

## QUARTERLY ACTIVITIES REPORT

31 OCTOBER 2008

### Highlights

- Barrambie (vanadium) – Completion of northern extension and infill drilling adds an extra 6 km strike length of magnetite mineralisation.
- Barrambie (vanadium) – Strategic acquisition of Exploration Licence applications, which encompass the Barrambie Project, will enhance fast tracking development of the vanadium deposit
- Comet Vale (gold) – Record ore production from underground during the quarter totalled 7,710 tonnes at an estimated grade of 9.5 g/t Au.
- Comet Vale (gold) – Completion of an infill and extension RC/diamond drilling program (6,746 metres) has confirmed the narrow, high-grade ‘nuggety’ style of gold mineralisation at Comet Vale, including intersections of 0.42 m @ **50.9 g/t Au** and 0.51 m @ **73.6 g/t Au**.
- Mt Finnerty (iron) – Completion of a RAB drilling program to test for secondary iron enrichment in palaeochannels. Assay results are awaited.
- Mt Finnerty (nickel) – Completion of RAB drilling program (225 drill holes) to test the key basal ultramafic contact and initial testing of other areas of ultramafic rocks. Assay results are awaited.

Reed Resources’ exploration and development activities during the quarter continued to focus on advancing the Barrambie vanadium project and the Comet Vale gold operations. Portman Iron Ore Ltd and Western Areas NL are continuing with exploration of the Mt Finnerty project for iron ore and nickel sulphide mineralisation, respectively, under joint venture agreements. The Bell Rock Range project in central Australia is progressing steadily.

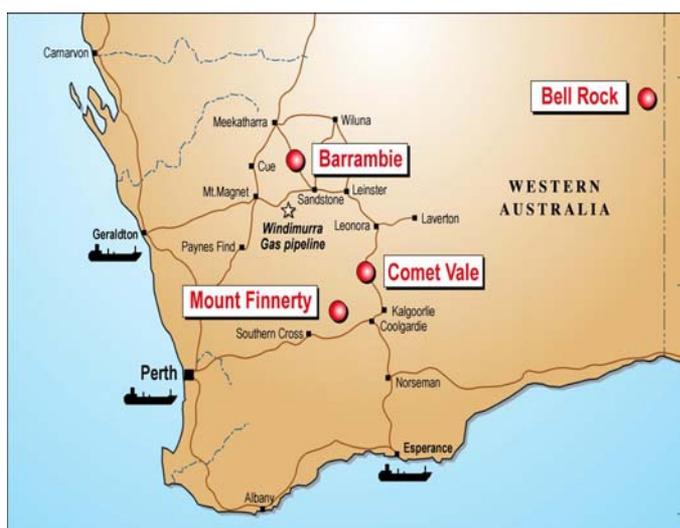


Figure 1 Location of Reed Resources’ projects in Western Australia.



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

### **Northern strike extension and infill drilling**

During the quarter the Company successfully completed a 363 hole reverse circulation percussion (RCP) drilling program (25,900 metres) on the northern half of its wholly owned Mining Lease M57/173, from 12000mN to 18000mN. Drill holes have been spaced at 25 metre intervals along drill lines 100 metres apart, which should be sufficient for estimation of an Indicated Resource.

The RC drilling program was designed to drill out the six kilometres of strike length to the north of the existing Mineral Resource of 36.5 million tonnes at a grade of 0.82 %  $V_2O_5$ , 17.7 %  $TiO_2$  and 49.9 %  $Fe_2O_3$  at a block cut off grade of 0.5%  $V_2O_5$  (ASX announcement 7<sup>th</sup> May 2008). The additional drilling is expected to contribute to a substantial increase in Mineral Resources.

Geological logs have been compiled for all drill holes and samples collected during the program are currently being assayed at analytical laboratories in Western Australia. Assay results for all drill holes are expected to be received during the December quarter 2008, which will then enable calculation of a final resource and reserve statement for the full 11 kilometres of strike length.

Results to date are encouraging with magnetite mineralisation confirmed throughout the full six kilometres strike length of the additional drilling. Vanadiferous magnetite mineralisation has now been established throughout the full length of the Mining Lease over a total strike length of 11 kilometres.

