



## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2010

ASX CODE: RNI

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### HIGHLIGHTS

#### DOOLGUNNA PROJECT

- At the flagship Doolgunna Project, RNI is completing a ground EM program designed to locate VMS-style sulphide targets. Preliminary results from this survey have suggested several promising targets, with final results imminent.
- Planning has commenced for extensive drilling programs to test geophysical and geochemical targets at Doolgunna. Both VMS copper-gold and vein-style gold deposits will be targeted.

#### THREE RIVERS PROJECT

- Reconnaissance soil geochemistry from the Three Rivers Project has identified anomalous gold geochemistry. An extensive soil sampling program covering the entire project area has now commenced.
- Final data from a detailed aeromagnetic survey flown over the Three Rivers Project area has been received. At least nine aeromagnetic targets with characteristics similar to kimberlites<sup>1</sup> have been identified from areas where previous exploration has reported kimberlitic indicator minerals.

#### Introduction

Resource and Investment NL (ASX: RNI) (RNI or the Company) is continuing an intensive exploration program within its Doolgunna and Three Rivers Project areas, located in the eastern Gascoyne region of Western Australia (Figure 1).

The Doolgunna Project comprises a single Exploration Licence (E52/2438) located 3km southeast of Sandfire Resources' spectacular VMS-style DeGrussa Copper-Gold Project. The geological succession within the Company's ground is similar to that which hosts the DeGrussa deposits, and an intensive exploration program targeting VMS style copper-gold mineralisation is underway. RNI

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<sup>1</sup>Kimberlites are the primary host for most of the world's diamond deposits.

expects to commence drilling geophysical and geochemical targets as soon as statutory and other approvals have been received.

The Three Rivers Project includes two Exploration Licences covering about 170km<sup>2</sup> and is located about 35km north of DeGrussa. During the quarter, RNI received results from a detailed aeromagnetic and radiometric survey flown over the area, and completed a detailed surface mapping program. A geochemical sampling program covering the entire tenement area has recently commenced.

### **Doolgunna Project (Option to acquire 100%)**

The Doolgunna Project covers an area of about 21km<sup>2</sup> and is located 3km southeast of Sandfire's DeGrussa Copper-Gold project (Figure 2). The DeGrussa deposits are Volcanogenic Massive Sulphide (VMS) style orebodies located within basaltic and sedimentary rocks (Narracoota Formation) of the Proterozoic-aged, Bryah Basin. Sandfire has announced<sup>2</sup> a combined resource of 10.67mt @ 5.6% Cu, 1.9g/t Au and 15g/t Ag contained within four deposits. Mining at DeGrussa is planned to commence later this year.

The size and grade of the DeGrussa system, combined with the tendency for VMS deposits to occur in clusters, has made the Doolgunna region a focus for intense exploration activity. RNI's Doolgunna Project covers similar lithologies to those recorded in the DeGrussa area, and the Company believes the exploration potential of its Doolgunna Project area to host equivalent copper-gold deposits is extremely high.

Geological mapping and soil sampling have defined two zones of basaltic rocks (Narracoota Formation) within the project area. These zones comprise a variety of basaltic lithologies as well as sedimentary lenses, with lithologies similar to those associated with the DeGrussa orebodies.

Exploration by other companies operating in the area has shown that these basaltic zones are regionally extensive. Talisman Mining Ltd (Talisman) has identified the Narracoota Formation, the prospective stratigraphic sequence, in three parallel corridors (the Northern, Central and Southern Corridors) across most of the eastern section of the Bryah Basin. RNI has mapped a total combined strike-length of 9km of Narracoota Formation from the Central and Southern Corridors within the Company's tenement (Figure 2). Talisman has recently reported<sup>3</sup> intersections containing chalcopyrite (copper iron sulphide) from drilling of their Monty and CC-02 prospects. These prospects occur within the Central Corridor of the Narracoota Formation to the north east of the Doolgunna Project.

