



# QUARTERLY ACTIVITIES REPORT

*for the period ended 31 March 2013*

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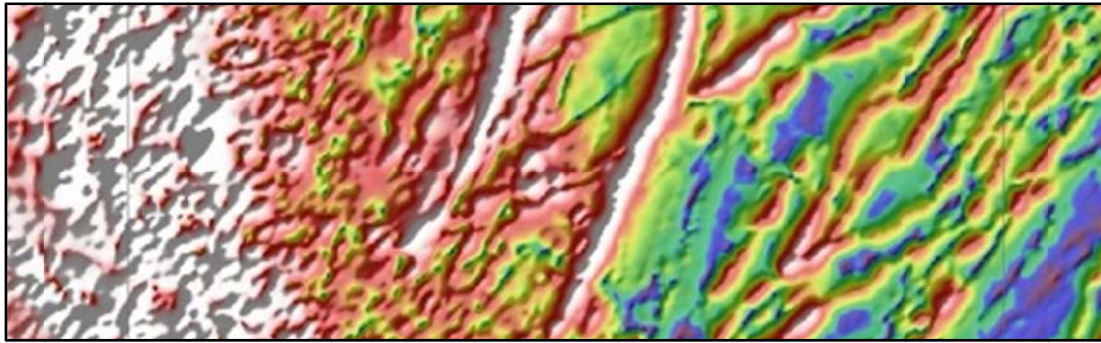
## HIGHLIGHTS

### NAMIBIA URANIUM EXPLORATION

- Interpretation of new high-resolution geophysical surveys at the Mile 72 uranium project completed,
- New data indicates a strong correlation between existing uranium anomalism and newly identified magnetic and radiometric features,
- Data shows a strong correlation with existing geochemical, drilling, radon cup and new radiometric airborne data,
- A series of target zones have been identified in the Kudu-Impala Corridor,
- A field assessment of the priority target areas to commence in May 2013 and will include sampling, mapping, and siting of drill-hole locations,
- Following final field reviews, a deep drilling program will be initiated to test the alaskite-hosted primary uranium mineralisation.

### AUSTRALIAN EXPLORATION

- Manindi Base Metal Cu-Zn Ni Project (WA) copper potential being re-evaluated following Ni-Cu discovery by Sirius Resources adjoining Metals' Wombat Copper anomaly
- Victorian Gold projects - Field visits highlight large-tonnage Gold potential at Wedderburn and St Arnaud



## 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 uranium grades in the world have been recorded in outcrop and in shallow pits. Metals has recently entered into a new phase of exploration at Mile 72, targeting a large high-tonnage moderate grade primary deposit of a similar style to the Rössing and Husab mines to the south.

In the March 2013 quarter, the Company announced the completion and interpretation of a high-resolution airborne magnetic survey at its Mile 72 Project

This high-resolution survey was conducted at 50 metre line spacing and flown at an altitude of 30 metres, covering 3,655.5 line kilometres. The survey has provided the Company with excellent high-resolution magnetic and radiometric imagery of the subsurface geology at Mile 72. This information is being used to plan a deeper drilling program to test for primary Rössing-style uranium mineralisation.

#### New Data Strongly Supports Previous Work

The survey has provided the Company with highly detailed supporting data to complement the existing geochemical, radiometric (radon cup), trenching and shallow drilling sampling data already obtained along the Kudu-Impala Zone at the Mile 72 Project.

The new geophysical data provides strong additional support for the mineralisation model. The high-resolution magnetic signature (magnetic lows corresponding to potential alaskite units, Figures 2 & 3) and airborne radiometric signature (total signal and uranium only signal, Figure 4) show **direct spatial correlation** with the known high-grade mineralised zones at Mile 72, in areas of outcropping or subcropping schists, granites and alaskites, and in some cases in areas of thin basaltic cover.

Uranium mineralisation on surface at Mile 72 occurs as secondary carnotite within gypcrete.