### **Diamond drilling program**

During the quarter the Company also completed a 16 hole PQ diamond drilling program (1,091 metres) comprising nine geotechnical holes and seven metallurgical holes to acquire additional geotechnical and metallurgical information on the northern extension of the mineralisation. Data from the geotechnical holes will assist in the design of the open pit mine and data from the metallurgical holes will enable the process plant design parameters to be further refined.

### **Definitive feasibility study (DFS)**

The Definitive Feasibility Study (DFS) was completed by Sinclair Knight Merz (SKM) on the 15<sup>th</sup> August 2008. This indicated that, based on the existing mineralisation, the Barrambie vanadium processing plant and associated infrastructure should target a through put of 3.2 million tonnes per annum of vanadium bearing magnetite mineralisation at a grade of 0.8%  $V_2O_5$  and produce either approximately 9,200 tonnes of  $V_2O_5$  or 6,400 tonnes of Ferro Vanadium per annum.

Mining studies indicated that selective mining of the Central Zone resulted in a feed to the plant in excess of 0.8 %  $V_2O_5$ , which is the highest grade of any primary vanadium-bearing mineralisation in Australia. This increase in grade resulted in a greater mass of higher grade concentrate reporting to the roasting/refinery circuit than initially planned.

## Optimisation study

As a direct result of the increased grade of the Central Zone mineralisation and the increased tonnages expected from the recently drilled northern mineralisation the following additional studies are underway to further enhance the project:

- Investigate increasing the size and or length of the roasting kiln in order to significantly increase the final product. Early indications are that  $V_2O_5$  and Ferro Vanadium production could increase by as much as 40 %.
- Investigate salt addition to the roasting kiln with a view to minimising salt consumption and reduce the operating temperature. Both of these initiatives should result in a significant reduction in operating costs.
- Examine the inclusion of a reverse flotation process and the new Chinese designed SLon electromagnetic recovery machines in the beneficiation circuit to produce a cleaner and higher vanadium grade concentrate.
- Investigation of the production of vanadium trioxide ( $V_2O_3$ ) as an intermediate product instead of vanadium pentoxide ( $V_2O_5$ ), which reduces the amount of aluminium needed to be added to produce Ferrovandium.
- Relocation of the production of Ferro Vanadium off site to Kwinana which is in a better position to take advantage of the use grid power to energise the arc furnace and have ready access to scrap iron, aluminium and lime which are all used in the production of Ferro Vanadium.
- Continue metallurgical test work on the primary mineralisation (ie, mineralisation from below the oxidised zone at a depth of 60 metres below the surface). Primary mineralisation is a potential future ore source and recent test results indicate that a magnetite concentrate of 1.24 %  $V_2O_5$  and 56 % Fe can be prepared to recover 95 % of the vanadium.

These initiatives are currently being investigated with a view to improving the quantity of vanadium recovered. Results of the new initiatives will then be incorporated into an addendum to the DFS, which is due for completion in the first quarter of 2009.

