

## QUARTERLY ACTIVITIES REPORT 30 SEPTEMBER 2009

### Highlights

- Option agreement to acquire the high grade Mount Marion Lithium Project, located approximately 40km south of Kalgoorlie in the Goldfields region of Western Australia.
- Acquired Nimbus Silver Project and Processing Plant in Kalgoorlie for A\$2.25M, the plant offers a long term milling solution for the Company's high-grade Sand Queen Gold Mine operations
- Option and Joint Venture Agreement with Anglo American Exploration (Australia) who can earn 75% of Nickel – Copper – PGE rights by spending A\$3m
- Completed \$6.4M Placement and opened an underwritten Share Purchase Plan for \$4.5m, which closed in October oversubscribed.

### COMET VALE

#### (Reed 100%, Production JV with Kingsrose Mining Limited)

Key developments at the Comet Vale project, situated 100 km north of Kalgoorlie, during the quarter has been the mining of high grade ore from the 4 Level Sand George Lodes.

In addition, the Company commenced an operational review of the Comet Vale Project to define the quantity and grade of underground resources that may be converted to ore reserves with the aim of increasing production from the existing underground operations.

This review will also evaluate the potential of existing shallow, open pit gold resources at Comet Vale (e.g. Sand Prince West and Princess Grace prospects) to provide base load feed to enable a decision to refurbish and re-commission its recently purchased Nimbus Processing plant at an initial rate of 100,000 tonnes per annum.

#### Sand Queen Mine Production (Kingsrose JV partner)

During the quarter, Kingsrose hauled 5,290 tonnes of ore at a grade of 13.3 g/t Au to the surface, and by quarter end 8,086 tonnes of ore grading 12.7 g/t Au were stockpiled on the surface ROM pad awaiting milling.



Two parallel lodes, the Hanging Wall and Footwall Lodes, are currently being mined on 4 Level at Sand George. Mining continued on the high grade ore in the Level 4 Hanging Wall Block 1 stoping block. Grade control sampling in this stope has returned an average mined grade (including dilution) of 17.0 g/t Au with approximately 6,100 tonnes of broken ore at 17.0 g/t Au contained within this block.

Kingsrose also completed 52 m of drive development on 4 Level along strike to the south on the Sand George Footwall Lode. There is an estimated 100m of strike length remaining to be developed to the south on this Lode. This area is planned to be developed in the next quarter.

Some 115 m of sub-level development was completed along strike to the north on the 4 Level Sand George Footwall lode, in preparation for stoping of this block. Initial grade control sampling of the sub-level has returned an average mined grade (including dilution) of 9.2 g/t Au.

### **Toll Treatment**

Toll treatment of surface stockpiled ore (Campaign 10) commenced on 12 October and is due for completion in early November.

### **MT MARION LITHIUM PROJECT (Reed option to acquire 100%)**

On August 13<sup>th</sup> Reed Resources Ltd. announced that it had secured an option to purchase the Mt Marion lithium project situated 40 km south of Kalgoorlie in the Goldfields region of Western Australia.

Key terms of the option are:

- A\$200,000 option fee for an option period of 2 years;
- A\$1.5M cash on exercise of the option;
- A\$1.5M cash on decision to mine; and
- A 2.5% gross royalty on spodumene concentrates, 3% gross on lithium carbonate produced in Australia, 2% gross royalty on all other minerals.

The Mt Marion project comprises two Mining Lease applications M15/999 and M15/1000 which cover outcropping spodumene-bearing pegmatites. The Company is in possession of a full Native Title Agreement and a State Deed enabling grant has been lodged with the Department of Mines and Petroleum.

During the 1960's through to the 1980's Western Mining Corporation (WMC) carried out extensive exploration on the Mount Marion tenements and completed a study which considered mining, beneficiation and chemical processing to produce 5,000 tonnes of lithium carbonate per annum over a mine life of 10 years. In 1996 Associated Minerals Pty Ltd completed a prefeasibility study to produce lithium and potassium products. Pilot test work has produced spodumene (lithium) concentrate of 6.5-7% Li<sub>2</sub>O, with lithium recoveries between 75 and 83 %.

