

This report covers FairStar's exploration related activities for the quarter ended 31st December 2009

Highlights of December Quarter

Mahendra's Find Project

- Geological mapping of Mahendra's Find Iron Project completed and maps integrated into MapInfo underway
- Extensive detrital hematite deposits adjacent to goethite hematite outcrops pitted over several kilometres and layers of loose hematite gravel exposed and sampled
- Sieving and washing of initial detrital samples undertaken, and hematite with minor quartz gravel observed. Analysis results are awaited.
- RC drilling of 21 holes for 1314m into goethite outcrops and silicate magnetite BIF returned goethite intercepts up to 18m thick.
- 419 RC samples submitted for assaying
- Magnetite BIF intercepts up to 70m downhole in six holes, with most holes ending in magnetite mineralisation.
- Planning and budgeting of exploration to June 2010 has been completed, to expedite exploration and development of the project
- In October 2009 the Company completed the acquisition of the Lindsay's Dam exploration tenement (E28/1672), which hosts the Mahendra's Find Iron Project, and is now the 100% owner of the tenement

New Iron Discovery

- In October the Company announced a new iron discovery at its 100% owned Jurangie Hill tenement (E28/1687), located 14 km north of the Mahendra's Find Project
- The Company believes the discovery has potential similar to Mahendra's Find
- Host BIF is highly folded, weathered, and confined to a major syncline (Steeple Hill Syncline). This is the same structure of the Mahendra's Find Project

Other Projects

- Planning for a geochemistry sampling (MMI) program at the Mt Padbury Uranium Project to test for uranium, gold and base metals.
- Geophysical interpretation was conducted from recently flown airborne magnetic-radiometric survey at the Killara Project and sample targets were identified
- Geophysical interpretation was also carried out at the Dutchess of York Gold Project and drill and sample targets were identified