RNI is undertaking a comprehensive and systematic exploration program to evaluate the Doolgunna Project. The geological mapping, airborne geophysical surveys and soil sampling programs already completed, have confirmed the prospectivity of the area. The Company is currently undertaking an extensive ground electromagnetic (EM) survey to define potential VMS targets that will be drill-tested over the coming months.

<sup>2</sup> Sandfire Resources NL, Annual General Meeting, 29 November 2010

<sup>3</sup> Talisman Mining Ltd December 2010 Quarterly Report

The ground EM program was due to be completed in late December, but thunderstorms and the monsoonal rains (that flooded Carnarvon and Gascoyne Junction) extended throughout the catchment of the Gascoyne River and caused the program to be suspended. Less than a week's work remains to finish this program and it is expected to be completed before the end of January.

Results so far from the ground EM have shown that the sedimentary and volcanic rocks within the project area are quite resistive and generally ideal for ground based electrical surveys. The preliminary data that has been examined so far suggests the presence of several promising anomalies within the area. A detailed interpretation of the EM data will be undertaken as soon as the survey is completed.

The EM survey is the final stage in determining priority RC and diamond drilling targets within the Doolgunna Project area. Drilling programs to evaluate both VMS and vein gold deposits are expected to commence after all statutory and other approvals have been received.

During the September Quarter RNI completed a comprehensive and detailed soil sampling program over the Doolgunna tenement. A total of fifteen high-priority anomalies were identified from this work, and during the reporting period follow-up sampling was undertaken over ten of these anomalies. The follow-up sampling confirmed all the copper anomalies with results broadly in agreement with those achieved in the original program.

Follow-up of the gold anomalies was more enigmatic. In most cases, initial results could not be repeated; however in a number of instances other samples within the follow-up sampling grids contained significant gold concentrations. It appears likely that most gold within the Doolgunna lease occurs in discrete gold particles and the distribution of these particles is not uniform. The anomalous soil samples appear to contain just one or two gold particles, and the 15gm sample-size used for the analyses is not representative of the area sample. Much larger samples would need to be analysed to compensate for this "nugget effect" and to achieve repeatable results.

Drilling of at least five of the targets identified from the original geochemical sampling and follow-up programs is being planned. Additional drilling at Salmon and Marty's Patch and the initial drilling at Tony's Find will also be undertaken.

Final data from the detailed UTS Geophysics aeromagnetic survey has now been received. This survey was flown with a line spacing of 25m and a nominal ground clearance of 20m. The final data provided a much clearer picture of the structure of the tenement. Interpretation of the aeromagnetic data also highlighted several magnetic features that appear transgressive to the regional stratigraphy. The most prominent of these features lies within the Central Corridor of the Narracoota Formation. The volcanic rocks of the Narracoota Formation are generally weakly magnetic within Doolgunna Project area, and this anomaly will be targeted during the up-coming drilling program.

The aeromagnetics also highlighted possible palaeo-channels in the northern and south-eastern sections of the Project area. These areas will require additional examination to determine whether drill follow-up is warranted.

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### Three Rivers Project (Option to acquire 100%)

The Three Rivers Project includes two granted Exploration Licences, E52/2124 and E52/2562<sup>4</sup>, that cover an area of about 170km<sup>2</sup>. The project lies about 35km north of DeGrussa and 15km northwest of the Plutonic Gold Mine (Figure 3). The tenements lie predominantly within Proterozoic sediments of the Bangemall Group; with large sections of the project area covered by recent alluvial sediments related to the Gascoyne River. RNI believes the area has potential to host significant mineralisation.

RNI has received final results from a 4,000 line km aeromagnetic and radiometric survey flown over the Company's Three Rivers Project area during the last quarter. An initial interpretation of the aeromagnetic data has been completed and a number of "bull's eye" type magnetic targets were identified (Figure 3). These targets are considered significant because previous exploration has reported kimberlitic indicator minerals within the area. A loam sampling program to test the magnetic targets has been completed with results expected within the coming month.