## Strategic land acquisition

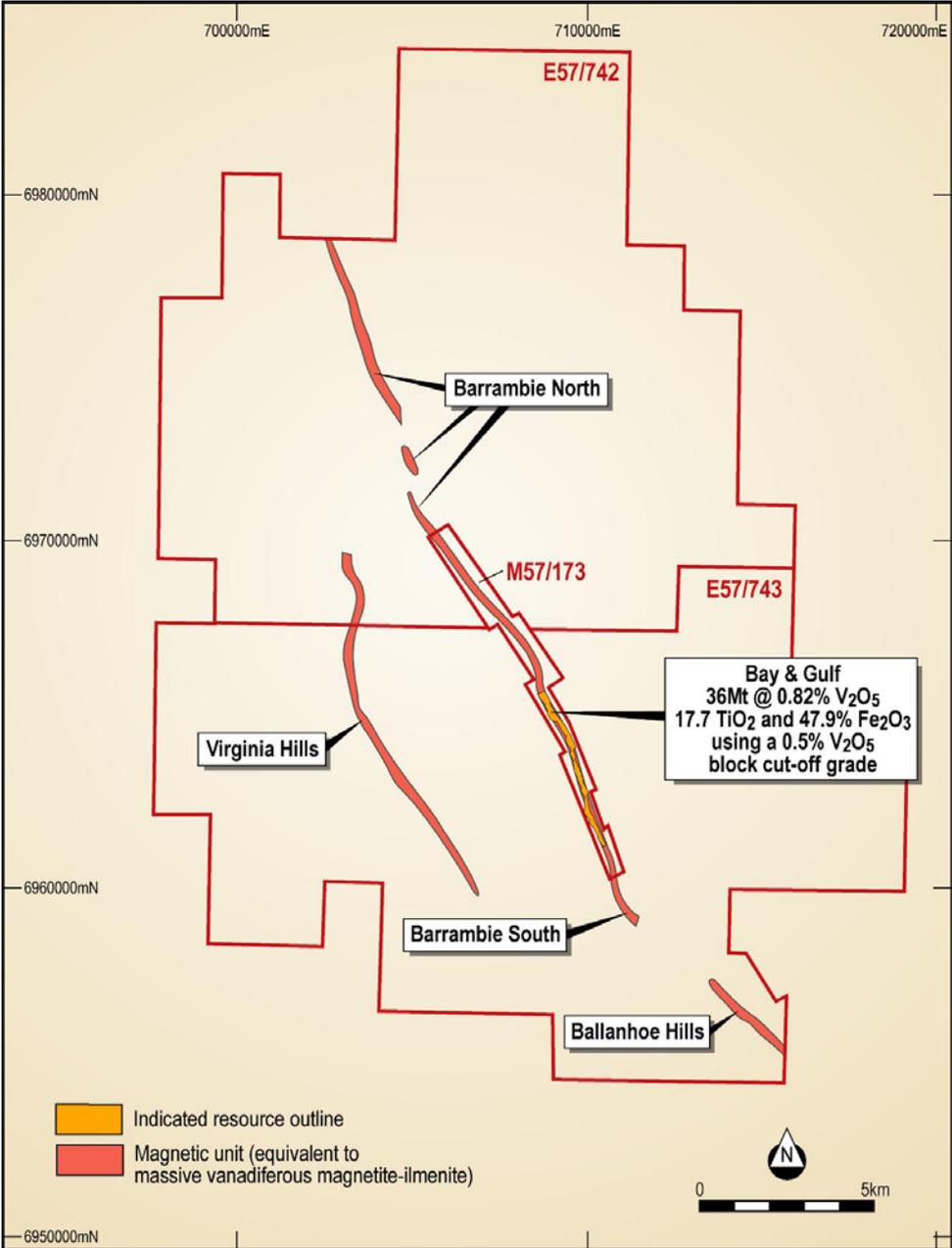
Reed Resources Ltd expanded its landholdings around the Barrambie vanadium deposit through the acquisition of Australian Vanadium Corporation Pty Ltd, a subsidiary of Prime Minerals Limited (ASX:PIM). Australian Vanadium Corporation Pty Ltd held two Exploration Licence applications, E57/742 and E57/743, which encompass the Barrambie Project (Figure 2). The acquisition will now enable the Company to place plant infrastructure and waste dumps in their optimal positions.

A summary of the agreement is as follows (ASX announcement 1<sup>st</sup> September 2008):

- \$1.0 million cash.
- 2 million ordinary shares in Reed Resources Ltd.
- 2% net smelter royalty of production from within the relevant tenement areas.
- Original Vendor free carried to 20 % until completion of a Bankable Feasibility Study.

Geological and geophysical data for E57/742 and E57/743 confirms that there is excellent potential for extensions of the same type and grade of mineralisation as that currently being assessed within the Company's Mining Lease (M57/173). There is potential for an additional 14 kilometres of strike length to the north and south of M57/173. The additional ground also includes a zone of poorly exposed magnetic formations about 5 kilometres to the west of and parallel to the Barrambie deposit (Figure 2).

These tenements represent a major strategic land package and their acquisition will allow Reed to further grow its resource base and to continue fast tracking development of the Barrambie vanadium deposit.



**Figure 2** Plan of recently acquired Exploration Licences (E57/742, E57/743) surrounding the Barrambie deposit (M57/173), showing extensions of magnetic formations to the north and south of the current resource and a parallel formation 5 km to the east (Virginia Hills).

