



**STELLAR RESOURCES LIMITED**  
Rubicon MinTech Ventures Pty. Ltd.

**EL 1/2004 RAMSAY RIVER**

**ANNUAL REPORT FOR THE PERIOD**  
**10 JANUARY 2012 – 9 JANUARY 2013**

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**Mineral Resources Tasmania, a Division of the**  
**Department of Infrastructure, Energy and Resources - Hobart**  
**Stellar Resources Limited - Melbourne**

## ABSTRACT

This Annual Report for EL1/2004 Ramsay River covers the period from 10 January 2012 to 9 January 2013. The licence area was reduced from 1/07/2012 from 71km<sup>2</sup> to 41km<sup>2</sup> with most of the area south of 5406000mN (GDA94) being relinquished.

The Ramsay River licence area contains historical occurrences of lead-silver-zinc, tin, gold and copper. Previous exploration in the area includes extensive stream sediment sampling, some soil and rock chip sampling, geological mapping, a range of geophysical surveys and several drill holes, which have revealed numerous anomalies. As many anomalies remain untested or inadequately drilled, the licence is considered to remain prospective for the discovery of significant base metal mineralisation, with tin being the main metal of interest at the current time.

In the Melbourne office, the collection of existing local and regional geological, geochemical and geophysical data has now largely been completed, with relevant follow-up map production.

Field work for the period consisted of an extension to the 2011 geochemical soil sampling programme at electromagnetic target RY02 at Butler's Road, to test for further tin mineralisation.

Expenditure on EL1/2004 for 2012 totalled \$47,209.

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## 1. INTRODUCTION

### 1.1. EXPLORATION RATIONALE & GEOLOGICAL SETTING

The licence covers the NE part of the Meredith Granite, which is recognised to have similar petrochemistry to the Heemskirk suite. The NE part of the Meredith Granite is considered to extend at shallow depth northeast, under EL 1/2004, and that the porphyry dykes at Mt Bischoff are attributed to the presence of granite at shallow depth. The margins of the Meredith granite in this region flank a series of major magnetic anomalies. The historic Magnet (Pb-Ag-Zn) Mine is on the northeast boundary of the EL, while the Mt Bischoff (Sn) and Cleveland (Sn-Cu) Mines lie within 3km. There are numerous small tin and base metal occurrences within the licence area. Base metal vein style mineralisation appears to be hosted by Precambrian and Cambrian volcanosedimentary sequences. Previous drilling by the Tasmanian Mines Department and Pasminco Limited has shown ultramafic rocks to be present in the area.

There is potential for additional base metal mineralisation adjacent to the old Magnet Mine both at depth and along strike. The area is also highly prospective for skarn deposits similar to Bischoff and Cleveland and there is thought to be some potential for skarn hosted nickel sulphides of the Avebury style. Anomalous tin soil geochemistry is evident in the Butler's Road area at the northernmost exposure of the Meredith granite highlighting this area for possible significant mineralisation.

#### 1.1.1. Geological Setting

Ramsay River is focussed on a major magnetic anomaly flanking the north-eastern corner of the Devonian Meredith Granite. Apart from the Meredith Granite, underlying lithologies comprise Neoproterozoic and Palaeozoic rocks of the Dundas Trough together with allochthonous Cambrian ultramafic bodies.

A block of Oonah Formation sediments surrounds the Mt Bischoff Mine and extends beneath Tertiary basalt to the east. The Neoproterozoic Oonah formation is composed of pale grey quartz sandstones, siltstones, shales, dolomites and minor lavas and volcanoclastics.

The Cleveland–Waratah Association, possibly Early Cambrian age, is largely composed of basalt lavas, basaltic volcanoclastics, siltstones and mudstones. The Cleveland mine sequence includes basalt, dolomite and chert units.

Mixed intermediate to mafic volcanics dominate the area to the west of Arthur Dam. These are high-magnesian andesites and low-titanium tholeiite basalts and were intersected in each of two diamond drill holes completed at Arthur Dam by Pasminco Exploration Limited (Pasminco) in 1997. Best assay result was 3m @ 2.4%Zn and 2.25%Pb in AD4.

To the south of Arthur Dam, some 5km along Betts Track, boulder outcrops are a matrix-supported conglomerate with clasts of pyroxene-feldsparphyric, chloritic lava, volcanoclastics and red-brown sandstone. This area is termed the Betts Basin and is unique to the area. It is possible the lithologies are related to the high magnesian andesites in the area.