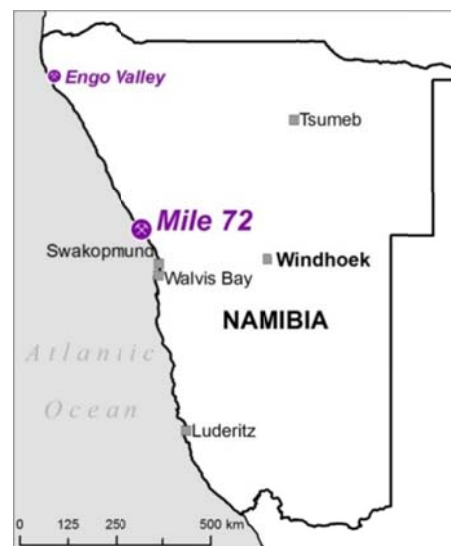


Figure 1 – Location of the Mile 72 uranium project, Namibia.

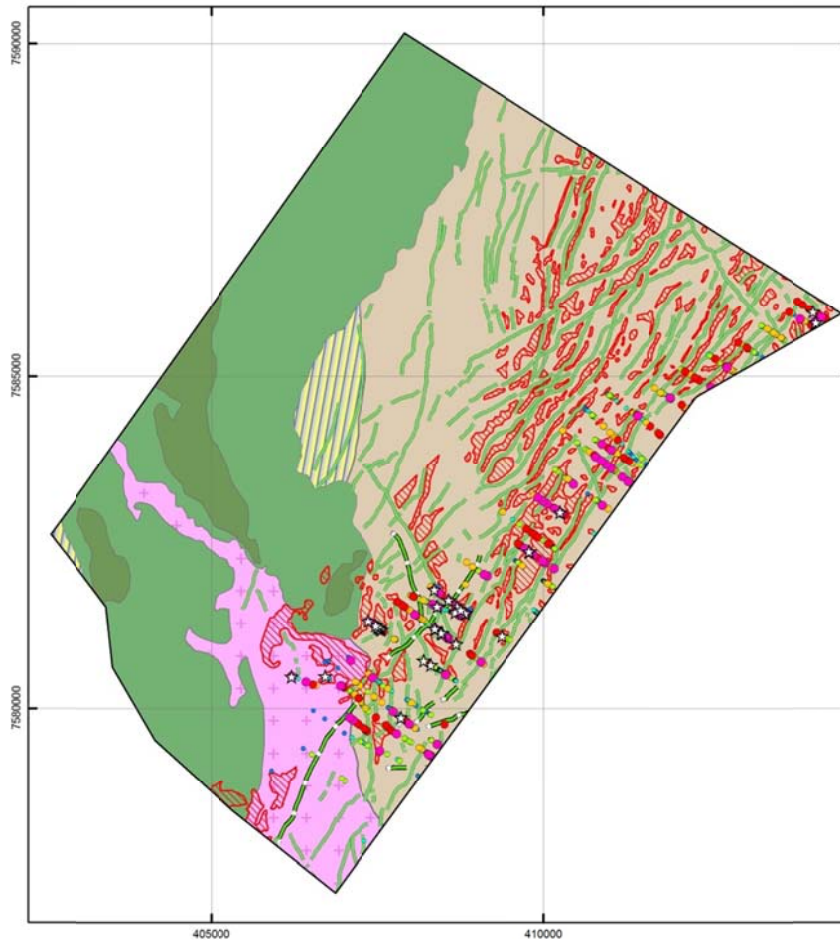


Figure 2 – Interpreted geology showing the distribution of units throughout the Mile 72 Project area, overlaid by the surface uranium assay results. Geological and magnetic units include: Etendeka basalts (green shades), Damaran schists, granite and alaskite (buff), dolerite dykes (green linework) and magnetic lows (red, cross-hatched). The distribution of these units, in conjunction with other data sets like the radiometrics, is being used to define targets for the forthcoming drilling.

