

# Quarterly Activities Report

## For the period ended 31<sup>th</sup> March 2012

### HIGHLIGHTS

- Infill and extensional EM work confirms and extends a number of drill ready targets at the Gidgee Project
- Targets are defined by coincident geological, geophysical and geochemical VMS-style signatures
- Key tenements granted in the vicinity of the VMS prospective Gravel Pit prospect

### OVERVIEW OF EXPLORATION PROJECTS

#### WESTERN AUSTRALIA

##### GIDGEE PROJECT

Field activities during the quarter included a ground EM survey designed to infill and extend existing anomalies. Approximately 46 line km were surveyed, split 60/40 between 100% Gateway tenements and the Avenue JV tenements.

Although interpretations are still preliminary, and modelling of selected anomalies is yet to be carried out, some interesting and possibly significant results came out of the survey. Redefined anomalous zones and the survey lines are shown in Figure 2.

Ongoing interpretation has reinforced the prospectivity of a number of tenements to host VMS mineralisation, with the known mineralisation at “The Cup” probably representing a zoned VMS lens.

Of particular interest are the under-explored tenements that include the Gravel Pit and Gossans Galore prospects, which have returned very promising results to date. These prospects exhibit geological, geophysical and geochemical signatures that can be considered indicative of VMS-mineralised systems.

A number of tenements were granted between the Gravel Pit and The Cup prospects which are interpreted as including a continuation of the prospective stratigraphy.

Reconnaissance and data interpretations are ongoing over the Bungarra tenements, which were acquired by Gateway from Legend Mining. The results are currently being interpreted; however preliminary thoughts indicate that this area too is prospective for VMS mineralisation; however the prospective stratigraphy has been disrupted due to the intrusion of the Bungarra Intrusive Complex.

## **Western Tenements – Gossans Galore E57/417, E57/688, P57/1232, P57/1152**

*Gateway 100%, (Avenue earning 80%)*

### **Gravel Pit, E57/807**

*Gateway 100%,*

These under-explored tenements represent a prime VMS target area, with pointers to mineralisation including geochemical, geophysical and geological anomalism. As reported previously lithogeochemical work has reinforced the prospectivity, returning alteration styles and lithologies typical of those associated with VMS mineralisation.

At Gossans Galore, this work pointed towards zoned alteration, ranging from distal albite to sericite/chlorite proximal to the EM anomalies and known gossans. In addition the work indicates that the dominant lithologies are basalts, with subordinate intermediate volcanics. Alteration at Gravel Pit includes sericite and chlorite/sericite.

The recently completed EM survey included two EW lines each of approximately 5km length, and a number of shorter lines (Figure 2).

Preliminary interpretations indicate that this work has extended three NNW trending anomalies in the Gravel Pit tenement; all three to the north into the newly granted E57/875, and two to the south. These anomalies are along strike from a trend that includes Julia's Fault and The Cup, and at least one may connect up with this trend. This is supported by an off-end conductor in a line within E57/824, between The Cup and Gravel Pit.

Further work needs to be done to determine the source of these anomalies, however work in The Cup/Julia's Fault area has shown EM anomalism related to semi-massive and massive sulphides (with associated gold and copper mineralisation in areas), possibly controlled by a lithological contact. Previous drilling at Gossans Galore has also shown an association between sulphides and EM anomalism.

### **The Cup E57/417/Julia's Fault M57/429**

*Gateway 100%, (Avenue earning 80%)/Gateway 75% - Red 5 25%*

As reported last quarter lithogeochemical analysis of The Cup and Julia's Fault shows sericite/chlorite and strong sericite alteration, with this alteration also occurring along the trend between the prospects and to the south of The Cup. In addition the results of the lithology analysis indicate a possible transition from basalts in the east to overlying intermediate volcanics and sediments to the west, with mineralisation occurring near the contact between the units.

### **Birthday Trend P57/1151, P571155/E57/795**

*Gateway 100%, (Avenue earning 80%)/Gateway 75% - Red 5 25%*

This trend (Figure 2) has been traced thus far for approximately 5km, and appears to be open to the north and south. The trend is marked by sporadic gossan outcrops and EM conductors, and in part forms a faulted eastern boundary to the Montague Granodiorite.

At the Birthday Gossan, work to date has identified approximately 140m of strike of gossan, with up to rock chip sample SEP036 returning 1,070ppm Zn and 789ppm Cu.

EM surveying has defined a ~800m long anomaly at the southern end of this trend.