A serpentinised ridge of ultramafic rock lies to the east of the mafic volcanic units. It extends NNE from its southern contact with the Meredith Granite near Wilson River where previously alluvial deposits of osmiridium were worked. This ultramafic body is considered thrust emplaced. Drilling by the Tasmanian Mines Department at Arthur Dam (Brown 1986) intersected the ultramafics in drill hole AD001 over an interval of 60m from 95m. The ultramafic is coincident with the strong magnetic anomaly that surrounds this part of the Meredith Granite. The anomaly is believed related to the granite's metamorphic aureole. However this magnetic anomaly has a similar appearance and amplitude to the anomalies defining the Heazlewood and Mt Stewart Ultramafic Complexes, located west of Ramsay River and also the Huskisson Ultramafic Complex flanking the Huskisson Syncline to the south.

Preliminary data from 3D geological modelling by a Tasmanian Government funded cooperative research project indicates the ultramafic body extends around the NE lobe of the Meredith Granite and then, extends southwards under shallow cover of Tertiary basalt to join with the Huskisson Ultramafic Complex. There is potential for skarns hosted by the ultramafics to lie within this significant aeromagnetic anomaly.

The historic Magnet Mine is located on the northern boundary of the Ramsay licence. It is a lode style base metal and silver deposit (0.64Mt @ 7.3%Zn, 7.3%Pb and 427 g/t Ag) hosted by a structurally emplaced mafic/ultramafic body known as the Magnet Dyke. The lower levels of the old mine (below 8 level) are within EL1/2004 while the postulated feeder structure trends southwest into the EL.

The northwest corner of the project area covers part of the Whyte River Complex of mafic and ultramafic rocks. This NE trending belt is generally low lying and tends to be covered by Quaternary alluvials as at the former Luina townsite. Silurian-Devonian Eldon Group shallow marine sandstones and siltstones are recognised in outcrop to the NE and south of Luina.

The NE corner of the Meredith Granite is known to extend as a ridge at shallow depth and underlie the historic Mt Bischoff porphyry and skarn tin deposit. This results in a considerable area of interpreted ultramafic rock being in proximity to the mineralising granite that is prospective for skarn style nickel sulphide deposits. BHP drilled hole BR1 into an electromagnetic/geochemical anomaly (RY01) on 'Butler's Hill' near Butler's Road in 1987. The 32m hole penetrated a roof pendant structure, intersecting base metal and tin mineralisation from 1m from the surface, with parts of an 8.5m zone assaying up to 0.18% tin, 4.42% zinc, 0.91% lead & 74g/t silver. RY01 is a lesser tenor anomaly than EM RY02 which lies 900m to the northeast. RY02 has a significantly larger and higher grade tin soil geochemical anomaly and mapped alteration/greisenisation zone. Stellar expanded upon a 1984 Comstaff soil sampling programme over the RY01 and RY02 anomalies in 2011 with a promising expansion of anomalous tin for the RY02 area.

## 1.2. LICENCE

TENEMENT NUMBER: 1/2004

TENEMENT NAME: Ramsay River

TENEMENT LOCATION: Located 60km southwest of Burnie, with main road access from the Corinna-Waratah Road approximately 10km west of the Murchison Highway (Figure 1). The licence covers 41km<sup>2</sup> from the Magnet Mine area west of Waratah township, south to 5405000mN (GDA94) which is 1km south of the Corinna-Waratah Road in the vicinity of the Mt Ramsay Track. Much of the EL area is Crown Land, covered by patches of rainforest and forestry, tea-tree scrub and button grass plains. Access is provided by the Corinna Road, numerous logging and old exploration tracks, and walking tracks. Much of the area is accessible only by foot.

TENEMENT YEAR: 10 February 2012 to 9 February 2013.

TENEMENT HOLDER: Rubicon MinTech Ventures Pty Ltd., a wholly owned subsidiary of Stellar Resources Ltd.

REPORTING PERIOD: 10 January 2012 to 9 January 2013.