The aeromagnetic data provided structural controls for a detailed geological mapping program that was completed over the tenement during the quarter. The geological mapping is currently being compiled, but recognises a series of chert ridges (with chert possibly replacing carbonate rocks) within a clastic sedimentary sequence. The aeromagnetic data shows a series of poorly exposed, but strongly magnetic units lying between the chert ridges. The magnetic units are thought to be magnetite-bearing clastic sediments.

The magnetic data and the geological mapping suggest that the Proterozoic sedimentary sequence within the project area is repeated several times across the tenement. At this stage it is uncertain whether the repetition of the succession is the result of faulting or a cyclic sedimentary pattern that occurred during deposition of the strata.

A reconnaissance and orientation soil sampling traverse was completed during the geological mapping program. This program comprised 241 samples collected at 50m intervals along a single east west line across the tenement (Figure 3). The samples were analysed for a suite of 53 elements. Anomalous gold values between 2 and 10 parts per billion were detected in a number of samples; higher gold concentrations were often associated with the magnetic units recognised from the aeromagnetic data.

During January RNI commenced an intensive soil sampling program covering the entire project area. The program will comprise over 6,000 samples and sampling is expected to be completed late in March.

### Yule River Project

Under a Joint Venture Agreement with Brumby Resources NL, RNI holds the exclusive right to carry out exploration and mining activities on alluvial deposits on tenements covered by the Yule River Project located in the Pilbara Region of Western Australia. No work was undertaken in this area during the past quarter.

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<sup>4</sup> E52/2562 was granted on 24 December 2010

| <b>Mining Tenements as at 31 December 2010</b>          |                              |                     |                                 |              |
|---|------------------------------|---------------------|---------------------------------|--------------|
| <b>Tenement Number</b>                                  | <b>Registered Holder</b>     | <b>Date Granted</b> | <b>Area (Graticular blocks)</b> | <b>Notes</b> |
| <b>Doolgunna Project</b>                                |                              |                     |                                 |              |
| E52/2438  | Ascidian Prospecting Pty Ltd | 11/02/2010          | 7                               | 1            |
| <b>Three Rivers Project</b>                             |                              |                     |                                 |              |
| E52/2124  | IMIC Pty Ltd                 | 19/09/2008          | 25                              | 1            |
| E52/2562  | IMIC Pty Ltd                 | 24/12/2010          | 28                              | 1            |
| <b>Yule River Project</b>                               |                              |                     |                                 |              |
| E45/2939  | Resource and Investment NL   | 20/04/2007          | 60                              | 2            |
| E47/1730  | Resource and Investment NL   | 16/12/2008          | 19                              | 2            |
| E47/1750  | Resource and Investment NL   | 5/09/2007           | 70                              | 2            |
| E47/1193  | Brumby Creek NL              | 13/10/2005          | 18                              | 2            |
| E47/1341  | Brumby Creek NL              | 17/11/2005          | 70                              | 2            |
| <b>Notes</b>  |                              |                     |                                 |              |
| 1 - Option to purchase                                  |                              |                     |                                 |              |
| 2 - RNI has the right to explore for and mine alluvials |                              |                     |                                 |              |

