



JAGUAR MINERALS LTD

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TEMMA - EL 27/2005

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MAP SHEETS: SK55-3 BURNIE 1:250,000.
Map 1:25,000: Ordnance 3042 and Temma 3043.

EXECUTIVE SUMMARY

The Temma Project, EL27/2005, is located in NW Tasmania about 20 kilometres SW of Arthur River. The Mesoproterozoic Rocky Cape Group contains the oldest rocks in the area and forms the basement sequence in northwest Tasmania. It consists of a thick, unfossiliferous, dominantly siliciclastic shelf sequence, consisting of interbedded sandstone and siltstone, carbonaceous pyritic siltstone and shale, quartz arenite and chloritic siltstone. Transgressive NNW orientated, elongate, shallow, magnetite rich ironstones occur in the Temma area. They have variable thicknesses and contain uneconomic amounts of sphalerite, galena, hematite, pyrite, chalcopyrite, and iron-manganese carbonates and silicates. Mineralisation of a secondary nature includes alluvial tin, and sub-economic coastal sand dune deposits containing cassiterite, zircon, rutile and chromite.

Previous explorers have drilled 7 diamond holes in the area of EL27/2005, targeting gold and base metal soil anomalies and old workings within the ironstones. At Possum Creek, hole PG1 was drilled to 86.6m in 1982. It intersected 2.6m @ 0.43% copper (Cu), 9.0 g/t silver (Ag) from 45.9m-48.5m, and 3m @ 1.95% lead (Pb), 12.0 g/t Ag from 50.5m-53.5m, and 1m @ 0.7% Cu from 75.3m-76.3m. Intersections of 1.6m @ 2.2 g/t gold (Au) were received from the Strickland area of workings in 2000.

Work by Jaguar Minerals Ltd ("Jaguar") within the period covered by this report has included clearing of 4km of access lines for the purpose of ground-magnetics, ground-magnetic survey, field reconnaissance, familiarisation with two previous drill holes (held at MRT's Mornington rock store), and analysis of several rock chips picked up on the above mentioned ground mag lines and in the vicinity of some old workings. Rock chips from the Possum Creek workings had anomalous copper and silver with the best result returning over 2% Cu and 17g/t Ag, and rock chips from the ground mag lines had anomalous Ti up to 1.16%.

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Rock geochemistry data and Ground magnetics data

EL272005_200902_rocks.txt	Rock chip samples
EL272005_200902_groundmag.tx	Ground magnetic data

All coordinates used in this report use the AGD_1966 AMG Zone_55 Map Datum.

1.0 INTRODUCTION

This is the third annual report since EL27/2005 was granted to Jaguar. The tenement is owned and operated by Jaguar Minerals. Exploration during the period covered by this report includes:

- Researching and processing of the reports relevant to the tenement from the Mineral Resources Tasmania ("MRT") Open File database.
- The revisiting of old core held at the MRT Mornington Rock Store
- The preparation of 4km of walking access lines in order to conduct ground magnetic traverses.
- The completion of ground magnetic traverse
- The collection of 16 rock chip samples assayed via OES Inductively Coupled Plasma (Optical Emission Spectrometry).
- Compilation, processing, interpreting and reporting of results.

2.0 LOCATION

The Temma Project is located in NW Tasmania about 25 km south of the township of Arthur River (Figure 1). The small community of Temma lies within the licence area. The tenement is accessible by all weather roads from Smithton. The licence area includes freehold farmland, state forest, and Crown Land that is part of the Arthur Pieman Protected Area.

The natural vegetation ranges from coastal scrub to dense forest. In the western third of the licence area, the soils contain a blanket of sands derived from the adjacent beach dunes. The coastal Temma - Sandy Cape track and the east west orientated old Balfour Track provide 4WD access. Both are passable in dry weather conditions by 4WD vehicle, however in wet weather they are only passable by quad bike.

3.0 GENETIC MODELS

Genetic models for mineralisation would include:

- Structurally controlled Cu-Au mineralisation within Proterozoic sediments.
- Structurally controlled iron-oxide hosted Cu-Au mineralisation (IOCG) within Proterozoic sediments.
- Stratabound base metal mineralisation within Proterozoic Sediments. The Zambian Copperbelt in Africa provides examples of sediment hosted stratabound copper mineralisation

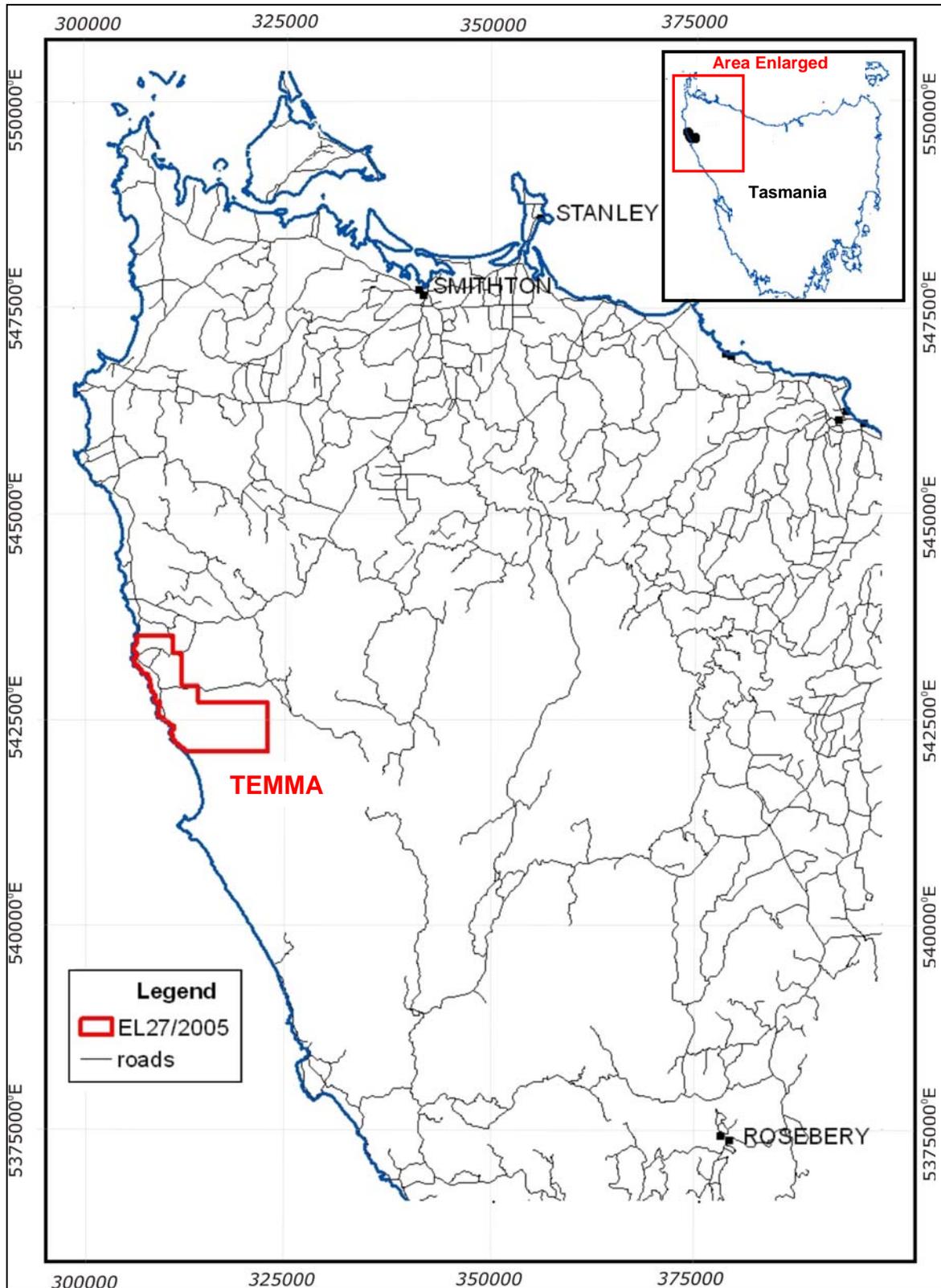


Figure 1. Regional Location Map, North West Tasmania.

