

# **ASX Quarterly Report**

## For the Period Ended 31 March 2011

# **HIGHLIGHTS**

# Pyrolysis Project - Carbon Nanotubes/Carbon Fibres/ Hydrogen

- First continuous production unit has been designed, built and has produced carbon fibres and carbon nanotubes which are being tested.
- Breakthrough on catalyst production used for manufacture of nano-carbon products.
- First sale of Eden's nano-carbon fibres for commercial application in batteries.
- Strength, weight, cost & anti-pollution gains for concrete following initial trials of adding nano-carbon fibres to concrete.
- Indian concrete manufacturers to test Eden's nano-carbon fibres.
- Procurement underway for the construction of a commercial scale production unit at Eden's US subsidiary in Denver, Colorado.

# **Optiblend® Dual Fuel Project**

- Eden India has completed the installation for an Optiblend® kit for a major Indian machinery manufacturer and received a second order from the same customer.
- Two other sales of OptiBlend® kits have since occurred in other parts of India.

# **Hythane® Project**

- Recent discussions in relation to the proposed Hythane® bus demonstration projects in Mumbai (with GAIL, MGL and BEST) and Gujarat (with GSPC) have re-started both of these projects, each of which is still hoped to be operational during 2011.
- Negotiations for the lease document for San Francisco Airport Hythane® project are underway and, if successful, it is hoped that the project will be able to commence in the second half of 2011.

# **UK Gas Project**

• Eden and its joint venture partner are currently having independent reports prepared on the prospectivity of the 17 PEDLs (1800 km<sup>2</sup>) in UK in which Eden holds or is earning an interest, to produce gas, with a view to Eden seeking to float its UK gas assets as a separate IPO in which Eden will be the major shareholder.

# **Corporate**

- In April 2011 Eden completed a share placement to sophisticated and professional investors raising \$0.55 million and announced a fully underwritten pro-rata non-renounceable rights issue on the same terms to raise a further \$2.4 million.
- Eden instigated proceedings to recover the balance of the monies owed (\$0.9 million) in relation to the sale of HyRadix, Eden Cryogenics and CTS that occurred in 2009.

# CARBON, HYDROGEN, DUAL FUEL and HYTHANE® PROJECTS

# 1 Pyrolysis Project (Eden 100%) Production of Carbon Nanotubes/Carbon Fibres/ Hydrogen

Through the pyrolysis process that has been developed, methane (natural gas) is broken down into its atomic constituents of hydrogen gas and solid carbon, without the production of carbon dioxide. In the Eden process, the solid carbon is produced as either carbon fibres or carbon nanotubes that have a tensile strength of up to several hundred times greater than that of steel.

The new process, developed by Eden with the University of Queensland (UQ) and which Eden now owns 100%:

- appears from the results to date to be relatively efficient when compared with other
  methods of production of carbon nanotubes and fibres and uses only a relatively low level
  of energy and lower cost capital equipment compared with most other published methods;
- employs relatively low cost catalysts (no precious metals are used in the catalysts);
- has a low carbon footprint; and
- produces only hydrogen, carbon nanotubes and solid carbon fibres from natural gas, all of which have significant commercial market potential opening up the possibility of:
  - i. low-cost, super strong, ultra light carbon nanotubes that can possibly be used in a wide range of composite materials suitable for many types of commercial applications including the domestic automobile industry and construction industries in concrete strengthening and in carbon composite materials;
  - ii. low-cost, high volume production of carbon nanofibres that are likely to possess significant electrical capacity opening up potential for use in a wide range of applications in batteries and electrical storage, and for electrical conductivity in composite materials due to their electrical conduction capability and ability to hold an electrical charge; and
  - iii. low-cost hydrogen production without the production of carbon dioxide as a byproduct that could help facilitate the more rapid spread of both hydrogen as a vehicle fuel and also Eden's Hythane® technology as an ultra-clean, highly efficient premium blend of hydrogen and natural gas that it is marketing in India and USA.

If successfully piloted on a commercial scale, the process could have important implications for the widespread commercialisation of these forms of carbon whilst also producing relatively low cost hydrogen with an extremely low carbon footprint as the only by-product.

