# **BAUXITE RESOURCES LIMITED ACN 119 699 982**

# **DECEMBER 2008 QUARTERLY REPORT**



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**ASX Code:** 

BAU: 110m shares
BAUO: 51m listed options
Market Cap (31 Dec 08)
BAU: A\$20.9 million (@19c)

Cash

A\$6.5 million (See Option conversion)

#### **Directors:**

Luke Atkins - Executive Chairman
Dan Tenardi - Managing Director
David McSweeney - Non Exec Director
Neil Lithgow - Non Exec Director
Robert Nash - Non Executive Director
Paul Fromson - Company Secretary

# **BACKGROUND**

Bauxite Resources Limited (BRL) launched in May 2006 with a mission to become initially a significant bauxite miner and subsequently an alumina producer.

By October 2007, following seed capital raising, BRL successfully listed on the ASX, raising \$7.5 million. BRL is currently the largest tenement holder in the Darling Range with approximately 11,000 km<sup>2</sup> of ground.

This area in south west Western Australia is acknowledged as the largest producing alumina region in the world supplying approximately 18% of the world's production and the location of Alcoa's Huntly Mine, the world's largest bauxite mine.

The Darling Range has four alumina refineries; three of these are in the top five for lowest operating costs globally, principally due to the gibbsite composition of the Darling Range bauxite, and its low reactive silica of around 3%.

#### **EXECUTIVE SUMMARY**

#### **BUSINESS CASE FOR DSO**

- ► Stage One Direct Shipping Ore (DSO) project is targeting a >30million tonne (Mt) bauxite resource to underpin a >3million tonne per annum (Mtpa) DSO operation.
- ► Shipping costs continue to fall on the C5, China to WA shipping route to a reported low of A\$2.80 per tonne.
- ► Chinese bauxite price weakens in second half of the quarter on falling alumina production and slowing world economy to a reported A\$45 FOB per tonne out of Indonesia.

#### STRONG CHINESE INTEREST IN BRL

- ▶ MOU signed with Shanxi Wusheng Aluminium, for off-take and direct investment.
- ▶ MOU signed with Shandong Bureau of Mineralogy for 'farm-in' type agreement.
- Strong Chinese interest for spot FOB shipments.

#### DSO PROJECT PROGRAM - PRELIMINARY STUDIES, BUDGETS & PLANS COMPLETED

▶ MD has completed the DSO Project Management Plan, Project Scoping Study, and draft timeline on the DSO business plan together with Operating Budget for a variety of bauxite 'starter pit' operations in the North & South project areas.

#### LAND ACCESS - ARRANGEMENTS SECURED ON PRIVATE FREEHOLD LAND

Land access arrangements, necessary for drilling and mining now in place with royalty agreements with owners of freehold, degraded farmland in areas in relative close proximity to infrastructure and pre-existing historical data identified by the exploration program.

#### **EXPLORATION PROGRAM - DRILLING PROGRAMME UNDERWAY**

- ▶ Drilling commences at Bindoon (North Darling Range Project) and east of Brunswick Junction (South Darling Range Project).
- Target generation and evaluation phase continues.
- As at 31 December 2008, Bauxite Resources Limited (BRL) has 59 tenement licenses, 3 granted and 56 in application.
- ► Tenements and applications now cover over 11000km² of highly prospective bauxite ground in the world class bauxite production region of the West Australian Darling Ranges, and 1,100km² in the Kimberley.
- ▶ Ravensgate have completed a JORC compliant Inferred Resource estimation.

#### MINING AND PROCESSING OPERATIONS - PLANS WELL ADVANCED

- ► Experienced Darling Range mining, processing and transport service provider identified and 'key terms' and rates negotiated.
- Start up pits for DSO identified for Darling Range North and South Projects on areas of private sub-economic degraded farmland with existing quarry activities.
- ▶ Trial mining scheduled to commence in first quarter 2009.

# **INFRASTRUCTURE ACCESS - CONTINUES AS SCHEDULED**

- Mining Processing and Transport Services secured.
- ▶ Road Haulage quotations obtained 'key terms' agreed with preferred operator.
- Rail Negotiations underway with a number of service providers.
- Port Negotiations well advanced with options being presented by providers.

#### **MARKETING - RESOURCE CHARACTERISATION & VALIDATION UNDERWAY**

- Representative samples obtained from key project areas sent for analysis, grade control for mining and protocol for bauxite sampling being developed.
- Scoping study for characterising the nature and attributes of Darling Range bauxite underway in conjunction with CSIRO, results currently being collated.

# ENVIRONMENTAL MANAGEMENT - PLAN AND STRATEGY IMPLEMENTED

- Environment policies established and consultants engaged.
- ▶ Annual and long-term Environment Plan drafted, approvals processes planned.
- Government Ministerial meetings scheduled for January 2009.
- State departmental contacts made toward the execution of post mining rehabilitation initiatives, including Sandalwood plantations and an endangered species breeding program.

#### **SUCCESSFUL CHINA TRIP**

- Mr Tenardi and Mr Chen visited China in October and negotiated MOU with Shanxi Wusheng for potential off-take agreement and direct investment opportunity.
- Chinese Minerals Marketing Manager appointed to facilitate bauxite sales.

# **COMMUNITY RELATIONSHIPS**

- Community Engagement strategy tabled to ensure correct procedures are followed.
- ► Licence to Operate strategies established to meet and elevate community and state henchmarks
- ▶ Local government relationship processes established.

#### RECENT DEVELPMENTS FOR THE QUARTER

#### MOU WITH SHANGXI WUSHENG ALUMINIUM CO

Following the signing of the MOU with Chinese refinery Shanxi Wusheng Aluminium Co (Wusheng), BRL has been in lengthy negotiations to agree the 'key terms'.

BRL has elected not to appoint a Chinese sole and exclusive agency for its bauxite, despite expressions of interest. Wusheng's refinery is located in the Shanxi Province which would necessitate a 800 km rail haul of the bauxite inland from the coast.

Negotiations are continuing, however, if the terms of agreement cannot be reached by the end of January, Wusheng's 'exclusivity agreement' lapses and BRL is 'free to negotiate' with other prospective equity partners.

To optimise the value of the product, BRL is focussing on delivering a number of spot shipments to strategically identified refineries that are seeking a long-term supply. Currently BRL has a number of interested parties and plans to send representatives to China in February 2009 to visit potential refinery off-take customers.

