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UNION CORPORATION (AUSTRALIA) PTY. LIMITED. N.J.W. MARCH, 1982

FINAL REPORT

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E.L. 11/77

FINAL REPORT

1. ATTACHED

- Appendix 1 - Table 1
- Plan No. 1 - Scale 1:50,000

2. INTRODUCTION AND WORK COMPLETED

Geological reconnaissance, mapping and sampling, percussion and diamond drilling were carried out mainly in the Mount Paris area where results were of a low order. These activities have already been reported in a six monthly report of October, 1981.

A stream sediment programme delineated several targets which were followed up by geological reconnaissance investigations the results of which are discussed below.

3. RESULTS

Plan No. 1 shows the localities of samples collected during follow-up. These are listed on Table 1, Appendix 1.

Two samples collected from the granite/sediment contact at the head of Hope Creek contain 600 ppm tin and another downstream has 420 ppm tin. There is also some enrichment in tungsten, up to 50 ppm, in samples collected in this area which has, in the past, been sluiced.

In the north east several narrow quartz greisen veins may be the source of tin in stream sediments. The granites and aplite dykes contain 35 ppm tin or less.

Most stream sediment anomalies appear to be related to known greisen vein tin deposits e.g. UCT 828 and the Rattler lodes in the east. These have little potential as economic, large scale depsoits.

4. CONCLUSIONS AND RECOMMENDATION

a) There are numerous small scale greisen vein style tin deposits most of which are the source of respective stream sediment anomalies.

b) The granites at the granite/sediment contact near Welcome prospect are anomalous in terms of tin and tungsten. This area is of low to moderate interest.

No further work should be carried out.

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N.J. WINNALL

APPENDIX 1

TABLE 1

SAMPLE ANAYLES AND LOCALITIES

Sampe No UCT Prefix	Sn	W	Mo	Cu	Pb	Zn	DESCRIPTION	LOCALITY
	(Anaylses in ppm unless otherwise stated)							
1864	30	30	<4	2	15	30	Granite/adamellite, medium grained, equigranular	Main Creek tributary
1865	20	40	<4	<2	20	40	Quartz greisen vein, 10cm wide	" " "
1866	25	30	<4	<2	15	30	Aplite, float	" " "
1867	35	30	<4	<2	15	30	Aplite dyke, 2metres wide	" " "
1868	15	40	<4	2	10	10	Quartz greisen, float	" " "
1869	40	20	<4	<2	10	25	Quartz porphyry, float	" " "
1874	15	20	<4	<2	15	20	Granite/adamellite, equigranular	Union Jack Creek
2017	30	20	2	5	25	30	Granite, muscovite-biotite, porphyritic	Hope Creek
2018	165	20	<2	15	170	15	Quartz	"
2019	<5	<10	2	10	40	40	Aplite	"
2020	30	<10	2	20	10	90	Granite, equigranular	"
2021	30	10	2	<2	10	20	Granite, biotite-muscovite, medium grained	Nuggety Creek
2022	30	10	5	2	10	20	Granite, muscovite-biotite, porphyritic	Hope Creek
2023	5	<10	2	2	5	<2	Quartz, float	"
2024	420	<10	<2	85	10	40	Granite, porphyritic	"
2027	220	10	2	15	15	35	Aplite	Laffer Creek
2028	140	<10	2	5	15	70	Greisen	"
2053	605	60	<2	5	20	40	Granite/adamellite, muscovite, medium grained, float	Welcome
2054	610	50	<2	10	20	45	Granite/adamellite,muscovite, medium grained, float	"
2055	140	50	<2	10	20	20	Aplite, float	"
2056	70	30	2	5	40	20	Granite/adamellite,muscovite, medium grained	"
2057	50	30	5	5	20	25	Granite/adamellite,porphyritic, grey, float	"
2058	55	30	2	10	25	30	Granite/adamellite,medium grained, grey	"
2059	60	40	5	5	30	30	Granite/adamellite,medium grained, suboutcrop	"

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REFERENCE

- Geological boundary
- Geological boundary – inferred
- 80 — Strike & dip
- Diamond drill borehole with number
- Percussion drill boreholes that intersected granite
- Percussion drill boreholes that failed to intersect granite, some with minor greisen or granite as indicated, drilled to a maximum depth of 40metres (more commonly 20-30 metres)
- Sample locality — Molybdenum in parts per million; Tin in parts per million or when written 0·17 equals percent tin; Sample number; Tungsten in parts per million; Sample width in metres where measured, or float sample; (copper, lead, zinc) in ppm
- Groves (1972) sample with assay in percent tin
- Costean
- Adit
- Shaft
- River, stream with stream sediment sample location & number
- Dam
- Road, track
- COX — Mineral prospect
- ML 77M/77 — Mineral Lease with number
- Exploration Licence boundary
- cpy, py — Chalcopyrite, pyrite occurence
- Magnetite in panned concentrate
- Flourescent minerals (probably) zircon in panned concentrate
- 392 T/S — Thin section sample locality

