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30 April, 2013

Centralised Company Announcements Office  
ASX Limited  
Exchange Centre 20 Bridge Street  
Sydney NSW 2000

## **ZAMIA METALS LIMITED QUARTERLY ACTIVITIES REPORT**

### **For the quarter ended 31 March 2013**

#### **BACKGROUND**

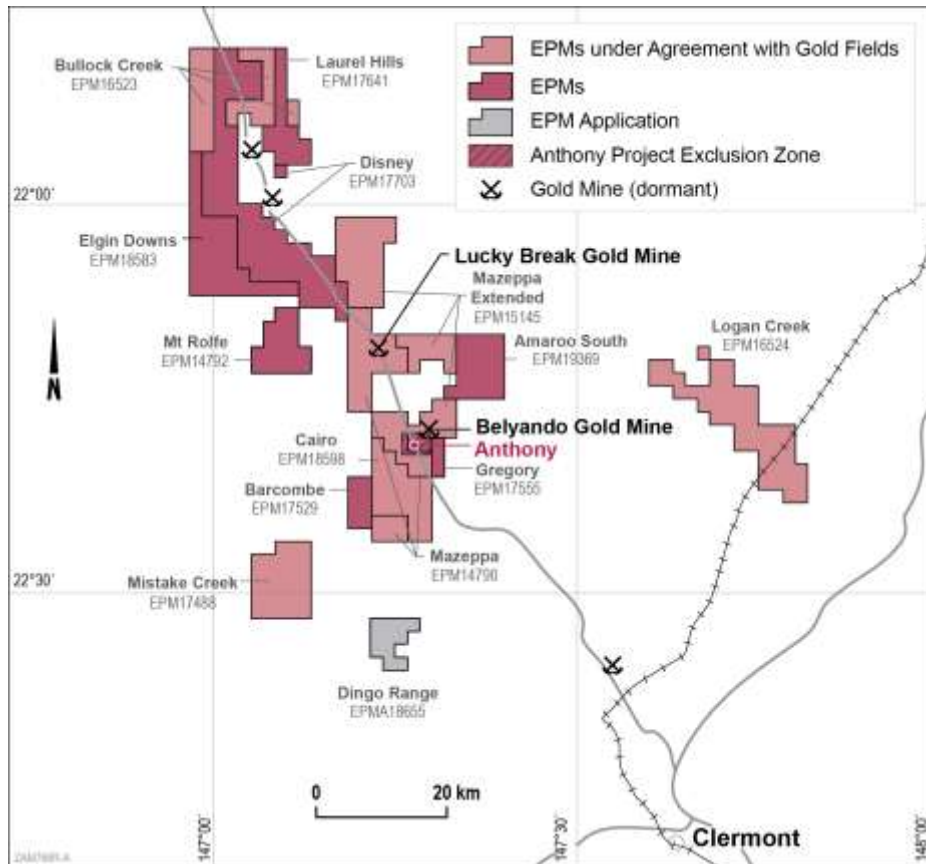
The Clermont district of Queensland is part of an established epithermal gold province. Zamia's fresh approach to exploration of the region led, in 2008, to the discovery of the Anthony molybdenum deposit, the first significant porphyry-style deposit in the province. In the following three years, Zamia expanded the Anthony resource to 269 million pounds of contained molybdenum, while drill-testing a number of regional gold-silver targets.

Over the past two years, Zamia has re-focussed its exploration activities on the search for copper and gold. In an announcement to the Australian Securities Exchange ('ASX') on 21 January 2013, Zamia confirmed its continued focus on gold and base metal exploration in the region. Through its wholly-owned subsidiary, Zamia Resources Pty Ltd, Zamia holds 13 Exploration Permits for Minerals ('EPMs') in the Clermont district.

In July 2012, Gold Fields Australasia Pty Ltd ('Gold Fields'), recognising the prospectivity of the region, signed an Option and Joint Venture Agreement ('Gold Field Agreement') over nine of the EPMs held by Zamia.

#### **GOLD FIELDS JOINT VENTURE ACTIVITIES**

Gold Fields selected a number of target areas over various Zamia EPMs for field work starting in April 2013 and has completed preliminary access arrangements with landholders and other parties. Under the terms of the Gold Fields Agreement, Gold Fields has the right to manage exploration over nine EPMs from Zamia's tenement portfolio for an initial period of 18 months which completes in January 2014. Following or during this period, Gold Fields can select up to three EPMs in which to earn a 51% joint venture interest. Gold Fields has to date retained six of the nine EPMs on which they are now focusing their exploration activity, having returned to Zamia three tenements - EPM 14792 (Mt Rolfe), EPM 17555 (Gregory) and EPM 17529 (Barcombe) - refer Figure 1.