An RC drilling campaign is scheduled for completion during the December quarter. In excess of 90 holes will be drilled to verify the results of previous WMC drilling and facilitate calculation of a JORC Code compliant measured resource.

As part of the ongoing program of taking Mt Marion into production, work carried out during the quarter included a flora survey of the mining tenement, and a heritage and ethnographic survey together with a physical on ground survey to locate the lease boundaries and existing RC holes and pegmatite outcrop.

In order to obtain lithium mineralisation for metallurgical test work, two winzes were sunk in the pegmatite; one on the number one deposit and one on the number two deposit. The Winzes were approximately 1.5 metres by 1.5 metres and 2 metres deep.

The samples obtained from the winzes were then subject to a crushing and screening analysis to identify the crushing size required to liberate the lithium mineral (spodumene) from the pegmatite. The crushed samples then underwent a dense media analysis to identify the specific gravity at which the lithium minerals may be separated from the gangue minerals and a lithium concentrate produced. This test work is currently ongoing.

The project is close to existing infrastructure (Figure 1) which will facilitate early development of the mining operations with an initial production rate expected to be in the order of 17,000 tonnes of spodumene concentrate per month grading +6.5% Li<sub>2</sub>O.

The main uses for lithium are in batteries (particularly hybrid cars), glass, lubricants, pharmaceuticals, air conditioning and chemicals.

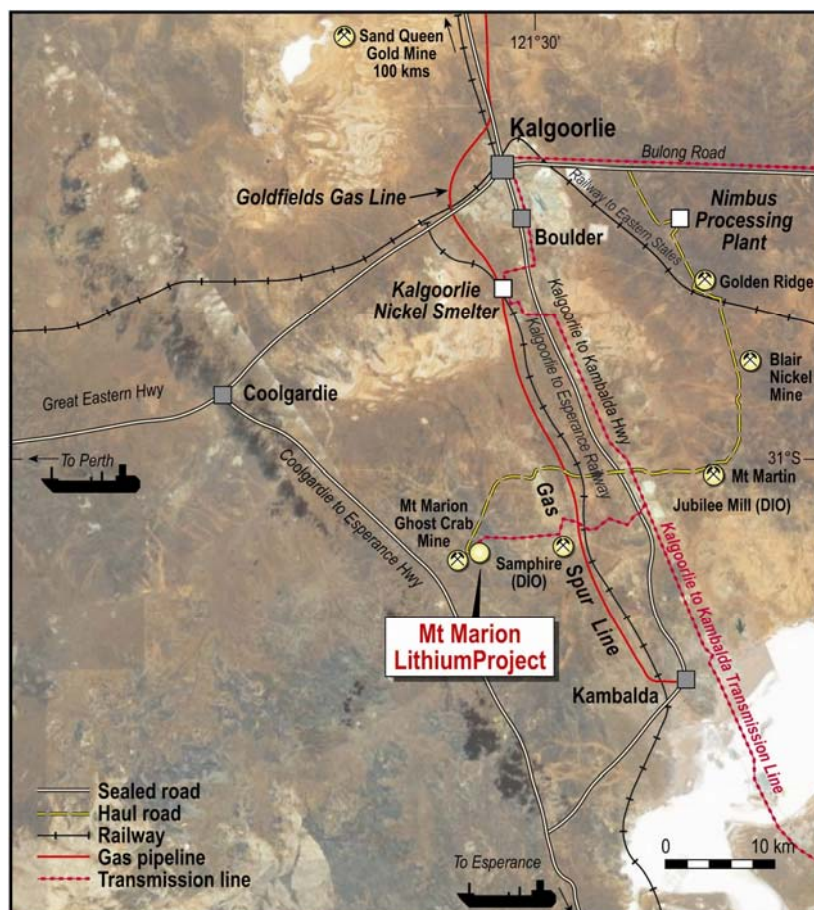


Figure 1 Location of the Mt Marion lithium pegmatite project

## **NIMBUS PROJECT**

### **(Reed 100%)**

The transaction to purchase the Nimbus Mining Leases and Processing Plant, situated 15 km southeast of Kalgoorlie (Figure 2), was completed on Friday 4<sup>th</sup> September 2009. The Company paid Polymetals Group Pty Ltd (PGPL) an initial option payment of \$50,000 followed by a final payment of \$2.25M to secure the asset.