#### Initial Scale-up in USA

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In July 2010 staff from Eden's wholly owned subsidiary, Hythane Company visited the University of Queensland meeting the engineers involved in developing the technology. Upon return from Queensland, Hythane Company completed the procurement and installation of the equipment required for the initial scale-up. Hythane Company has built a catalyst production laboratory in US and catalysts for production of multi-walled carbon nanotubes (MWCNT) and carbon nanofibres (CNF) have been produced and tested confirming their quality.

#### High Quality Hydrogen/ Carbon Production at US Facility

Since July 2010, the first scale-up of a batch production unit was designed and built by Hythane Company in US and is producing hydrogen and MWCNT or CNF (depending upon the

particular catalyst that is used). This unit has an output capacity approximately 25 times larger than the original laboratory scale unit that was used at UQ. This US built unit has now been successfully trialed and produced hydrogen and either MWCNT or CNF on a batch basis, with stable, production levels for both forms of carbon being achieved. The quality and quantity of the MWCNT and CNF were measured and tested using high technology techniques including TEM (Transmission Electron Microscope) photography and Raman Spectroscopy and the results to date of both the quality and the quantity of all carbon products are very encouraging. Two photographs and three TEM images of carbon nanotubes that have been produced by Hythane Company in US are attached (Figures 1-5).

## First Prototype Continuous Production Unit Completed in US

During the quarter Hythane Company also completed the design and manufacture of its first, relatively small, prototype continuous production unit which has the capacity to produce up to 10 tonnes of carbon fibre per annum or up to 3 tonnes per annum of MWCNT. This unit is now successfully operating utilizing catalysts produced by Hythane Company and the carbon fibres and the carbon nanotubes that have been produced have been analysed and samples sent off for commercial assessment and testing. Eden anticipates that testing and final optimisation of the first prototype continuous production unit will be completed in early 2011

#### Small Commercial Scale Continuous Production Unit in US

The Company's pyrolysis process and catalyst production capability is currently being scaled-up to a small scale commercial production level of up to 100 tonnes of carbon per year, and is planned to be completed by the end of 2011, which, if successful, will open the way to a commercial rollout in 2012, with initial deployment being planned for India.

#### Market progress

Initial progress has been made in establishing markets for the carbon products.

#### **Batteries**

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The Company has made its first commercial sale of its CNT and CNF to an industrial battery manufacturer. Whilst the first sale was of only a relatively small quantity of carbon, it is nevertheless understood to be sufficient for possibly up to 1000 batteries, but most importantly is confirmation from the market of the commercial acceptability of the Company's carbon nanoproducts for electrical applications.

#### Concrete

The Company has achieved encouraging results in trials in US, where initial trials have shown that the addition of CNF equal to 0.1% (by weight) of the amount of the cement in concrete can increase compressive strength by up to 19% without affecting the flexural strength of the concrete. This potential improvement in compressive strength is relevant to all grades of concrete.

Several leading Indian concrete manufacturers have expressed interest in testing the Company's CNF as an additive to concrete to increase its performance, particularly the compressive strength. This is hoped to open up a significant market for CNF in the enormous Indian concrete market.

The Company is also conducting a wide range of further tests of the CNF-enhanced concrete to further optimise the compressive strength benefits and to also test the effect on a number of other properties of the concrete, that are relevant to specific applications such as, high strength concrete used in the construction of bridges, flyovers and high rise buildings, and ultra-hard concrete for use in high impact applications.

## **Rubber and plastics**

The Company intends to commence testing, at the Hythane Company's laboratory in Colorado, USA, the effects of mixing CNT and CNF with rubber and plastic, with a view to testing the effect that the substitution of CNT for carbon black will have on the tensile strength and strain density of the rubber (and its potential to result in lighter, longer life tyres), and the effect of the addition of CNT and CNF to plastic on the strength, and electrical and thermal conductivity of plastic.

#### **Timetable**

It is planned that the commercial scale-up process will be completed by the end of 2011 or during the first half of 2012, at which time Eden projects that, subject to satisfactory resolution of any technical difficulties that may arise, it will have both a catalyst production capability and a fully developed pyrolysis production technology that together will enable Eden to produce and market commercial quantities of high quality, low cost hydrogen and carbon nanotubes and/or carbon fibres, which the company intends to market on a widespread basis.

