



# QUARTERLY ACTIVITIES REPORT

*for the period ended 30 June 2013*

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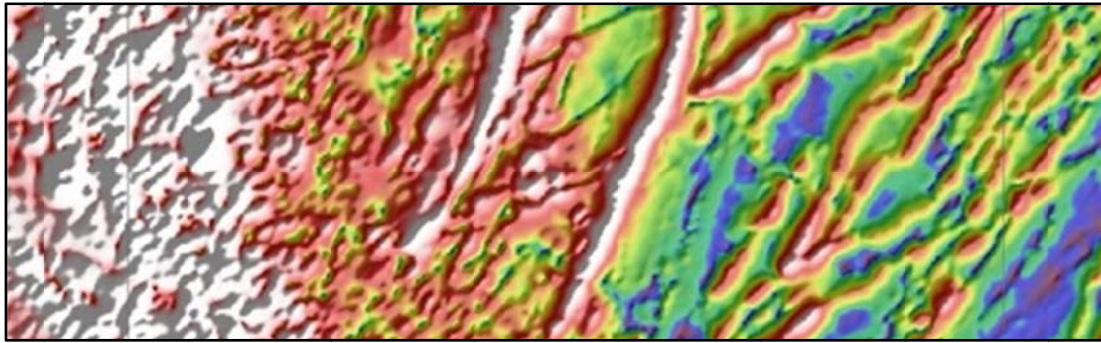
## HIGHLIGHTS

### NAMIBIA URANIUM EXPLORATION

- **Alaskite drill targets confirmed by on-ground assessment of high-resolution geophysical targets at the Mile 72 uranium project in Namibia.**
- **The combined historical work and recent high-resolution geophysics interpretation strongly support the primary alaskite-hosted mineralisation model previously developed by Metals.**
- **Positive results from the on-ground assessment program correlate with existing geochemical, drilling, radon cup, and radiometric anomalism and mineralisation.**
- **Drill planning has been being finalised for the commencement of a 3,000 m – 5,000 m RC drilling program to test for alaskite-hosted primary uranium mineralisation targets more than 50 m below surface.**
- **Drilling will commence upon renewal of the environmental permit for the licence.**

### AUSTRALIAN EXPLORATION

- **Copper and nickel potential identified at the Manindi Base Metal Project (WA).**



## URANIUM PROJECTS, NAMIBIA

### THE MILE 72 URANIUM PROJECT

The Mile 72 Uranium Project is a large uranium project on the coast of Namibia, north of the city of Swakopmund (Figure 1). Some of the highest worldwide uranium grades in recent times have been recorded in outcrop and in shallow pits. Uranium mineralisation on surface at Mile 72 occurs as secondary carnotite within gypcrete, **and importantly, as carnotite in the alaskite units** (Figure 2).

Metals is advancing towards drill testing a series of well-defined targets, aimed at identifying a large high-tonnage moderate grade primary deposit of a similar style to the Rössing and Husab mines to the south.

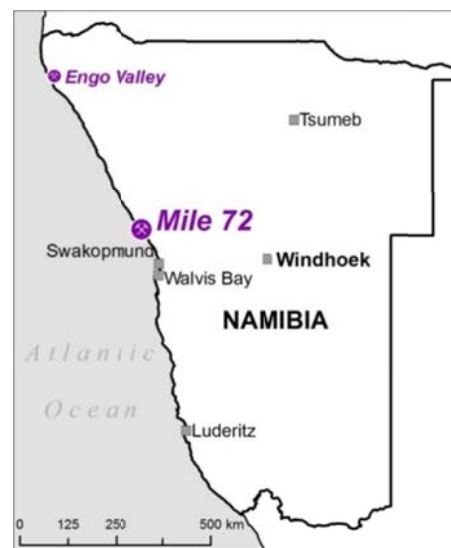


Figure 1 – Location of the Mile 72 uranium project, Namibia.