Contact Details

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ABN 38 115 157 689

Capital Structure

27 January 2010

Ordinary Shares on issue: 480 M

Share price: \$0.08

Estimated market

capitalisation: \$38 M

Board Directors

Ken Allen

Chairman Non Executive

Kevin J Robertson MAICD

Managing Director

Harold J Paiker

B.Juris LLB LLM

Director Non Executive

Alan Thomas

Company Secretary



Work performed

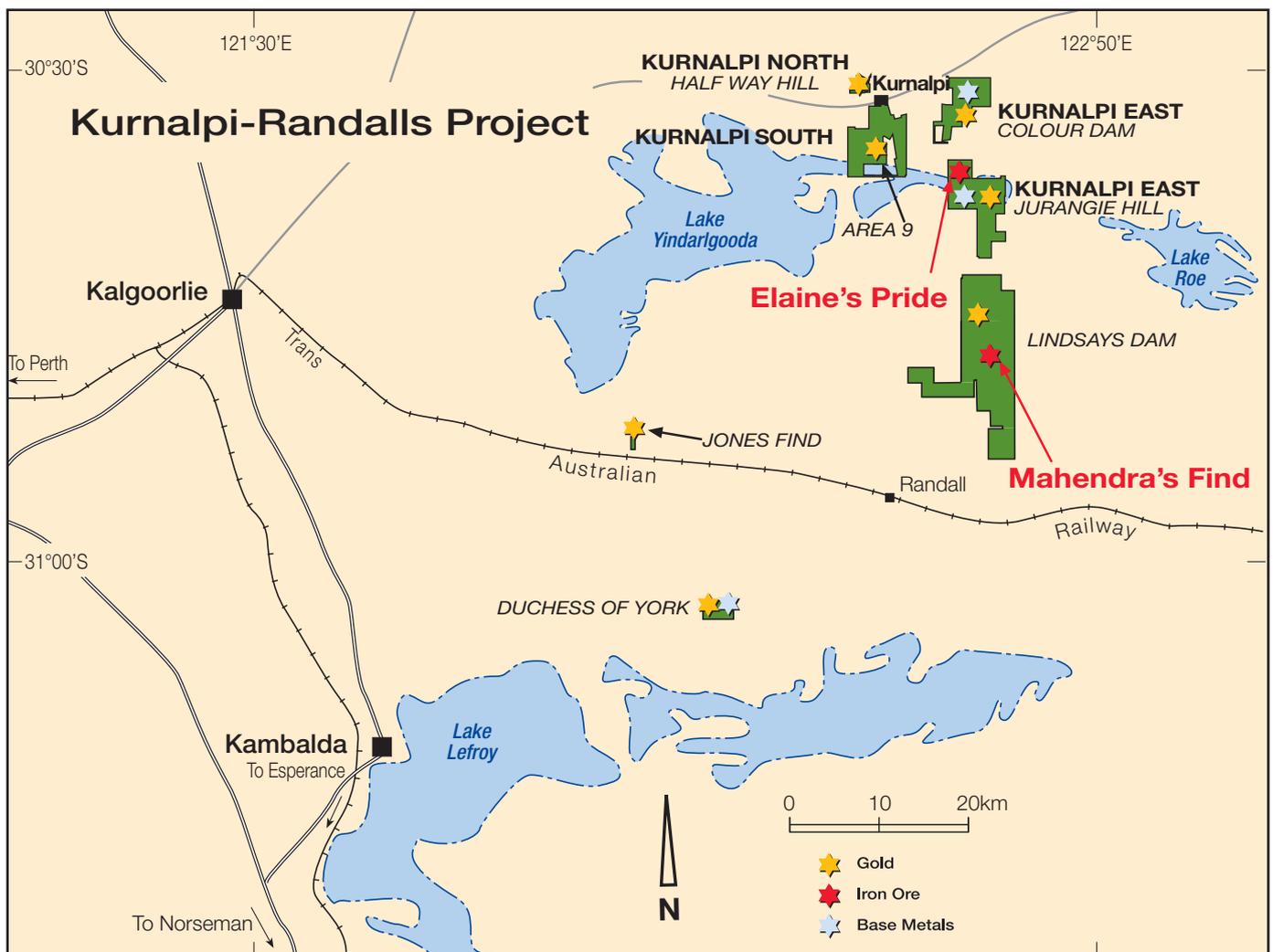
During the December 2009 Quarter exploration work focused on the Company's Mahendra's Find Iron Project in Western Australia's eastern goldfields, and included; the completion of geological mapping at the project, planning and completion of pitting of shallow detrital iron oxide deposits, a 21 RC hole drilling program (into goethite mineralisation and magnetite BIF). Sampling and initial observation of the detritals, goethite mineralisation and magnetite BIF was also undertaken and we are still waiting for the final analysis results.

Mahendra's Find Iron Ore Project (E28/1672 and E28/1766)

Geological Mapping

Geological mapping at the Mahendra's Find Iron Project was completed in October 2009. Hand plotted maps are now being digitised into Mapinfo. The mapping has provided a good understanding of the geology and iron mineralisation in the tenements.

Figure 1: Kurnalpi-Randalls Project tenements with Iron Discoveries



Detritals

The detrital hematite gravels were pitted with an excavator to a depth of 3.5m, and channel samples taken from the sidewalls over the richer gravel beds to a thickness of 1.2m - with several layers in some pits. The samples were sieved, and the coarse fraction washed to remove soil and clay. These samples were mostly hematite gravel with minor quartz gravel also present.



Plate 1: Washed Iron Ore detritals in sieve



Plate 2: Layered Iron Oxide Detritals in trench 053

Goethite Hematite Drilling

The geological mapping was used to define targets for drilling. The major target identified was the eastern side of the Steeple Hill Syncline, where the west dipping goethite outcrop can be followed for 5km with minor areas under alluvial cover. Costeaming was undertaken to expose the full width of concealed goethite, to enable RC holes to be optimally placed.



Plate 3: Drilling at Mahendra's Flnd during the quarter

Two rows of holes, on lines 800m apart, were drilled here and they intersected goethite 18m in thickness on one line, and 11m to 15m thick on the other line, with moderate dips to the west. The other RC holes were drilled into goethite hematite targets around the syncline, and most intersected goethite and hematite mineralisation.