### Key Findings Support Drill Targeting

- The area has an equivalent propensity to generate alaskites (the hosts to uranium mineralisation) as the “Alaskite Alley” area that contains Rössing and Husab.
- The current interpretation of the geology from the new geophysics data (Figure 2) confirms a large area of the licence being underlain by the target sequences of Damaran schists, granites and alaskites
- Numerous areas of magnetic lows have been identified throughout the licence area (Figure 3). Some magnetic lows, which are thought to correspond to alaskites in the subsurface, show **a direct correlation with areas of surface mineralisation**. These lows are, however, far more extensive than the presently known extents of outcropping mineralisation, following and extending beyond the broad subsurface anomalies defined by the Company’s earlier radon cup survey.
- Many lows are cross-cut by a magnetically strong, northwest-oriented dolerite dyke swarm, which tends to mask the full extent of the lows. Suspected

extensions will need to be checked in the field to confirm the extent of the potential alaskite units.

- Uranium concentrated at surface at Kudu-Impala must be sourced from the basement sequence within the licence area, and has not been transported in from elsewhere. This is illustrated by the uranium radiometrics which clearly show U highs associated with basement outcrops, cross-cut by drainage channels with a very low signature. (Figure 4).
- Several targets have been identified. All will require physical examination prior to the commencement of the deeper drilling program.

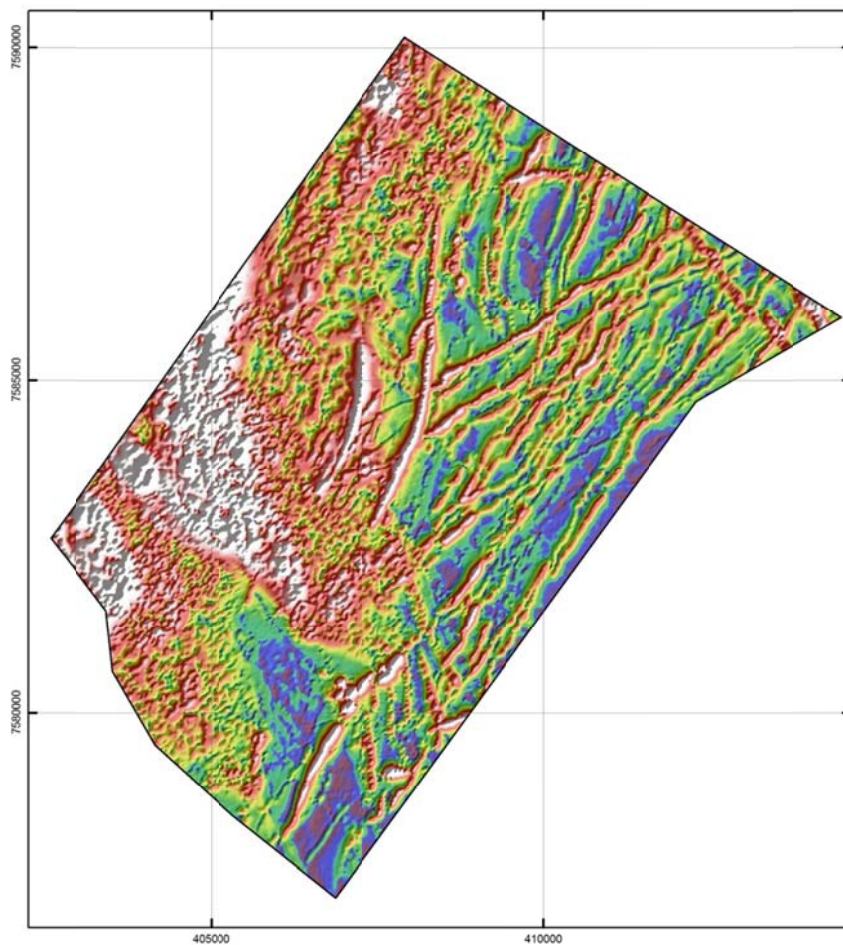


Figure 3 – Aeromagnetics image (analytical signal) showing the high level of detail provided by the new geophysical data. This and many other manipulations of the geophysical data have been used to determine the distributions of various magnetic units shown in the geological interpretation in Figure 2.