### 1.3. LOCATION OF LICENCE

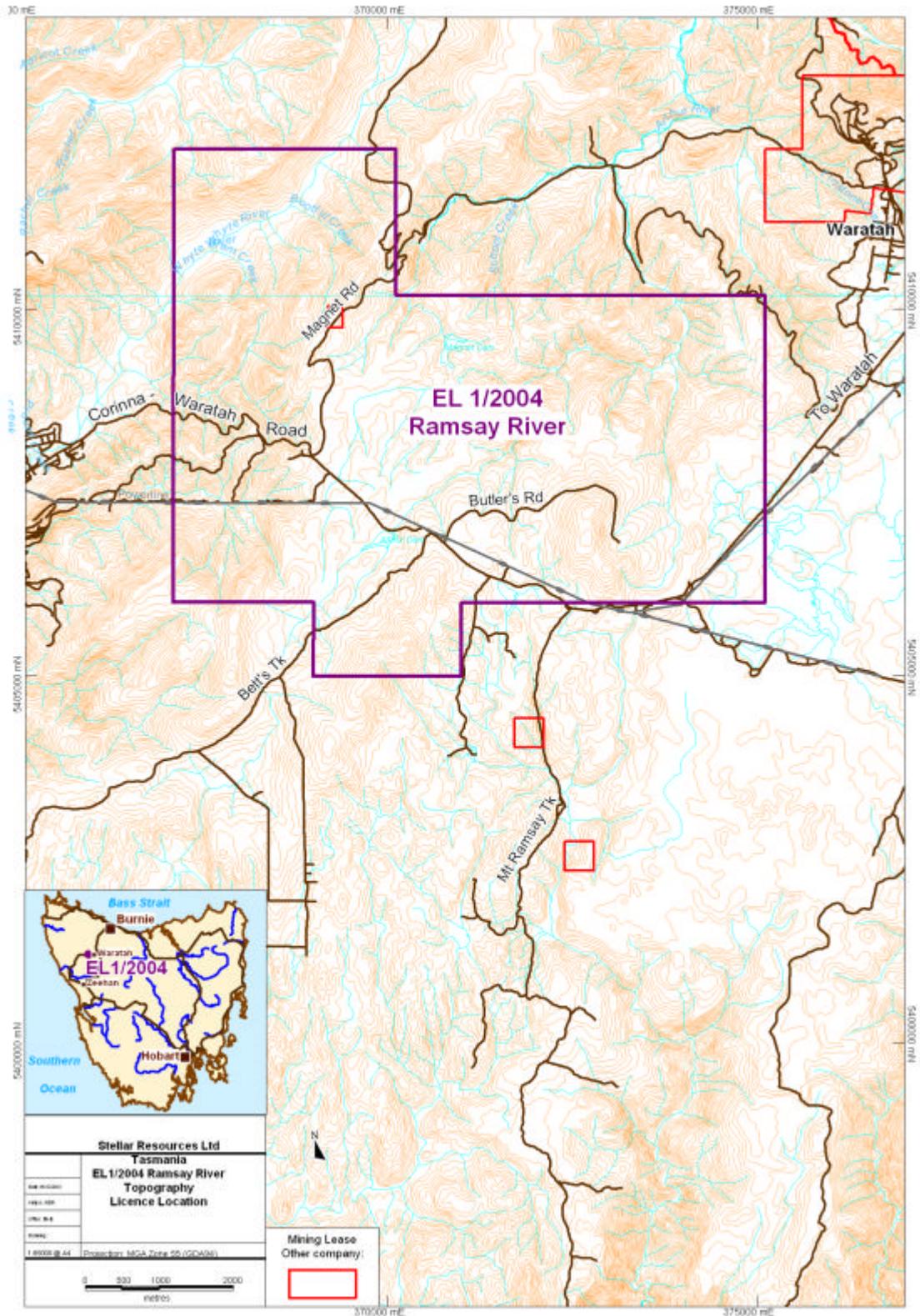


Figure 1. EL1/2004, Location Map.

## 1.4. LAND TENURE

### SCHEDULE

LAND DISTRICT OF RUSSELL  
VICINITY OF RAMSAY RIVER 8KM SW OF WARATAH  
MUNICIPALITY OF WARATAH / WYNYARD  
EXPLORATION LICENCE 1/2004 41km<sup>2</sup>  
RUBICON MIN TECH VENTURES PTY. LTD.

Commencing at the northwest corner at grid coordinates 367 112 mE 5 412 184 mN, thence grid east to 370 112 mE, grid south to 5 410 184 mN, grid east to 375 112 mE, grid south to 5 406 000 mN, grid west to 371 000 mE, grid south to 5 405 000 mN, grid west to 369 000 mE, grid north to 5 406 000 mN, grid west to 367 112 mE and finally grid north to the point of commencement.

Coordinate datum – GDA94, MGA Zone 55.