4.0 GEOLOGY

4.1 Regional Geology

The Mesoproterozoic Rocky Cape Group contains the oldest rocks in the area and forms the basement sequence in northwest Tasmania. It consists of a thick, unfossiliferous, dominantly siliciclastic shelf sequence, the basement of which is unknown. According to recent classification by Everard et al. (2002), the Rocky Cape Group had been divided (from youngest to oldest) into subgroups, and described as follows:

- Jacob Quartzite
- Irby Siltstone
- Detention Subgroup
- Cowrie Siltstone
- Balfour Subgroup
- Lagoon River Quartzite
- Pedder River Siltstone

The Balfour Subgroup consists of interbedded sandstone and siltstone, carbonaceous pyritic siltstone and shale, quartz arenite and chloritic siltstone. It conformably overlies the Lagoon River Quartzite and is apparently conformably overlain by a correlate of the Cowrie Siltstone in the vicinity of Balfour. The Balfour subgroup and the Cowrie Siltstone are potential source rocks for copper mineralisation along the Balfour copper belt and in the Temma area. This will be discussed in the section on genetic models.

A tectonically stable, shallow marine depositional environment is suggested for the formation of the quartzites. In contrast, the Cowrie Siltstone is mainly carbonaceous, and diagenetic pyrite is very common, indicating reducing depositional conditions. The presence of likely anhydrite casts in the unit is consistent with shallow water, locally evaporitic conditions. The Balfour Subgroup represents a much higher-energy environment with current-influenced deposition than the Cowrie Siltstone.

The Rocky Cape Group is overlain by the Togari Group of Neoproterozoic-Early Cambrian age. A low angle unconformity separates Rocky Cape Group rocks from the overlying Togari Group along the eastern margin of the Smithton Synclinorium, near the mouth of the Black River east of the Smithton. The Togari Group is up to four km thick and mainly consists of conglomerate, dolomite and chert, siliceous and volcanoclastic sedimentary rocks, and basalt. It is divided into the Forest Conglomerate and Quartzite (0-120m thick), Black River Dolomite (\leq 800m), a sequence of intercalated lithicwacke, tholeiitic basalt, diamictite, lithicarenite, hematitic ironstone, mudstone and impure carbonate (Kanunnah Subgroup \leq 1400m), Smithton Dolomite (\leq 1500m), and the uppermost Salmon River Siltstone (\leq 350m).

The basalt units (Spinks Creek Volcanics) form the middle to lower part of the Kanunnah Subgroup and are thickest east of the Roger River Fault. They mainly consist of massive to locally pillowed, dominantly tholeiitic basalt. The volcanic rocks are metamorphosed up to the prehnite-pumpellyite or, rarely, greenschist

facies. They are commonly anomalous in copper, reaching up to 590 ppm. Copper appears to vary erratically and does not show any relationships with other elements. The basalt is thought to be a possible copper source for the copper mineralisation in the Temma-Balfour area.

The post-Proterozoic units present are siliceous gravel with interbedded quartz sand and clay of probable Tertiary age (?pre-basalt), Tertiary basalt and Quaternary talus, alluvium and swamp deposits. Tertiary basalt occurs mostly as thin hill cappings, which are probably the dissected remnants of an extensive series of flows that once covered much of the region. Chemically the basalts are predominantly moderately fractionated and range from basanite through alkali olivine basalt and hawaiite, to transitional olivine basalt tholeiite.

Two early phases of syndepositional extension were followed by at least four compressional phases of deformation within the area. The first two phases of deformation (D1, D2) are possibly of Cambrian age whereas D3 and D4 are considered to be Devonian in age. D3 is the main deformation phase and is characterised mainly by north-west trending folding, some cleavage development and major northeast-directed low and high angle thrusts, one of which hosts the copper mineralisation at Murray's Reward mine along the copper belt.

4.2 Local Geology

The rocks in the Temma area mainly consist of the Balfour Subgroup and Cowrie Siltstone overlain by some minor Tertiary basalt and younger deposits of siliceous sandstone and siltstone, carbonaceous pyritic siltstone and shale, quartz arenite and chloritic siltstone (Everard et al., 2002). These rocks are unconformably overlain by the Togari Group, which consists of a discontinuous basal, siliceous conglomerate overlain by tholeiitic basalt and associated volcanoclastic rocks, and variably silicified dolomite.

Turner (1994) subdivided the older rocks of the Balfour area (Rocky Cape Group) on the basis of lithological associations, mainly the character of siltstone which is the most common rock type in the area. There are lithological sequences where the siltstone is dark grey (carbonaceous), whereas in other sequences it is green or olive (chloritic). The rocks along the Balfour track and west of Murray's Reward consist of conformable, east facing sequence ranging from quartz arenite to grey siltstone in the west, changing into green and grey siltstone with interbedded quartz arenite to the east, near Murray's Reward.

Based on the gravity interpretation of Leaman and Webster (2003), the Rocky Cape Group has been overthrust onto the younger sedimentary rocks and basalt (i.e. Togaro Group) of the Smithton Synclinorium. The succession has been folded, forming the eastern limb of a southerly extension of the large anticline that occurs south of Marrawah. Small scale, NNW trending folds showing different plunges are also common within the area including Balfour South, on the Heemskirk Road, on the Blackwater Road and around Specimen Hill.

There are no granitic outcrops known within the Balfour-Temma area. The nearest outcrop of granite (the Pieman Granite) is at Sandy Cape, some 5 km south of EL27/2005. Most deposits (e.g. Murray's Reward), occur where the interpreted granite surface is about two to four kilometres deep.

The Temma area is structurally complex. Everand et al. (2002) have recognised at least two extensional and four compressional deformation events; these are summarised in Table 1.

Table 1. Deformational Events in the Balfour Temma Area.

(A.R. Reed and D.B.Seymour, pers.comm.)

<i>Deformation event</i>	<i>Nature of deformation</i>	<i>Description/location</i>	<i>Mineralisation</i>
Extension	Growth faulting associated with deposition of Rocky Cape Group	Outcrop-scale growth faulting near Temma coast	
Extension	Growth faulting associated with deposition of Togari Group	Block rotation during extension may account for unconformity between Rocky Cape Group and Togari Groups	
D ₁	?Tyennan Orogeny	Foliation pre-dates chlorite porphyroblasts observed in thin sections of Rocky Cape Group rocks (e.g. southeast of Mt Frankland)	
D ₂	Tyennan Orogeny/ Tabberabberan Orogeny	E-W trending folds and cleavage in Rocky Cape and Togari groups (e.g. southwest of Mt Frankland)	
D ₃	Tabberabberan Orogeny	NW-trending folds and thrusts. Reactivation of Roger River Fault.	Copper mineralisation (Murray's Reward mine), Sn-W mineralisation (Specimen Hill)
D ₄	Tabberabberan Orogeny	Open upright north-trending folds (regionally developed)	

Extensional structures and the results of their influence on sedimentation are preserved in Rocky Cape Group rocks on the Temma coastline (Everard et al., 2002). Extensional structures may be significant for the emplacement of economic mineralisation, as they may act as conduits for the hot, ascending metal-rich brines from which some major stratiform copper deposits are believed to have been formed.