**Figure 1** Zamia's tenement package showing the current EPM's covered by the Gold Fields Option and Joint Venture Agreement (Note: Belyando gold mine is NOT within Zamia's tenements)

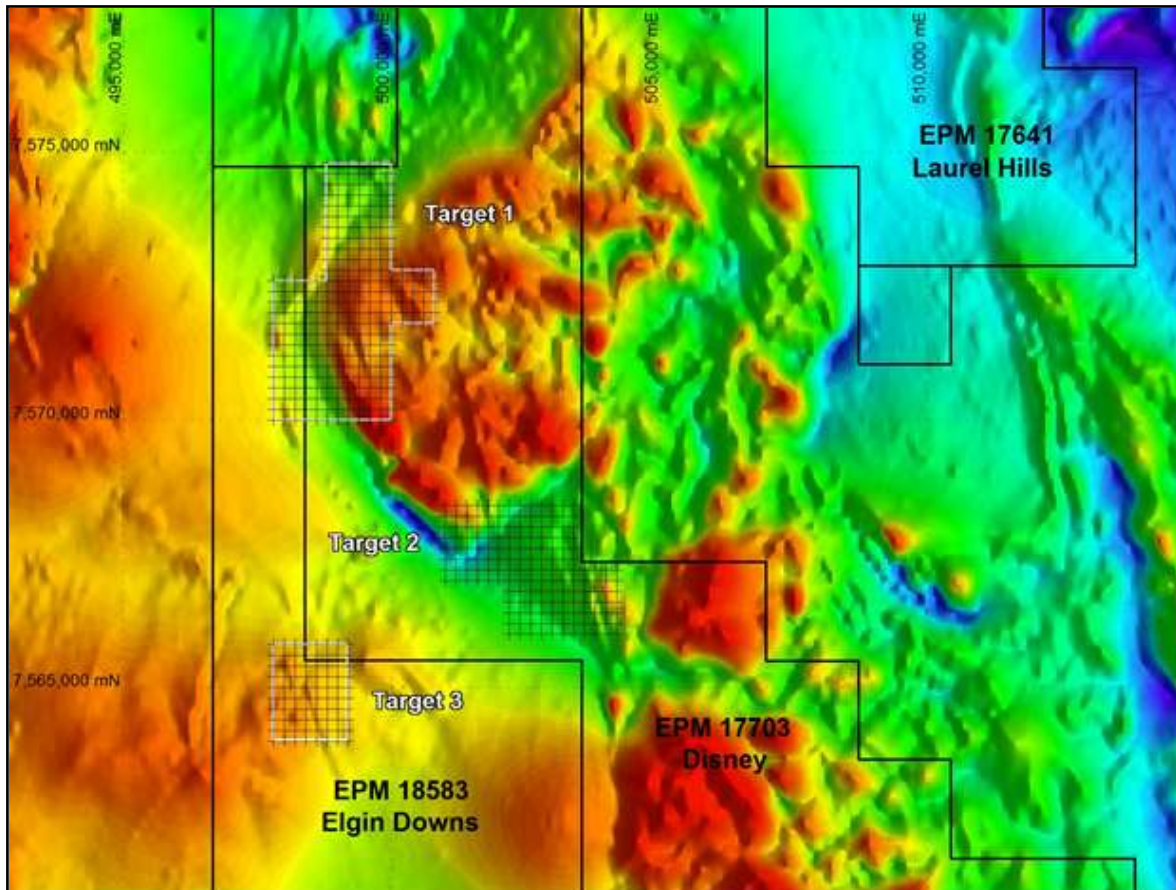
## ZAMIA EXPLORATION RESULTS AND REVIEW

Three EPMs in the northern part of the tenement portfolio - EPM 17641 Laurel Hills, EPM 17703 Disney and EPM 18583 Elgin Downs - are not subject to the agreement with Gold Fields. During the quarter, Zamia reviewed the results of previous exploration and compiled annual reports.

These three EPMs are strategically located over a structurally complex sector of the Silver Hills Volcanics, the basal unit of the Drummond Group, which consists largely of volcanoclastic rocks and minor rhyodacite. This sector of the Silver Hills Volcanics hosts the Twin Hills (309, Lone Sister) gold deposits (not in Zamia's tenements).