## **Bungarra E57/706, E57/709**

*Gateway 100%*

As reported in the December 2011 Quarter follow up reconnaissance work was carried out on the Bungarra leases. This included further follow up along the Bigfinger trend (Figure 3).

The interpreted zinc corridor strikes NNW for approximately 2km, and is defined by surface geochemistry and EM responses. Rock chips collected during the current quarter returned up to 4930ppm Zn and 901 ppm Cu (sample SEP096).

Gateway is looking at JV possibilities for these tenements.

## **NEW SOUTH WALES**

### **COWRA PROJECT : EL 5514 & 6102**

*Gateway Mining 100%.*

Gateway is seeking joint venture partners on its 100% held Cowra Project.

## **QUEENSLAND**

### **SURPRISE PROJECT : EPM 9053, 13677**

*Gateway 100%*

No work has been carried out on the Surprise Project during the quarter.

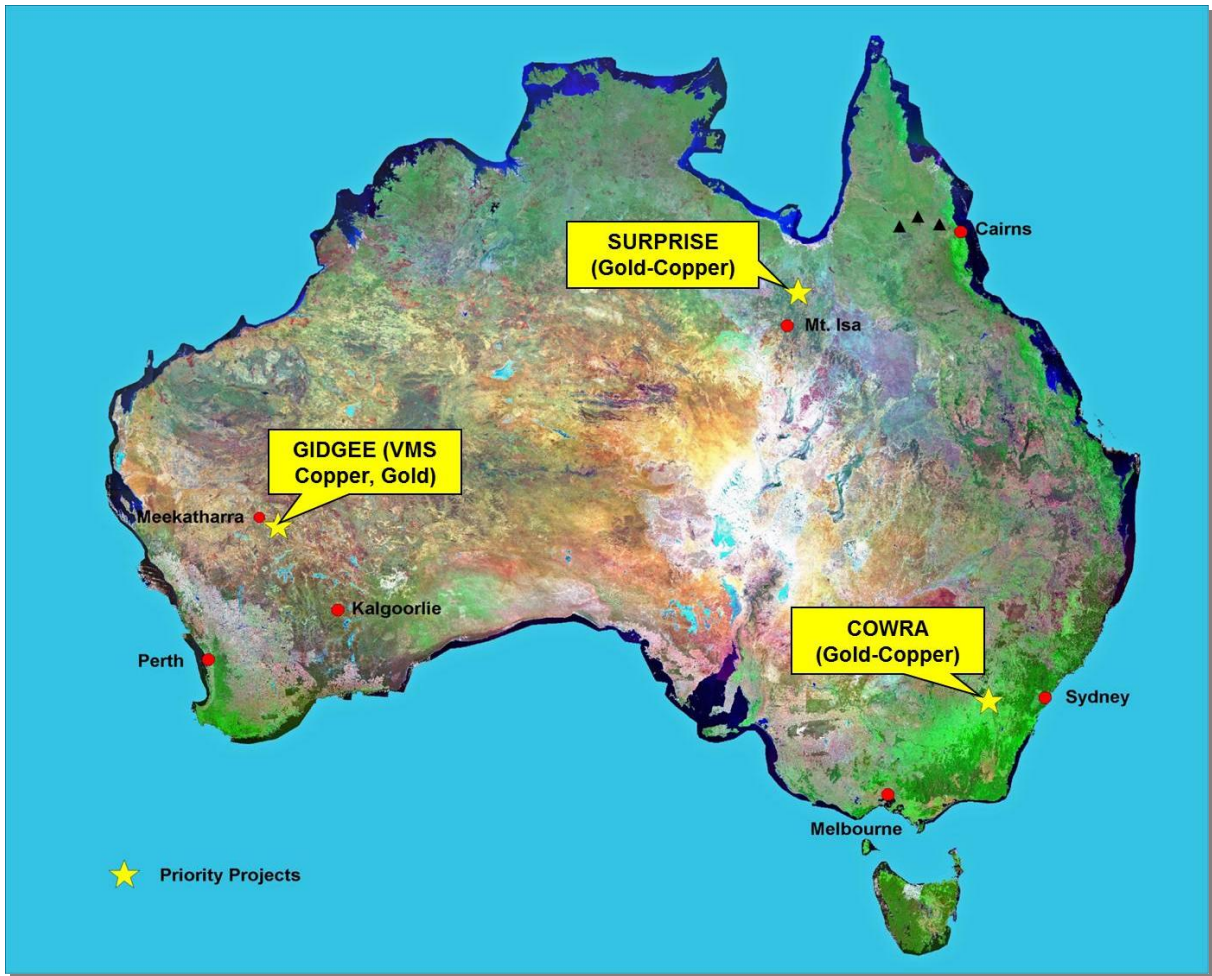
## **CORPORATE**

Four new Gidgee Project tenements, E57/405, 874, 975 and 888 were granted during the quarter.