## Summary

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Eden is well on the way to developing an efficient, commercially competitive process that will enable Eden to produce and market the carbon itself, or else licence others to use its technology.

Additionally, the only other major by-product from Eden's pyrolysis process is hydrogen, the real cost of which will be dependent upon the value of the carbon produced. The quantity of hydrogen produced will be 33.33% (by weight) of the quantity of carbon produced and this can be either captured and fed into the various hydrogen/Hythane® applications that Eden has been developing around the world, with the intention of accelerating the commercial rollout of these downstream hydrogen applications based on the prospect of relatively low cost hydrogen, or alternatively it can be used to help fuel the pyrolysis reactor. The current cost of hydrogen is one of the major factors holding back a broader rollout of hydrogen technology. Of further interest, the hydrogen produced using the Eden pyrolysis process will generate only a relatively small amount of greenhouse gas as a by-product of the production process compared with most other currently available methods of hydrogen production, and in consequence it is projected that the hydrogen will be both commercially competitive and extremely environmentally acceptable.

# 2 Optiblend® Dual Fuel Technology (Eden 100%)

#### Background

Eden has completed the development of an efficient dual fuel kit that is capable of operating on diesel engines and displacing up to 70% of the diesel fuel with natural gas. If Hythane® is used in place of natural gas, the displacement of diesel fuel could be as high as 80%. The use of the natural gas will greatly reduce greenhouse gas emissions and, in places where natural gas is cheaper than diesel, will also reduce fuel costs. In various parts of India, available natural gas is

already significantly cheaper than diesel, and accordingly Eden has been targeting a diversified market for this technology, starting with stationary power generators and then locomotives.

Many millions of diesel generators are installed throughout India in industrial, commercial, and residential applications, to provide either base load power or backup power generation, largely due to the unreliability of the Indian power grid in many parts of the country. As natural gas, which is both much cleaner and cheaper than diesel, becomes more widely available, a large market is emerging for the conversion of these diesel engines to operate on a dual-fuel system of both natural gas and diesel. Depending upon the size of the engine and the number of hours per day that it operates, payback times for the conversions are often less than 12 months, so the cost is minimal compared to the replacement cost of a natural gas generator.

#### Indian Optiblend® Sales

During the quarter Eden completed the installation of another Optiblend® kit for a 1,250KVA Cummins K50 generator at a major Indian machinery manufacturer, and has received another order for a second similar installation from the same customer.

Two other orders for OptiBlend® kits were received during the quarter for installations in other parts of India.

Quotes have been provided to many other potential customers in various cities across northern and western India. The sales prices of an installed OptiBlend® kit varies according to the configuration of the engine, but is often in the range of US\$25,000 - \$40,000.

Eden Energy India has now found suitable Indian manufacturers for many of the dual fuel kit components, which will help reduce the cost of the production of future units.

#### US Optiblend® Sales

During the quarter Eden, through its US subsidiary, Hythane Co, continued marketing the Optiblend® kit in US and has received encouraging enquiries for the kit which it is hoped will translate into sales during the next 3 months.

## 3 Hythane®

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# **Indian Hythane® Project**

#### Mumbai Hythane® Bus Demonstration Project

During the quarter, discussions in relation to this project (with GAIL, MGL and BEST, the Mumbai government bus operator) have re-started this project, which is still hoped to be operational during 2011.

GAIL (Gas Authority of India) is the largest distributor of Natural Gas in India. MGL is a joint venture company, jointly owned by GAIL, BG Group and the Government of Maharashtra, which owns and operates pipelines and markets Natural Gas in the greater Mumbai area to a broad commercial, domestic and industrial customer base of more than 25 million people and is keen for the planned Hythane® demonstration project to proceed.