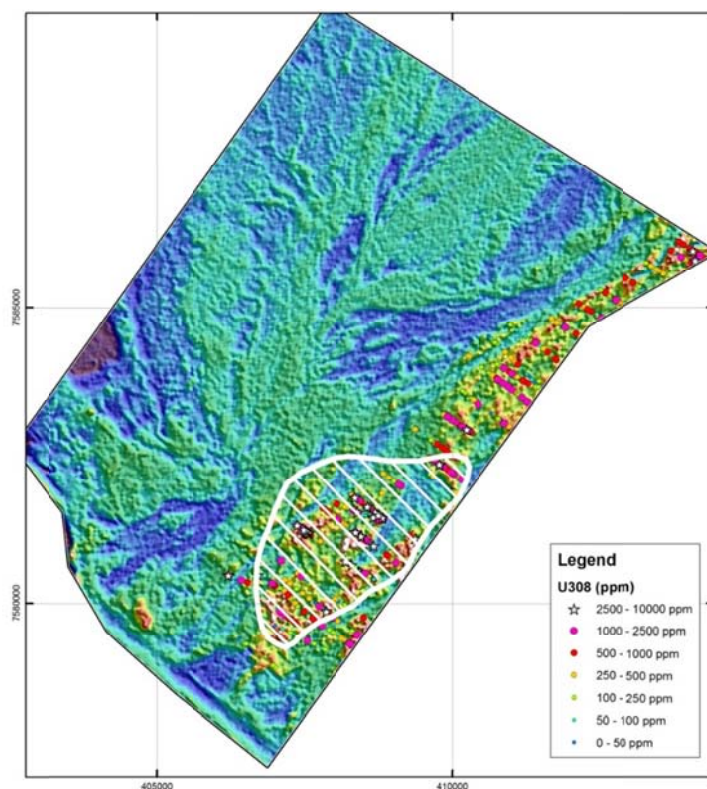
Figure 2. Alaskite with smoky quartz (black) and carnotite (light yellow) on fracture surface Smoky quartz is developed through damage to the quartz crystal structure through radioactive breakdown, most likely from primary uranium minerals rather than the secondary carnotite shown here.

### Site visit and shallow radiometric survey

During the June 2013 quarter, the Company conducted a site visit and shallow ground radiometric survey over the southern portion of the Mile 72 licence. This work confirmed the priority targets generated by the interpretation of the high-resolution airborne radiometric and magnetic survey conducted in December 2012.

The high priority targets within the subcropping schist, granite and alaskite package are defined by the coincidence of several key exploration factors, which include magnetic response, rock type, radiometric response, and uranium content. Field validation showed that each of the pre-defined target areas was found to correspond with surface mineralisation, **even in areas which had not previously been sampled.**

The findings of the recent field work have allowed the company to refine the geological interpretation of the Mile 72 area and has resulted in detailed target generation for a program of deeper drilling to test for primary deep-seated uranium mineralisation. The new geological interpretation for Mile 72 provides strong additional support for a Rössing-style uranium mineralisation model and provides a sound basis for the forthcoming drill program.



**Figure 3** – Several high priority target areas have been defined within a broad zone in the south of the licence (white, cross-hatched). The targets are defined on numerous criteria, including geology, and magnetic and radiometric response. Shown on the licence area are surface geochemical results and high-resolution radiometrics.

### Proposed drilling program

A drilling program of 3,000 – 5,000 metres has been finalised to test the defined priority targets. Around 40 widely-spaced drillholes will penetrate to a downhole depth of around 100 m in order to adequately test fresh rock well below the influence of the water table, which is suspected of remobilising substantial quantities of uranium in the near-surface environment.

The program is designed as a proof-of-concept for deep-seated Rössing-style alaskite-hosted uranium mineralisation in the southern part of the Mile 72 licence area. Success will be

measured on the basis of extended intercepts of significant uranium mineralisation, which in this context would be **several metres in excess of 150ppm U<sub>3</sub>O<sub>8</sub>**.