Gateway disposed of its interests in the Hodgkinson Basin tenements EPM9934 and 10026 to Territory Minerals Pty Ltd.

***For further information visit our website at [www.gatewaymining.com.au](http://www.gatewaymining.com.au) or contact: Bob Creelman, Director, or Mark Gordon on Tel: 02 9283 5711***

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. M.J.Gordon, a consultant to Gateway Mining, a Member of the Australasian Institute of Mining and Metallurgy (CPGeo) and Australian Institute of Geoscientists. Mr.M.J.Gordon has a minimum of 5 years experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. M.J.Gordon consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*



*Figure 1. Gateway Mining Limited Project Locations*



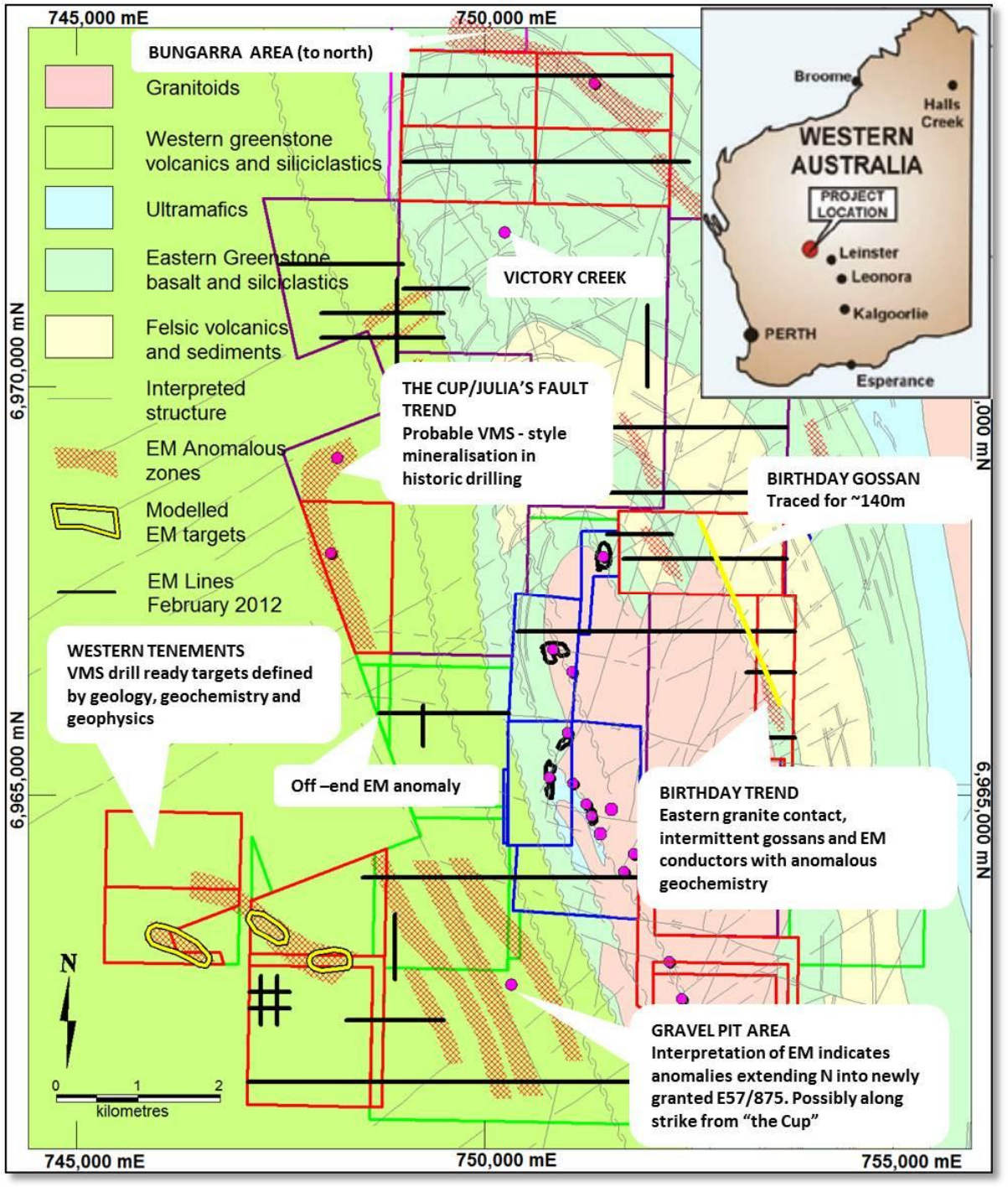


Figure 2. Gidgee Project, showing tenements, prospects (pink dots) and results summary. Tenements outlined in red and blue are in the Avenue JV's