Follow up drilling is planned to extend and infill the goethite mineralisation with drill lines 400m apart on the eastern limb of the syncline. This area is located close to major rail infrastructure, 20km to 25km north of the Trans Australia railway line.

Magnetite Drilling

Six RC holes targeted soft shaly magnetite BIF and intersected up to 70m of magnetite BIF, with five holes ending in BIF. This rock is much softer than cherty BIF and is very amenable to fine grinding at a lower cost.

Eight composite samples of four metres each were taken from the six holes, and submitted for DTR separation and analysis of magnetic concentrate.

Planning

Detailed planning and budgeting for the period to June 2010 has been undertaken to expedite the exploration and development of the project. This includes; the pitting of shallow hematite detritals, aircore drilling of deeper hematite detritals, and infill and step-out drilling of the goethite/hematite mineralisation and magnetite BIF. The processed aeromagnetic data will also be used to guide this exploration.

Beneficiation testwork will be undertaken at a metallurgical laboratory to determine procedures for processing the various samples.

Bulk samples for pilot plant processing will be composited from the pitting and drilling of the three iron ore types.

Database compilation will continue to allow resource consultants to estimate JORC resources at the appropriate time. Preparation of detailed topographic maps will be undertaken to facilitate this.

The Company plans to give priority to the hematite detritals exploration and development and metallurgical testwork, as these could lead to the shortest development timeframe for a low capital cost mine with a high Fe grade product.

Acquisition of Lindsay's Dam tenement

On October 20, 2009 FairStar announced the completion of the acquisition of the Lindsay's Dam exploration tenement (E28/1672). The Lindsay's Dam tenement hosts the Company's Mahendra's Find Iron Project and FairStar Resources Limited is now the 100% owner of the tenement.



Plate 4: Outcrop of goethite mineralisation



Plate 5: Dense canga at Mahendra's Find



Plate 6: High Grade Hematite Goethite Outcrop at Hematite Hill

The Company completed all its obligations with respect to the acquisition of the Lindsay's Dam tenement, and with the acquisition completed it plans to accelerate its exploration activities at the tenement area. This included a maiden drilling program which was launched during the Quarter.

New Iron Discovery

On October 14, 2009, the Company announced a new discovery at its Jurangie Hill tenement (E28/1687), about 90 km southeast of Kalgoorlie. It is located 14 km north of the Mahendra's Find Iron Project. The Jurangie Hill tenement is close to major rail infrastructure, with the Trans Australian Railway passing around 37 km south of the tenement. The new discovery will be known as Elaine's Pride.