The first two compressional deformations (D_1 and D_2) are both probably Cambrian in age (Everard et al., 2002). D_1 can only be seen on a microscopic scale, whereas D_2 has associated mesoscopic folds. The S_1 cleavage is commonly defined by an alignment of chlorite between variably sutured quartz and feldspar grains. It strikes about E-W and dips between 200 and 450N in weakly deformed rocks from east of Mt Frankland.

The S_2 cleavage (related to D_2 structures) is similar in form too, but typically cross-cuts S_1 (Everard et al., 2002). It is defined by preferred alignment of chlorite grains and strikes east-west and dips about 200 to 450S.

D_3 structures are seen west of the Frankland River where a northwest-trending D_3 anticline deforms Balfour Subgroup sedimentary rocks. The northeast limb of the anticline is truncated by southwest-dipping thrusts. Reverse movement on thrusts has placed older (Rocky Cape Group) over younger (Togari Group) rocks.

D_4 structures in the Temma area are open upright folds, verging toward the west. Fold closures are evident in the aeromagnetic image south of Strickland and in the Dawson's River area, south of the Balfour Track. Steeply east-dipping D_4 reverse faults are recognised along the Temma coast, overprinting D_3 structures. Both D_3 and D_4 structures are interpreted to be Devonian in age.

A number of faults, including an east-trending fault that dissects the Possum Creek area, dominate the local structure of the Temma area.

4.3 Mineralisation

Transgressive NNW orientated, elongate, shallow, magnetite rich lodes occur in the Temma area. They are clearly seen in the aeromagnetic image, Figure 2. The deposits show similar trends to the Balfour Copper Belt. They have variable thicknesses and contain minor amounts of sphalerite, galena, hematite, pyrite, chalcopyrite, Fe-Mn carbonates and silicates. Mineral deposits of a secondary nature include alluvial tin, and sub-economic coastal sand dune deposits containing cassiterite, zircon, rutile and chromite.

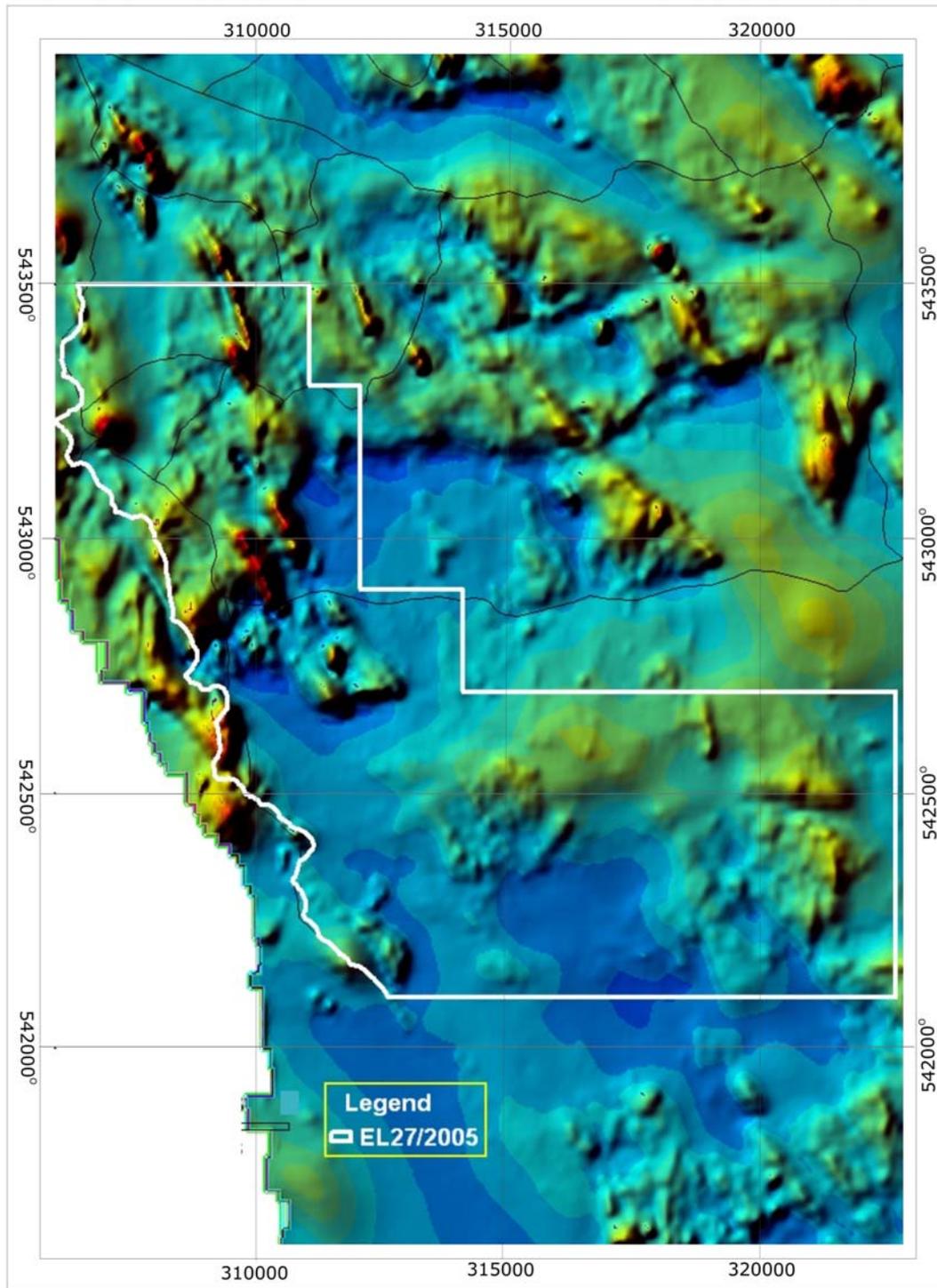


Figure 2. Aeromagnetic Image, showing NNW trending linear magnetic ironstones EL27/2005.

5.0 HISTORICAL WORK COMPLETED

The **Strickland** area (Figure 3) was mined for copper early last century. The workings lay adjacent to the old walking track-tramway connecting the Balfour mines to the port of Temma. The Strickland workings consist of a number of shafts and trenches close to the Temma Farm track, and a second group of workings approximately 250m along strike to the north. A third group of workings lay 150m to the east of these northern workings and is suggestive of a second, parallel, zone of mineralisation.

Contemporary exploration of the area commenced in the mid 1960's when aeromagnetic surveys defined a substantial anomaly co-incident with the Strickland workings. **Pickands Mather** decided to drill test this anomaly as part of their larger exploration effort to locate resources to supplement their newly opened Savage River Mine, which was developed on Proterozoic iron formations. Two holes, T301 and T302, drilled 200m apart, tested the iron mineralisation. T301 and, to a lesser extent T302 intersected a zone of magnetic-pyrite mineralisation which was interpreted as a satisfactory explanation of the aeromagnetic anomaly. T301 intersected 22m (68-90m) of 34-44% Fe. Their locations are illustrated in Figure 3.