Exploration has primarily targeted vein and breccia-hosted epithermal gold-silver mineralisation, with porphyry-type mineralisation as a secondary target. Previous exploration, in 1998-99, focussed on the AVR prospect (EPM 17641). This is characterised by weakly anomalous soil and stream sediment samples in an area featuring abundant epithermal-style quartz float.

During October to December 2012 Zamia carried out geochemical soil sampling and mapping over three target areas delineated from magnetic imagery and geological data (see Figure 2).



**Figure 2** Soil sampling grids over three target areas within EPM 17703 and EPM 18583

A total of 166 conventional soil samples were analysed for selected precious and base metals as well as a small group of pathfinder elements. Analytical results were returned in December 2012 for Targets 1 and 3 (previously reported) and for Target 2 in February 2013.

Results were not encouraging. Weakly elevated concentrations of Cu, Pb and Zn were interpreted to represent coarse volcanoclastic rocks with elevated primary base metal contents.

In the next quarter, Zamia plans further infill sampling over Target 1 and extensions of the grid to the east to include prospects outlined by previous explorers.

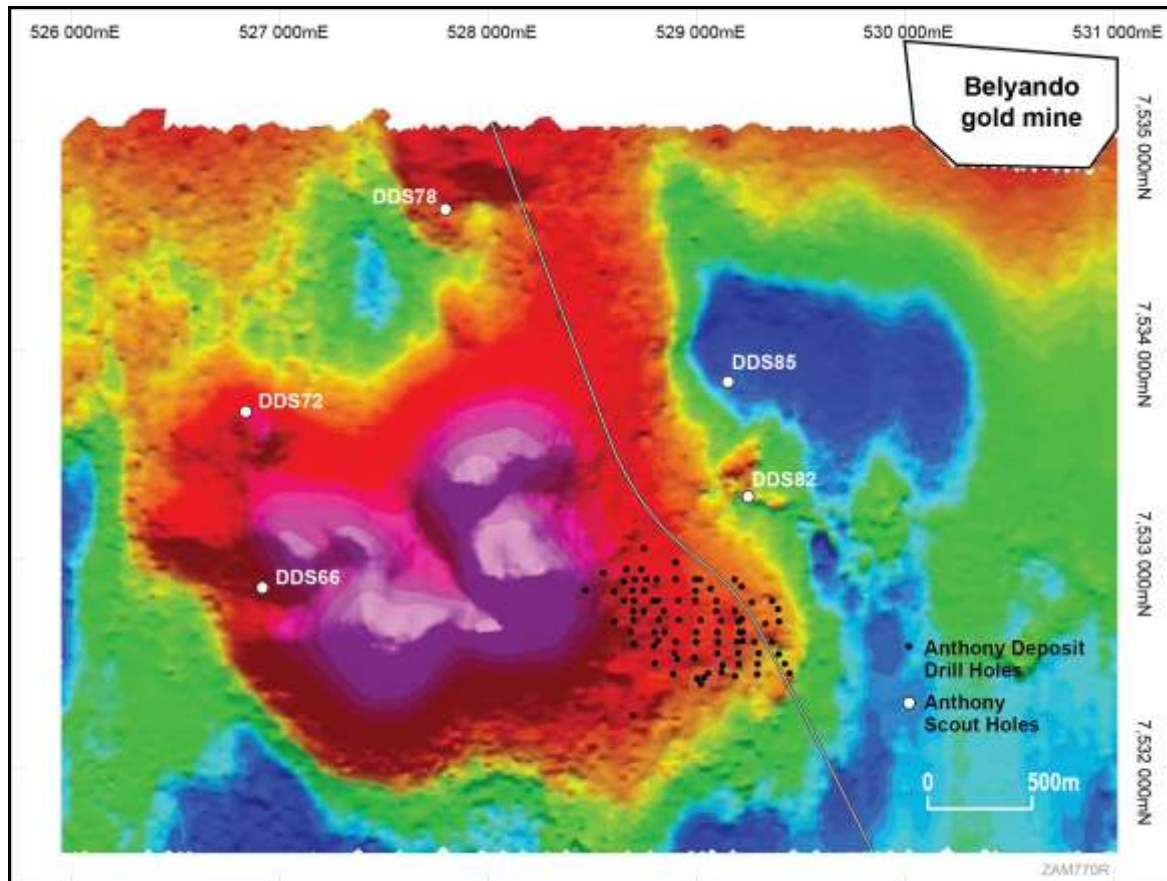
## **ANTHONY PROJECT AREA**

The Anthony molybdenum deposit is related to a series of intrusive quartz monzonite and quartz-feldspar porphyry bodies, which are part of the Dead Horse intrusive complex. This intrusive complex presents a target for gold and copper mineralisation in addition to molybdenum.