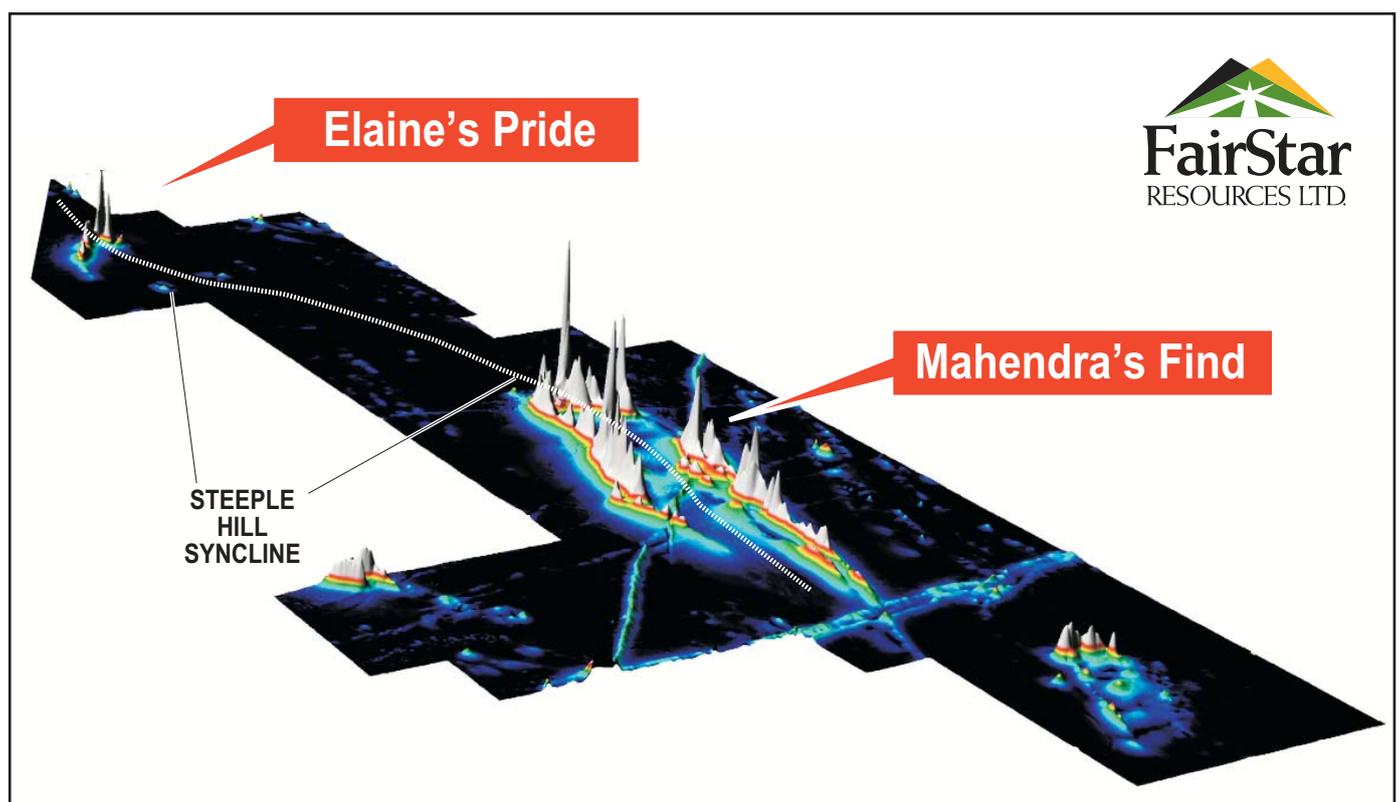
The Company sees the new discovery as an extension of its Mahendra's Find project area, which is a potentially significant iron discovery in the area.

Interpretation of aeromagnetic data suggests that there is high probability for the tenement to host concealed high-grade iron areas. In addition, the tenement area and environs are considered to have strong potential for base metals.

Based on these observations and rock chip sampling from the tenement along with analysis of the airborne magnetic data, the Company is of the view that there is high probability that the new iron discovery (with the benefit of detailed exploration work) may host iron resource potential similar to Mahendra's Find.

FairStar plans to continue with further rock chip sampling, geological mapping, analysis of high resolution airborne magnetic-radiometric data, and gravity survey for concealed iron mineralisation. This activity is then planned to be followed by a drilling program and, subject to the results, an eventual resource estimation

Figure 2: 3D Analytical Signal Image of Iron Discoveries & environs



Oil and Gas Exploration

The tenement lease (PEP165) covering the Company's Oil and Gas Project in the on-shore Murray Basin in Victoria was transferred to FairStar as 100% owner by the Victorian Department of Primary Industries (DPI) on July 9, 2009.

At the time of this report FairStar advise that it still has some issues with its joint venture partner, Knight Industries Pty Ltd regarding the terms of the Oil and Gas joint venture Project. FairStar will make further comment on these issues when they have been resolved.

FairStar had previously applied for a suspension of further exploration at the tenement for a period of 6 months, to allow it to procure and examine all available information in detail and plan further action. The Company is in regular communication with the DPI, Victoria on this matter and is awaiting a response.

Other Tenements

FairStar's exploration activities for the Quarter in review focused on those referred to in this report. However, the Company can report that all other tenements remain in good standing and meet statutory requirements.