In the early 1980's **Geopeko-CRA** re-gridded and mapped the area and completed ground magnetic and C-horizon soil geochemical surveys. The magnetics indicates a strong schistosity-bedding conformable anomaly through the eastern workings of T301 and T302. There is a weaker, parallel trend through the western workings in the north, but interestingly no substantial anomaly over the main workings. Geochemically there is a modest Cu-Pb anomaly co-incident with the eastern magnetic anomaly, but it does not extend south as far as T301. There is a very strong Cu-Pb anomaly coincident with the northern workings on the western trend, but it does not appear to extend south over the main workings.

Geopeko-CRA re-split cores from T301 and T302. Their assaying was extensive which included gold. The most interesting result was a sample from T302, which reportedly assayed 1.5 g/t Au.

CRAE Pty Ltd drilled the magnetic units at **Possum Creek** and at **Little Eel Creek** in 1982, Figure 3. (Herman & Sumpton, 1982). Both holes intersected iron rich intervals characterised by magnetite. Gold values of up to 1.08gpt were returned from the iron-rich interval in DD82 PG1 at Possum Creek, but no values above detection limit were returned from DD82 LE1 at Little Eel Creek. Hole PG1 was drilled to 86.6m. It intersected 2.6m @ 0.43% Cu, 9.0 g/t Ag from 45.9m-48.5m, and 3m @ 1.95% Pb, 12.0 g/t Ag from 50.5m-53.5m, and 1m @ 0.7% Cu from 75.3m-76.3m. This hole targeted very anomalous soil geochemistry, up to 0.3% Cu.

In the **Little Eel** area, diamond hole LE1 was drilled to 109.7m. It intersected 10m @ 0.48% Cu from 14-24m and 1.6m @ 1.14% Cu, 0.17% Zn, 1.0 g/t Ag from 38.1-39.7m. This hole targeted a magnetic high. Host rocks were ironstones and dolomites.

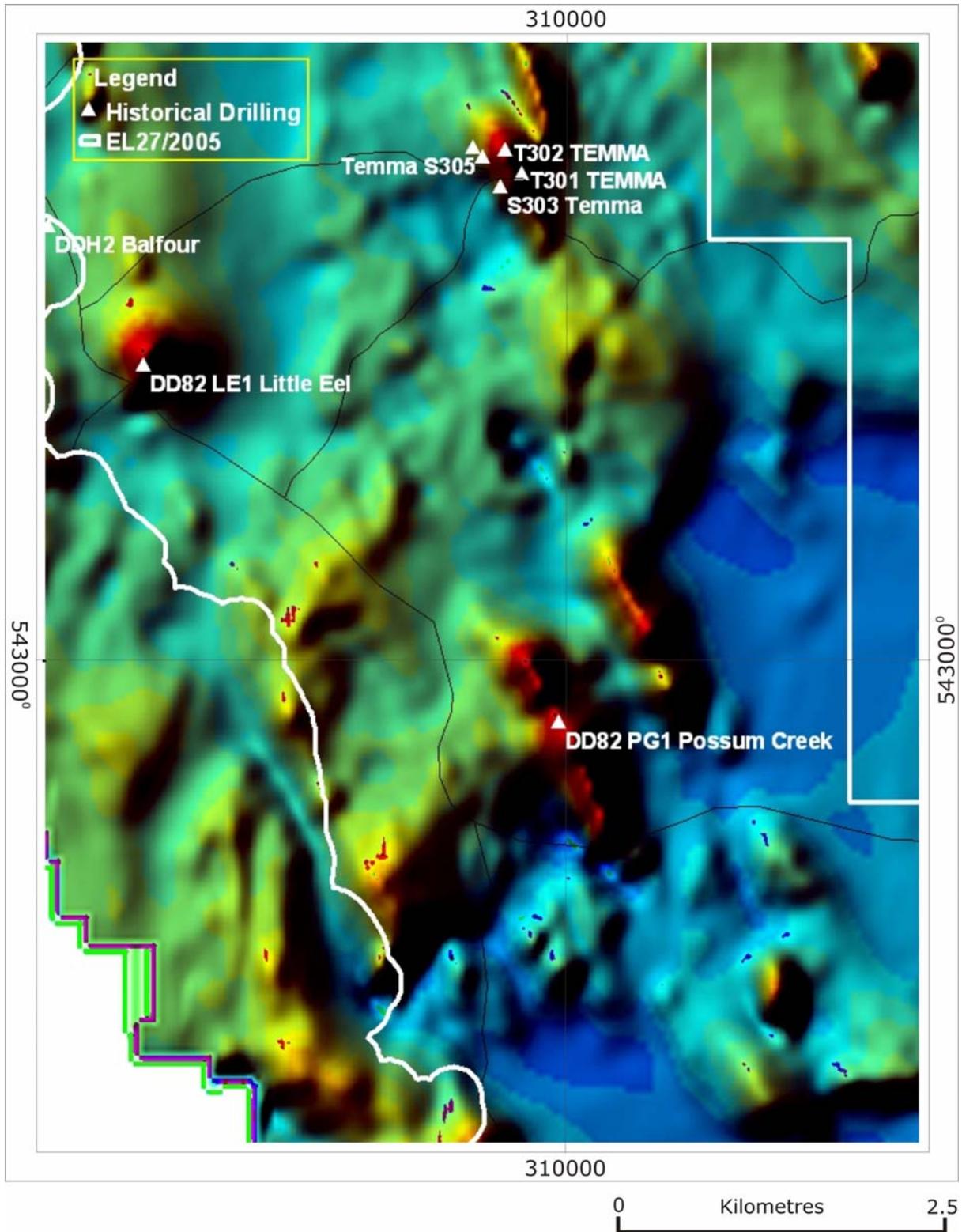


Figure 3. Location of Historical Drilling.

Petrological examination of two samples from the magnetite bearing interval in PG1 showed a weakly sheared assemblage of magnetite-grunerite-siderite and a strongly sheared (schistose) assemblage of magnetite stilpnomelane-siderite. Both assemblages contained minor pyrite, chalcopyrite and arsenopyrite. A schistose sample from just above the magnetite bearing interval consisted of a substantially chloritised, garnet rich assemblage. Three samples from the magnetite bearing interval in LE1 consisted of quartz-magnetite-siderite and quartz-magnetite-sericite assemblages, each with pyrite and chalcopyrite. The assemblages in PG1 and LE1 are interpreted as being the result of pyro-metasomatism, with late formation of siderite, sericite and chlorite (Weber, 1983).

In the late 1990's **AGSO** completed an aeromagnetic survey over the region on lines 200m apart, with a mean terrain clearance of 90m and a reading interval of 7m. Flagstaff GeoConsultants modelled data obtained in the **Strickland** area for Pacific-Nevada and results were presented in a report titled:

"Pacific-Nevada Pty Ltd, Temma Area, NW Tasmania Geophysical Modelling" By N. Hungerford, Flagstaff GeoConsultants, August 1999

With respect to the Strickland Prospect, this report states:

This prospect is the most magnetic part of a magnetic trend that extends over 4 kilometres in strike. Two closely spaced parallel trends to the north may indicate limbs of a fold, which coalesce at the Strickland anomaly. The magnetic model shows an anticline and a more steeply dipping west limb. The depth is very close to ground level.

In 1999, **Pacific Nevada** acquired EL27/97 over the Temma area (Newnham, 2000). Since substantial parts of the T302, PG1 and LE1 cores were not assayed previously, Pacific-Nevada systematically split, re-logged and assayed all of both cores. The analytical work for PG1 shows an iron-rich interval extending from 38.62m to 58m depth. This includes 15.2m (41.9–57.1m depth) of magnetite bearing material ranging 25.3% to 45.5% Fe and returning gold assays consistent with **CRA's** results. Gold was not detected in the iron-rich interval (75.5–95.4m depth) in EL1. Results of the T302 sampling are listed in Table 2.