### EXCLUSIONS

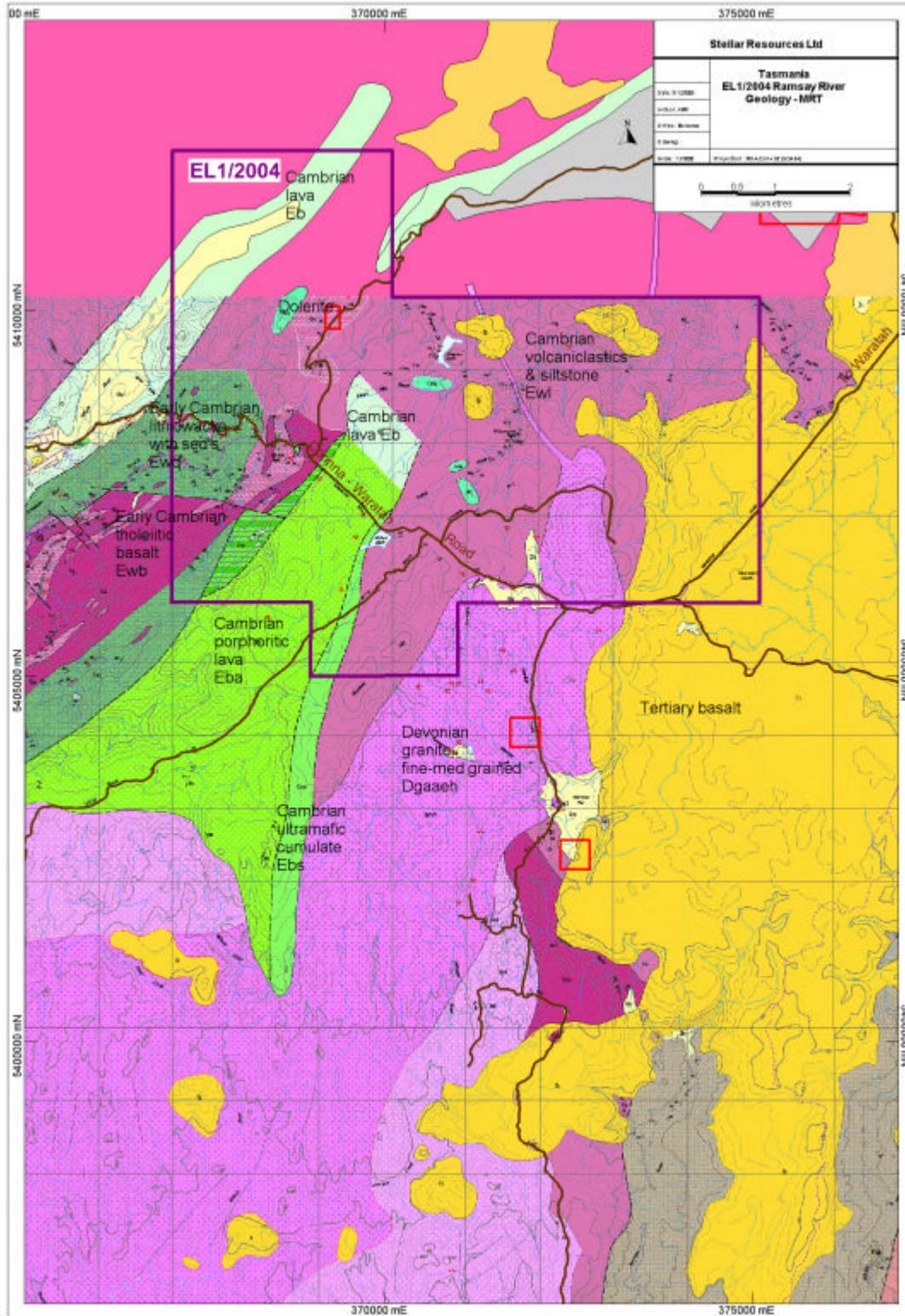
- (a) Any land owned or leased by the Commonwealth of Australia.
- (b) Mining leases amounting to 70ha (more or less) which were applied for or in force prior to the date of application for this licence.
- (c) Crown reservations or other land set apart or dedicated for any public purposes such as public reserves, municipal reserves or roadways unless such areas have been brought under the provisions of the *Mineral Resources Development Act 1995*.
- (d) Land declared as a fossicking area under the *Mineral Resources Development Act 1995* as shown hereunder:  
10ha Magnet Fossicking Area
- (e) Areas of private land which either have been, or are in the process of being, purchased by the Crown under the Regional Forest Agreement - Private Forests Reserves Program and / or private land over which the landowners have agreed, or are in the process of agreeing, to place a covenant or management agreement for conservation purposes under the Regional Forest Agreement - Private Forests Reserves Program.

### LAND TENURE

The area comprises:

- Private Property
- Multiple Use State Forest
- MDC Informal Reserve
- Meredith Range Regional Reserve
- Savage River Regional Reserve

The licence area contains areas, which are listed (including listed on an interim basis) on the Register of the National Estate kept under the *Australian Heritage Commission Act 1975*.



**Figure 2.** EL1/2004, MRT Geology Plan



## 2. REVIEW OF PREVIOUS WORK

Data from MRT digital geology, geophysics and geochemical datasets and open-file company reports has been captured, summarised and reviewed. Over the term of this licence several targets have been reviewed and field tested with soil geochemistry programmes and/or drilling.

During 2006 Stellar carried out a regional mapping and soil/rock chip programme aimed at identifying potential nickel targets in the ultramafic rocks that outcrop around the northern end of Betts Track and near Arthur Dam. The company also carried out a five hole (AD05 – AD09), 1200 m diamond drilling program that was primarily aimed at the further testing of known base metal targets near Arthur Dam. One drill hole tested a magnetic anomaly just west of the entrance to Betts Track. The conclusions were:

- Serpentinised pyroxenite bodies around the northern end of Betts Track and Arthur Dam are relatively small, structurally emplaced lenses with limited potential for nickel mineralisation;
- Hornfelsed, greywacke sandstone that contains substantial magnetite as disseminations and in veinlets is the likely source of strong aeromagnetic anomalies around Betts Track and Arthur Dam;
- Vein style copper mineralisation in the eastern part of the Arthur Dam prospect appears to be of sub-economic grade. However, there is potential for the further drill testing of vein style zinc, lead and silver mineralisation in the south western part of the Arthur Dam prospect.