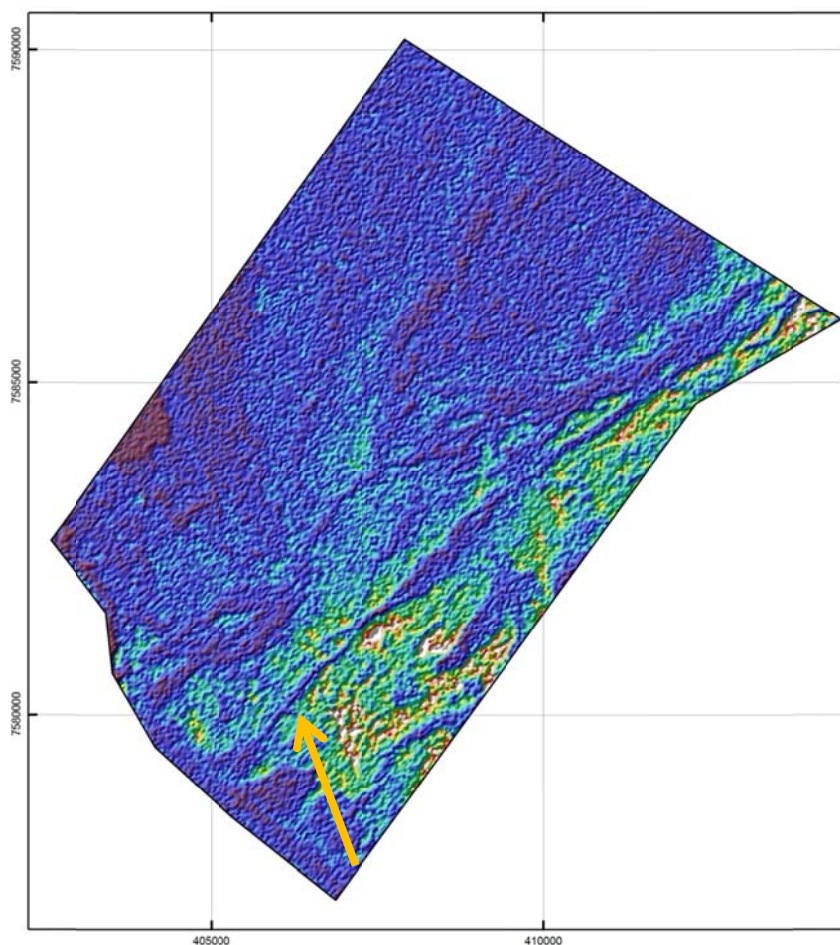


Figure 4 – Radiometric image (uranium channel) over the Mile 72 licence area. Areas of high response (yellows, reds and white) correspond directly with outcrop of schist, granite and alaskite. River channels are depicted as wavy radiometric lows (e.g. channel indicated by arrow) that indicate low uranium content. Uranium is therefore limited to areas of schist-granite-alaskite outcrop, consistent with a Rossing-style model for mineralisation at Mile 72.

### PLANNED ACTIVITIES

The Company has developed a series of immediate targets from the interpretation. These consist of areas where deeper drilling can test the Damaran schist-granite-alaskite sequence where this correlates with our best surface and radiometric results.

The Company will mobilise a review team to the site in May 2013, and finalise drilling plans for a 2,000-4,000m deep drill program to take place as soon as possible thereafter to test the anomalies identified by the Company.

### EXPLORATION LICENCE 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 Australia has met or exceeded all requirements for ongoing exploration of the licence area, and foresees no impediments to the renewal of the exploration licence

## 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).

In January 2012, Metals submitted a detailed Environmental Overview and Environmental Management Plan document to the Namibian Ministry of Environment and Tourism (MET) to apply for an Environmental Clearance and Access Permit to commence surface exploration work at Engo Valley. The necessary Environmental Clearance and Access Permits were granted in July 2012.

A programme of field work to map, sample and assess the Engo Valley Project area has been planned and is ready to commence once relevant approvals are in place. Given the remoteness of this project, field work at Engo is not likely to be undertaken until after the completion of drilling at Mile 72.