Pacific-Nevada completed three (3) cored drill holes (S303–S305) totalling 552m in July 2000, to further test the Strickland Prospect (see Figure 3). The target was gold hosted by either Proterozoic iron formations or breccia zones. S304 intersected a monotonous east-dipping sequence of micaceous siltstones and sandstones cut by major quartz-pyrite-magnetite shear zones between 159-166 m and 193.4-211.8 m. The lower interval appears to be a major structure and averages approximately 20-30% pyrite and minor chalcopyrite over a 14 m interval. Hole S305 was designed to test the magnetic and geochemical soil anomaly associated with the group of shallow workings on the northern end of the western trend. It intersected a sequence of micaceous fine grained sediments passing down-hole into a sequence of more siliceous banded siltstones/sandstones (ribbon rock).

Table 2. Significant Historical drilling, Strickland Area.

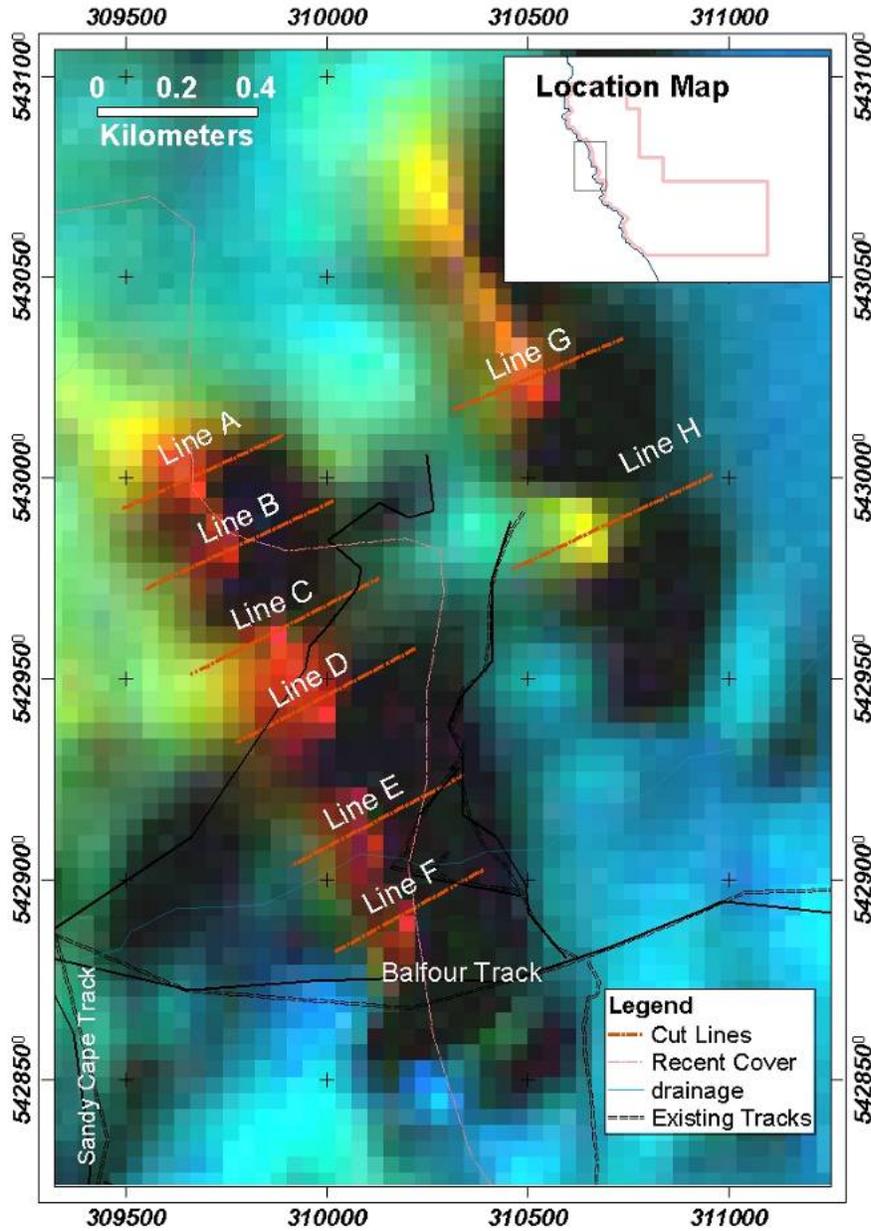
HOLE	TOTAL DEPTH	FROM	TO	INTERSECTION
S304	248m	194.3	195.9	1.6m @ 2.2 g/t Au
		199.1	199.6	0.5m @ 0.11% Cu
		209.7	211.8	1.9m @ 0.13% Cu
S305	100m	44.7	47.0	2.3m @ 1.01% Cu
T302	48m	38.9	45.1	Pyritic fragments in very poor recovery core were all that remained. Random sampling of this zone assayed 0.22% Cu, 1.7 g/t Ag, 1.5 g/t Au.

Drilling to date supports the aeromagnetic interpretation that there are two sub-parallel zones of interest at Strickland – an eastern zone dipping steeply to the east and a western zone dipping at a steep angle to the west. Most of the former workings are along the western zone and it appears to carry significant copper mineralisation as evidenced by both S305 and records of the main workings. No drilling has yet been undertaken beneath the main workings.

6.0 WORK COMPLETED BY JAGUAR MINERALS.

6.1 Ground magnetic survey.

A total of 8 lines were cut for 4 km to allow access for ground magnetic surveys Figure 4. The surveys were designed to cross two of the magnetic Temma ironstones, perpendicular to their strike, in order to gain a better understanding as to their dip and morphology.