STREAM SEDIMENT GEOCHEMISTRY

TOTAL TIN CONTENT OF STREAM SEDIMENT SAMPLES CALCULATED FROM ASSAYS OF PANNED CONCENTRATES

Below limit of detection | <1 | 1 – 50 | > 50 ppm Sn

MULTI – ELEMENT PLOT, MINUS 80 MESH FRACTION

KEY: Sn, W, Mo, Cu, Zn, Pb

1 × threshold; 2 × threshold; 3 × threshold; 4 × threshold & greater

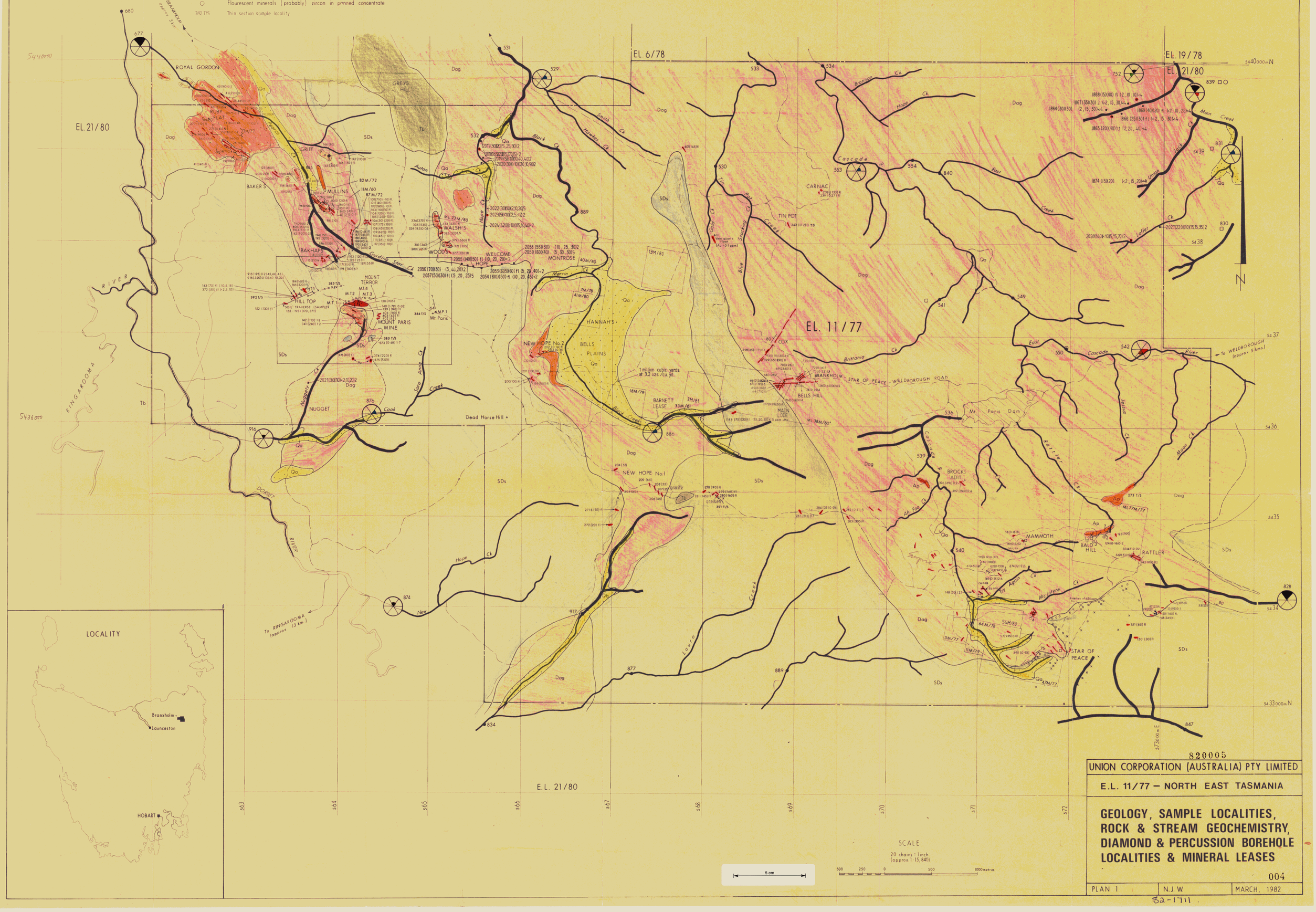
THRESHOLD VALUES

	MATHINNA BEDS	ADAMELLITE / ALKALI GRANITE
Sn	210	2975
W	20	104
Mo	10	9
Cu	39	115
Pb	87	57
Zn	135	162

LEGEND

PLEISTOCENE & RECENT	Qa	Alluvium or alluvial material carrying cassiterite (dotted)
TERTIARY	Tb	Basalt
		Greisen, quartz + tourmaline, pegmatite
UPPER DEVONIAN – LOWER CARBONIFEROUS		Kaolinised granite – worked to depths of 5metres or less
		Kaolinised granite – worked to depths of 5metres or more
	Dag / Ap	Adamellite / alkali granite – fine to coarse-grained biotite-muscovite granite mainly equigranular with some porphyritic types (Dag) & minor aplite (Ap)
DEVONIAN – SILURIAN – (?) ORDOVICIAN	SDs	Mathinna Beds – mainly siltstones and argillaceous sandstones

NOTE : Major Geology after Groves (1972)



LOCALITY

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UNION CORPORATION (AUSTRALIA) PTY LIMITED

E.L. 11/77 – NORTH EAST TASMANIA

GEOLOGY, SAMPLE LOCALITIES, ROCK & STREAM GEOCHEMISTRY, DIAMOND & PERCUSSION BOREHOLE LOCALITIES & MINERAL LEASES

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PLAN 1	N.J.W	MARCH, 1982

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