#### MOU WITH SHANDONG PROVINCIAL BUREAU OF GEOLOGY

Since the signing of the MOU between BRL and Shandong Provincial Bureau of Geology and Mineral Resources (SDGM) on 17th November 2008, favourable negotiations have continued.

SDGM have settled Dr Yang Chenghai in Perth to establish a base of operations for Western Australia. A team of geologists are to follow and a company has been incorporated as the corporate vehicle to enter into prospective mining projects.

BRL has held initial talks and a number of 'farm-in' type proposals are currently being evaluated. These essentially currently relate to the possible exploration for all minerals other than bauxite in the Company's Darling Range Project areas and the possibility of all minerals including bauxite relating to the Kimberley Project.

SDGM has also expressed a strong interest to source bauxite as the seven refineries in the Shandong Province rely on imported bauxite.

### POTENTIAL FOB SPOT SHIPMENTS TO CHINA

Bauxite Resources has engaged the services of a highly experienced metals trader, based in China, to source bauxite buyers.

Since the appointment of the Chinese metal marketing expert, BRL have had a number of approaches from alumina refinery operators. Negotiations are currently underway as to the possibility of a number of FOB spot shipments in the shorter term.

Bauxite Resources sees spot shipments freight on board (FOB) as an excellent opportunity to "showcase" Darling Range bauxite with its inherent characteristics of low reactive silica and gibbsitic nature.

Darling Range gibbsitic bauxite has the key attribute of low reactive silica content, about 3%. This requires less caustic soda usage and delivers a higher alumina recovery rate in the refining process, and only a small percentage of available alumina is lost in the refining extraction process.

The Company believes that the Darling Range bauxite attributes, which enable the Darling Range refinery operators to be amongst the lowest cost alumina refineries in the world, may not have been fully appreciated by the Chinese market.

Apart from a quality product, Australia offers China the advantage of a stable political and business environment, safe shipping routes and a reliable supply of quality product. These factors coupled with current reduced shipping rates make direct shipping of bauxite FOB a viable option.

#### **EXPLORATION PROGRAM – QUARTERLY UPDATE**

#### Overview

During the December quarter the Company's exploration program continued on schedule with commencement of drilling at Bindoon and Brunswick Junction following agreements for access from freehold landowners. Assays have returned excellent grades and widths of mineralisation, providing further support for the Company's objective of developing a high-quality DSO bauxite export business later this year.

# **Additional Exploration Licences Obtained during the Quarter**

Ongoing target generation identified large areas of bauxitic laterite in the Nannup, Boyup Brook and Toodyay regions. BRL has applied for a further 11 Exploration Licences (ELs) over these regions in the Darling Range since September 2008. This brings the total number of granted licences and applications to 59 tenements in its four project areas totalling approximately 12,500 square kilometres; 56 tenements are located in the North, South and East Darling Range project areas and three tenements in the Kimberley project area. Three of these licenses have been granted in the North Darling Range Project area.

# **Target Generation**

BRL has focused resource definition drilling on specific target areas. Exploratory drilling has been undertaken near strategic locations to assess the potential for economic bauxite mineralisation. Exploration planning with necessary land access and regulatory approvals has commenced under Mr Tenardi to enable the commencement of drilling to define sufficient mineralisation to support a >3Mtpa DSO operation. **Drilling has commenced on the North and South Darling Range project areas and is ongoing.** 

# **Targets**

The initial Stage 1 program is targeting a >30Mt of bauxite mineralisation to support the commencement of a >3Mtpa DSO operation, hence the targeted areas comprise areas of previously explored ground including Crown Land and degraded, sub-economic freehold farmland close to existing infrastructure, including rail lines and ports.

# **Exploration Program**

Exploration in December Quarter has focused on target generation, surface mapping, securing land access arrangements, resource modelling of historic drilling and the drilling of 113 holes in the Bindoon and Brunswick Junction regions. Results from this work are discussed below.

### Bindoon - Avon Resource Modelling

Resource modelling work commenced on BRL's Bindoon and Avon granted and pending exploration licences in the Darling Range, Western Australia during the Quarter. BRL has released a maiden JORC Compliant Inferred Resource in early January 2009. The bauxite mineralisation present in the Bindoon (E70/3064) and Avon (E70/3003, E70/3159, E70/3433) regions, situated in the North Darling Range project area, consist of gibbsitic bauxite laterites that were drill tested by CSR Ltd/Pacminex Pty Ltd (Pacminex) in the 1960s and 1970s.

### **Brunswick Junction – Shenton Ridge**

A total 76 holes for 222 metres were completed at the Shenton Ridge Prospects where historic drilling by Project Mining Corporation (PMC) intersected bauxite mineralisation up to **5m at 36.4%** Available Al<sub>2</sub>O<sub>3</sub> from an extensive laterite plateaus.

A close spaced drill pattern has been completed over higher-grade bauxite mineralisation (4m at 41.1% Available  $Al_2O_3$ ) at Blackboy Hollow within an existing Planning Consent and Extractive Industries Licence and regional drilling has commenced on a 200m by 200m spacing over the remainder of the laterite plateau.

The objectives of the drilling programme are to confirm historical drill results, determine the significance of the bauxite mineralisation present and obtain samples for mineralogical characteristics studies. Results from this drilling have

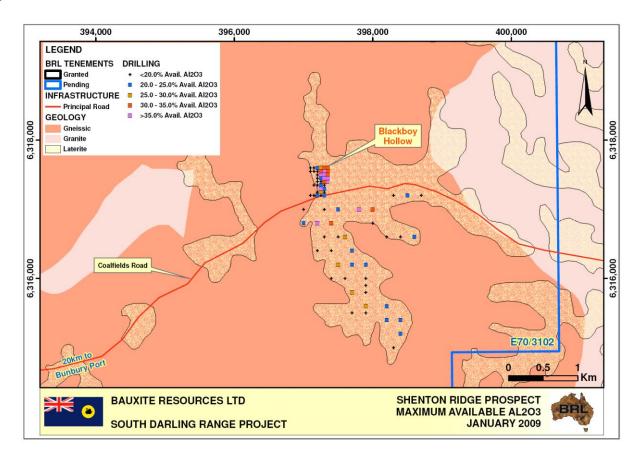
defined a higher-grade pod of bauxite mineralisation at Blackboy Hollow that is open to the north and east. Preliminary results from the regional drilling have delineated zones of anomalous bauxite mineralisation up to 3m at 30.7% Available  $Al_2O_3$ . Further infill drilling is now required on a 200m x200m spaced drill pattern. Better results from Shenton Ridge drilling are tabulated below.