## Forward work

The following activities are planned for the next quarter:

- Compile drilling results for geological interpretation and estimation of a revised Mineral Resource for the combined northern and southern areas.
- Continue beneficiation and roasting test work on core samples from the northern sections (Bight and Strait) of Barrambie deposit.
- Continue testing the effectiveness of SLon magnetic separators and reverse flotation recovery of fines in the beneficiation of Barrambie mineralisation.
- Modify the DFS process flow sheet and process plant design to produce increased levels of Ferro Vanadium product.

## Market price

The current price of vanadium is quoted by the Ryans Notes at US\$11.50/lb for V<sub>2</sub>O<sub>5</sub> and US\$57 per kg of V for Ferro Vanadium (FeV<sub>80</sub>), as at 27 October 2008. The primary use for vanadium is to harden steel.

## COMET VALE PROJECT (gold, nickel)

### **Sand Queen Mine Operations (Reed Resources 100 %, Kingsrose Mining Limited earning 50 %)**

#### **Mining**

Underground mining operations at Comet Vale continue to improve, with Kingsrose Mining Limited (Kingsrose) reporting record production of 7,710 tonnes of ore at an estimated average grade of 9.5 g/t Au for the September 2008 quarter. This included a monthly production record of 3,145 tonnes of ore hoisted during July.

Most of the ore mined during the quarter has been from the 3 Level, with small amounts of ore still being generated from stopes on the 2 Level, as labour resources permit.

Mining during the December 2008 quarter will continue to focus on the 3 Level stopes and re-opening of the 4 Level in preparation for accessing the Sand George lodes at that level.

Kingsrose Mining Ltd has requested Reed Resources consider revising the terms of the Comet Vale Joint Venture to ensure viability of the mining operation. Reed wishes to support our JV partner, and have agreed to enter into discussions in regard to restructuring of the Joint Venture to deliver mutually beneficial long term sustainable outcomes to both parties. Under the current joint venture, Kingsrose is responsible for all development and production costs for which it receives 50 % of revenue from ore produced from above the 6 Level. Reed Resources is responsible for treatment of the ore for its 50 %. Reed will keep the market informed of developments.

#### **Milling**

An ore parcel of some 5,487 tonnes was toll treated in July 2008. A total of 1,235.8 ounces of gold was recovered of which 627 ounces of gold has been credited to Reed Resources. The gold recovered is considerably less than what sampling had indicated and Reed has not accepted the gold recovery figures. The Company has completed diagnostic metallurgical test work and is preparing courses of action to recover the gold in question.

Reed Resources expects to achieve resolution of this matter in the current quarter. Notwithstanding the non-acceptance of the outcome of the July toll treatment campaign, the cash margin was \$321,003 on gold sales of \$622,813.

Another ore parcel of 6,646 tonnes of ore at an estimated grade of 9.0 g/t Au was sold in late September 2008 to a local gold producer. Reed Resources' cash margin was \$301,446. Payment for this ore is expected to be received in the next week.

Reed Resources is not reporting cash costs of production (C1) this quarter until results of the July toll treatment campaign have been finalized. Gold production from Sand Queen is not hedged and therefore fully leveraged to further upward movements in the price of gold.

The next parcel of ore is expected to be available for processing in December.

### **Comet Vale Gold Exploration (Reed Resources 100 %)**

During the quarter work focused on a major drilling program that commenced in 15 August and completed on 10 October. The infill and extension drilling program, which consisted of 4,456 metres of reverse circulation percussion (RC) drilling and 2,290.8 metres of diamond core drilling, has confirmed the narrow, high-grade 'nuggety' style of gold mineralisation at Comet Vale.

#### **Sand Queen Mine infill and extension drilling**

Most of the drilling focussed has on three main targets (Figure 3): Sand Queen South, Comet Vale lodes at depth, and Sand Prince area. Significant intersections, in excess of 5 g/t Au, are listed in Table 1, and a full listing of results is included in ASX announcement of 24 October 2008.

**Table 1.** Drilled intercepts with gold assays in excess of 5g/t Au (compiled from data in ASX announcement 24 October 2008, Table 2).