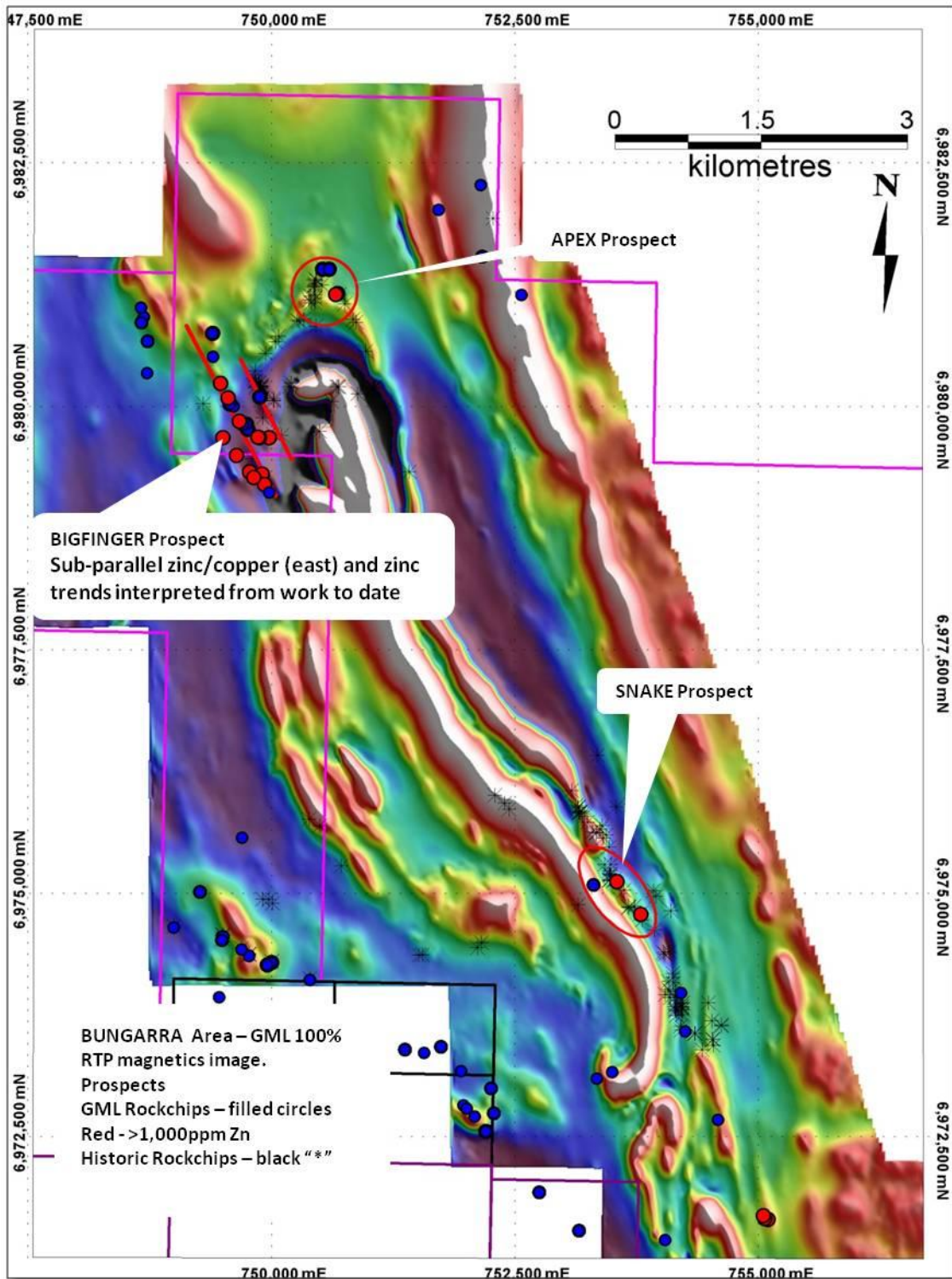


Figure 3. Bungarra area, Gidgee Project, on magnetic image, showing main prospects and sampling to date