Hole ID	Intersections							
	From	То	Interval	Total	Avail	Re. SiO₂%		
	(m)	(m)	(m)	Al <sub>2</sub> O <sub>3</sub> %	Al <sub>2</sub> O <sub>3</sub> %			
Blackboy Hollow								
SRV013	2	6	4 (EOH)	41.6	35.2	2.8		
SRV022	1	5	4 (EOH)	42.7	35.6	4.3		
SRV028	0	5	5 (EOH)	41.0	34.8	2.6		
SRV033	1	6	5 (EOH)	42.6	32.7	2.1		
SRV034	0	4	4 (EOH)	39.0	33	2.8		
Regional [	Regional Drilling (200m by 200m spacing)							
SRV058	0	3	3 (EOH)	*	30.7	2.7		
SRV063	1	3	2	*	33.7	2.9		
SRV064	1	4	3 (EOH)	*	28.5	5.3		

Available  $Al_2O_3$  and Reactive  $SiO_2$  analysed by bomb digest at  $143^{\circ}C$  / ICP05 by SGS. Total  $Al_2O_3$ ,  $SiO_2$  and  $Fe_2O_3$  analysed by XRF at SGS. Intersections calculated using a lower cut-off of 27% Available  $Al_2O_3$ , minimum width of 1m and maximum of 1m internal waste. EOH denotes intersection to end of hole.

\* Results from XRF are pending.

A list of all intersections greater than 27% Available Al<sub>2</sub>O<sub>3</sub> is presented in Appendix 1 and collar locations are shown below.



### **Brunswick Junction - Martin Road**

Historic PMC drilling at the Martin Road Prospect intersected significant bauxite mineralisation associated with lateritic ridges in the Mornington region. BRL completed 25 holes for 81 metres on a 200m by 200m spacing with initial results delineating zones of anomalous bauxite mineralisation warranting infill drilling.

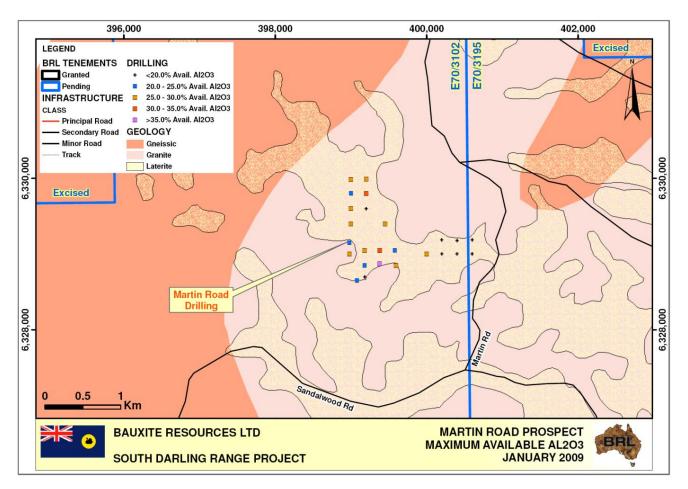
Better results from Martin Road drilling are tabulated below.

Hole ID	Intersections						
	From	From To Interval Total				Re. SiO <sub>2</sub> %	
	(m)	(m)	(m)	Al <sub>2</sub> O <sub>3</sub> %	Al <sub>2</sub> O <sub>3</sub> %		
MR003	0	3	3	*	33.3	4.2	
MR008	1	3	2 EOH)	*	28.9	4.9	
MR020	0	4	4 (EOH)	*	30.7	3.7	

Available  $Al_2O_3$  and Reactive  $SiO_2$  analysed by bomb digest at  $143^{\circ}C$  / ICP05 by SGS. Total  $Al_2O_3$ ,  $SiO_2$  and  $Fe_2O_3$  analysed by XRF at SGS. Intersections calculated using a lower cut-off of 27% Available  $Al_2O_3$ , minimum width of 1m and maximum of 1m internal waste. EOH denotes intersection to end of hole.

\* Results from XRF are pending.

A list of all intersections greater than 27% Available Al<sub>2</sub>O<sub>3</sub> is presented in Appendix 1 and collar locations shown below.



# **Bindoon Region - Dewars Prospect**

Close-spaced drilling was completed over areas of historical CSR Ltd/Pacminex Pty Ltd drilling at the Dewars prospect to obtain representative samples for mineralogical characterisation studies. This drilling is located within the area where BRL has completed resource modelling of historical data and drill results demonstrate the quality of bauxite mineralisation present.

Initial results from Mineralogical Characterisation studies on representative samples from the Bindoon region confirmed that mineralisation is premium bauxite, being gibbsitic in nature with low reactive silica. This type of bauxite is suitable for digestion in a conventional Bayer Refinery at low temperature and low pressures with low caustic soda consumption.

Better results from Dewars Prospect drilling are tabulated below.

Hole ID	Intersections							
	From	From To Interval Total				Re. SiO <sub>2</sub> %		
	(m)	(m)	(m)	Al <sub>2</sub> O <sub>3</sub> %	Al₂O₃%			
BDV003	0	3	3	42.8	31.2	1.0		
BDV039	4	10	6 (EOH)	36.6	30.1	4.3		
BDV050	0	6	6	38.2	31.6	2.7		
BDV051	0	3	3	42.8	35.8	4.2		
BDV052	1	6	5	43.3	34.6	3.0		

Available  $Al_2O_3$  and Reactive  $SiO_2$  analysed by bomb digest at  $143^{\circ}C$  / ICP05 by SGS. Total  $Al_2O_3$ ,  $SiO_2$  and  $Fe_2O_3$  analysed by XRF at SGS. Intersections calculated using a lower cut-off of 27% Available  $Al_2O_3$ , minimum width of 1m and maximum of 1m internal waste. EOH denotes intersection to end of hole.

A list of all intersections greater than 27% Available Al<sub>2</sub>O<sub>3</sub> is presented in Appendix 1.

### **EXPLORATION PROGRAM SCHEDULED FOR MARCH 2009 QUARTER**

Exploration planned for the March Quarter will focus on drilling in the Brunswick Junction and Bindoon regions. At Bindoon target generation has identified targets outside the existing resource area where CSR/ Pacminex pattern-drilling have outlined significant zones of higher-grade bauxite mineralisation. BRL is planning to gain necessary land access and regulatory approval to complete resource definition drilling of these further targets.