The precious metals plant which is capable of processing 250,000 tpa, will enable Reed to further develop its strategy of increasing its level of profitable gold production from its share of the high grade Sand Queen Production Joint Venture (which ends on 31 May 2010).



**Figure 2** Location of the Nimbus processing plant

The Comet Vale gold ore is highly amenable to gravity recovery followed by leaching, and the Nimbus plant which includes a yet to be installed gravity circuit, will enable both open pit and underground ores to be processed at their optimal conditions.

The Nimbus Project comprises two granted mining leases (M26/490, M26/598). PGPL commenced mining operations in early 2004 and produced approximately 3M oz of silver from two open pits before mining operations ceased in late 2006. The processing plant was placed on care and maintenance in late 2007.

During the quarter Reed completed an environmental audit of the plant and leases and commenced a clean up of the site. Meetings were held with Department of Mines and Petroleum and the Environmental Protection Agency and various other Government Departments to ensure the Company's plans to rehabilitate and restart the site address any outstanding compliance issues. Meetings were also held with Western Power to investigate getting mains power supplied to the site.

## **BARRAMBIE VANADIUM PROJECT (Reed 100%)**

The Barrambie Vanadium Project continues to be a high priority despite the current global financial crisis restricting access to previously available funding for a project of this nature. The Company is continuing to investigate various project development alternatives and strategies.

Barrambie remains one of the world's highest grade vanadium deposits with a Probable Ore Reserve of 39.7 Mt at 0.82% V<sub>2</sub>O<sub>5</sub> (outlined below). This Ore Reserve is based on an Indicated Mineral Resource of 49.2 Mt which represents a Resource to Reserve conversion rate of 81%.

### **Probable Ore Reserve\* estimate for Barrambie vanadium deposit (announced 5<sup>th</sup> May 2009)**

<b>Diluted Ore Tonnes (Mt)</b>	<b>Diluted V<sub>2</sub>O<sub>5</sub> (%)</b>	<b>Diluted TiO<sub>2</sub> (%)</b>	<b>Diluted Fe<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Diluted Al<sub>2</sub>O<sub>3</sub> (%)</b>	<b>Diluted SiO<sub>2</sub> (%)</b>
39.7	0.82	15.69	48.77	11.59	16.12

\* Probable Ore Reserve by Snowden Mining Industry Consultants Pty Ltd for a diluted cut-off grade of 0.6% V<sub>2</sub>O<sub>5</sub>. All tonnes are estimated as dry tonnes.