The demonstration project in Mumbai will involve Eden establishing a Hythane® refuelling station at a suitable bus depot to fuel buses. The project, provided it proceeds, is now planned to involve firstly a two bus trial of Hythane® fuel, with the initial hydrogen planned to be supplied

from bottled hydrogen, followed by a second stage, planned for the second half of 2012, of up to 35 buses, with the hydrogen planned to be supplied by the Company from one of its new pyrolysis reformers. This reformer is planned to be installed on site, and will produce both the required hydrogen, and also carbon products that the Company hopes to be able to sell into the Indian market.

BEST is the state owned Mumbai bus operator that operates more than 4,000 buses, half of which are already using natural gas and all of which are planned to be operating on natural gas within the next three years. MGL supplies BEST with all its natural gas requirements.

If the project proceeds, then upon successful completion of the demonstration project the parties will endeavour to negotiate a commercial agreement for the ongoing promotion and marketing of Hythane® by MGL in its area of operation. If commercial scale hydrogen production, using Eden's new pyrolysis process were available by that time, it may well increase the chances of developing a very large Hythane® market in India if the hydrogen were effectively produced as a by-product to the production of higher value carbon fibres and nanotubes and with a very low carbon footprint.

## Gujurat Hythane® Bus Demonstration Project

Discussions with GSPC Gas in relation to this project (and which is similar in scale and timetable to the Mumbai demonstration) during the quarter have also re-started this project, and it is still hoped to also be operational during 2011.

#### Background- Hythane® in India

In 2006, India adopted a Hydrogen Roadmap that proposes to have 20% of all vehicles running on a hydrogen based fuel by 2020, and plans to use hydrogen enriched natural gas (Hythane®) as the transitional fuel. At present there are approximately 12 Indian cities that have established natural gas distribution networks, in which expanding numbers of natural gas fueled vehicles, particularly buses, are operating. The Indian Government has announced a new target to expand such networks to 200 cities by 2015 – opening up a potentially huge Hythane® market across the country.

During the past two years, various vehicle manufacturers, with funding from the MNRE and assistance from the Society of Indian Automobile Manufacturers ("SIAM") and IOC, have developed the following seven types of vehicles to run on HCNG fuel:

- two models of three-wheel autorickshaws;
- one SUV:

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- one passenger car; and
- three models of mini-buses.

The MNRE is now funding an extended field trial of these seven HCNG vehicles in Delhi, with refueling at either the Dwarka public Hythane station and at IOC's research and design facility near Delhi. SIAM will also participate by testing the vehicles' emissions and efficiency at regular intervals.

This field trial will add significant national momentum to the overall Indian HCNG programme and the Company is encouraged that its considerable efforts to date to develop Hythane® fuelled buses and to build HCNG refueling stations will be rewarded in due course as a significant Hythane® vehicle market develops in India as the supply of natural gas spreads

from the 30 cities where it is currently available to the more than 300 cities where it is planned over the next 5-10 years.

As part of this development, the Company plans to promote its pyrolysis technology, by which hydrogen and CNT and CNF are produced from natural gas, as a cost effective means to produce the hydrogen necessary for the rollout of HCNG across India.

Additionally, commercial production of natural gas from the large offshore KG basin commenced in April 2009, which is expected to significantly increase the amount of available natural gas in the coming years. These factors together with other exploration success and a possible emerging domestic shale gas market in India make India the primary target market for Eden's hydrogen and Hythane® technology.

# **US Hythane® Project**

## San Francisco International Airport (SFO)

Last quarter Eden was advised that the final funding required for this project had been awarded, and during March quarter Eden has been negotiating the lease agreement for the site. Subject to the lease being finalised, it is hoped that construction may begin late 2011. If this happens, both the hydrogen and Hythane® stations are now likely to be completed and operational during 2012. Again, whilst there has been an undesired delay in this project, progress does now seem to be being achieved and Eden is hopeful that this project will now proceed.

For this project, Hythane Company had received funding for station infrastructure as well as the conversion of potentially up to 27 Ford E-450 airport shuttles to run on Hythane<sup>®</sup>. Unfortunately, because of the delay in this project, funding is currently now available for only the first 13 Hythane<sup>®</sup> vehicles. The project is intended to demonstrate the commercial practicality of Hythane<sup>®</sup> vehicles for large-scale projects across the US particularly in smog prone areas where lower emissions are required.