In the Brunswick Junction region BRL has identified extensive blankets of potentially bauxitic laterite at Shenton Ridge and Martin Road. Regional drilling programs of these targets commenced in the December Quarter and the program is ongoing. Results received to date with 3m at 30% Available  $Al_2O_3$  and 2.7% Reactive silica have identified significant bauxite mineralisation and indicate the highly prospective nature of the region.

# TRIAL MINING PROGRAM SCHEDULED FOR MARCH 2009 QUARTER

BRL will initially undertake a 'trial mining' operation targeting a range of 150,000 to 200,000 tonnes of bauxite (approximately four shiploads) which will be transported to a stockpile storage area close to the Bunbury port for direct loading to the ship loading conveyor and subsequent loading onto Handimax-class ships.

The bauxite will be extracted from areas of private, sub-economic freehold degraded farmland where earlier drill results have indicated bauxite mineralisation at surface, with better results of 4m at 41.6% Total  $Al_2O_3$ , 35.2% Available  $Al_2O_3$  and 2.8% Reactive  $SiO_2$ . The target size for the DSO shipping has a grade range of 40% - 43% Total  $Al_2O_3$ , 30%-34% Available  $Al_2O_3$  and 2.5%-3% Reactive  $SiO_2$  from the drilling completed to date. The potential quality of the grade is conceptual in nature, there has been insufficient exploration in the target area to define a Mineral Resource and further exploration is required to determine a Mineral Resource. BRL is currently infill drilling in the target area for resource definition and in due course it is anticipated that a mineral resource estimation will be completed when the infill drilling results are received.

# **INFRASTRUCTURE PROGRAM – QUARTERLY UPDATE**

### SEEKING LOW COST CAPITAL COST SOLUTIONS FOR THE DSO LOGISTICAL SUPPLY CHAIN FROM MINE TO PORT

BRL has continued to work closely with key providers of infrastructure for proposed low capital cost options to support BRL's Direct Shipping Ore (DSO) operation planned to commence in 2009.

During the last quarter, three logistical supply chains have been indentified to enable implementation of a DSO from the respective ports of Kwinana, Bunbury and Albany. The initial focus is to finalise the two logistical supply chains required to deliver bauxite from the North and South Darling Range Projects areas utilising Kwinana Port in the north and Bunbury Port in the south. The associated capacity for each scenario is being defined via input from working groups that includes representation from the respective service providers.

A summary of the current position of the Logistical Supply Chain is detailed in the table below.

LOGISTICAL SUPPLY CHAIN	CURRENT STATUS
MINE TO PORT	
MINING BAUXITE: Involves breaking the surface caprock layer, excavating and loading the bauxite into a crusher. The crusher is used to break the ore down to a size suitable for blending to meet an agreed product specification and stockpiled.	Following a comprehensive review of various forms of mining BRL has received proposed terms of a mining and logistics agreement from a recognized and experienced operator with many years of experience in the Darling Range.  Finalisation of the mining and logistics agreement is expected in early 2009.
ROAD TRANSPORT TO PORTS OR RAIL: In certain project areas close to Ports, trucks and trailers will be used to transport from the mine site direct to the port loading area.	The same agreement for Mining Ore includes the 'key terms' for truck transport to the rail or port loading area.
RAIL TRANSPORT TO PORTS: In project areas further afield, mined ore is delivered by road to rail sidings, the Company is concentrating on utilising existing rail sidings. These sidings need to include appropriate loading equipment. Provision of rail includes rolling stock and locomotive and rail access usage agreements.	Working groups have been formed with a rail and above-rail operator. Rail access schedules and rolling stock options are currently being refined. In addition modes of loading at rail sidings are being agreed to define the rail siding layout of selected sites for inclusion in the rail siding license agreements.
SHIP LOADING & TRANSPORT TO OVERSEAS MARKETS: The crushed bauxite product will be received at the Port and loaded onto the contracted ships for export on a 'FOB' basis (i.e. Payment to be received prior to ship departure).	BRL is working through various Port options to utilise existing capacities in order to initiate and establish the DSO business at a minimal capital cost.  Agreement on preferred options is expected in early 2009.

# **BUSINESS PLAN OVERVIEW - MANAGING DIRECTORS QUARTERLY UPDATE**

# BRL Stage 1 – (Shorter Term) DSO Business Case

The Company has continued to advance its business case of defining an economic >30Mt bauxite resource as Stage 1 necessary to support a >3Mtpa DSO bauxite operation by concentrating on areas of previously explored ground with substantial volumes of historical data. This plan has been further enhanced by two key factors; firstly shipping rates to China have dropped dramatically and secondly China is estimated to exhaust its reserves of bauxite in 10 years. This coupled with a forecast increase in demand from China despite present world economic conditions will see alumina stockpiles reduce and a recovery of the bauxite spot price.

It is envisaged that the DSO operation will initially be in its raw form, although the Company is reviewing beneficiation techniques, to supply the emerging Asian markets in the shorter term. The Company's ultimate goal is to define a resource necessary to support an alumina refinery and/or smelter in the longer term following the planned establishment of a reliable cash flow from the DSO with the cooperation of a significant joint venture or off-take partner.

# BRL Stage 2 – (Longer Term) Alumina Refinery /Smelter -Business Case

High level analysis by the in-house team in conjunction with leading external consultants experienced in this field are working through a scoping analysis and order of merit study to provide likely costing scenarios for BRL's Stage 2/3 Alumina Refinery/Smelter business case. This includes the preliminary scoping studies to address and evaluate such issues as available energy requirements (coal or gas), potential refinery sites, availability of existing infrastructure (rail and port) and assessment of opportunities to develop a refinery in conjunction with other energy providers. Further high level ancillary work addressing the requirements of a refinery continues, however, until the DSO operation is established, a cash flow is generated and or a joint venture partner is secured with suitable funding arrangements, the expenditure on progressing the Stage 2 business case will be carefully managed and kept to a minimum.

Globally, energy requirements are likely to become a critical issue, particularly in relation to policy on climate change. In this regard the South West of Western Australia is extremely well placed with ample supplies of the key ingredients necessary for alumina refining /smelting including silicon from the Kemerton Industrial Park, Bunbury, (currently being shipped overseas or interstate) low ash and low sulphur thermal coal located within the South West region of the State around Collie, thus raising the construction of an alumina refinery and smelter as a potentially viable longer term business opportunity. The South West is also well serviced by the existing rail network, Bunbury Port and skilled labour force.