On the successful completion of this program, a series of follow-up programs will be required to infill and expand upon any intercepts encountered.

The program will be initiated upon the renewal of the environmental permit for the licence.

### Exploration licence and environmental permit update

In accordance with Namibian law, the Company has submitted the required documentation to the Namibian Ministry of Mines and Energy for the renewal of the Mile 72 licence, EPL3308. The Ministry has acknowledged the Company's early submission of the application for renewal and will advise further in due course. In the Company's view, Metals has met or exceeded all requirements for ongoing exploration of the licence area, and foresees no impediments to the renewal of the exploration licence.

Before drilling can commence, recent changes to Namibian legislation have required that a renewal of the environmental permit is required. The application has been lodged and assessment is underway by the relevant department. On receipt of a renewed permit, the company will commence drilling at Mile 72.

## THE ENGO VALLEY URANIUM PROJECT

The Engo Valley Project (EPL3306) is located in the remote northwest of Namibia in the Skeleton Coast National Park. The project is located close to the proposed port location at Angra Fria on the northern Namibian coast. The Project is prospective for uranium located within and below the Karoo-age sediments present on the licence. Access permits are required to visit the Skeleton Coast National Park and there are no roads and no habitable sites within the 16,000 km<sup>2</sup> park (See Figure 4).

The necessary Environmental Clearance and Access Permits for Engo Valley were granted in July 2012.

An extension application was lodged prior to the expiry of the licence in June 2013. The delay in granting of the environmental permit was cited as a reason for limited work having been carried out. The company now awaits the decision of the Ministry on the licence extension. Given the remoteness of this project, any field work at Engo is not likely to be undertaken until after the completion of drilling at Mile 72.

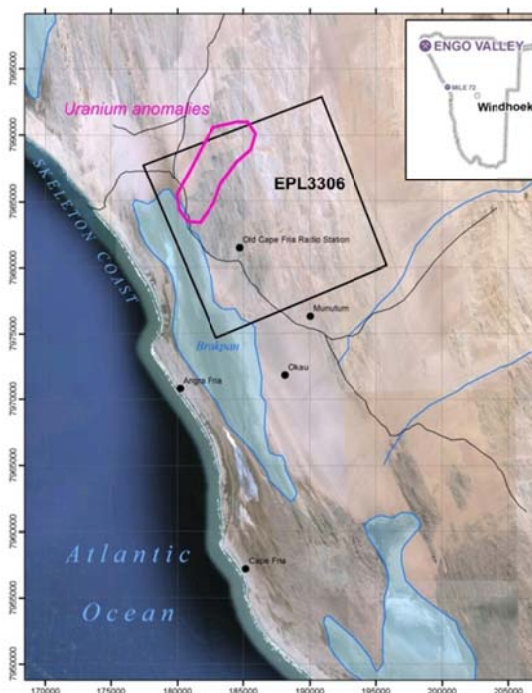


Figure 4 – The Engo Valley licence area (EPL3306)

## BASE METAL PROJECTS, WESTERN AUSTRALIA

Metals currently holds an interest in two base metals projects in Western Australia (Figure 5).

The Manindi zinc project is located around 500 km northeast of Perth and is being explored by Metals with a view to expanding the existing resources and examining the project's copper potential.

The Sherlock Bay base metal joint venture project is located in the Pilbara region and is being managed and explored by Australasian Resources Ltd (ARH). The project surrounds ARH's Sherlock Bay nickel deposit.



Figure 5 – Location of the Western Australian base metals projects.

### MANINDI ZINC PROJECT

The Manindi zinc project is a significant resource located in the Murchison District of Western Australia, 20 km southwest of the defunct Youanmi gold mine.