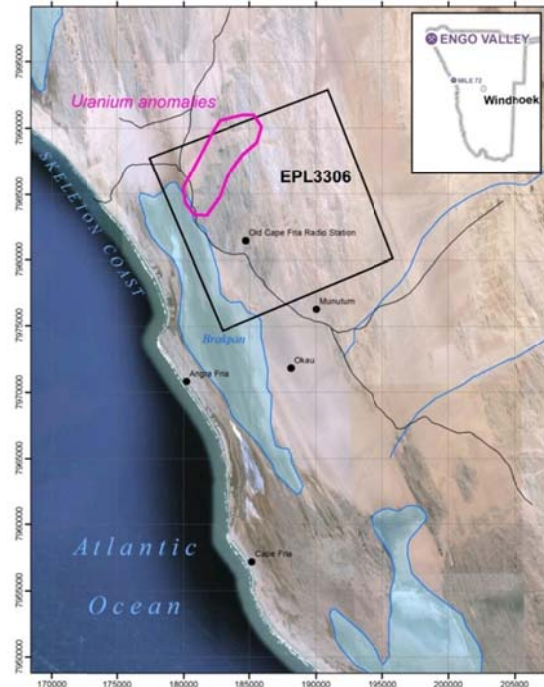


Figure 5 – The Engo Valley licence area (EPL3306)

## BASE METAL PROJECTS, WESTERN AUSTRALIA

Metals currently holds an interest in two base metals projects in Western Australia (Figure 6).

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 6 – 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.

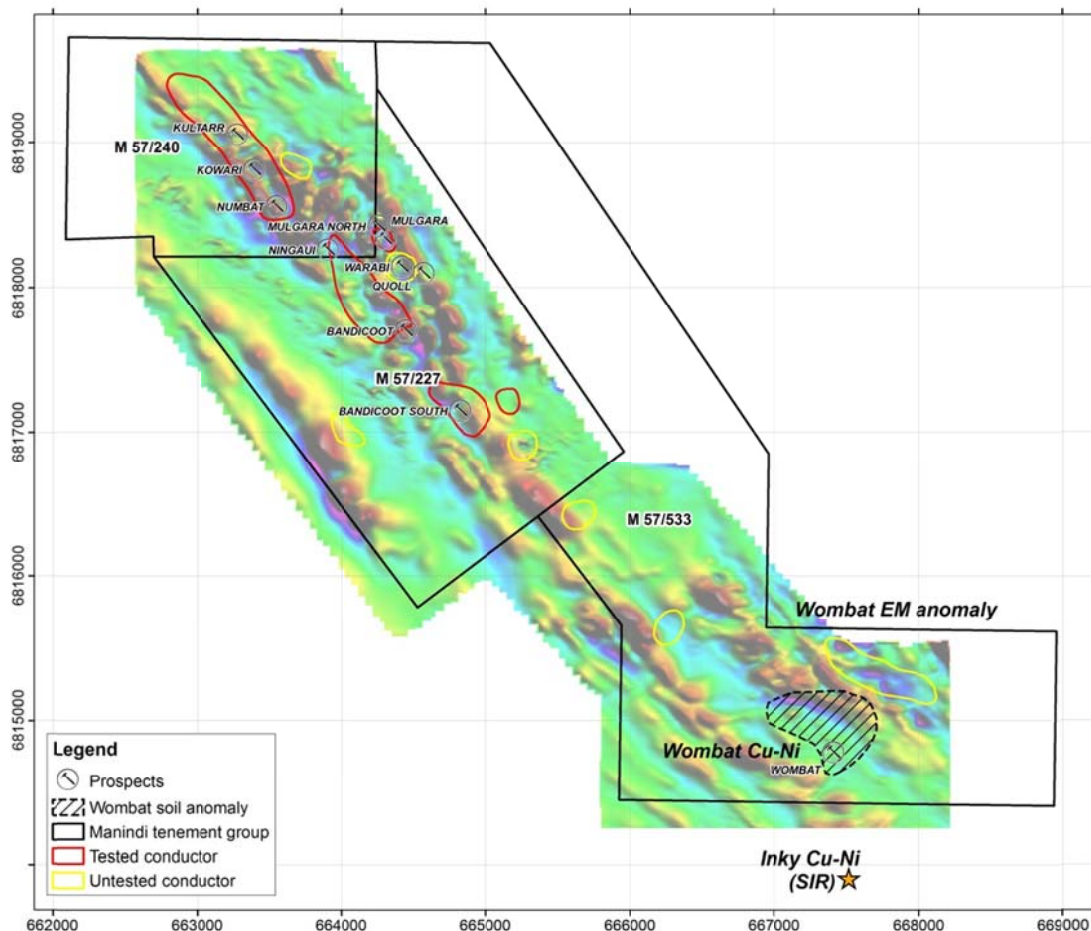


Figure 7 - EM and Geochemistry targets at Manindi showing location of Inky Prospect (Sirius Resources)

During the current quarter, the Company has 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 Inky Cu-Ni Prospect (see Figure 7 and see Sirius Resource NL 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.