Darling Range bauxite is gibbsitic in nature, low in reactive silica (1-3%) and whilst it may be somewhat lower than the grade reported in other locations around the world with an extractable level of alumina at 30-33% it requires lower energy in the refining process, is located in a politically secure and mature business location, is relatively close to the emerging markets of India and China, adding significant weight to the feasibility of an alumina refinery.

Following a number of high level meetings potential refinery sites have been identified and a number of the 'key issues' to support a refinery identified, long lead-time items have been initiated. The company continues to progress possible refinery business opportunities with prospective parties and evaluate fresh approaches.

# **DSO PROJECT PROGRAM**

# **Project Scoping Study and Management Plan for DSO**

Since his appointment as Managing Director, Mr Tenardi has conducted a comprehensive review of the Company's project plans of a Stage 1 DSO project in the shorter term and a high level analysis of a Stage 2 alumina refinery and possible smelter in the longer term.

Mr Tenardi has now completed the Project Scoping Study and Management Plan for the commencement of the DSO operation which has been incorporated into the DSO Project Budget and presented to the Board of Directors in December 2008. The Scoping Study is continuously updated to take account of all changing variables and the Project Budget demonstrates positive economic outcomes in terms of current prevailing FOB bauxite prices.

#### **PROJECT REVIEWS – QUARTERLY UPDATE**

Following a review of the Darling Range Projects, Mr Tenardi has elected to increase the Darling Range projects by establishing the East Darling Range Project. This area relates to the tenements lying to the east of the BHP Alumina State agreement area, in the vicinity of the Northam Albany rail line.

The underlying rational for the new project area is that the North Darling Range Project is serviced by three northern rail lines which lead to Kwinana Port suited to a DSO operation. The recently established East Darling Range Project is serviced by the Northam-Albany rail line and the Albany Port which could accommodate a separate DSO operation. The South Darling Range Project is serviced by the Perth-Bunbury rail line, Bunbury-Collie rail line, Bunbury-Manjimup rail lines and Bunbury Port. This infrastructure could also service a DSO operation and an Alumina refinery/smelter in the Bunbury/Kemerton or Collie areas utilising the coalfield in the area.

# NORTH DARLING RANGE PROJECT - 18 ELS COVERING APPROXIMATELY 3,000KM<sup>2</sup>

The North Darling Range project encompasses the tenement areas that lie north of Perth. This covers part of an area in the Darling Range which was the subject of major exploration programs completed in the late 1960's, 1970's and 1980's by,

- CSR / Pacminex;
- Project Mining Corporation (PMC);
- Bridge Oil Pty Ltd; and
- Vam Ltd.

CSR/Pacminex, PMC and Bridge Oil all conducted extensive exploration programs, in summary:

- Over 10,000 drill holes comprising 172,000 feet drilling carried out;
- 87,950 samples were taken;
- 1971 State Alumina Refinery Agreement reached (now lapsed);
- In excess of \$2million (circa in the order of \$40m in today's terms) spent up until 1971 on the CSR/Pacminex Project.
- Additionally, BRL has ELs in areas adjacent to previously explored ground.

Tenements held by the Company in the North Darling Range Project area also cover significant areas with bauxitic laterites indicated from the Geological Survey of Western Australia 1:250,000 scale geology map sheets. Field verification by the Company confirms extensive bauxitic laterites within its ELs and applications. To the knowledge of the Company, no exploration to assess the economic potential of these additional bauxitic laterites has been carried out to date.

The bauxitic laterites are largely preserved on plateaus and form outcropping ridges. Historical drilling identified bauxite mineralisation from surface to a maximum depth of 12 metres averaging three metres in thickness. The bauxitic laterites overlie a distinguishable saprolite clay zone.

Historical data, reconnaissance mapping and surface sampling has outlined a number of potential target areas that will be the focus of resource definition drilling, subject to procurement of all necessary land access arrangements and regulatory approvals.

Drilling has commenced in the Bindoon region as discussed above and further drilling is planned to focus on areas identified by CSR/Pacminex that contains potentially economic bauxite mineralisation serviced by existing infrastructure. Ongoing surface mapping and sampling is likely to identify additional new target areas.

# SOUTH DARLING RANGE PROJECT - 30 ELS COVERING APPROXIMATELY 6,500KM<sup>2</sup>

The South Darling Range project encompasses areas that lie south of Perth. This project covers large areas of privately owned land within the Alcoa State Agreement area, and now following further exploration licence applications, significant areas of ground adjoining Alcoa and Worsley Alumina's mineral leases. These areas extend from Jarrahdale in the north through to south of Manjimup.

The project area contains significant bauxite mineralisation identified by previous exploration in the 1960's and 1970's conducted by;

- PMC;
- Vam Ltd;
- Alcoa;
- Bridge Oil Pty Ltd.

PMC and Vam conducted exploration programs over the project area, in summary:

- Greater than 7,500 holes were drilled; and
- Greater than 20,000 samples were analysed.

Further, additional bauxite laterites are reported by the West Australian Geological Survey within the project area. To the knowledge of the Company no exploration to assess the economic potential of these additional bauxitic laterites has been carried out to date.

Significant areas covered by the Company's ELs have the same environmental land category classification as those areas where Alcoa and BHP are currently mining bauxite. These mining operations are conducted according to established environmental principles and world's best practices which have enabled the Darling Range to become the world's leading bauxite producing region on the virtual doorstep of the State's capital city Perth.

EL70/3312, in the Manjimup area of the South Darling Range, covers parts of areas which were previously explored for bauxite by Vam Ltd from 1969 to 1973. Drilling by Vam Ltd of the residual Tertiary/Quaternary lateritic bauxites overlying the Archaean granitic and gneissic basement had been completed with 2,368 Scout holes for 6,891 metres. The Scout drilling was completed along tracks and areas which were selected visually on the ground and from monochromatic aerial photographs.