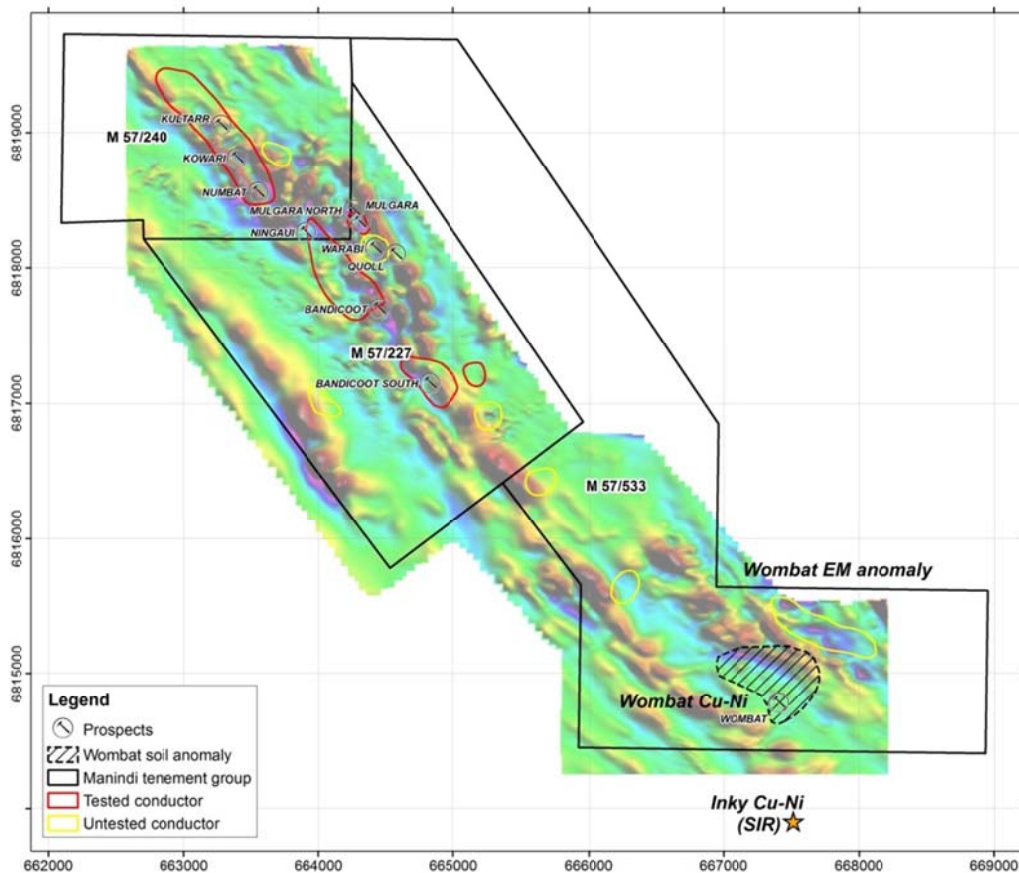


Figure 6 - EM and Geochemistry targets at Manindi showing location of Inky Prospect (Sirius Resources)  
 During the current quarter, the Company continued to review the potential of the project to yield new copper and nickel mineralisation following a series of positive announcements by Sirius Resources at its adjacent Inky Cu-Ni Prospect (see Figure 6 and see Sirius's

announcement of 2 April 2013). The Inky prospect is located 1km south of the licence boundary of Metals' M57/533, 2km south of the Metals Wombat Cu-Ni soil and VTEM anomalies, and 6.25km SE of the Manindi Zn-Cu-Au-Ag Resource.

Metals has identified seven untested geophysical anomalies adjacent to the known mineralisation at Manindi which constitute attractive new drill targets for copper-zinc and copper-nickel mineralisation. Copper-rich VMS deposit discoveries such as Sandfire's Doolgunna Project and Cu-Ni discoveries such as Sirius's Nova deposit have been found utilising similar geophysical techniques in WA in the recent past. Manindi is located within a known mineralised terrane with significant upside potential for further base metals discovery.