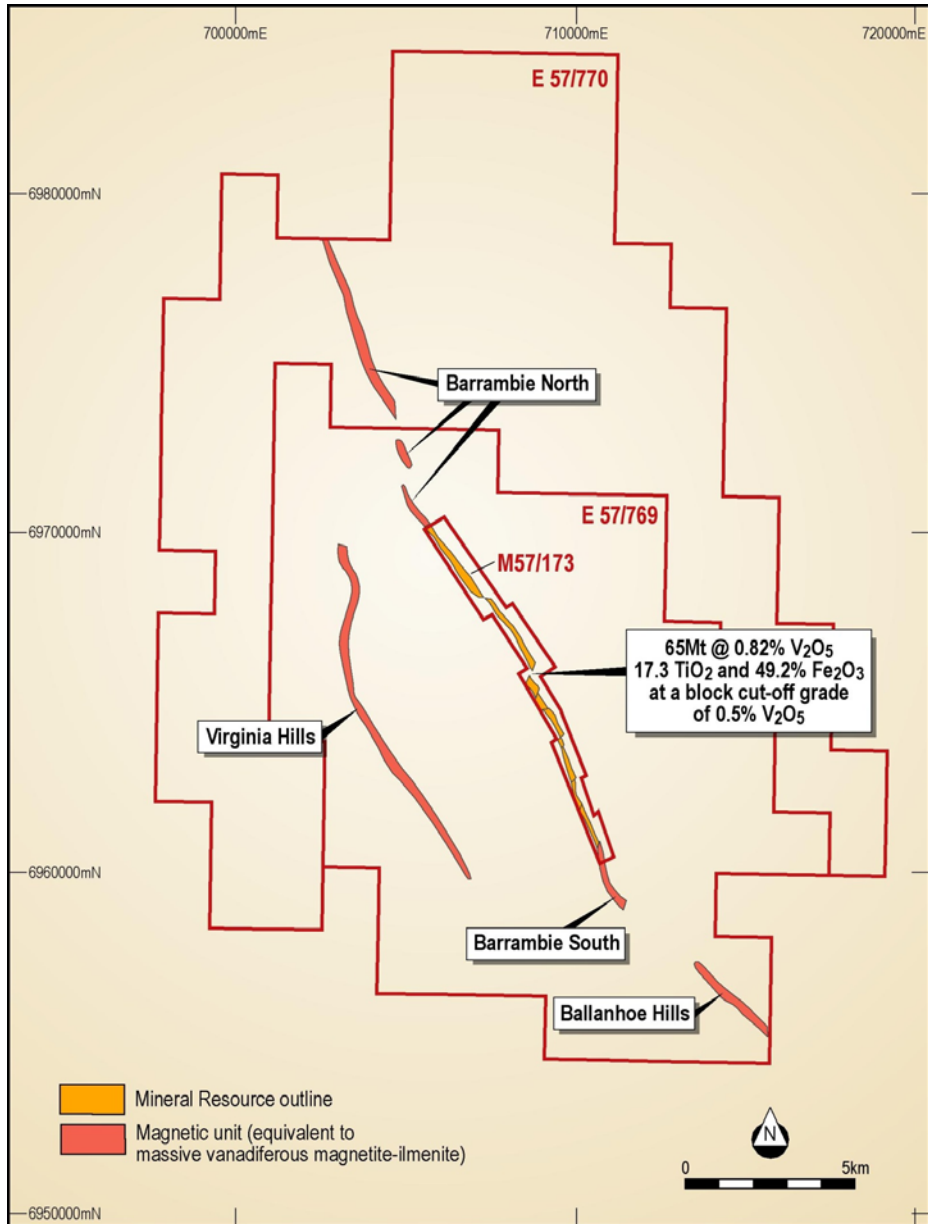
The Definitive Feasibility Study (DFS) completed in April 2009 indicated that, based on the existing mineralisation, the Barrambie vanadium processing plant and associated infrastructure will target a through-put of 3.2 million tonnes per annum of vanadium bearing magnetite mineralisation at a grade of 0.82% V<sub>2</sub>O<sub>5</sub> to produce either approximately 11,200 tonnes of vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>) or 7,700 tonnes of Ferro-Vanadium (FeV80) per annum, for a minimum 12 year period. The DFS estimated that the capital cost for mine development and construction of a processing plant is \$628.9M and indicative operating costs would be less than US \$20/kg V.

During the quarter the Company coordinated the removal from site of a representative sample of vanadium mineralisation comprising over 150 tonnes of reverse circulation (RC) drill cuttings obtained from previous drilling campaigns. Plans were made to subject these cuttings to a magnetic concentration program to be followed by further metallurgical test work targeting a reduction in the quantity of salt and possibly the temperature required to solubilise the vanadium.

As part of the DFS, a draft Public Environmental Review (PER) document was lodged with the Environmental Protection Authority (EPA) during the first quarter 2009. A response has since been received from the EPA which the company is in the process of responding to matters raised by the EPA.