During February 2009, 36 samples of soil or rock were collected from channels cut in the walls of a series of old costeans and adits south of the Magnet Mine, and assayed for Cu, Pb, Zn, Ag, Sn & Au. These workings were cut across the southern extension of the structure hosting the Magnet mineralisation. Only one sample, from the northernmost adit, returned any significant assays (0.4 %Pb, 1.9 %Zn & 17 g/t Ag).

In 2011 Stellar conducted soil geochemical surveys in five areas of the licence to test prioritised EM/mag/geochem anomalies defined through earlier analysis (Silic, 2006) of the WTRMP Meredith Granite airborne EM survey.

RY01, an EM/mag/geochem anomaly on 'Butler's Hill' near Butler's Road, previously sampled and drill tested by Comstaff/BHP, was soil sampled and mapped. Results confirmed the Comstaff sampling, showing anomalous Sn, Pb & Zn in a greisenised zone. There was no apparent relationship between the EM anomaly and the adjacent magnetic anomaly. A Sn zone of up to 170ppm in soil was defined over and to the east of the EM anomaly.

RY02, an EM/mag/geochem anomaly 900m northeast of RY01 near Butler's Road, also previously soil sampled by Comstaff was sampled and mapped. Again Comstaff sampling was confirmed, showing anomalous Sn, Pb & Zn in a greisenised zone. There was no apparent relationship between the EM anomaly and an adjacent magnetic anomaly. A Sn zone, larger than that of RY01, of up to 473ppm in soil was defined from the northwest to south of the EM centre. RY02 was the most prospective anomaly sampled.

RY03, 1200m southeast of RY01, represented a weaker EM/mag target. The low-order geochemical response was reflective of the geology, rather than elevated mineralisation.

RY15, an EM/mag target is located in the Ramsay River valley, approximately 4km south of the Corinna-Waratah Rd., being adjacent to the old South Bischoff tin mine and scattered alluvial tin workings. A low-order geochemical response was registered, again being reflective of geology rather than any anomalous mineralisation.

RY36, an EM/geochem anomaly near the Ramsay River near the southern boundary of the licence was soil sampled and mapped. This was a follow-up to soil sampling conducted by Comstaff in 1981, which had reported zinc assays near the EM anomaly of up to 2.3%. Stellar sampling could not replicate, to the slightest degree, the Comstaff assays. Comstaff's reporting gave no reference or explanation to their strong single-line results. Stellar could only conclude that there may have been a problem with the original sample assaying process.

### 3. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Comstaff soil geochemical sampling from 1976 for the Bett's Track – Wombat Hill area adjacent to the Meredith granite was captured and mapped from MRT open-file reports. The data showed elevated Sn, Pb & Zn, and while a little discontinuous, appeared to be of a similar tenor to the Butler's Rd RY01 & RY02 anomalies. The Comstaff data shows an increase in mineralisation along the margin of the granite. Further sampling may be warranted to test the granite margin zone further north and south (Figure 5).