Hole ID (1)	Hole Depth (m)	Northing (2)	Easting (2)	From (m)	To (m)	Intercept (3)	Grade (g/t Au) (4)
JVC067	80	12875	7815	14	15	1.0	8.35
JVC068	100	12875	7790	17	18	1.0	15.1
JVD014	429.4	13300	7600	391.12	391.54	0.42	50.9
JVD015	350	13125	7625	293.10	294.68	1.58	7.58
JVD016	441.04	13200	7575	61	62	1.0	5.12
JVD019	192.5	13425	7715	133.86	134.70	0.84	13.6
				155.10	158.12	3.02	6.97
			<i>including</i>	155.10	156.00	0.90	21.5
JVD020	413.7	13525	7560	396.95	397.30	0.35	7.02
JVD021	240.5	13450	7675	188.13	188.56	0.43	6.02
JVD022	210.5	13425	7675	173.29	179.47	6.18	11.1
JVD023	190	13375	7720	119	120	1.0	10.6
JVD028	372.5	13425	7600	298.85	299.50	0.65	6.08
				338.50	339.01	0.51	73.6
JVD029	366.5	13350	7550	309.5	310.09	0.59	10.6

Drill holes targeting the Sand Queen South position (13300N to 13550N, local grid), between the Sand Queen shaft and Sand George lodes between the 3 and 6 Levels (Figure 3), intersected up to four lode positions, some with substantial grades and width (down hole), including:

- 0.84 metres @ 13.6 g/t Au from 133.86 m in JVD019
- 0.78 metres @ 4.80 g/t Au from 141.09 m in JVD019
- 3.02 metres @ 6.97 g/t Au from 155.10 m in JVD019, *including* 0.90 metres @ 21.5 g/t Au from 155.10 m
- 0.72 metres @ 4.22 g/t Au from 182.83 m in JVD021
- 0.43 metres @ 6.02 g/t Au from 188.13 m in JVD021
- 6.18 metres @ 11.1g/t Au from 173.29 m in JVD022
- 1 metre @ 10.6 g/t Au from 119 m in JVD023

Multiple lode intersections in drill holes JVD019 and JVD021 and a wide intersection in JVD022 have confirmed a geological interpretation that high grade lodes are widest (up to 5m) at the intersection of bi-furcating sub-parallel quartz lodes (e.g., in JVD022). The intercepts listed above are in a key position between the 3 Level and 5 Level (Figure 3) as they indicate potential high grade ore in close proximity to the Sand Queen shaft when development commences on Levels 4 and 5.

Although gold assays in most drilled intercepts are in excess of 5 g/t Au, some drill holes intersected a substantial quartz lode (e.g. 6.47 metres in JVD018) but with no significant assay results (i.e. less than 1 g/t Au). This is attributed to the variability in gold distribution within the lode.