As part of the ongoing consultation process a site visit to Barrambie was undertaken during the quarter to familiarise decision-making authorities with the proposed mine development.

The Company recently has commissioned an aeromagnetic survey to better constrain the extent of magnetite-bearing formations along strike and to the west of the Barrambie Vanadium deposit on recently granted tenements (E57/769, E57/770).



**Figure 3** Barrambie vanadium project showing along strike extensions of potential magnetite formations.

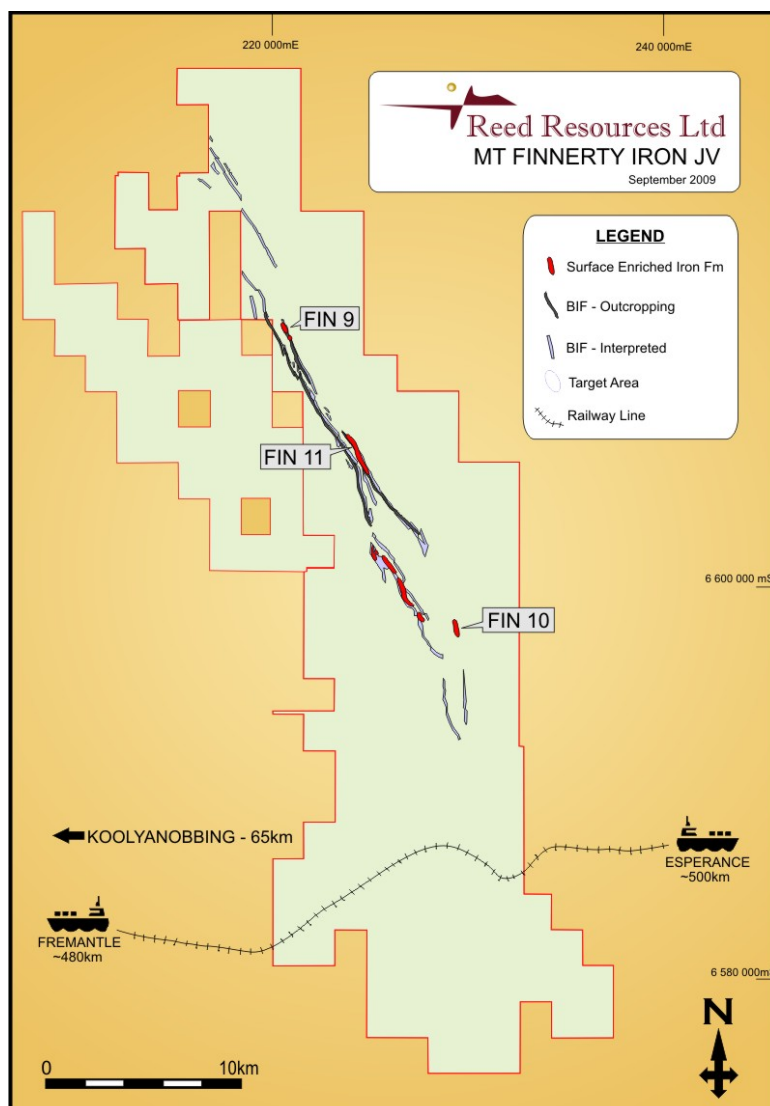
## MT FINNERTY PROJECT

### Iron Ore Joint Venture (Reed 20%, Cliffs 80%)

During the Quarter, an RC drilling campaign was completed by our joint venture partner Cliffs Asia Pacific Iron Ore Pty Ltd (“Cliffs”) during June-August 2009. Cliffs have earned an 80% interest in the iron rights at Mt Finnerty.

The RC drilling program targeted extensions to goethitic iron mineralisation in banded iron formations (BIF) at the FIN9, FIN10 and FIN11 prospects (Figure 4). These are three of the more advanced prospects along the NNW-SSE trending central spine of BIFs that traverses the full length of the Mt Finnerty project. Drilling at FIN9, FIN10 and FIN11 comprised 58 holes for a total of 7,255 metres of drilling.