Proposed Work Program for Q1, 2010

During the coming Quarter, work will continue to focus on the Mahendra's Find Iron Project. A summary of proposed activity is given below:

- Follow-up and assessment of Mahendra's Find 2009 drill program. This will include the input of drillholes and analyses as well as costean and sample pit locations into the Micromine database
- Planning of follow up drillhole targets adjacent to holes from the project's 2009 drill campaign which hosted good iron mineralisation. Follow up drilling will step-out down-dip to test for iron mineralisation at depth
- Planning for the next phase of drilling. This will include; modifying the planned 400 metre spaced RC drillhole lines, mark-out lines of aircore holes at 1km line spacing north-south with holes 100m apart to test iron oxide detritals, and submit Program of Work to DMP for approval
- Commence next phase of drilling; 100 aircore holes (averaging 15m) for a total of 1500 metres into iron oxide detritals, and 60 RC holes (averaging 60m) for a total of 3600 metres. The RC drilling will focus on goethite/hematite outcrop at the project.
- Results from aircore and RC drilling to be logged and sampled, and data will be entered into Micromine database
- The Company aims to confirm a maiden JORC Inferred Resource at the Mahendra's Find Project by the end of March

Corporate Activity

\$2.5 million in funding secured

In October, the Company secured \$2.5 million in funding via a loan facility from Ask Funding Ltd. against the expected dividend from the Opes Prime settlement. Funds will be used to assist with the Company's exploration activities and to provide working capital.

Resignation of Director

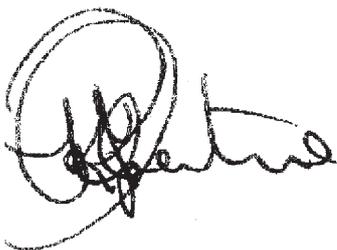
During the Quarter Mr Mahendra Pal resigned from his position as a Director of the Company.

Shareholding in Golden West Resources

The Company continues to review its options in respect to its shareholding in iron ore exploration and development company Golden West Resources (ASX: GWR). The Company will advise the market when any decision or outcome in respect of this shareholding is achieved.

The information reported herein is based on information compiled by Mr Sheldon Coates who is a member of the Australasian Institution of Mining and Metallurgy. He has sufficient experience relevant to the style of mineralisation and deposit type under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Coates consents to the inclusion of this report of the matters based on his observations in the form and context in which it appears. Mr Coates has a B.Sc. Geology, MBA in Technology Management, and MSc in Mineral Economics. He has 13 years iron ore experience. Mr. Coates consents to the inclusion of this report of the matters based on his observations in the form and context in which it appears.

Yours faithfully



KEVIN J. ROBERTSON
Managing Director
FairStar Resources Limited

About FairStar Resources

FairStar Resources is a Perth-based multi-commodity exploration company, which listed on the ASX in October 2006. The Company has project interests in Iron, Gold, base metals, Uranium and Oil and Gas.

It currently has several high potential projects; Mahendra's Find iron discovery and Kurnalpi-Randalls Gold Project, both in the Eastern Goldfields of Western Australia, Spinifex Well Gold Project near Leonora, and Mt Padbury Uranium, Mindoolah Gold and Uranium and Killara Base metals and Uranium projects near Meekatharra in the Murchison region of WA. It also has a tenement with the potential for natural gas in the on-shore Murray Basin in north west Victoria.