In the previous quarter, the Company began undertaking a review of VTEM and geochemistry targets and its work in the March quarter continues that review to include Cu-Ni mineralisation potential in the ultramafic and gabbroic rocks contained in the Manindi sequence.

Metals has identified seven untested geophysical anomalies adjacent to the known mineralisation at Manindi which constitute a number of 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' 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

### **Manindi Existing Resources**

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.

Biogeochemical samples were collected during August, September and October 2012, which have been submitted to Genalysis Laboratory in Perth for analysis. This biogeochemical survey program was based on a combination of the information generated by Global Ore

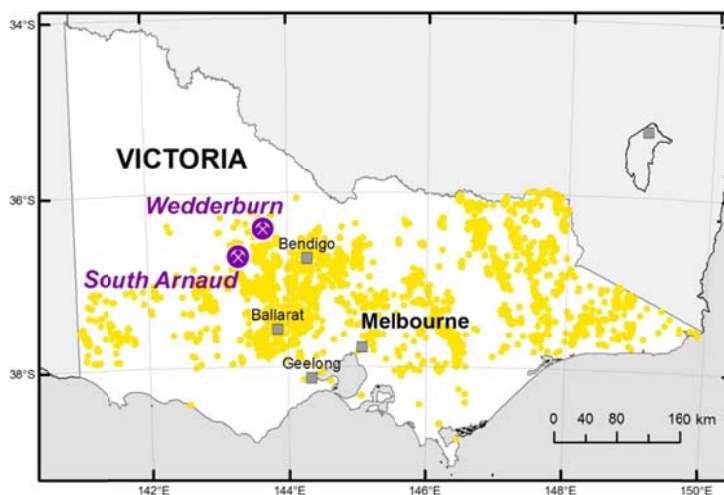


Discovery (processed HyMap data) along with the DTM data and past biogeochemical assay data. Consultants have received all assay results and are now reviewing and standardising the dataset. Results of the consultants work are expected to be announced within the coming quarter.

## GOLD PROJECTS, VICTORIA

Metals holds two low impact exploration licences in western Victoria (Figure ). 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 9** – 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 March quarter Metals' local consultant and geologist visited the South Arnaud area.

### EL5242 ST ARNAUD SOUTH –PERCYDALE FAULT ZONE

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 has regular north-west striking, west dipping fault zones that show a strong association with gold mineralisation. Research and field trips during the quarter have further focused on the Sailor-Greenock-Federal trend of mineralisation which the company plans to develop into a 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 carried out at a time of significantly lower gold prices by larger companies in search of large tonnage, high grade 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.

#### **PLANNED ACTIVITY IN 2013 ON EL 5242**

An Area Work Plan has been submitted to the Department of Primary Industry for assessment. A site meeting is expected in the coming period to advance the work application, which will involve taking soil and rock samples on the unrestricted Crown Land within the exploration licence. Once the work plan is approved, mapping and sampling will commence targeting the Percydale Fault Zone in order to outline further targets based on the Company's large-tonnage, moderate grade model. Sampling work is required to determine if there has been underreporting of gold grades in historical drillholes in the area.