Geological interpretation of the three drilled prospects has been completed, and all assay results are due to be received in October. Cliffs is currently undertaking a resource and reserve evaluation of these prospects, which is scheduled to be completed in November.



**Figure 4.** The Mt Finnerty project with the location of the FIN9, FIN10 and FIN11 prospects.

## **Nickel Exploration (Reed 100%, WSA earning 65% Ni Rights)**

Exploration by Western Areas NL (“WSA”) focussed on the Johnnies Dam prospect on the Western Ultramafic sequence on the western flank of the Watt Hills greenstone belt where a deep (220m) RC drill hole was designed to test an IP anomaly coincident with contact between the footwall basalt and the Western Ultramafic. However, the hole was stopped at 124m due to an inflow of salty water. The drill hole intersected unmineralised basalt and thin low-Mg ultramafic unit and did not reach its target.

Data from recent RC and RAB drilling has been compiled and further assessment of the assay results is in progress.

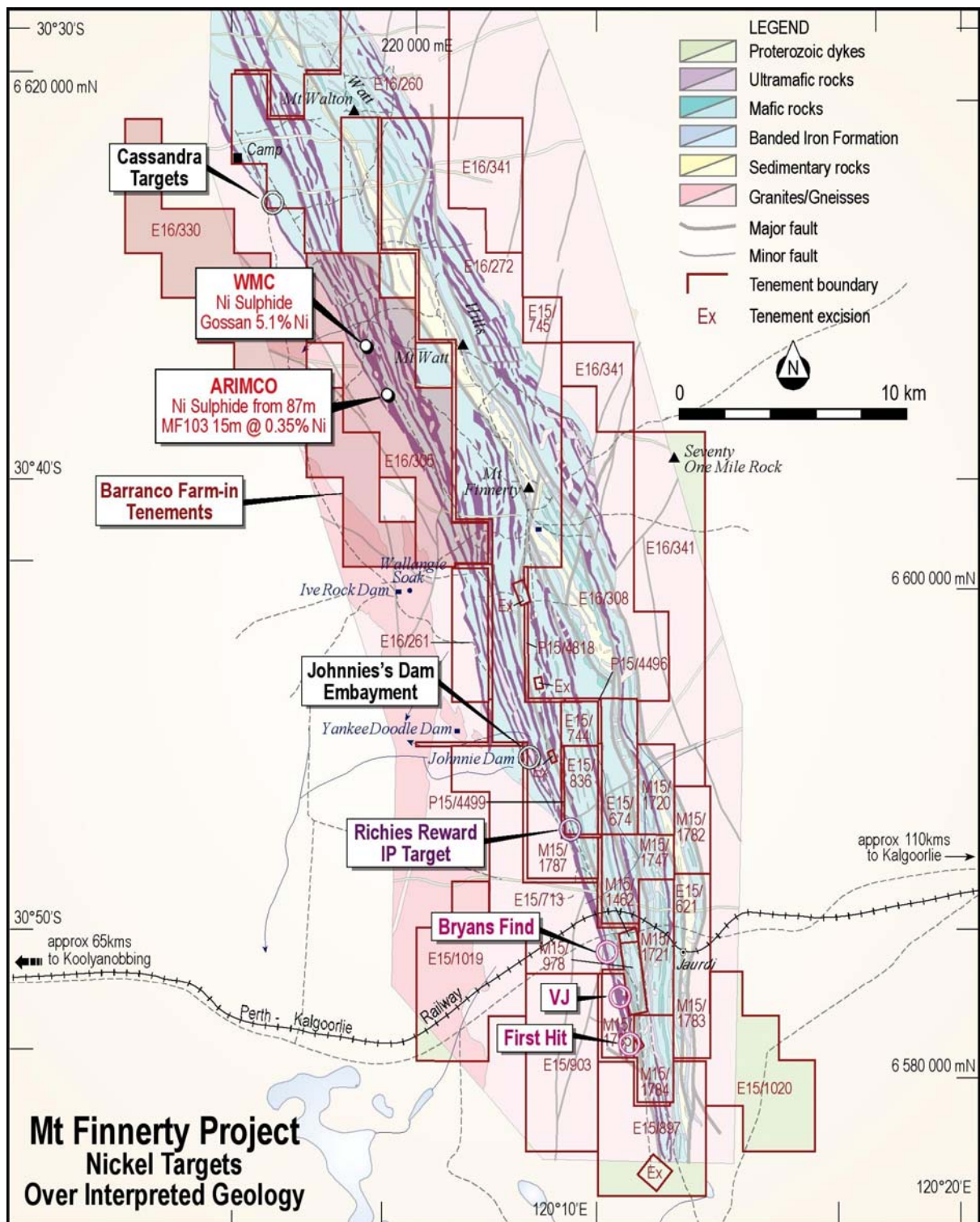
During the quarter, Western Areas completed rehabilitation of access lines and drill pads that had been cleared for previous RAB and RC drilling.