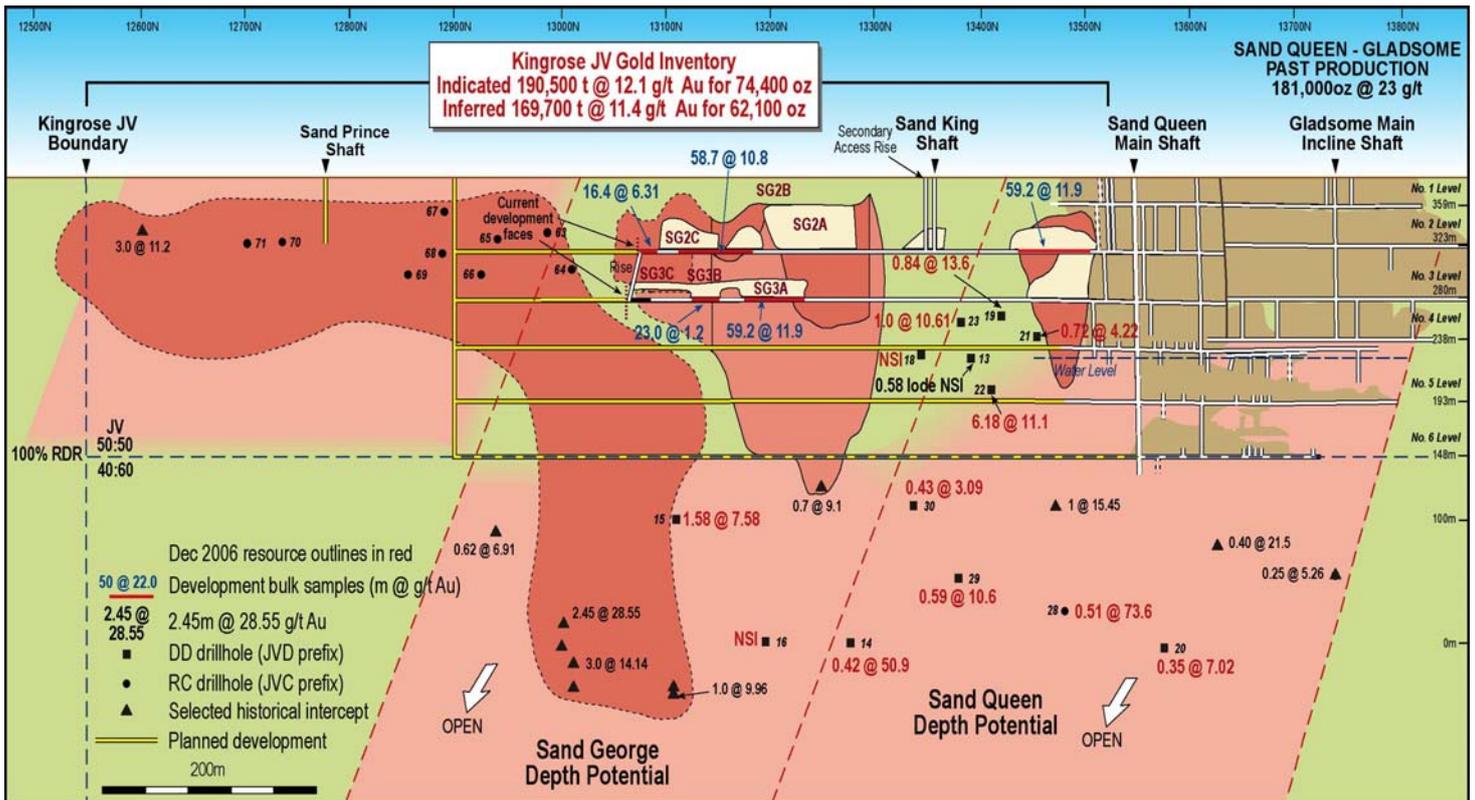
Deep drilling of the Comet Vale lode position below the 6 Level of the Sand Queen mine, at depths of up to 370 metres below surface (Figure 3), has intercepted some narrow (0.35-0.6 m) but very high grade lodes, including:

- 0.42 metres @ 50.9 g/t Au from 391.12 m in JVD014
- 0.21 metres @ 4.87 g/t Au from 388.6 m in JVD020
- 0.35 metres @ 7.02 g/t Au from 396.95 m in JVD020
- 0.51 metres @ 73.6 g/t Au from 338.5 m in JVD028
- 0.59 metres @ 10.6 g/t Au from 309.5 m in JVD029
- 0.43 metres @ 3.09 g/t Au from 276.32 m JVD030

One deep drill hole (JVD015 ) targeting the Comet Vale lode structure at depth below the 6 Level at the Sand George lodes has confirmed continuation of this structure, albeit low grade, with two intersections of 0.39 metres @ 3.26 g/t Au from 249.3 m and 1.59 metres @ 7.58 g/t Au from 293.1 m.

Shallow RC drilling in the Sand Prince area (12500N to 13000N), to the south of the Sand George lodes (Figure 3), was designed to infill around some previous high grade intercepts (eg, 1m @ 12.3 g/t Au, 1m @ 6.48 g/t Au) at depths less than 100 m below surface. Although this drilling intercepted vein positions, the gold grades are relatively low (1.3 - 3.2 g/t Au). Deeper diamond drilling, below 100m vertical depth, remains a priority given the southerly plunge of the gold system elsewhere along the Comet Vale lode structure.

Two narrow but high grade intercepts of 1 metre @ 8.35 g/t Au from 14 m in JVC067 and 1 metre @ 15.1 g/t Au from 17 m in JVC068 are interpreted be a flat lying lode that may be in a similar structural position to the Sand Prince West and Princess Grace deposits to the north. The geological significance of these intercepts will be further investigated.