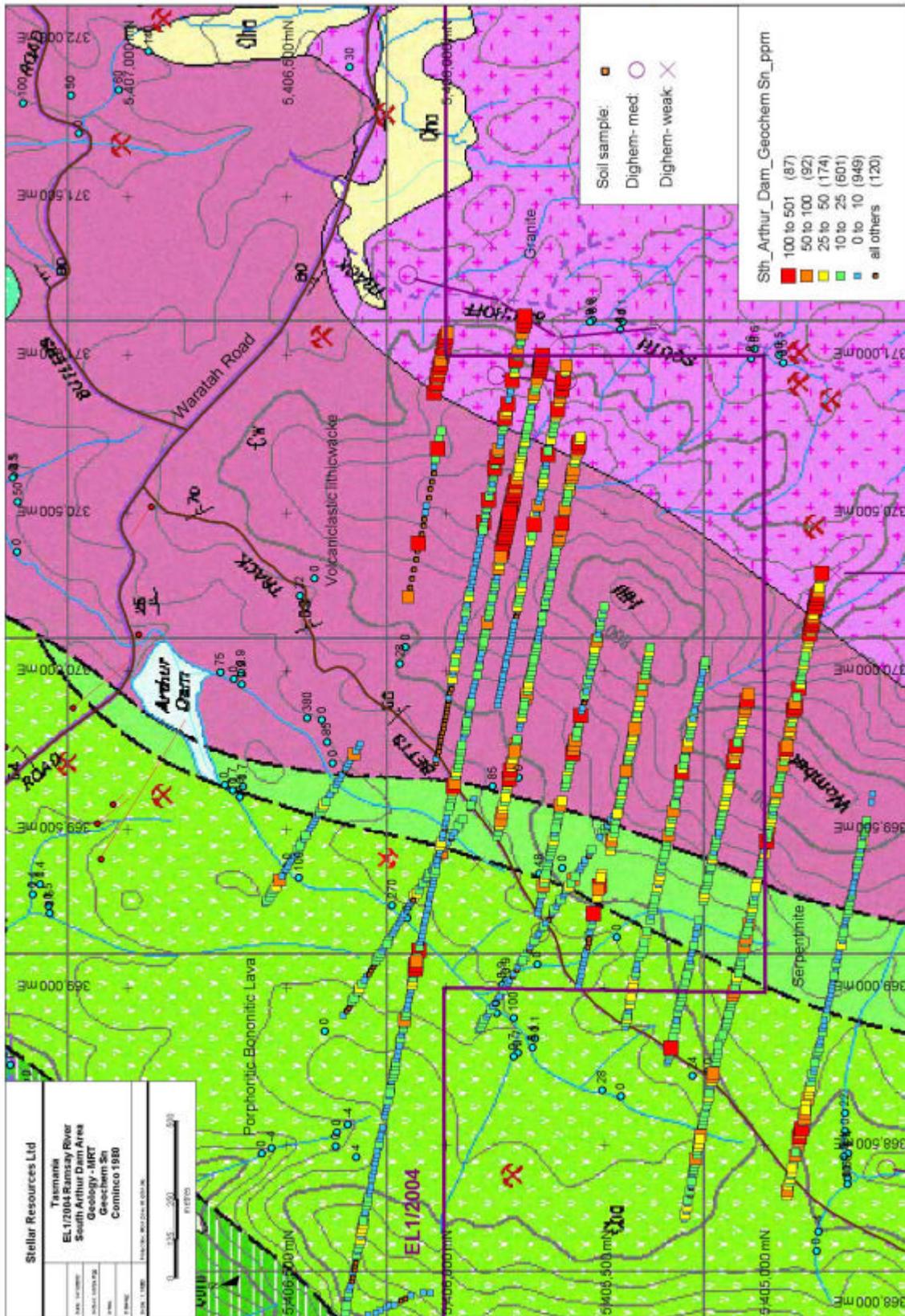
Digitally captured soil geochemistry from previous explorers and Stellar has been mapped (Figure 6), and areas of the licence with Sn geochemistry greater than 100ppm have been outlined (Figure 7).

During January/February 2013 Stellar conducted a Phase 2 westerly extension to the 2011 RY02 soil sampling programme to test further the Sn distribution north of Butler's Road. At the time of writing the sampling has been completed and the samples submitted to the assay laboratory.