#### **ENERGY PROJECTS**

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## UK Coal bed Methane, Conventional Natural Gas and Shale Gas Project

Eden and its UK joint venture partner are currently having reports prepared by independent consultants on the prospectivity of the 17 PEDLs in South Wales, Bristol/Somerset and Kent in which Eden either holds or is earning an interest to produce either coal bed methane, shale gas and/or natural gas. Eden anticipates that these reports will identify a prospective and/or a contingent resource, but the amounts and catergorisation of each is yet to be determined. Upon these reports being completed it is now Eden's intention to proceed, on its own, with a spin-out of its UK gas assets into a new Initial Public Offering (IPO) in which Eden will remain as a major shareholder.

The total area of the 17 UK exploration licences in which Eden holds or is earning an interest is approximately 1800km<sup>2</sup> or 500,000 acres, all of which is all considered prospective for coal bed methane, conventional natural gas and/or shale gas.

#### Australian Natural Gas and Geothermal Projects (Eden 100%)

Eden has secured a voluntary suspension on its work commitments on all of its geothermal licences and its SA Natural Gas licence. This is giving Eden time to try and find a suitable partner / cornerstone investor to progress these projects.

## **CORPORATE**

In April 2011 Eden completed a share placement to sophisticated and professional investors raising \$0.55 million and announced a fully underwritten pro-rata non-renounceable rights issue on the same terms to raise a further \$2.4 million.

Eden instigated proceedings to recover the balance of the monies owed (\$0.9 million) in relation to the sale of HyRadix, Eden Cryogenics and CTS that occurred in 2009. The directors are confident the proceedings will be successful.

A claim has been made against Eden by Ticora Geosciences Inc ('Ticora"), the company that carried out permeability and desorption testing for Eden in 2007-8 in UK, for the unpaid portion of its bill (US\$786,191) for this testing. Eden disputes the claim and in turn has counterclaimed against Ticora for damages resulting from the alleged negligence of Ticora in carrying out the permeability testing on the second well, and claims a right of setoff. This dispute is scheduled to be determined by the UK courts late 2011 if not previously settled.

Gregory H Solomon

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Executive Chairman

#### About Eden Energy Limited

Eden Energy Ltd is a diversified clean energy company that listed on the Australian Securities Exchange in June 2006. Eden owns a new low temperature pyrolysis technology that produces hydrogen and nanocarbon fibres from methane, hydrogen transport fuel technology, including the low emission Hythane (a hydrogen-methane blend), the Optiblend® dual fuel technology, and owns or is earning an interest in coal bed methane, shale gas and natural gas exploration licences in the UK, conventional gas exploration licences in SA, and geothermal energy licences in SA.

All these aspects of Eden's business are part of an integrated strategy to become a major global participant in the alternate energy market, particularly focussing on producing and marketing hydrogen and nanocarbon fibres without any carbon emissions, and providing the fuel, engines and technology to power hydrogen- based transport systems and dual fuel energy solutions for power generation.

For further information please contact Greg Solomon (+61 8 9282 5889) or visit our website (www.edenenergy.com.au).

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, 01/06/10.

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EDEN ENERGY LTD

ABN

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Quarter ended ("current quarter")

31 March 2011

#### Consolidated statement of cash flows

		Current quarter	Year to March
Cash flows related to operating activities		\$A'000	(9 months)
	• 0		\$A'000
1.1	Receipts from product sales and related debtors	40	65
1.2	Payments for (a) exploration & evaluation (b) development	(259)	(428)
	(c) production	_	-
	(d) administration	(87)	(496)
	(e) other (see note below)	(674)	(2,013)
1.3	Dividends received	1	· · ·
1.4	Interest and other items of a similar nature received	13	38
1.5	Interest and other costs of finance paid	_	_
1.6	Income taxes paid	-	_
1.7	Other (see note below)	_	212
	,		
	Net Operating Cash Flows	(967)	(2,622)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects		
1.0	(b) equity investments		_
	(c) other fixed assets		(6)
1.9	Proceeds from sale of: (a) prospects		700
1.9	(b) equity investments	_	200
	(c) other fixed assets	_	200
1.10	Loans to other entities	_	_
1.10	Loans repaid by other entities	_	_
1.11	Other (provide details if material)	_	_
1.12	Other (provide details if material)		
	Net investing cash flows	-	894
1.13	Total operating and investing cash flows (carried forward)	(967)	(1,728)