**Figure 4. Location of grid lines for ground magnetic survey:
Base Map: aeromagnetic image.**

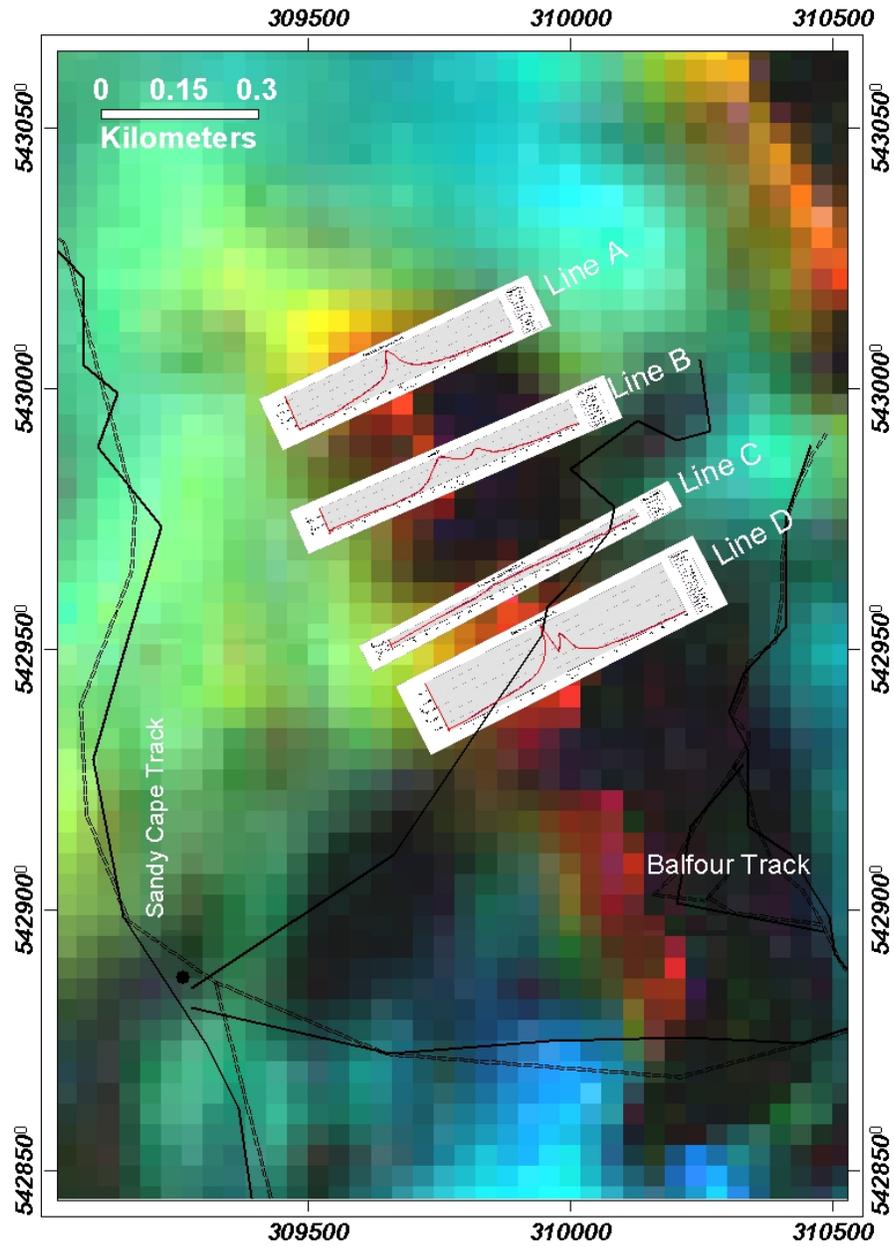


Figure 5. Surveyed lines located on the base aeromagnetic image.

The survey was conducted using two Geoterrics G856 portable magnetometers, using one as a base station situated away from any metalliferous objects and in a zone of low magnetic intensity as indicated from existing aeromagnetic data held over the tenement. The survey was budgeted to take 5 days to cover the 4km of lines, but only three days were spent surveying due to atmospheric electrical activity affecting the accuracy of the magnetic readings, and thus 2km of the 4km were surveyed, refer to Figure 4 for surveyed lines.

Profiles of the ground magnetic surveys are presented in Figure 5 and 6. They show a varied response in both the amplitude of the magnetic response and the morphology of the response.

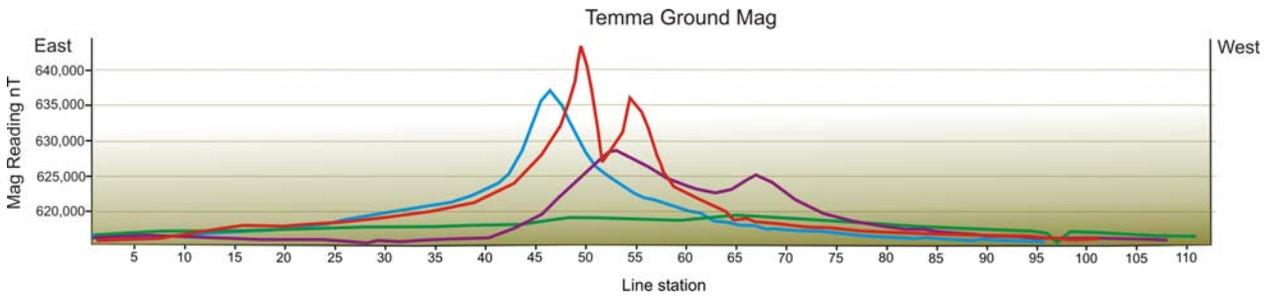


Figure 6. Ground magnetic responses.

Line A, (Figure 7) traversed across the north end of the magnetic body. The magnetic reading has a simple peak morphology, a response in the order of 20000 nT. The largest values occur over a distance of approximately 60m across line, and there is slightly less inclined western limb (compared to the eastern limb) of the curve. This indicates a single magnetic body, vertical or dipping steeply to the east. It was noted during the survey that the magnetic high corresponds with a topographic high (Figure 4), indicating this may not be as extensively covered with sand dunes as previously thought.

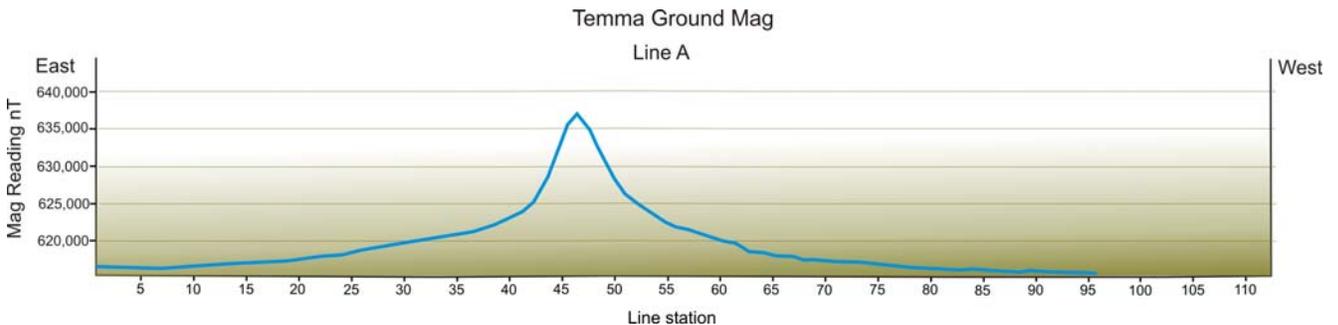


Figure 7. Ground magnetic anomaly – Line A

Line B, Figure 8 traversed 200m south (along strike of the magnetic bodies) of Line A. The magnetic reading has a double peak morphology and a broader zone of anomalism compared to Line A, but a lower amplitude reading, with a response in the order of 15000 nT. The magnetic anomalism occurs over a distance of approximately 160m across line, with the western peak being greater in amplitude than the eastern peak, but both being anomalous over a similar distance across line. The western peak has a morphology indicative of a steeply east dipping magnetite body, whereas the eastern peak has a morphology of an upright to very steeply west dipping magnetic body that is either a narrower structure or less magnetic, or may represent a small offsetting fault, causing a repetition of the ironstone, although this wouldn't explain a difference in the amplitude of the two signals.