Planning has commenced for additional programs at Manindi including new soil sampling programs focused on the identification of copper and nickel as well as starting a detailed review of the resource estimate for the Manindi Zn-Cu-Au-Ag mineralisation. These activities will be continued in the September 2013 Quarter.

### **Manindi resource**

The Manindi base metal deposit is a volcanogenic massive sulphide zinc deposit, comprising a series of lenses of mineralisation that have been folded, sheared, faulted, and possibly intruded by later dolerites and gabbros. The style of mineralisation is similar to other base metal sulphide deposits in the Yilgarn Craton, particularly Golden Grove to the west of Manindi at Yalgoo, and Teutonic Bore-Jaguar in the Eastern Goldfields.

In 2008, Metals delineated a JORC resource of:

**1.354 million tonnes @ 6.04% Zinc, 0.25% Copper, 3.4 g/t Silver & 0.25 g/t Gold**

The resource is divided into the following categories (at a 1% Zinc cut-off):

<b>Measured</b>	<b>497,000 tonnes @ 7.32% Zinc</b>
<b>Indicated</b>	<b>438,000 tonnes @ 6.38% Zinc</b>
<b>Inferred</b>	<b>419,000 tonnes @ 4.14% Zinc</b>

### **SHERLOCK BAY EXTENDED BASE METAL PROJECT**

The Sherlock Bay Extended project is composed of two Exploration Licences (E47/1769 and E47/1770), which surround the main Sherlock Bay nickel deposit (wholly owned by Australasian Resources Ltd - 'ARH'). The project is prospective for nickel, copper, silver and gold mineralisation.

The project is a joint venture between ARH (70% interest) and Metals (30% interest). ARH are the managers of the project, with Metals being 'free-carried' through to the completion of a bankable feasibility study and the decision to commence commercial mining.

A sampling program, which was based on a combination of information generated by Global Ore Discovery (processed HyMap data) with the DTM data (GeoEYE) and a past biogeochemical assay data, was completed during the last reporting year. The program included sampling on all tenements in the Sherlock and Sherlock Extended project areas; results have now been received and interpreted by ARH's consultant. A total of 20 target areas have been identified for follow up.

ARH undertook an extensive vegetation sampling program across tenements making up the Sherlock Exploration Project, located between Roebourne and Whim Creek in the Western Pilbara. Geko-Co Pty Ltd (Geko-Co) was requested to review and interpret the assay results

in conjunction with existing hyperspectral and topography data, and in combination with the historic dataset built up by IEL. Assay results were progressively provided by Genalysis Laboratory Services in the first half of 2013 and the interpretation is now complete.

The interpretive work has identified seven areas of interest shown on Figure 7 and Table 1. Thirteen targets which warrant further exploration were located on the JV tenements. The interpretation gave consideration to specific elements that might be most significant in determining areas of potential economic mineralisation. Known deposits within the region include; Sherlock Bay (Ni,Cu), Balla Balla (Fe,Ti,V & P), plus the Salt Creek, Balla Balla and Whim Creek base metals deposits (Cu,Zn,Pb). The elements associated with ore minerals of these deposits were considered for anomalism across the project area.