**Figure 3** Long section of the Sand Queen gold mine with location and grade of drilled intercepts of lodes from the latest RC/diamond drilling campaign.

## Regional exploration

Two areas near the Coonega deposit to the northwest of the Sand Queen mine were test drilled during the quarter.

An area to the east of the Coonega deposit, where there is an historical intercept of 10 metres @ 0.26 g/t Au in a milky quartz vein, was tested by five RC drill holes (452 metres). The drill holes (Table 2) are 100-200 metres along strike from the Coonega deposit. All holes intercepted vein quartz of significant thickness but with variable assay results, including:

- 5 metres @ 6.28 g/t Au from 68m in WTC023
- 4 metres @ 4.43 g/t Au from 112m in WTC024 (composite sample)

**Table 2:** Drilled intercepts of quartz veining in the Coonega east area.

Hole ID	Final Depth	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Depth from (m)	Depth to (m)	Intercept <sup>(2)</sup> (m)	Grade <sup>(3)</sup> (g/t Au)
WTC023	108	6685567	318315	68	73	5	6.28
WTC024	138	6685562	318373	112	116	4	4.43
WTC030	70	6685598	318387	40	48	8	0.41
WTC031	66	6685585	318326	52	56	4	0.16
WTC032	70	6685568	318275	48	52	4	0.61

1. Collar coordinates are for AMG84, Zone 51. All holes collared at 60° toward 025° grid N.

2. Down hole width

3. Samples of drill chips analysed by Amdel Laboratory using an aqua regia technique; except WTC023 which used a 400g Leach well assay with an SAAS finish (LW400/sAAS).

Five RC drill holes (496 metres) tested a sheared contact between ultramafic rocks and basalt, about 150 metres north of and parallel to the Coonega lode. Three of the holes, spaced at 200 metre intervals, intersected quartz veining on the contact with intercepts of 4 metres @ 1.07 g/t Au from 87m in WTC025, 4 metres @ 1.04 g/t Au from 76m in WTC028, and 4 metres @ 0.57 g/t Au from 56m in WTC029.

## **Forward Work**

The following gold exploration activities are planned for the December quarter:

- Validating results from the latest drilling program for updating of the Comet Vale database in preparation for a re-evaluation of Indicated and Inferred Mineral Resources.
- Collation of all regolith and geology mapping at Comet Vale for compilation of a 3D geological model of the region for further evaluation of structural targets.
- Ongoing metallurgical test work at the Western Australian School of Mines (WASM) to assess the viability of heap leaching of lateritic nickel from Comet Vale.

## **MOUNT FINNERTY PROJECT (iron, nickel, gold)**

### **Iron Ore Exploration (Reed Resources 20 %, Portman 80 %)**

Iron ore exploration is undertaken by Portman Iron Ore Ltd (Portman) in joint venture with Reed Resources Ltd. The principal aim of this exploration is to locate sufficient iron mineralisation within trucking distance of Portman's Koolyanobbing Iron Ore operation, which is about 65km to the west. Previous exploration has identified two key exploration targets: banded iron formation (BIF) hosted iron enrichment (BID) deposits (e.g. FIN1 to FIN11 prospects) and channel iron deposits (CID) within broad palaeochannels that had been identified from geophysical interpretation of satellite imagery and aeromagnetic and ground magnetic survey data.

Exploration for BIF-hosted iron mineralisation has identified several new areas of outcropping iron mineralisation, including the FIN7 West, FIN10 North and FIN10 South prospects and an extension of surface Fe enrichment at the southern end of the FIN11 prospect. Sampling data is being evaluated with a view to defining potential drill targets.

New BID targets such as 'Red Tulip', a magnetic and gravity anomaly with discontinuous sub-cropping iron mineralisation, and 'Blue Rose', a concealed geophysical target, are also being evaluated as future drill targets.

During the quarter, Portman carried out systematic RAB drilling to test the extent of iron-enriched detrital material in a number of palaeochannel deposits. The drilling intersected numerous relatively thin beds with detectable iron-enrichment and assays results are awaited.

The joint venture continues to maintain a high level of environmental management, including botanical surveys in all areas of drilling activities and rehabilitation of drill pads.