Historical data and reconnaissance mapping is being utilised to prioritise exploration targets and has outlined a number of priority targets areas for drilling. Work on the procurement of all necessary land access arrangements has commenced and is focussed on areas close to existing infrastructure and the Bunbury Port. Drilling commenced during the quarter on the Shenton Ridge and Martin Road prospects and the program is ongoing. Results from this drilling were very encouraging with intersections of 5 metres at 41.0% Total  $Al_2O_3$ , 34.8% Available  $Al_2O_3$  and 2.6% Reactive  $Al_2O_3$  at Shenton Ridge and 4 metres at 30.7% Available  $Al_2O_3$  and 3.7% Reactive  $Al_2O_3$  and 3.7% Reactive A

Work will focus on surface mapping and sampling of target areas followed by resource definition drilling upon procurement of necessary regulatory approvals.

The South Darling Range project area has been identified as having the greatest potential to support a DSO project out of the Bunbury Port. Some of the tenements cover areas that may relate to Alcoa and BHP Alumina State Agreements. The terms of the State Agreements may affect the Company's applications to explore for bauxite, in which case the Company intends to negotiate with the relevant parties in an effort to secure bauxite exploration and mining rights to these areas.

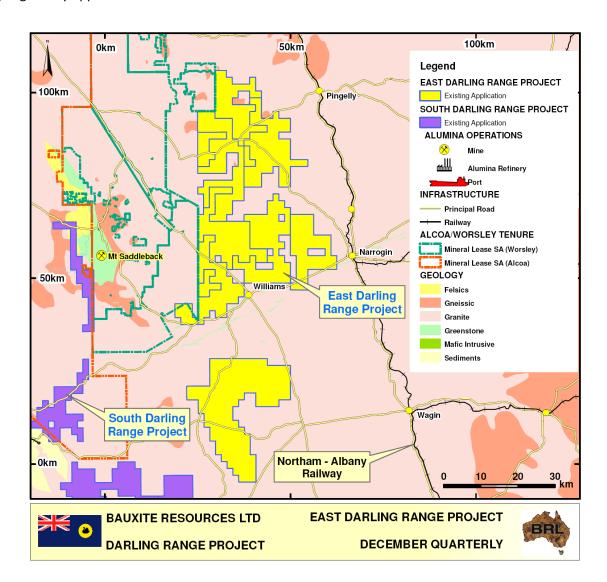
# EAST DARLING RANGE PROJECT - 8 ELS COVERING APPROXIMATELY 1,800KM<sup>2</sup>

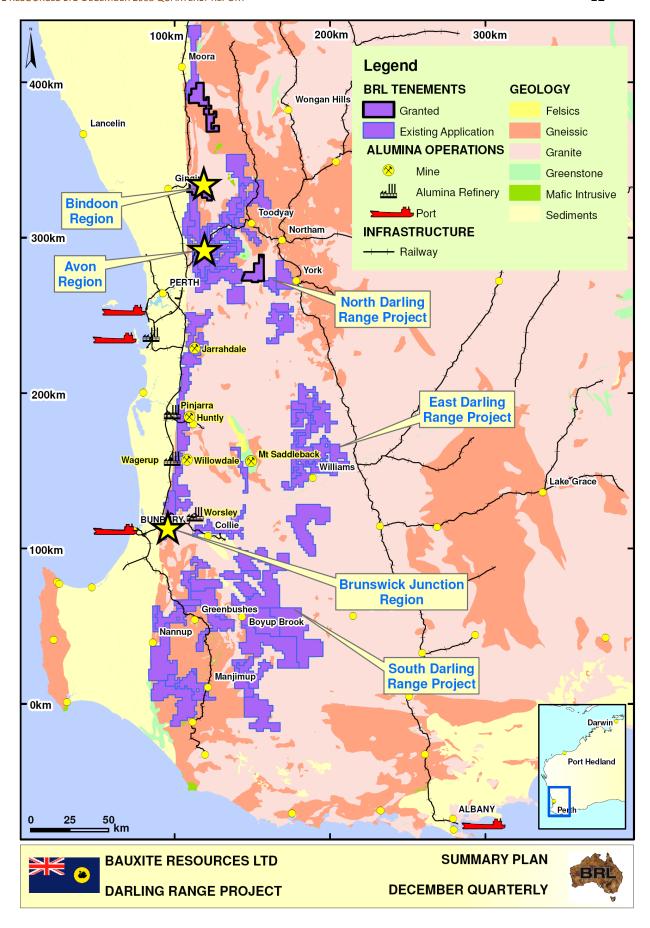
The East Darling Range project encompasses areas that lie to the east of the Alcoa and BHP Alumina State Agreement mineral leases east of Perth. This project covers large areas of broad-acre privately owned farmland in the vicinity of the Northam - Albany railway line providing access to the Albany Port.

The project area contains significant bauxite mineralisation identified by Broken Hill Propriety Company Limited (BHP) in the 1960's and 1970's. BHP conducted exploration programs consisting of geological mapping, surface sampling and reconnaissance drilling. Reconnaissance exploration conducted by BRL confirms that remnant laterite occurs over much of the project area where historic drilling intersected substantial thicknesses of bauxitic laterite. Better intersections from historic drilling in the Williams region include 7.9m at 32.7% Available Al<sub>2</sub>O<sub>3</sub> and 7.3m at 36.1% Available Al<sub>2</sub>O<sub>3</sub>.

West Australian Geological Survey maps of the region display extensive areas of bauxitic laterites and to the company's knowledge these additional laterites have not been explored to assess the economic potential.

Work on digital capture of historical data is proceeding and will be utilised to prioritise exploration targets. Work will focus on surface mapping and sampling of targets followed by reconnaissance drilling, and subject to procurement of necessary regulatory approvals.

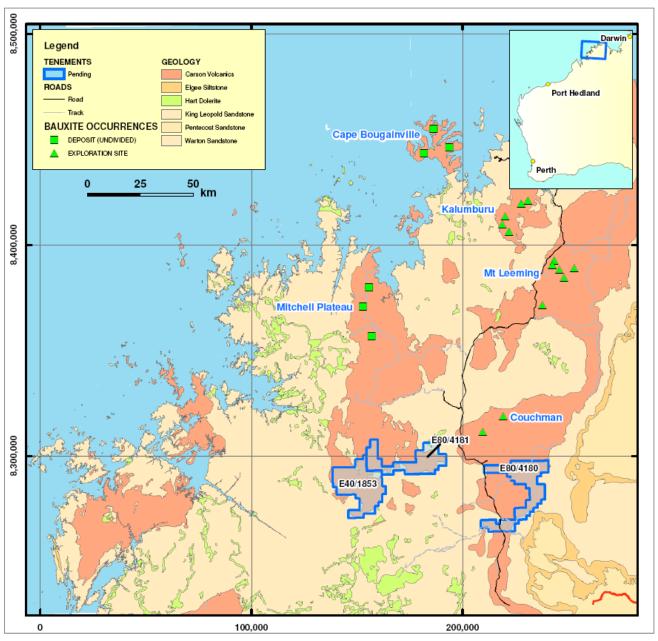




# KIMBERLEY PROJECT - 3 ELS COVERING APPROXIMATELY 1,200KM<sup>2</sup>

In keeping with the Company's prescribed, staged business development, BRL has formulated a business strategy to accommodate its Kimberley tenement holdings. The Company strategy is to focus on the Darling Range Project in the short term for establishment of a DSO operation, while securing tenure over highly prospective targets in the Kimberley. Work related to the Kimberley project will involve building a comprehensive geological database of bauxite occurrences in the Kimberley region and target generation.