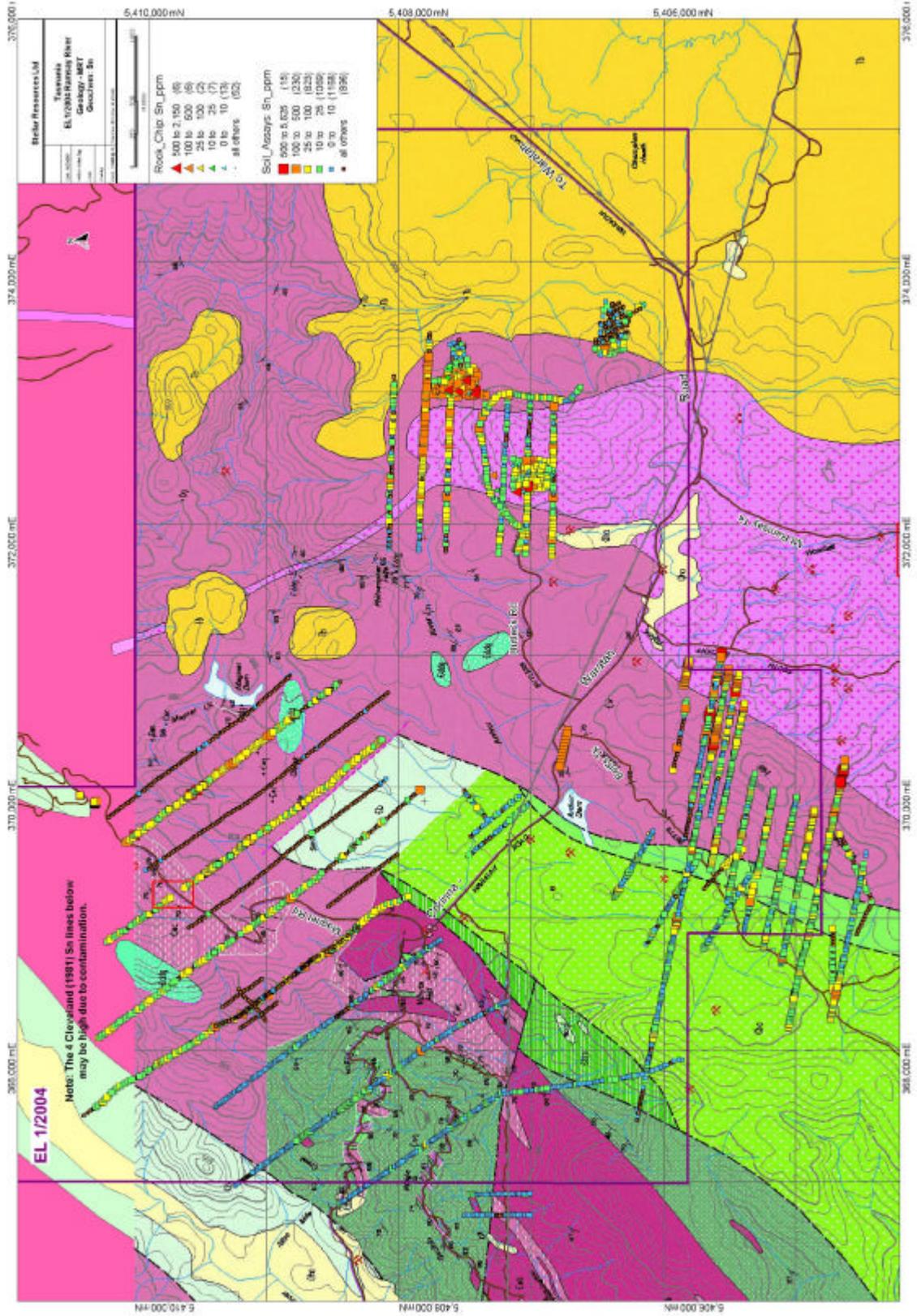
The programme was managed by Ken Morrison, with a field crew supplied by Ron Gregory Prospecting based at Waratah. Soil samples were taken by 2 x 2 person teams from the B/C horizon at 0.1 to 0.7m by hand auger. Reconnaissance mapping, logging of rock fragments recovered during the soil sampling and sampling of outcrop and float where available, was conducted at the same time as the survey. A total of 107 soil samples were collected (Figure 4).

Assays were sent to ALS Burnie for analysis at Townsville.