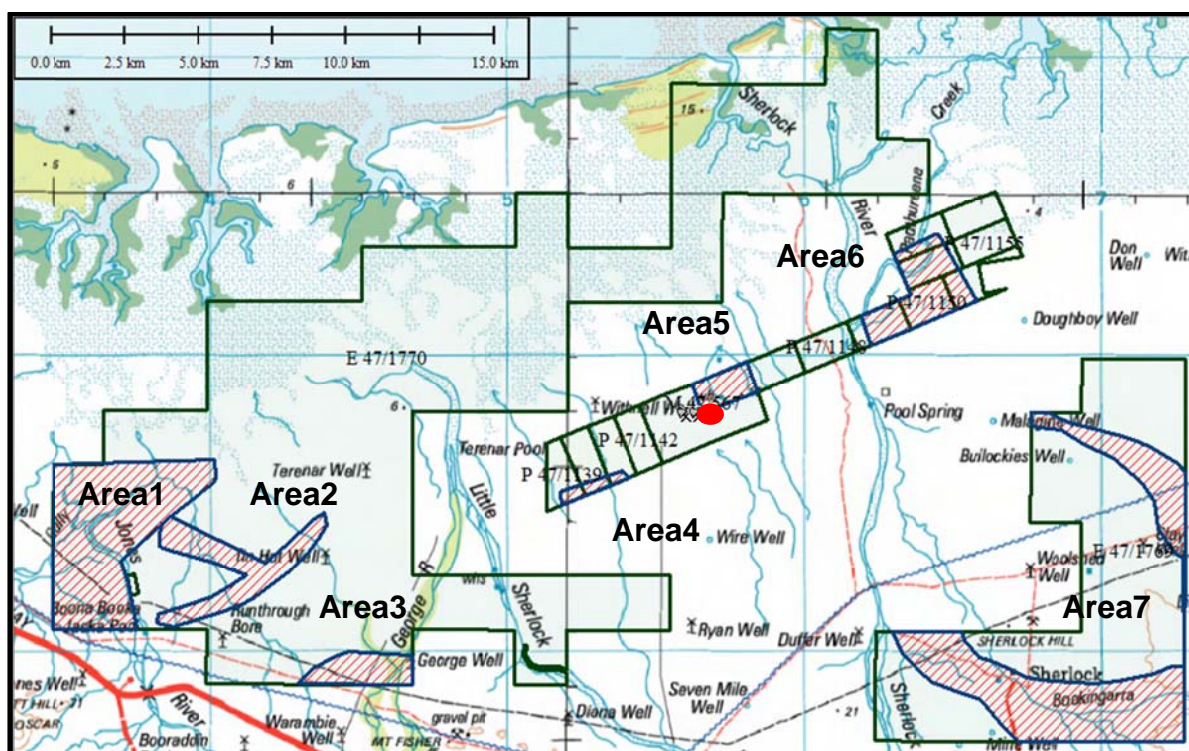


Figure 7: Areas of exploratory interest set against 1:250,000 topography data (red oval indicates Sherlock deposit)

Targeted Anomalism	Prospective Areas	Prospective Area Subgroup	Tenement
Nickel	Area 1	A1.1	E47/1770
		A1.2	E47/1770
		A1.3	E47/1770
	Area 2	A2.1	E47/1770
		A2.2	E47/1770
	Area 7	A7.1	E47/1769
		A7.2	E47/1769

Gold	Area 8	E47/1770
	Area 9	E47/1769
Platinoid	Area 10	E47/1769
Titanium	Area 11	E47/1770
	Area 12	E47/1770

**Table 2: Total areas of exploratory interest (note Ti is often elevated in areas of interest for Nickel)**

The Consultant to ARH has made the following recommendations relating to potential and follow up work on the Joint Venture tenements;