## **Nickel Exploration (Barranco farm-in agreement)**

During the Quarter, the Company reached agreement with Breakaway Resources NL (“BRW”) to acquire its earn-in rights in Barranco Resources NL (“Barranco”)’s Mt Finnerty exploration project, principally Exploration Licences E16/305 and E16/330 (Figure 5).

The Company acquired BRW’s rights to earn a 60% interest in the Barranco Mt Finnerty joint venture for a total consideration of 500,000 fully paid ordinary shares in Reed Resources Ltd.

This section of the Watt Hills greenstone belt covered by Exploration Licence E16/305 is along strike from the ultramafic sequence currently being explored by Western Areas. The thick sequence of ultramafics within Barranco’s ground is considered highly prospective for nickel sulphide mineralisation. Previous exploration in the area by Western Mining Corporation (WMC) during the 1970s discovered a gossan (Figure 5); and two vertical drill holes in a subsequent drilling program intersected 1.34% Ni (BRFP28) and 1.14 % Ni (BRFP21) each over an interval of 3 metres.



**Figure 5** Location of the Barranco joint venture (E16/305, E16/330) on the western flank of the Mt Finnerty project, including some key indicators of nickel mineralisation.

**BELL ROCK RANGE PROJECT**  
**(Reed 100%, AAE earning 75%)**

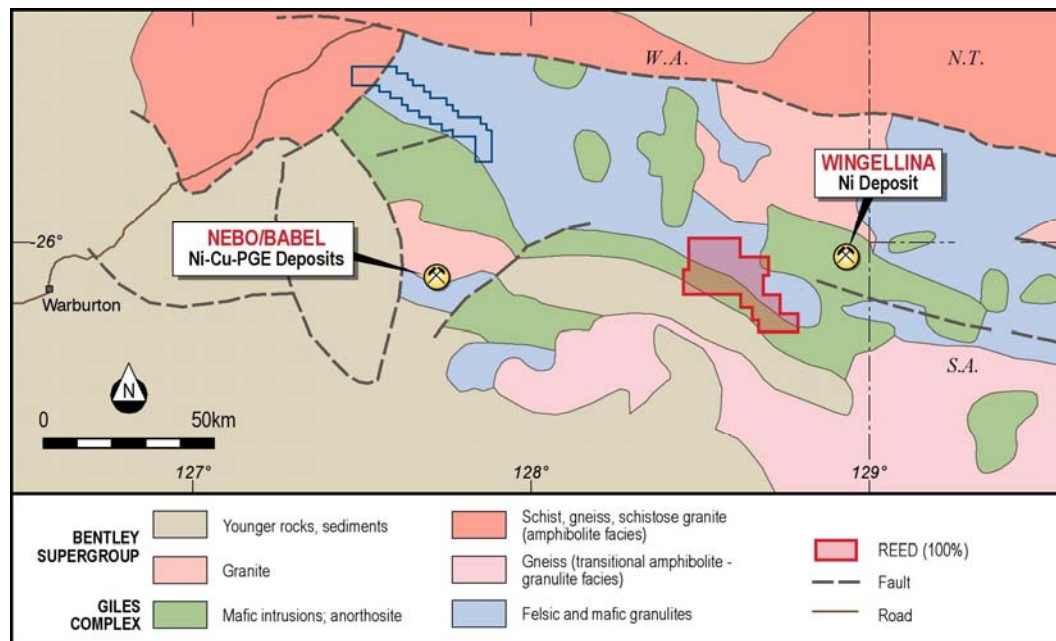
On 29 September 2009 the Company entered into an Option and Joint Venture Agreement with Anglo American, through its 100% owned subsidiary Anglo American Exploration (Australia) Pty Ltd (“AAE”).