The Company continues to review potential ground for acquisition and inclusion into the project area.



**BAUXITE RESOURCES KIMBERLEY TENEMENT MAP DECEMBER 2008** 

# **EXECUTIVE STAFF – QUARTERLY UPDATE**

The assembly of the DSO team is nearing completion with the following key appointments for the quarter:

- Brad Farmer appointed Public Affairs & Environmental Manager. Mr Farmer joins from CITIC Pacific Mining and has a wealth of experience in this field.
- Gemma Lee, formerly with Gindalbie Minerals, appointed as a Senior Geologist.
- Paul Fromson appointed Company Secretary.
- Experienced Minerals Marketing Manager, Justin Tian, appointed to coordinated bauxite marketing and sales in China.

### **CORPORATE SUMMARY**

As at 31 December 2008, BRL had 958 shareholders with the Top 20 holding 64% of the Company comprising 70 million shares.

The Company has A\$6.5 million cash on hand. (See note below on Option conversion monies)

#### **OPTION CONVERSION MONIES**

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As at 31 December 2008, the company had received option conversion monies of over \$400,000. The funds were transferred to the company in early January upon allotment of the shares. Since that time the company has received further option conversion monies and the total is expected to be well in excess of \$1million. The company's cash position is therefore expected to increase as a result of option conversion by at least \$1million.

Dan Tenardi Managing Director

In accordance with the Australian Stock Exchange requirements, the technical information contained in this report has been reviewed by Mr. Neil Lithgow, a director of the company. The information in the report to which this statement is attached that relates to Exploration Results and Mineral Resources is based on information reviewed by Mr. Lithgow, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Lithgow has sufficient experience which is relevant to the style of mineralisation 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 "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr. Lithgow consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Appendix 1 – Drill results > 27% Available  $Al_2O_3$  for the December Quarter.

Hole ID	MGA N	MGA E	Depth				Ir	ntersectio	ns			
	(Zone 50)	(Zone 50)	(m)	From	То	Interval	Avail.	Re.	Total	Total	Fe <sub>2</sub> O <sub>3</sub>	LOI
				(m)	(m)	(m)	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	SiO₂%	%	%
Shenton I	Ridge – Blackb	ooy Hollow										
SRV007	6,317,250	397,250	2	1	2	1 (EOH)	28.5	10.7	38.7	20.4	18.2	20.3
SRV010	6,317,300	397,250	3	2	3	1 (EOH)	40.6	11.4	28.7	37.9	18.6	13.3
SRV013	6,317,400	397,340	6	2	6	4 (EOH)	35.2	2.8	41.6	21.3	14.7	21.0
SRV014	6,317,400	397,300	3	1	3	2 (EOH)	30.1	2.6	40.5	26.8	13.9	16.8
SRV022	6,317,500	397,250	5	1	5	4 (EOH)	35.6	4.3	42.7	23.8	9.7	21.9
SRV024	6,317,600	397,250	4	2	3	1	28.3	3.5	38.2	28.3	12.4	19.2
SRV025	6,317,600	397,300	3	0	2	2	31.9	5.2	40.0	26.6	11.0	20.8
SRV026	6,317,600	397,350	4	1	2	1	31.8	2.8	42.1	17.9	18.9	19.3
SRV027	6,317,550	397,350	3	0	1	1	30.3	3.8	37.5	23.1	19.1	18.6
SRV028	6,317,550	397,300	5	0	5	5 (EOH)	34.8	2.6	41.0	22.8	13.1	21.3
SRV029	6,317,550	397,250	4	0	3	3	31.6	3.2	39.9	24.6	13.7	20.0
SRV031	6,317,500	397,300	3	0	3	3 (EOH)	34.9	2.5	39.9	24.7	11.5	22.1
SRV032	6,317,500	397,350	4	0	2	2	31.2	2.7	42.9	18.1	16.9	20.3
SRV033	6,317,450	397,350	6	1	6	5 (EOH)	32.7	2.1	42.6	20.0	15.6	20.2
SRV034	6,317,450	397,300	4	0	4	4 (EOH)	33.0	2.8	39.0	28.3	11.0	20.2
Shenton F	Ridge – Scout	Drilling										
SRV039	6316600	397600	4	2	3	1	28.0	3.5	*	*	*	*
SRV053	6315800	397700	4	3	4	1 (EOH)	28.3	3.1	*	*	*	*
SRV057	6316800	397400	3	1	2	1	30.8	5.6	*	*	*	*
SRV058	6316800	397200	3	0	3	3 (EOH)	30.7	2.7	*	*	*	*
SRV063	6317000	397800	3	1	3	2	33.7	2.9	*	*	*	*
SRV064	6317000	398000	4	1	4	3 (EOH)	28.5	5.3	*	*	*	*
Martin Ro	ad – Scout D	rilling										
MR003	6329050	399380	4	0	3	3	33.3	4.2	*	*	*	*
MR004	6328871	399378	3	0	1	1	36.4	3.6	*	*	*	*
MR008	6329050	399180	3	1	3	2 EOH)	28.9	4.9	*	*	*	*
MR010	6329000	398980	2	1	2	1 (EOH)	27.7	3.9	*	*	*	*
MR011	6329000	400000	3	2	3	1	28.0	6.5	*	*	*	*
MR020	6329800	399201	4	0	4	4 (EOH)	30.7	3.7	*	*	*	*
MR021	6329992	399203	3	0	1	1	27.5	4.0	*	*	*	*
MR025	6329400	399000	4	3	4	1 (EOH)	28.6	9.1	*	*	*	*
Bindoon I	Region – Dew	ars Prospect										
BDV001	6533050	420600	7	4	5	1	32.7	2.3	41.5	6.6	26.8	22.2
BDV003	6533150	420550	8	0	3	3	31.2	1.0	42.8	2.6	29.2	19.1
BDV005	6533100	420550	7	2	3	1	27.8	3.8	37.7	6.3	32.7	19.2
BDV039	6533100	420650	10	4	10	6 (EOH)	30.1	4.3	36.6	7.6	33.2	19.4
BDV041	6533150	420650	9	4	6	2	28.7	0.9	39.3	1.9	36.5	18.0
BDV050	6533050	420700	8	0	6	6	31.6	2.7	38.2	3.9	35.9	18.7
BDV051	6533100	420700	4	0	3	3	35.8	4.2	42.8	7.6	24.5	22.0
BDV052	6533150	420700	7	1	6	5	34.6	3.0	43.3	7.0	24.3	22.3
BDV056	6533150	420600	8	0	2	2	28.8	1.5	43.0	3.2	30.6	17.5