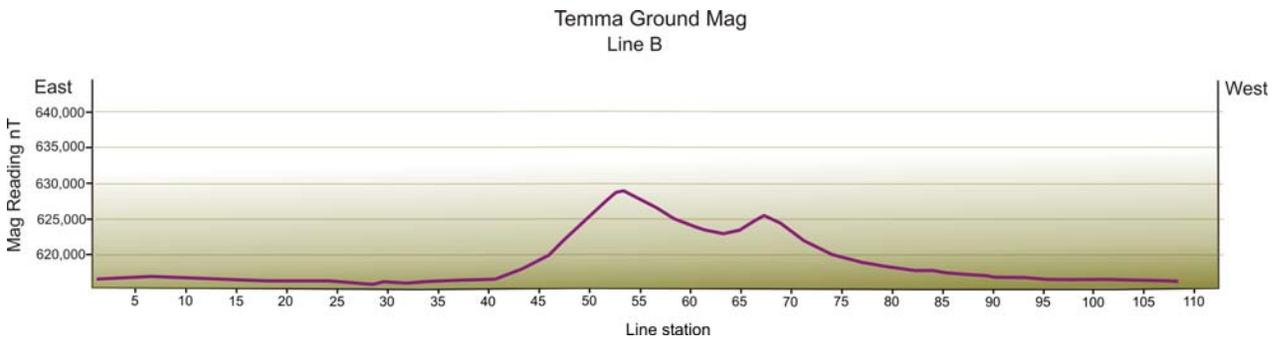


Figure 8. Ground magnetic anomaly-Line B

Line C, Figure 9 traversed 200m south (along strike of the magnetic bodies) of Line B. There is a break in the intensity of the magnetic signal, as seen in the aeromagnetic image Figure 4, where this line crosses the ironstone. This is characterised in the ground magnetic survey by a broad low amplitude signal (displayed in figure 5 relative to the other lines), that has a response in the order of 3000-4000 nT above background, over a distance of 70m across line. The response from the reading is so subdued it is difficult to confidently assume a dip direction. It is suggested that an ENE structure cuts the magnetite bodies as seen on the aeromagnetic image, channelling fluids causing the hydrothermal destruction of magnetite.

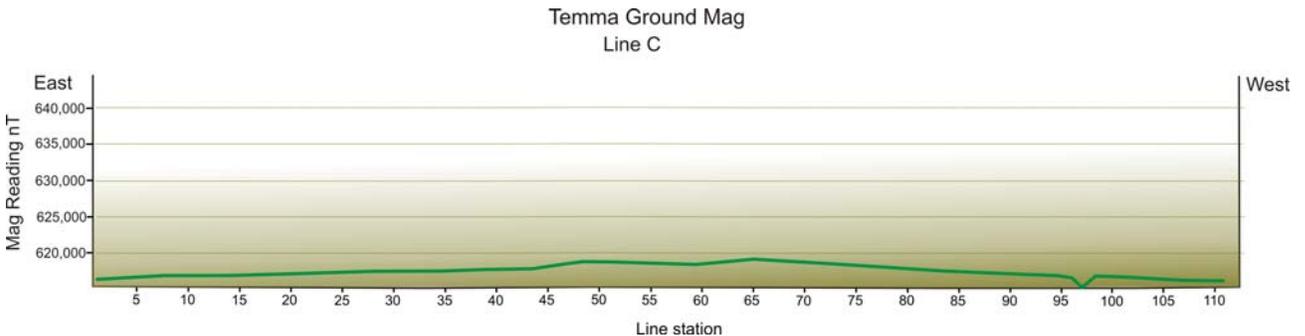


Figure 9. Ground magnetic anomaly-Line C

Line D Figure 10, traversed 200m south of Line C (along strike of the magnetic bodies). The magnetic reading has a double peaked morphology, with the highest magnetic response in the order of 30000 nT, with the anomalism occurring over a distance of roughly 100m. As with Line B the western peak has a greater amplitude than the eastern peak, in this case however there is a difference of 10000 nT. The western peak has a morphology indicative of a steeply east dipping magnetite body, whereas the eastern peak has a morphology of an upright to very steeply west dipping magnetic body that is either a narrower structure or less magnetic. During the survey no coincident change in topography was noted with the magnetic anomalism and sand was noted underfoot indicating the presence of dunes in the area.

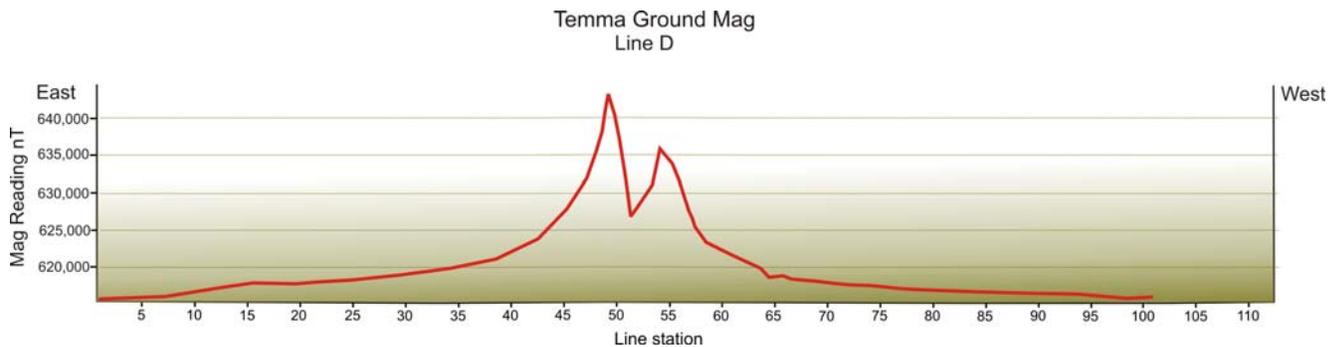


Figure 10. Ground magnetic anomaly-Line D

6.2 Other exploration activities

During the reporting year the author has embarked upon several day trips on the Temma tenement to become familiarised with the area, assess the access into the area for the purpose of drilling and exploration.

The access in the tenement is by the Sandy Cape track and the Balfour track. Both are popular attractions for off road enthusiasts and caution needs to be taken with regards to traffic. The Sandy Cape track, as the name suggests, is very sandy, and becomes boggy with very deep water pools during the winter months. The Balfour track is rugged and rocky in parts, but has deep and boggy sections along it also. For this reason most exploration was conducted on quad bikes, preferred for the versatility they allow.

A total of 16 rock chips were taken to be sampled by Genalysis Laboratory Services for Au, Ag, As, Bi, Ca, Cr, Cu, Fe, Mn, Mo, Ni, Pb, S, Sn, Ti, V, W, Zn. The results are given in Appendix 2, with significant results shown below in Table 3.

Table 3. Selected assay results for Temma rock chips

	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)	Mn (%)	Ti (%)
256407	0.039	1.91	0.5228	26.32	2.0582	X
256410	0.161	17.73	2.3455	31.11	3.3630	X
TEMRC001	X	X	X	43.82	X	X
TEMRC002	X	X	X	X	X	1.1648
TEMRC004	X	X	X	X	X	0.3189

Samples 256407 and 256410 were taken from the vicinity of the Possum Creek workings, samples TEMRC001, 2 and 4 were taken on the prepared groundmagnetic lines. TEMRC001 represents a sample of ferruginous lateritic looking rock, and is leached of virtually everything except for Fe. TEMRC002 is from a black rock possibly of igneous origin found over the eastern magnetite body on Line H, refer to Figure 4. It is interesting to note that this rock was located near a magnetic break in the magnetite body. TEMRC004 is from a dark grey siltstone/shale.

7.0 EXPENDITURE**Table 4. Expenditure 2008-2009.**

Description	Expenditure	Comment
Salaries, wages and oncosts, contractors.	61,919	Geologist, technicians, field crew.
Stationery, computers, printing, maps	147	Data processing, reporting
Tenement Rent	5,364	
Geochemical studies, rock chip assays, Ground geophysics	1,436	
Helicopter	6,290	Helicopter Support
Freight, courier	3,070	Freight, sample bags
Equipment, vehicle hire	19,138	Vehicles, chain saws and generators.
Fuel, Oil	1,362	
Travel	4,564	Field Crew
Accommodation, consumables, food, telephone.	9,879	Messing and camping costs for field crew
Total	\$117,932	

8. CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS.

Transgressive NNW orientated, elongate, shallow, magnetite rich lodes intrude the Rocky Cape sequence in the Temma area. The formations show similar trends to the Balfour Copper Belt, and there are some interesting similarities to the Savage River magnetite bodies. They have variable thicknesses and historical drilling has demonstrated that they contain minor amounts of sphalerite, galena, hematite, pyrite, chalcopyrite, Fe-Mn carbonates and silicates. Only 7 shallow drill holes have tested the Temma ironstones in the north west corner of the licence. The ironstones occur over a combined strike length of 15 kms in several horizons that may represent folded repetitions, or parallel fault structures.