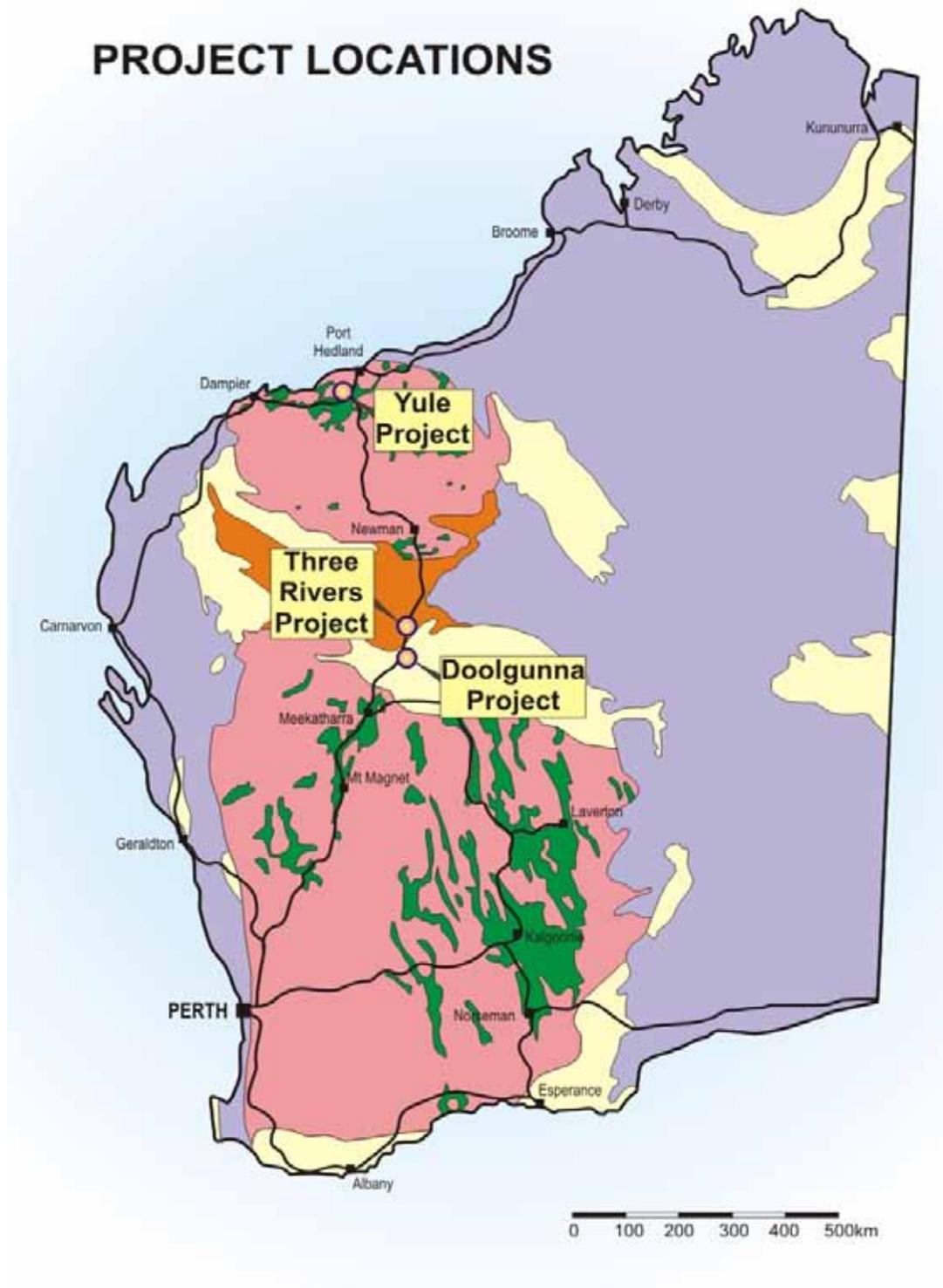


Figure 1 – Project Locations

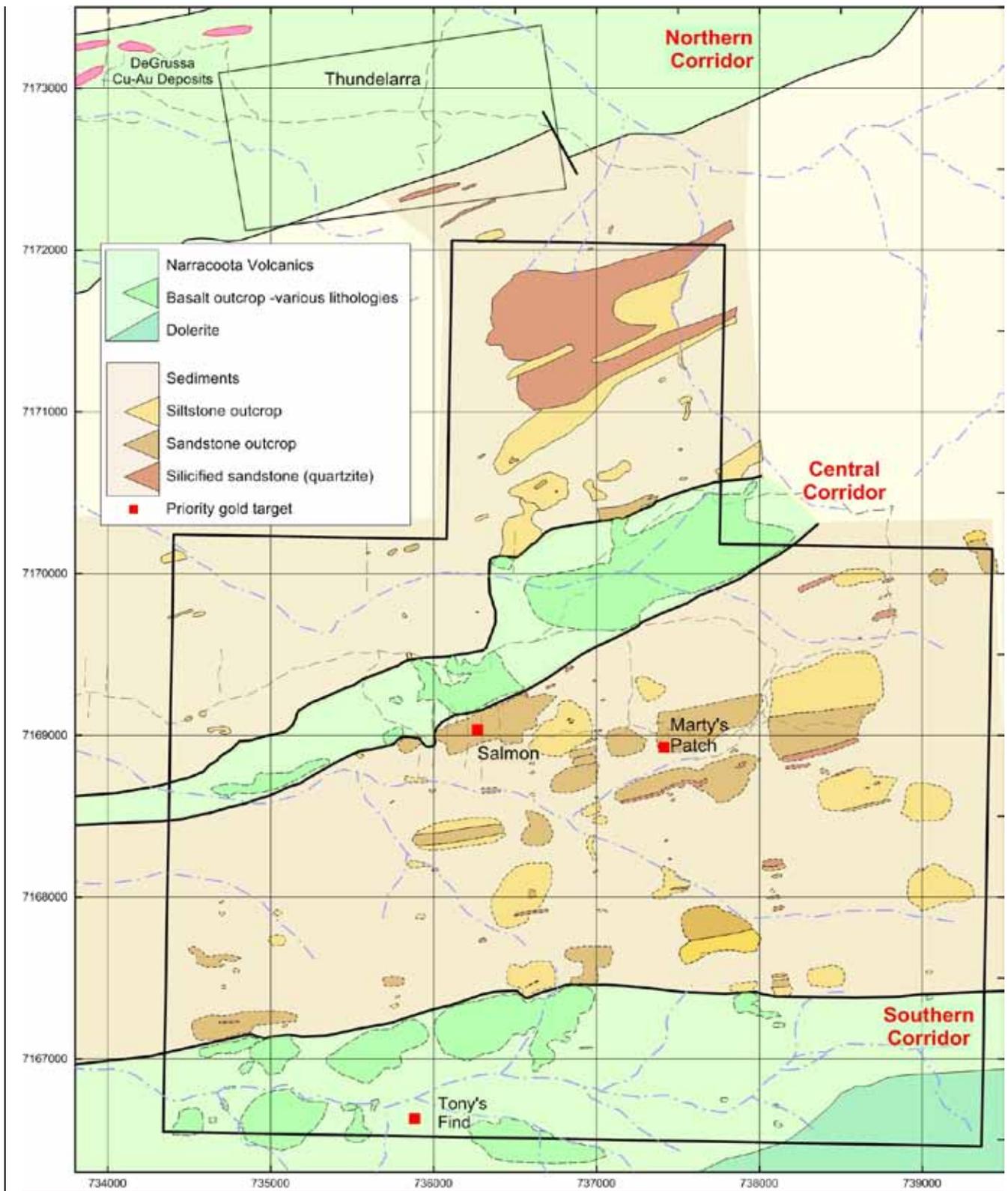


Figure 2 – Geological Map – Doolgunna Project

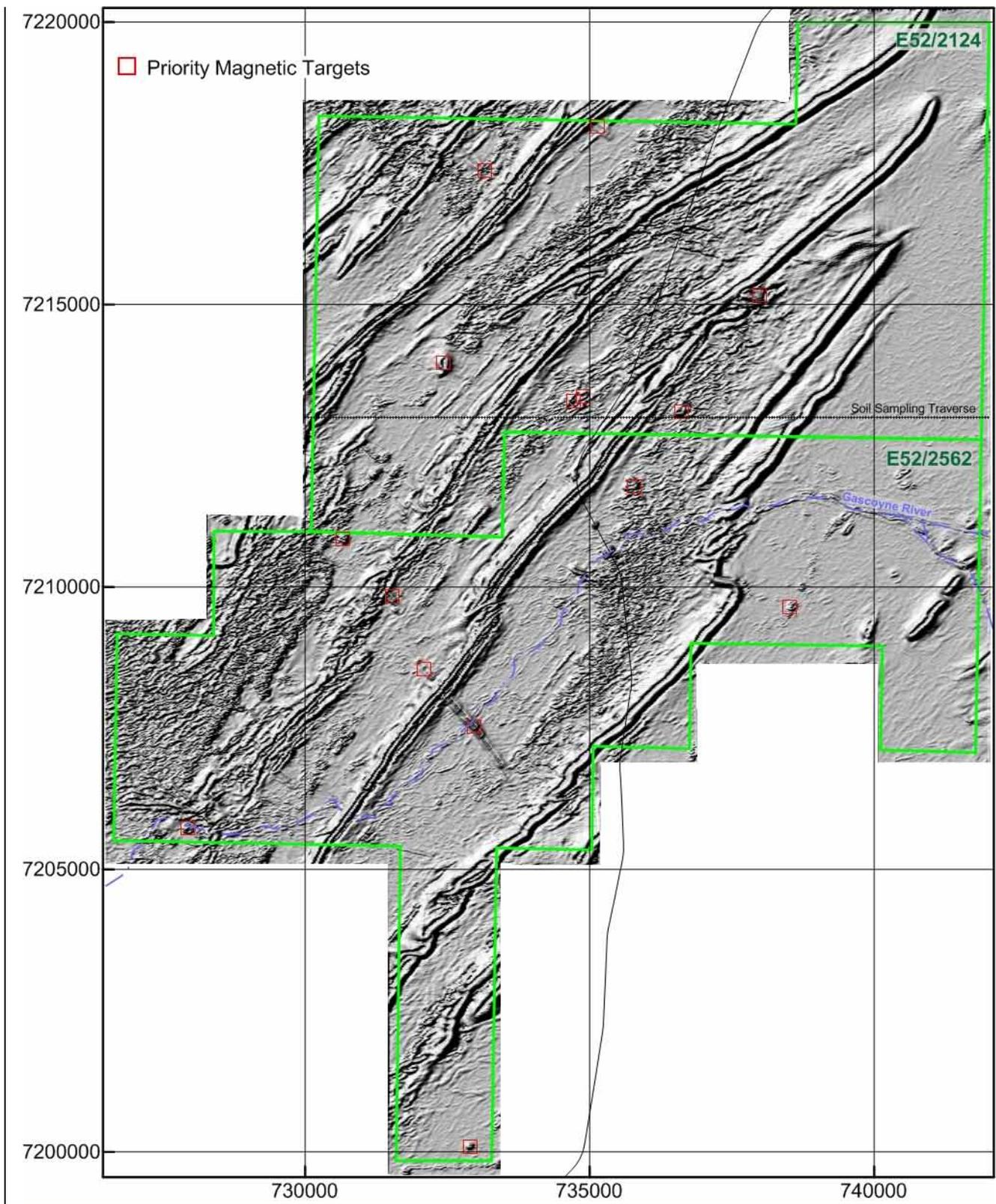


Figure 3 – Aeromagnetic Image – Three Rivers Project

For further information, contact:

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27 January 2011

**Competent Persons Statement**

The information in this report which relates to exploration results, mineral resources or ore reserves is based on information compiled by David Jones BSc (Hons) MSc of Ascidian Prospecting Pty Ltd, who is a Corporate Member of the Australasian Institute of Mining and Metallurgy. Mr Jones is a consultant to RNI and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which it is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr Jones consents to the inclusion in the document of the matters based on this information in the form and context in which it appears.