#### **EL5243 WEDDERBURN –TANTALLA FAULT ZONE**

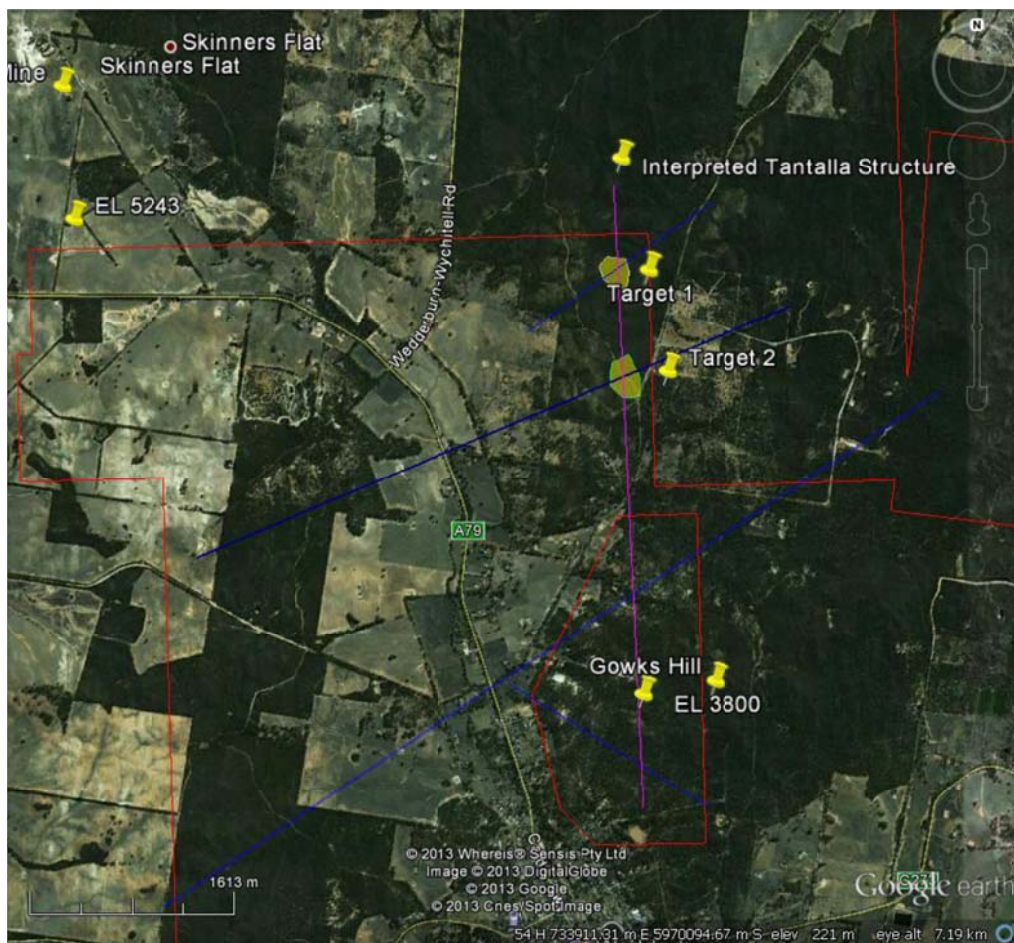
Metals' consultants have completed a study and have outlined targets for mapping, soil sampling and rock chip sampling.

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. In the southern area of the EL, small hard rock workings are present and several alluvial leads have been worked. These leads indicate the presence of gold, although a genuine source is yet to be identified.

Soil sampling data from previous work (342 rock chip and soil samples) was received and entered into Micromine for analysis. Further sampling will be undertaken as the initial review of the geochemistry has highlighted an anomaly at the Potters Reef.

During the quarter, work focused in on the potential extensions to the Gowks Hill Resource located within the Inglewood Gold Mining Companies (IGMCo) EL 3800. (see Figure 10). IGMCo have a small open pit resource identified which is associated with a major north- south structure (the Tantalla Fault Zone) which extends north and south into the Metals Australia EL 5243.

The presence of cross faulting highlights the Tantalla structure, which is a strong west dipping fault zone up to 5 metres wide and imagery shows several oblique structures intersecting it in the EL 5243 area.



**Figure 10** - Plan showing Northern Extension of the Tantalla Structure from EL 3800 and subsequent target areas for investigation.

### PLANNED ACTIVITY IN 2013 ON EL 5243

Field based work in the coming quarter will focus on potential extensions to the Tantalla structure north and south of the Gowks Hill Resource area as outlined in Figure 10.

The ground is predominantly Restricted Crown Land to the north, and a reconnaissance visit will ascertain the best method to assess the potential extension of the Tantalla zone.

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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.