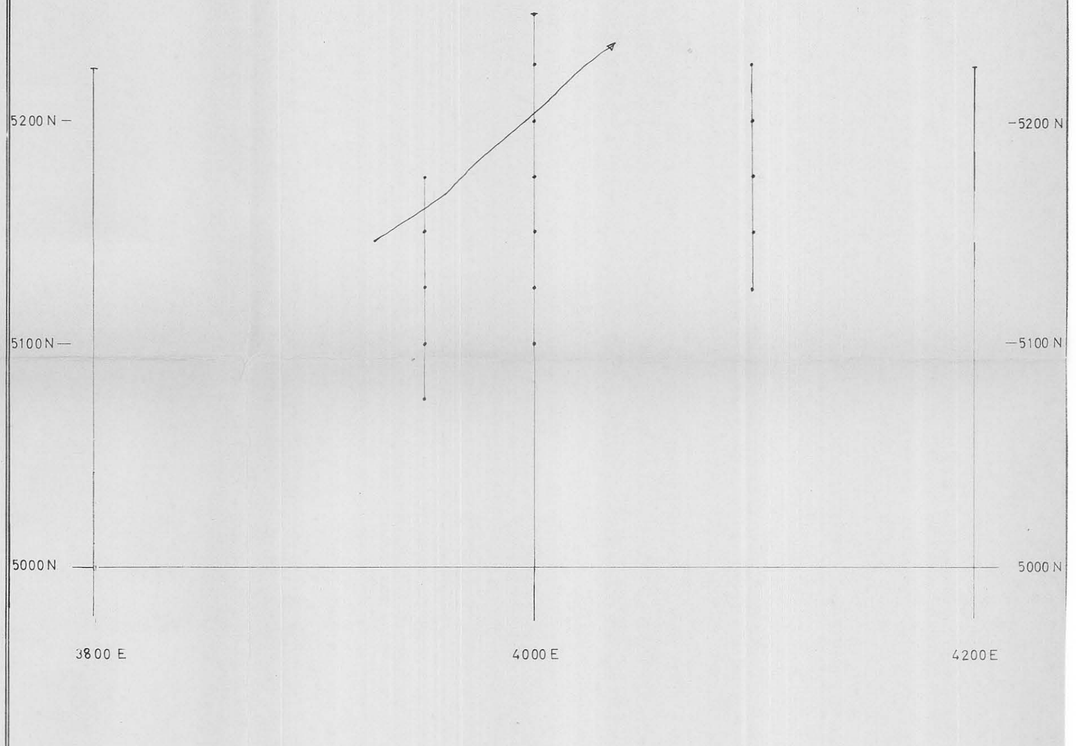

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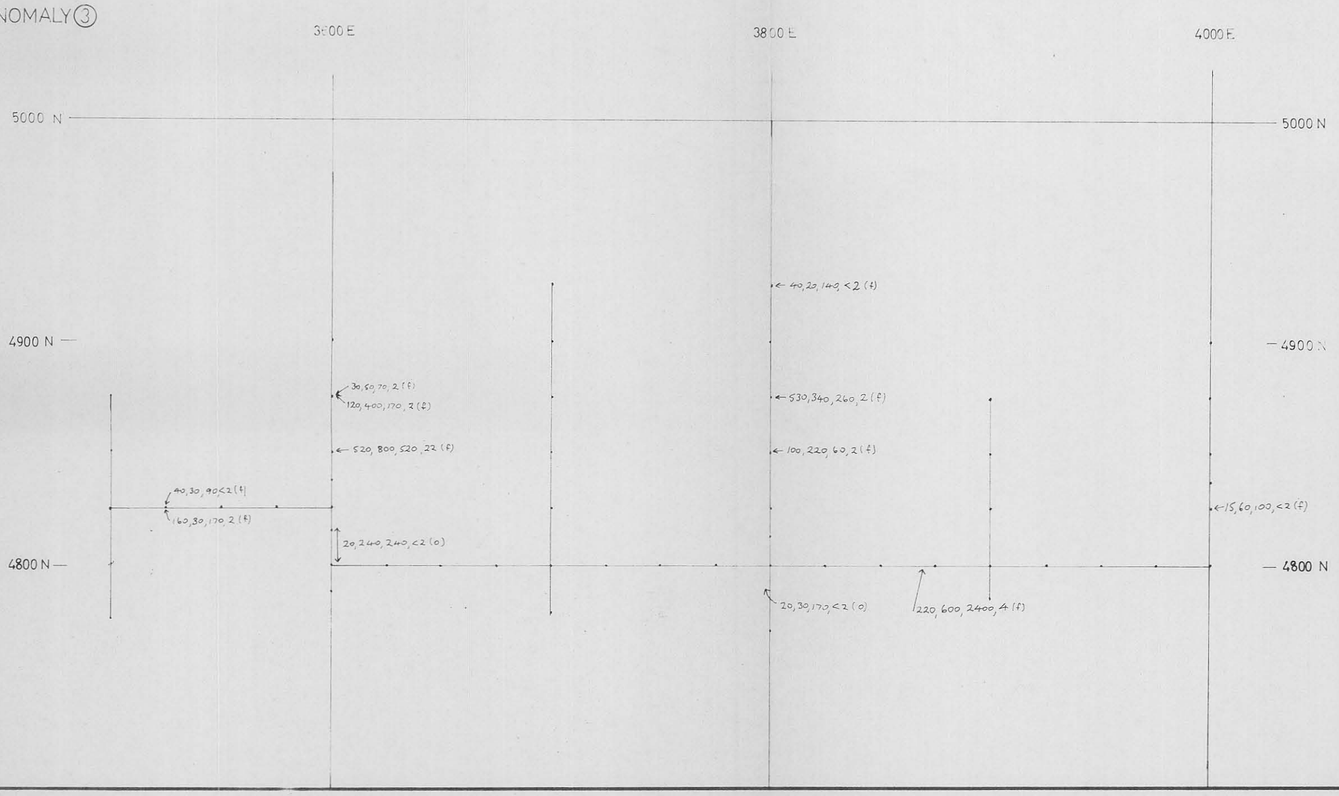

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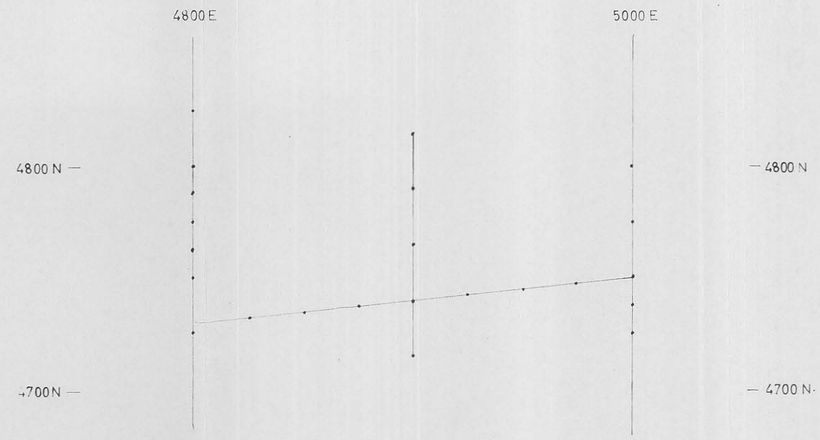

SCALE 1: 2000

0 25 50 100 200 metres

5 cm

502018

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75-1118.

E.L 7/73 PARADISE, TASMANIA: GOG RANGE PROSPECT

FOLLOW-UP ROCK SAMPLE RESULTS

COMPILED RGB	FILE	PLAN No
DRAFTED		5220
CHECKED	DATE MAY, 1975	