#### **Notes**

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<sup>1.2</sup>e Other - mainly relates to payments to suppliers and employees by Eden's wholly owned subsidiaries; Eden Energy India Pvt Ltd and Hythane Co LLC which are trading companies and these payments mainly consist of payments for cost of goods sold, research & development, inventory and overheads. It also includes non-administrative legal fees.

<sup>1.7 -</sup> Mainly relates to R&D Tax Rebates received by the company

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

1.13	Total operating and investing cash flows		
	(brought forward)	(967)	(1,728)
1 1 /	Cash flows related to financing activities		1 275
1.14	Proceeds from issues of shares, options, etc.	-	1,275
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)	-	_
	Net financing cash flows	-	1,275
	Net increase (decrease) in cash held	(967)	(453)
1.20	Cash at beginning of quarter/year to date	1,505	1,046
1.21	Exchange rate adjustments to item 1.20	(7)	(62)
1.22	Cash at end of quarter	531	531
Pax	ments to directors of the entity and associ	ates of the directors	
•	ments to unrectors of the entity and associated entities of the entity and		ted entities
,	and the country and	Current	

		\$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	168
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Management Fees, as per agreement, were paid during the quarter to a company of which Mr GH Solomon and Mr DH Solomon are directors.

Directors Fees paid during the period.

Reimbursement of bona-fide expenses.

Legal Fees were paid during the quarter to a firm of which Mr GH Solomon and Mr DH Solomon are partners.

# Non-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
-

## Financing facilities available

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

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

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	•	\$A'000
4.1	Exploration and evaluation	70
4.2	Development	-
4.3	Production	-
4.4	Administration	180
4.5	Other (see note below)	450
	Total	700

#### <u>Notes</u>

4.5 Other - mainly relates to payments to suppliers and employees by Eden's wholly owned subsidiaries; Eden Energy India Pvt Ltd and Hythane Co LLC which are trading companies and these payments mainly consist of payments for cost of goods sold, research & development, inventory and overheads.

Subsequent to the end of the quarter Eden has completed a share placement raising \$0.55 million and announced a fully underwritten non-renounceable rights issue to raise an additional \$2.4 million before costs.

# Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	531	1,505
5.2	Deposits at call	-	-
5.3	Bank overdraft	-	-
5.4 Other (provide details)		-	-
Total: cash at end of quarter (item 1.22)		531	1,505

# Changes in interests in mining tenements

6.1 Interests in mining tenements relinquished, reduced or lapsed

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 +securities (description)				
	7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
_	7.3	<sup>+</sup> Ordinary securities	213,989,654	213,989,654		
	7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
-	7.5	*Convertible debt securities (description)	NOT APPLICABLE			
	7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
_	7.7	Options (description and conversion factor)	1,425,000 1,227,000 886,764 5,000,000 500,000 310,000 4,000,000 310,000 500,000	NIL NIL NIL NIL NIL NIL NIL	Exercise price 68.5 cents 45 cents 20 cents 10 cents 58.5 cents 20 cents 10.625 cents 20 cents 38.5 cents	Expiry date 15 May 2011 30 June 2011 30 Nov 2011 31 Dec 2011 5 April 2012 14 May 2012 20 Nov 2012 14 May 2013 26 May 2013
	7.8	Issued during quarter	200,200			
	7.9	Exercised during quarter				
-	7.10	Expired during quarter	50,000	NIL	31 cents	15 March 2011
_	7.11	<b>Debentures</b> (totals only)	NOT APPLICABLE			
	7.12	Unsecured notes (totals only)	NOT APPLICABLE			

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

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# **Compliance statement**

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act.
- 2 This statement does give a true and fair view of the matters disclosed.

(Company secretary)

Sign here: Date: 28 April 2011

Print name: Aaron Gates

# **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.

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