Under the terms of the agreement AAE can earn a 75% interest by spending A\$3M on the Bell Rock Range Project. The key terms of the Agreement with AAE are:

- AAE can exercise an Option and earn 51% equity by spending A\$1M within 3 years;
- Upon AAE earning 51% equity it can elect to earn an additional 24% by additional expenditure of A\$2m in an additional 4 year period; and
- Upon AAE earning 75% equity, Reed can elect to either contribute or dilute to a royalty of 2% Net Smelter Return (“NSR”) from gold and 1.5% NSR for all other minerals;
- The Agreement is subject to executing an Access Agreement with the Ngaanyatjarra Council.

Bell Rock Range project (E69/2293) covers some 471 km<sup>2</sup> within the western part of the Proterozoic Musgrave Block in central Australia (Figure 6). It is highly prospective for several commodities, particularly Ni-Cu sulphide and PGE mineralisation.

Initial exploration will involve an extensive airborne electromagnetic (EM) geophysical survey using their highly successful proprietary SPECTREM system. This is the first time that the SPECTREM system has been used in Australia. The planned SPECTREM survey is designed to rapidly screen the tenement and identify geophysical anomalies that may represent metallic sulphide bodies.



**Figure 6** Location of the Bell Rock Range tenement (E69/2293) in the western Musgrave Province, Western Australia.

## CORPORATE

The corporate events that took place during the quarter are summarised below:

- 15 July 2009 - the Company granted 500,000 fully paid ordinary shares in the Company to BRW. The issue of shares was made pursuant to the terms of a Sale Agreement dated 15 July 2009 between the company and BRW for the sale and purchase of a joint venture interest. The Company also granted 400,000 fully paid ordinary shares in the Company to Lennonville Pty Ltd ACN 075 867 515 as trustee for the Lennonville Trust, a consultant to the Company pursuant to a consulting agreement dated 1 July 2009 between the Company and the Consultant.
- On 17 July 2009 - 650,000 unlisted options previously issued pursuant to the Company's Employee Share Option Plan 2007 ("ESOP") lapsed.
- 25 August 2009 - the Company placed 19.5 million shares at A\$0.33 per share to raise A\$6.4 million before costs to qualified investors, domestic and international institutional clients of Patersons Securities Ltd ("Patersons"). The Company announced a fully-underwritten Share Purchase Plan ("SPP") on the same terms to raise a further A\$4.5 million.
- 1 September 2009 - the executive directors of the Company, David Reed and Christopher Reed agreed to renew their contracts with the Company.
- 7 September 2009 – the Company issued 1,600,000 options to three employees and one consultant of the Company pursuant to the ESOP.

At the end of the quarter the Company had \$11.4 million in cash and term deposits, including \$8.8 million in restricted-use term deposits supporting performance bonds. The funds raised through the SPP (\$4.5 million) were received on 7 October 2009.



CJ Reed  
**MANAGING DIRECTOR**

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*Geological aspects of this report that relate to Exploration Results have been compiled by Dr Peter Collins (MAIG), a Director of Reed Resources Ltd. Dr Collins has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity being reported on to qualify as a Competent Person as defined in the Code for Reporting of Mineral Resources and Ore Reserves. Dr Collins consents to the inclusion in the report of the matters in the form and context in which it appears.*