- *Further biogeochemical sampling within E47/1770 is recommended within areas 1, 2, and 3. One of the most prospective areas, Area 1.1 (see Table 1), would be benefitted by highly detailed 50 m spaced sampling.*
- *It is recommended to extend the planned sampling lines for A1.1 to continue into A1.2, with the same sampling methodology, orientation and spacing to continue within the highlighted zone of interest and further test the relationship between anomalism of A1.1 & A1.2.*
- *The structural interpretation in relation to A1.3 would be further tested by lines of infill sampling at 200 m spacing running through the highlighted zone within figure 1 for a total of 23 lines at a constant length of 1.2 km.*
- *The deformation associated with the area in A2.1 (E47/1770) may be host to mineralisation resulting from migration of nickel in structural breaks along the broad contact/s. With current line spacing at two to four kilometres a two stage infill programme is recommended. The first stage would be 1 km or 500 m line spacing to confirm continued anomalism along the trend, with positive results leading to further infill at a scale suitable for drill target definition.*
- *Knowledge of Area 7's potential mineralised corridor within E47/1769 would be greatly improved by an infill programme of 100 m spaced lines along the northern inferred corridor zone and 200 m spaced lines throughout the southern portion of the corridor with lines at a total length of 3.6 km.*
- *Area 10's platinoid anomalism is located in a large portion of the central area of E47/1769 and sits directly adjacent to the HyMap highlighted corridor of prospective nickel anomalism. It is difficult to ascertain if economic mineralisation is likely to be hosted in the underlying granitic rocks and at this stage it is thought to be a lower priority target for follow up. A two stage follow up approach would be advisable to reduce the amount of sampling initially required.*
- *Titanium anomalism in Area 11 (E47/1770) would be further tested by the implementation of individual relatively close (250 m) spaced lines either side of anomalous lines for a total of length of 2.5km north-south to determine the local extent of anomalism. Given Titanium is likely to be indicative of Balla Balla style*



*Fe+Ti+V mineralisation it would be prudent to consider the aeromagnetics data for this area when designing the program.*

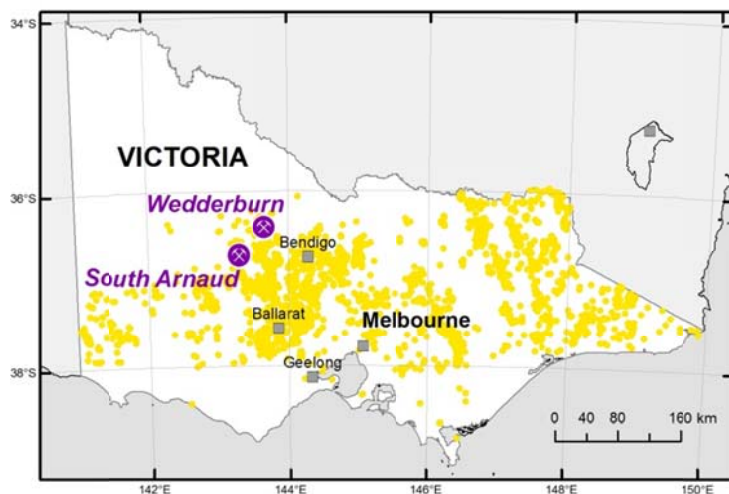
- *Finally, Titanium anomalism in Area 12 (E47/1770) is suggested to be approached with an initial programme of infill sampling to help improve the resolution of data by the use of 3 additional lines at 250 m spacing. Given Titanium is likely to be indicative of Balla Balla style Fe+Ti+V mineralisation it would be prudent to consider the aeromagnetics data for this area when designing the program.”*

These results provide significant encouragement to progress exploration. In the coming quarter ARH expects to utilise all available information to plan the next stage of field work on the Project

## GOLD PROJECTS, VICTORIA

Metals holds two low impact exploration licences in western Victoria (Figure 8). The St Arnaud South (EL5242) and Wedderburn (EL5243) projects contain significant historic workings that have received little modern and systematic exploration.

The Victorian Goldfields were discovered in the gold rushes of the mid-1800s, with all significant gold mining activity ceasing by 1930. Government records show that numerous gold prospects, mines and occurrences are documented within the licence areas.



**Figure 8** – Location of the Wedderburn and South Arnaud projects in western Victoria. Yellow dots represent gold deposits and prospects, and their distribution highlights the rich gold belts of Victoria.

During the June Quarter, limited work was undertaken on the Victorian licences due to the lack of availability of the geological consultant.