## **Nickel Exploration (Western Areas NL earning 65 %)**

Exploration by Western Areas continued during the quarter with RAB drilling programs testing the prospective basal contact of the Western Ultramafic unit (WUM) and other potentially favourable lithologies. A total of 225 RAB holes were drilled (holes WMFRB127 - WMFRB 351) for a total 5,248 metres of which 1,987 metres were drilled at Yalenbarine Creek prospect and 3,261 metres at Johnnies Dam. Assay results are awaited.

Four RC holes (total 682m) were drilled on or near the Western Ultramafic Unit (WUM). Drill hole MFRC003 (at 226327mE 6591194mN) drill tested an area that had previously reported highly anomalous Ni in MFR064 (at 226250mE, 6591400mN), which intersected 25m @ 0.91% Ni with up to 31 ppb PGE. This hole intersected low-Mg ultramafic rocks with no significant nickel values.

The two moderate IP anomalies that had previously been identified to the west of the interpreted basal contact of the WUM were tested with two holes MFRC001 (at 227360mE 6589300mN) and MFRC002 (at 226730mE 6590300mN). These holes intersected a basalt-dolerite intrusive sequence with barren pyrite, which is the likely cause of the IP anomalies.

Hole MFRC004 (at 225353mE, 6593400mN) intersected favourable ultramafic rocks with values up to 3,000 ppm Ni, measured using a Niton portable XRF analyser. Assay results are awaited.

## **Gold and Other Minerals Exploration (Reed 100 %)**

RC drilling of the Little Nipper gold mine was completed without any significant intersections or gold assay results.

Reconnaissance geological mapping and sampling was completed in the Mt Watt area where there have been previous reports of manganese (historical assay of 59 % Mn) about 1.5 km north of Mt Watt. This work did not identify any pyrolusite or psilomelane mineralisation.

## **Forward Work**

Planned iron exploration (PMM) includes:

- Evaluation of the results of the RAB drilling program that tested for iron enrichment within palaeochannel systems.
- An RC drilling program to better define mineralisation at FIN9 and FIN10 prospects, to achieve a Mineral Resource classification.
- Further drill testing of the northern and southern extensions of the FIN11 prospect.
- Drill testing of the new targets at 'Red Tulip' and 'Blue Rose'.

Planned nickel exploration (WSA) includes:

- Extension of the soil and MagLag sampling in areas of suitably shallow cover on the western and central ultramafic units.
- Further RAB drilling to test areas under regolith cover throughout the Mt Finnerty project.

Gold and other minerals exploration is planned to include:

- Completion of resource models for Flinders and Tasman.
- Collation of all available regolith and bedrock geology mapping.
- Detailed geological mapping and sampling of selected geological, geochemical and geophysical targets to delineate targets for drill testing.

A botanical survey of the entire Mt Finnerty project commenced in mid-October and is scheduled for completion during the December quarter. The survey is being undertaken to update a previous biological assessment completed in 2005.

## **BELL ROCK RANGE PROJECT (Reed 100%)**

The Bell Rock Range project is within the western part of the Proterozoic Musgrave Province in central Australia. It is highly prospective for several commodities, particularly Ni-Cu sulphide and PGE mineralisation in area that is underexplored. During the quarter, the company continued discussions with local aboriginal communities to finalise agreements for access within the exploration licence.

## **CORPORATE**

During the quarter the Company appointed Steven Cole as Deputy Chairman of the Company and adopted a revitalised Corporate Governance Charter reflective of the revised ASX Corporate Governance Council Recommendations (2008). This represents a significant step in the corporate evolution of Reed.

As stated above the Barrambie project strategic land acquisition resulted in the issue of 2 million ordinary shares to Prime Minerals Ltd as part purchase consideration.

In addition, 1 million options were issued during the quarter to particular employees and consultants of the Company in accordance with the Company's Employee Share Option Plan.

At the end of the quarter the Company had \$14.33 million cash at bank.



**C J 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 style of mineralisation and type of deposit under consideration and to the activity which is 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.*

*Although Reed Resources remain optimistic about the potential of its exploration projects, any reference to the terms "ore, "high-grade" and "low-grade" in this report is conceptual in nature. Use of the term "grade(s)" is not intended to represent the grade of a resource.*