Available  $Al_2O_3$  and Reactive  $SiO_2$  analysed by bomb digest at  $143^{\circ}$ C / ICP05 by SGS. Total  $Al_2O_3$ ,  $SiO_2$  and  $Fe_2O_3$  analysed by XRF at SGS. Intersections calculated using a lower cut-off of 27% Available  $Al_2O_3$ , minimum width of 1m and maximum of 1m internal waste. EOH denotes intersection to end of hole. \* Results for XFR are pending.

Rule 5.3

# Appendix 5B

# Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

# Bauxite Resources Limited

ABN

72 119 699 982

Quarter ended ("current quarter")

31 December 2008

# Consolidated statement of cash flows

		Current quarter	Year to date
Cash f	lows related to operating activities	\$A'000	(6 months)
1.1	Passints from product color and related		\$A'000
1.1	Receipts from product sales and related debtors	-	-
	GODIO		
1.2	Payments for (a) exploration and		
	evaluation	(347)	(564)
	(b) development	-	-
	(c) production	- (=00)	- (0.40)
4.0	(d) administration	(588)	(842)
1.3	Dividends received	=	-
1.4	Interest and other items of a similar nature	100	224
1.5	received	186	324
1.6	Interest and other costs of finance paid Income taxes paid	-	-
1.7	Other (provide details if material)	<u>-</u>	_
1.7	Other (provide details if material)	<u> </u>	
	Net Operating Cash Flows	(749)	(1082)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
1.0	(a) prospects	_	_
	(b) equity investments	-	_
	(c) other fixed assets	(62)	(70)
1.9	Proceeds from sale of:	(- /	( - )
	(a) prospects	-	-
	(b) equity investments	=	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	<del>-</del>	-
1.12	Other (provide details if material)	(3)	(3)
	Net investing cash flows	(65)	(73)
1.13	Total operating and investing cash flows	\/	(/
	(carried forward)	(814)	(1155)

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<sup>+</sup> See chapter 19 for defined terms.

1.13	Total operating and investing cash flows	(814)	(1,155)
	(brought forward)		
	Cash flows related to financing activities		
1.14	Proceeds/(over subscription) from issues of shares, options, etc.	2	2
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material) Share issue transaction costs	-	(2)
	Net financing cash flows	2	0
	Net increase (decrease) in cash held	(812)	(1,155)
1.20 1.21	Cash at beginning of quarter/year to date Exchange rate adjustments to item 1.20	7,298 -	7,641 -
1.22	Cash at end of quarter	6,486	6,486

Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	201
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Item 1.23 includes aggregate amounts paid to directors including salary, directors' fees and consulting fees.

No	n-cash financing and investing activities
2.1	Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows.
2.2	Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest.

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<sup>+</sup> See chapter 19 for defined terms.

# Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	NIL	NIL
3.2	Credit standby arrangements	NIL	NIL

Estimated cash outflows for next quarter

# Reconciliation of cash

show	onciliation of cash at the end of the quarter (as on in the consolidated statement of cash to the related items in the accounts is as ws.	Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	6	166
5.2	Deposits at call	6,480	7,132
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	6,486	7,298

# Changes in interests in mining tenements

6.1	Interests in mining
	tenements
	relinquished, reduced
	or lapsed
C 0	Internacia in maining

6.2 Interests in mining tenements acquired or increased

Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter

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<sup>+</sup> See chapter 19 for defined terms.

**Issued and quoted securities at end of current quarter**Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference			note 3) (cents)	Hote 3) (cents)
7.1	*securities				
	(description)				
7.2	Changes				
	during quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through returns				
	of capital, buy-				
	backs,				
	redemptions	440.047.070	54000070		
7.3	†Ordinary	110,047,070	54,362,070		
	securities				
7.4	Changes				
7.4	during quarter				
	(a) Increases	2,021,000	2,021,000	Conversion of	
	through issues	_,,,,,,,,	_,=_,,,,,,,	options at 20c	
	(b) Decreases			each	
	through returns				
	of capital, buy-				
	backs				
7.5	<sup>+</sup> Convertible				
	debt securities				
7.6	(description)				
7.0	Changes during quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through				
	securities				
	matured,				
	converted				
7.7	Options	<b>F</b>		Exercise price	Expiry date
	(description	51,409,180	51,409,180	20 cents	31 January 2009
	and conversion	2,000,000	-	25 cents	15 May 2012
	factor)	4,000,000	-	40 cents 20 cents	15 May 2012 31 May 2012
		9,000,000 100,000	-	50 cents	31 May 2012 31 May 2012
		666,668	]	35 cents	30 November 2013
		666,666	_	45 cents	30 November 2013
		666,666	-	55 cents	30 November 2013
7.8	Issued during quarter				
7.9	Exercised	2,021,000	2,021,000	20c each	31 January 2009
	during quarter	_,52.,550	_,02.,000		2. 522, 2000
7.10	Expired during				
711	quarter				
7.11	Debentures (totals only)				
	(idiais diliy)				

<sup>+</sup> See chapter 19 for defined terms.

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7.12	Unsecured		
	notes (totals		
	only)		

# Compliance statement

- This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:

Date: 30 January 2009

(Company secretary)

Print name: Paul Fromson

# **Notes**

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- Issued and quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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<sup>+</sup> See chapter 19 for defined terms.