### EL5242 ST ARNAUD SOUTH –PERCYDALE FAULT ZONE

Previous work on EL 5242 is focused on workings hosted by the Percydale Fault Zone, which is a sheared, altered zone of strong deformation that is up to 500 metres wide. The fault zone within the licence contains regular north-west striking, west dipping zones that show a strong association with gold mineralisation. The Company has focused in on the Sailor-Greenock-Federal trend of mineralisation as a potential significant exploration target.

Discrete veins within this zone have exhibited high grade gold mineralisation over short strike lengths of 50 to 100 metres. Grades have typically been in the range of 10 to 30 g/t Au, and high values of lead, zinc, copper, and silver have been associated with the gold mineralisation at various locations throughout the area.

### Large tonnage, moderate grade gold potential

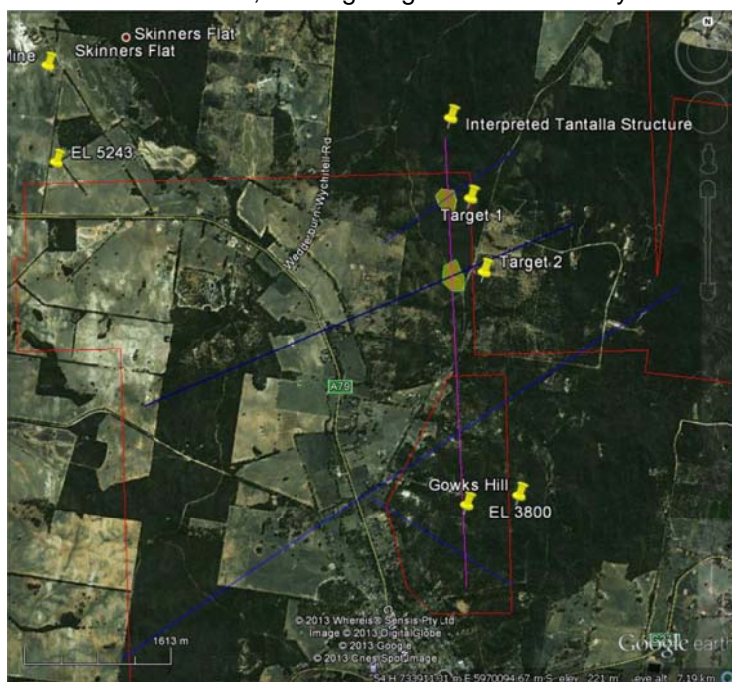
Historical exploration in the region was for low tonnage, high grade gold deposits. A review of that work shows that a series of small high-grade bodies were identified (3,000-10,000t range), but the potential for larger, lower grade disseminated gold mineralisation in the area was not considered.

Reappraisal of the historical work indicates there is potential for a 10 to 20 metre wide, moderate grade shear zone to exist between hanging wall and footwall fault structures in the EL area (North Percydale Block).

Work by Metals has shown rock chip samples from the Greenock mine area returned in excess of 3 g/t Au. The length and orientation of these zones is presently unknown but will be subject to further work.

### EL5243 WEDDERBURN –TANTALLA FAULT ZONE

A structural analysis has outlined the Tantalla Shear Zone as a prospective host for gold mineralisation. This structure is interpreted to project through the EL in the north and the south (see Figure 9). In the southern area of the EL, small hard rock workings are present and several alluvial leads have been worked. These leads suggest the presence of primary gold mineralisation in the subsurface, although a genuine source is yet to be identified.



**Figure 9** - Plan showing Northern Extension of the Tantalla Structure from EL 3800 and subsequent target areas for investigation.

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**Competent Person Declaration**

The information in this release relating to the geology and exploration results of the projects owned by Metals Australia Ltd is based on information compiled by Dr Matthew Painter, who is a consultant to Metals Australia. Dr Painter is a member of The Australian Institute of Geoscientists, a Recognised Professional Organisation by the Australasian Joint Ore Reserves Committee, who has sufficient experience relevant to the style of mineralisation and types of deposits under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Painter consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

**Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Metals Australia Ltd's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Metals Australia Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.