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

Fairstar Resources Limited

ABN

38 115 157 689

Quarter ended ("current quarter")

31 December 2009

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1 Receipts from product sales and related debtors		
1.2 Payments for (a) exploration and evaluation	(629)	(1,039)
(b) development		
(c) production		
(d) administration	(776)	(1,070)
(e) borrowing costs		
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	1	2
1.5 Interest and other costs of finance paid	(223)	(486)
1.6 Income taxes paid	-	-
1.7 Other – Net GST (Paid) / refunded	(10)	(5)
Net Operating Cash Flows	(1,637)	(2,598)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects	(35)	(35)
(b)equity investments	-	-
(c) other fixed assets	(16)	(16)
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	27	27
1.12 Other (provide details if material)	-	-
Net investing cash flows	(24)	(24)
1.13 Total operating and investing cash flows (carried forward)	(1,661)	(2,622)

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(1,661)	(2,622)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	566	1,877
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	2,090	2,602
1.17	Repayment of borrowings	(781)	(1,501)
1.18	Dividends paid		
1.19	Other (provide details if material) – Share issue costs	-	(44)
	Net financing cash flows	1,875	2,934
	Net increase (decrease) in cash held	214	312
1.20	Cash at beginning of quarter/year to date	123	25
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	337	337

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	296
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

Directors' fees and Salaries in normal course of trading.

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

- (a) Acquisition of mining interests satisfied by issue of 21,000,000 shares in Fairstar Resources Ltd as announced on 1 October 2009.
- (b) In December 2009 the liquidators of Opes Prime paid a part settlement sum of \$2,215,207 to Fairstar in relation to shares sold after the collapse of Opes Prime Group Ltd. These funds were used to repay a facility with Ask Funding Ltd – details of which were announced on 20 October 2009. Fairstar estimates a further \$450,000 may be recovered in this matter before 30 June 2010.

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

NA

+ 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	0	0
3.2 Credit standby arrangements- Refer Note (a)	5000	937

(a) At 31/12/09 Fairstar had a standby subscription agreement in place with Fortrend Securities Ltd. The total facility is \$5,000,000 of which \$937,000 has been used at 31/12/09.

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	700
4.2 Administration	500
Total	1,200

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	337	123
5.2 Deposits at call		
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	337	123

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	E37/749, 760, 793 & 800	Relinquished	70%	Nil
6.2 Interests in mining tenements acquired or increased	E28/1672 E25/393	Exercise of option to purchase interests in tenements		

Appendix 5B
Mining exploration entity quarterly report

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 <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	480,769,839	480,769,839		
7.4 Changes during quarter (a) Increases through issues	21,000,000 1,000,000 1,774,194 2,067,750 1,897,492 2,431,946	21,000,000 1,000,000 1,774,194 2,067,750 1,897,492 2,431,946	0.036 for Acquisition of Mining Tenements Issued for services rendered Issued at 3.1c to provide working capital Issued at 3.42c pursuant to standby subscription Issued at 6.54c pursuant to subscription funding agreement. Issued at 6.17c to provide working capital	
(b) Decreases through returns of capital, buy-backs				
7.5 +Convertible debt securities Convertible notes				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				

+ See chapter 19 for defined terms.

7.7 Options <i>(description and conversion factor)</i>	<i>Total Number</i>	<i>Number Quoted</i>	<i>Exercise price</i>	<i>Expiry date</i>
	200,000	0	\$0.35	01/05/2011
	663,311	0	\$0.04221	31/07/2012
	683,125	0	\$0.0391	07/08/2012
	1,070,549	0	\$0.0369	14/08/2012
	951,348	0	\$0.0351	25/08/2012
	1,086,767	0	\$0.0351	01/09/2012
	541,331	0	\$0.0369	09/09/2012
	166,805,854	166,805,854	\$0.10	30/08/2011
	1,000,000	0	\$0.15	30/11/2011
7.8 Issued during quarter	166,805,854	166,805,854	\$0.10	30/08/2011
	1,000,000	0	\$0.15	30/11/2011
7.9 Exercised during quarter				
7.1 Expired during quarter				
7.1 Debentures 1 <i>(totals only)</i>				
7.1 Unsecured notes 2 <i>(totals only)</i>				

Compliance statement

- 1 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 / * (*delete one*) give a true and fair view of the matters disclosed.

Sign here: *Alan Thomas*
(Company secretary)

Date: 29/01/2010

Print name: Alan Thomas

Notes

- 1 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.

Appendix 5B

Mining exploration entity quarterly report

- 2 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.
- 3 **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.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **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.