The ground magnetic survey highlights the dip of the Temma ironstones, and indicates there may be more than one structural control on the formation and morphology of these ironstones. Possible structural controls include either, additional smaller or less magnetised structures, or a series of cross cutting faults repeating the ironstone. This could explain double peaked profiles on the ground magnetic survey, Figure 8 and 10.

The assay results from the outcrop rock-chips have reinforced the prospectivity of the area for a variety of commodities. This has caused questions to arise regarding the significance of titanium in the ironstones and surrounding Proterozoic metasediments.

The genesis of the Temma ironstones is still enigmatic after over 40 years of exploration and study of the area by various companies, governmental bodies, and academic institutions.

Recent work on the Savage River Mine (Bottrill, pers. comm. 2009), proposes a possible affiliation with IOCG type mineralisation for the equally enigmatic genesis of the Savage River magnetite bodies, and there appear to be some significant similarities between the Temma ironstones and the Savage River magnetite bodies.

Work at Temma has highlighted several interesting similarities between the Temma ironstones and recognised global IOCG deposits. The ironstones are hosted in near vertical to steeply dipping NNW striking structures that are apparently discordant with the host meta-sediments. Figure 12 shows the first vertical derivative (1VD) of magnetics covering NW Tasmania. This map illustrates a weakly defined general NNW trend in the Temma area (labelled "Temma NW lineament") as "seen" by the magnetics, which trends in the same orientation as the Temma ironstones. This implies the Temma ironstones may be small scale expressions of a large scale crustal structure, the sort of structure seen in the right side of Figure 12 labelled the "Arthur NE lineament", which is host to the Savage River Mine (potentially a large IOCG deposit). Such large scale crustal structures are an important factor in the formation of IOCG deposits

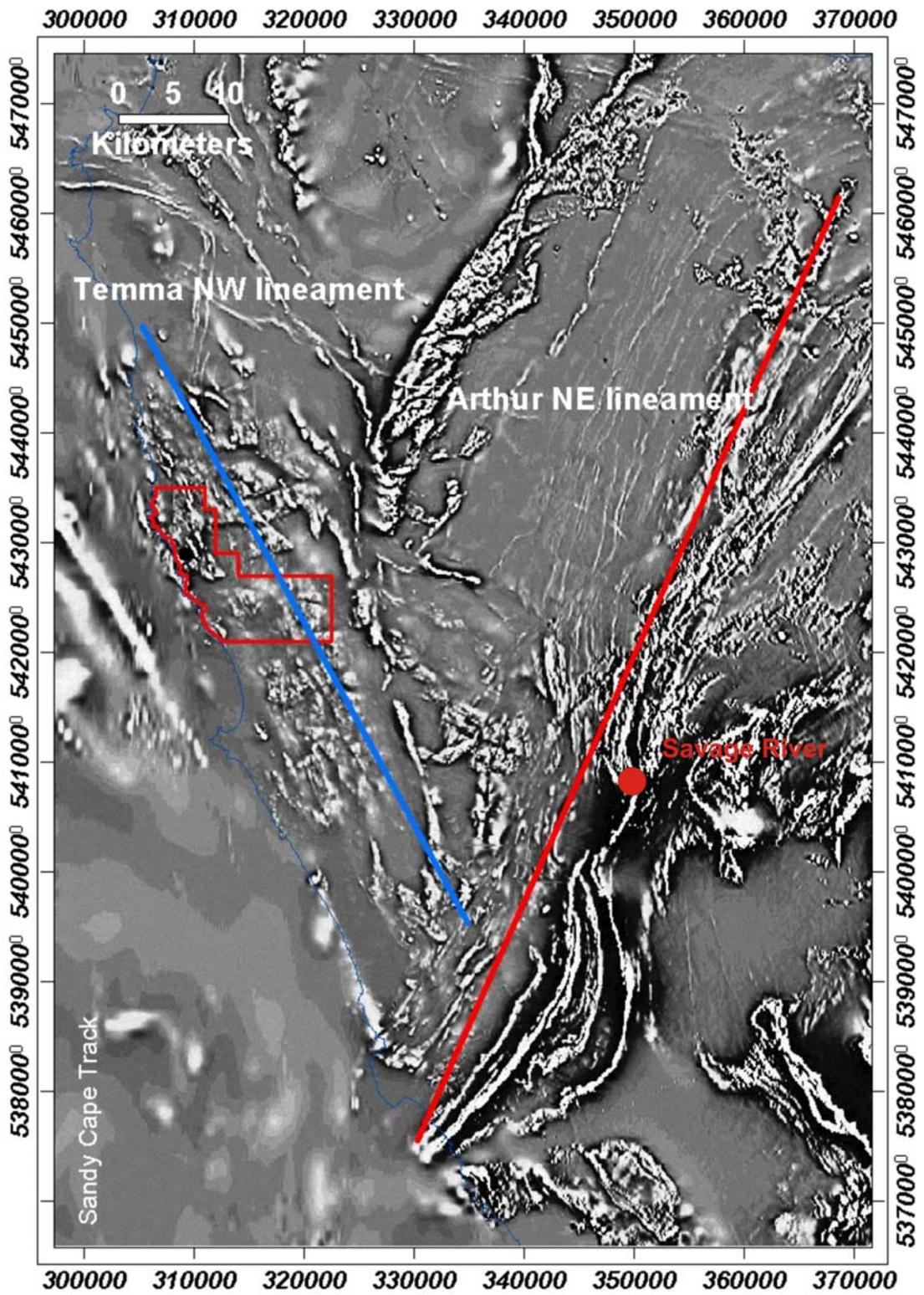


Figure 11. First vertical derivative of magnetics image of NW Tasmania

Alteration and mineralisation in the Temma ironstones (e.g. Weber, 1983), shows an assemblage which is diagnostic of other IOCG's (e.g the Igarahé bahia deposit in Brazil (Tallerico et al, 2005)), comprising over 20% magnetite, and including chalcopyrite, stilpnomelane, grunerite, garnet, siderite, chlorite, sericite, quartz. More work needs to be undertaken to understand the relationships of these minerals within the ironstone to see if there is a definite transition from sodic-calcic alteration to potassic alteration as seen in other IOCG's (e.g. Olympic Dam (Reeve et al., 1990)), when approaching the ore zone. Testing for P, Nb, U, and REE's (which previously has not been done at Temma) could help to categorise the Temma ironstones.

C-horizon soil sampling is recommended along the strike of the iron stones to test the distribution of copper and gold, testing of the ironstone for U, REE's, P, F, Nb will be completed using the relatively accessible Possum Creek working as the source of the ironstone. Completion of the other half of the ground magnetic survey, with additional lines covering any anomalous zones delineated in the C-horizon survey is also recommended.

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Appendix 1

Rock geochemistry data and Groundmagnetics data

EL272005_200902_rocks.txt	Rock chip samples
EL272005_200902_groundmag.tx	Ground mag data