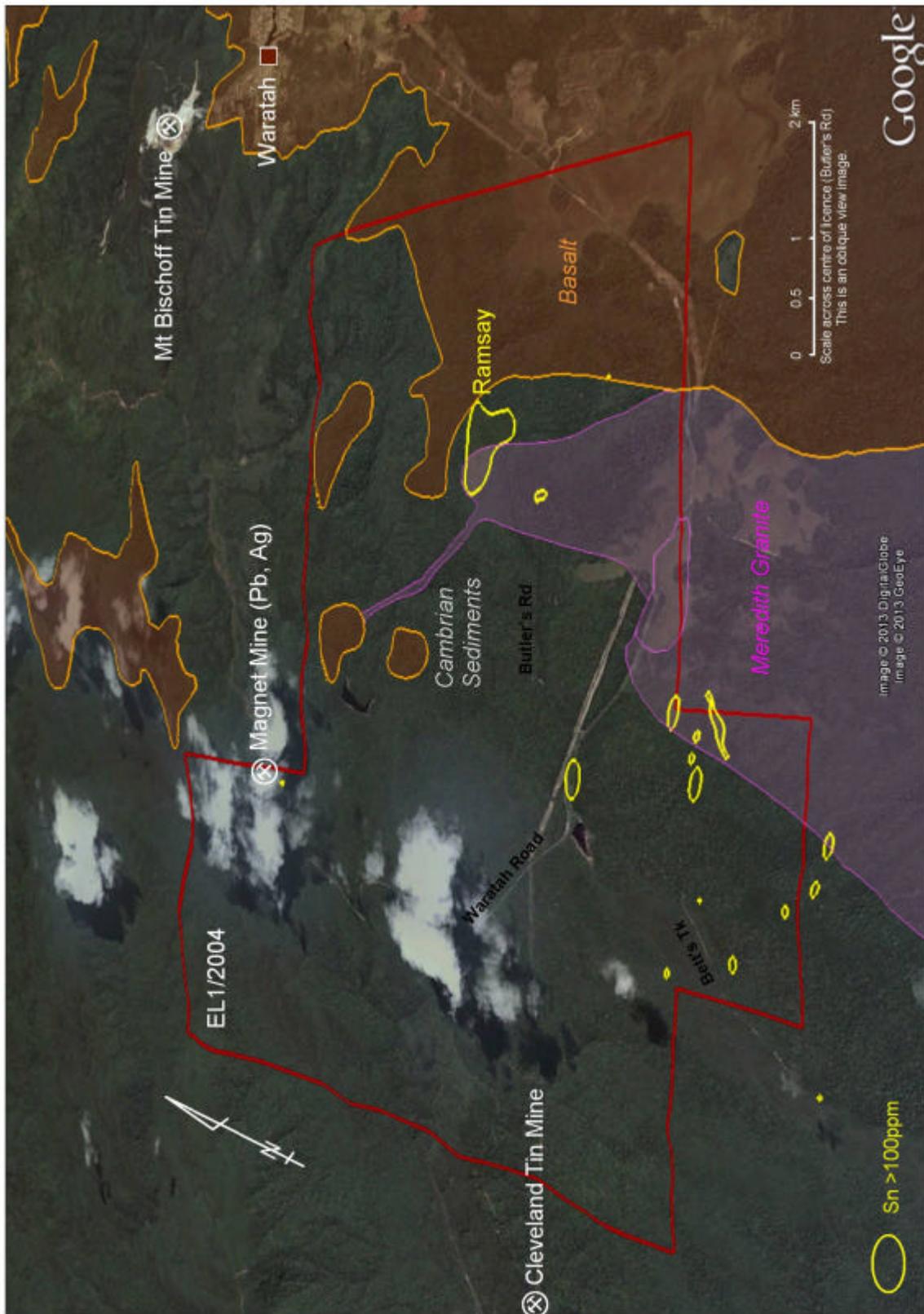




**Figure 5.** EL1/2004, Bett's Track – Wombat Hill: MRT Geology with Comstaff 1976 geochemical sampling - Sn.



**Figure 6.** EL1/2004, MRT Geology with Cominco, Comstaff, Geopeko & Stellar geochemical sampling - Sn.



**Figure 7.** EL1/2004, Satellite image (GoogleEarth), with MRT Geology, Cominco, Comstaff, Geopeko & Stellar geochemical sampling – Sn >100ppm.

#### **4. DISCUSSION OF RESULTS**

Results of the RY02 Phase 2 extension soil sampling programme will be reported in the 2013 annual report.

#### **5. CONCLUSIONS**

Further work will depend upon the results of the RY02 Phase 2 sampling programme. If the results are sufficiently encouraging for tin (and base metals), further sampling may be undertaken and the concise targeting of drilling sites may be possible.

#### **6. ENVIRONMENT**

During the 2012 period all track cutting and sampling was in accordance with the MRT Exploration Code of Practice, the specific conditions of the Work Programme and in consultation with the land managers. No sample bags or litter was left in the field and auger holes were manually back filled after sampling. No environmental issues remain outstanding from the programme.

## 7. EXPENDITURE

Transaction Report Rubicon Limited							Page: 1
Job No	Job Details	Department	Class	Group	Posting Ref	Amount	
Tran. Date		Doc Ref - Description	RUB	GROUP			
Job Code: 6502	EL 1/2004 Ramsay River	D1	RUB	GROUP			
	1053	Technical			Total	AU\$2,839.15	
Phase Total	105	STAFF COSTS				AU\$2,839.15	
	1061	Professional Technical			Total	AU\$14,376.68	
	1062	Labour			Total	AU\$14,100.00	
Phase Total	106	CONTRACT PERSONNEL				AU\$28,476.68	
	1072	Geoscientist			Total	AU\$3,600.00	
Phase Total	107	CONSULTANT PERSONNEL				AU\$3,600.00	
	1251	Vehicle Costs All			Total	AU\$920.00	
Phase Total	125	SUPPORT COSTS				AU\$920.00	
	1501	Purchase Costs / Stamp Duties			Total	AU\$0.00	
	1503	Pegging Application Forms			Total	AU\$972.00	
	1505	Rents/ Other Utilities			Total	AU\$2,195.45	
Phase Total	150	TENEMENT COSTS				AU\$3,167.45	
	1551	Meals and Accommodation			Total	AU\$163.64	
Phase Total	155	TRAVEL				AU\$163.64	
	1651	Administration			Total	AU\$8,042.00	
Phase Total	165	OVERHEADS				AU\$8,042.00	
Job Total : 6502	Class RUB					AU\$47,208.92	
Report Total:						AU\$47,208.92	

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## Keywords

Location:	Waratah - Luina
Mineralisation environment:	Stockwork veins, skarns,
Minerals:	Galena, Sphalerite, Cassiterite, Arsenopyrite, Magnetite
Exploration methods:	Geochemistry, Aeromagnetics, Drilling
Mine/prospect name:	Magnet Mine, Betts track, Arthur Dam, Butlers Road
Stratigraphic name:	Oonah Formation, Cleveland-Waratah Association, Meredith Granite Whyte River Complex
Lithologic name:	Sandstone, shale, dolomite, basalt, volcanoclastic, breccia, granite
Geological Province:	Dundas Trough, Betts Basin
Geological age:	Neoproterozoic, Palaeozoic, Devonian, Tertiary