Figure 3, a ground magnetic image of the Anthony area, shows a number of magnetic features (purple colours), which are believed to represent diorite bodies buried beneath shallow soil cover. The Anthony drill holes, concentrated to the east of the magnetic features, intersected intrusive bodies which have no clear magnetic expression. The Dead

Horse intrusive complex, therefore, consists of intrusive bodies of a range of compositions and varying magnetic expression. It can be readily appreciated that most of the Dead Horse intrusive complex has not been drilled.

In 2011, Zamia drilled five diamond scout holes to test magnetic features to the east, north and west of the Anthony deposit (Figure 3). This drilling produced a total of 2,190m of core.



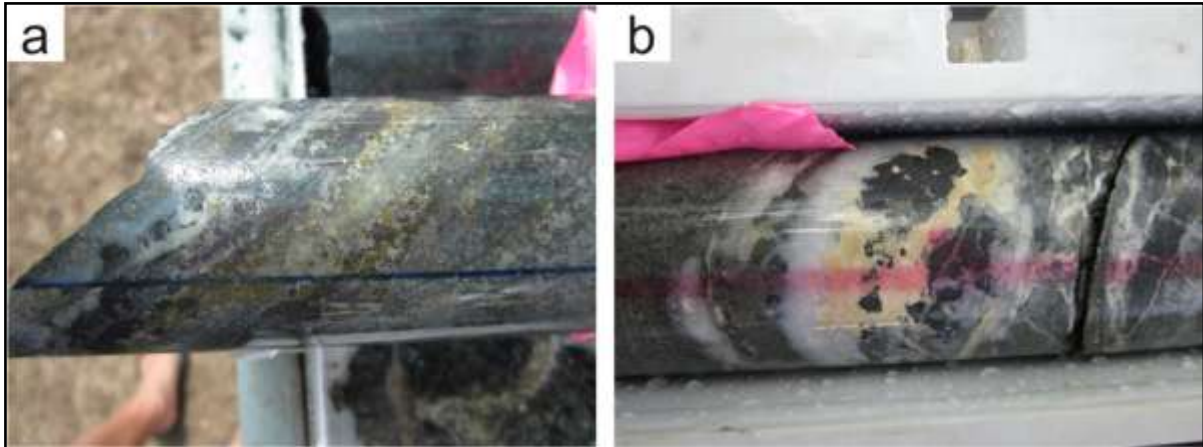
**Figure 3** Location of Anthony Project scout holes shown on ground magnetic imagery. Coordinates given are MGA94, zone 55S. (Note: Belyando gold mine is NOT within Zamia's tenements.)

During February 2013, Zamia completed detailed geological logging of this core. This work showed the presence of base metal veins (Figure 4) up to 2 km from the Anthony deposit, indicating the extent of base metal mineralisation within the Dead Horse intrusive complex.

The detailed record for the five diamond scout holes completes the geological data acquisition of all 98 holes drilled within and around the Anthony deposit. Geological data from the drill logs are being incorporated into geological cross-sections to:

- (a) advance the understanding of the Anthony deposit, and
- (b) indicate the potential for copper and gold mineralisation.





**Figure 4** Poly-phase quartz-carbonate-base metal veins in NQ diamond core from hole DDS11A066

During the June quarter, Zamia plans further Induced Polarisation (IP) surveys, extending northwest and west from the Anthony deposit.

## **CORPORATE ACTIVITIES**

- Technical experts and Zamia Directors visited a number of prospects on Zamia's tenements (including Anthony, Lucky Break, West Microwave Tower, Big Red, Hill 271) to gain an understanding of the regional and local geology as well as the surface expression of gold and base metal mineralisation.
- During the quarter, the Company entered into a Loan Agreement with Brownstone International Pty Limited, a substantial shareholder, to provide a short-term loan of \$800,000 for the current exploration program, with a focus on copper and gold targets. The Loan is repayable by an issue of the Company's shares at the discretion of the Company and after approval by shareholders.
- Zamia Resources relocated its field office from 70 Cotton Patch Lane to 15 Athol Court in Clermont. All Zamia inventory not stored on the Anthony Project site was moved to the new premises during March 2013.

Ken Maiden  
Director, Zamia Metals Limited

### **Competent Person**

Dr Ken Maiden, MAIG FAusIMM, a Director of Zamia Metals Limited, compiled the geological technical aspects of this report. He has sufficient experience to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Maiden consents to the inclusion of the matters in the form and context in which they appear and takes responsibility for data quality.