

QUARTERLY REPORT

Period ending 31 December 2010



HIGHLIGHTS

- *Landmark Agreement to acquire South East Energy Limited*
- *Major change of focus approved post end of quarter*
- *Now primary focus is on lithium and uranium*
- *Overwhelming shareholder support*

LITHIUM OUR CORE FUTURE BUSINESS

In an historic development for ERO Mining Limited (ASX: "ERO") just weeks after the end of the December period under review in this report, shareholders overwhelmingly approved at a general meeting in Adelaide in January 2011, proposals by the Board and management to change the exploration priority for ERO to that of lithium and uranium.

The transition was achieved by shareholder endorsement of ERO's acquisition of unlisted South Australian-based lithium and uranium mineral explorer, South East Energy Limited (South East).

ERO will continue to develop and progress its other assets and holdings, for retention and value-adding, joint venture development or disposal.

As a result of the transition, ERO will embark on a comprehensive exploration program across the Company's now wholly-owned Lake Frome lithium project in South Australia.

This program will assess for lithium contained in sandstone hosted brines and sediments, and establish flow volumes. Drilling is expected to commence in the second quarter 2011.

Lithium and its compounds have a number of industrial applications including use in heat resistant glass and ceramics, high strength to weight alloys used in aircraft, lithium batteries, greases and pharmaceuticals. China, Chile and Argentina have the most significant lithium carbonate production from subsurface brines.

The world demand is currently estimated at 120,000 tonnes of lithium carbonate equivalent (LCE) per year, with expectations that it will grow to more than 165,000 tonnes (+40%) by 2014.

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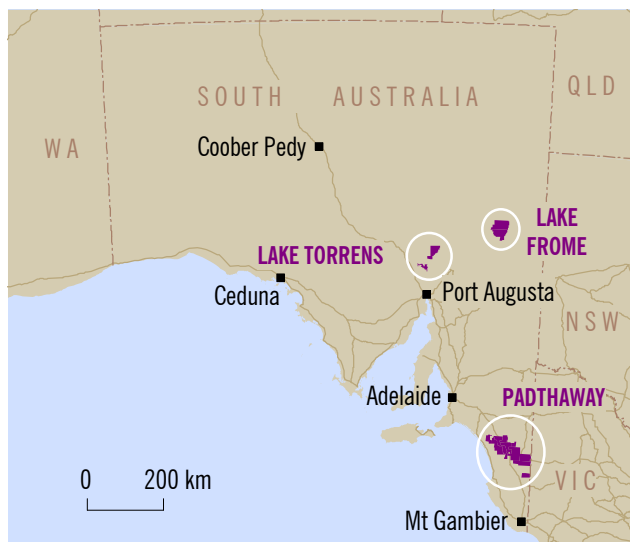
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As mentioned on the page 1, ERO acquired exploration licences at Lake Frome (EL4601 and EL4602) and the southern end of Lake Torrens (EL4580), all of which are highly prospective for accumulations of lithium in brine charged sediments. Previous exploration of the surface and subsurface sediments at Lake Frome carried out by Comalco during 1978–80 encountered significant lithium concentration. The Lake Frome, Lake Torrens and the Padthaway projects are also considered to be prospective for sandstone-hosted uranium deposits.



Location of South East Energy Limited's tenement locations.

CORPORATE ACTIVITIES

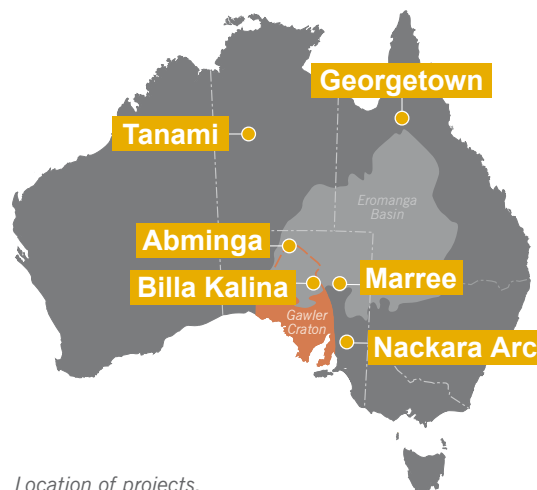
- \$450,000 raised via Share Placement.
- Mr Shane Gale appointed as the Company's interim Chief Executive Officer.

ERO raised \$450,000 via the issue of 11,250,000 ordinary shares at 4 cents per share, together with one free attaching option exercisable at 5 cents each on or before 31 October 2011 for each share issued, with proceeds to be used for working capital. The Placement was made to sophisticated and professional investors under the Company's 15% placement capacity and as a result did not require shareholder approval.

The Board appointed Mr Shane Gale as the Company's interim Chief Executive Officer in December 2010. Following completion of the South East acquisition, Mr Gale was appointed to this position. Mr Gale is experienced in the formation, development and team leadership of start-up ventures that have achieved organisational growth. Most recently, he was Logistics Manager with Cheetham Salt Limited and has been involved with exploration and mining in the Northern Territory.

OPERATIONS

- Georgetown Gold Operations in northern Queensland continued mining activities to the onset of the wet season.
- Suplejack (ELA26625) Project Deed for Exploration submitted to the Central Lands Council for execution.
- Subsequent to the end of the quarter approval received for the Groundrush (ELA28493) competing application.



Location of projects.

Queensland

GEORGETOWN REGIONAL GOLD EXPLORATION

ERO Mining Ltd 100%

The Georgetown Alluvial Gold Mine and surrounding exploration areas are located SSW of Georgetown in central-northern Queensland. The project comprises the alluvial gold mine and the surrounding granted exploration licence, EPM15995. The mining operation consists of thirteen (13) granted mining leases, covering a total 389.39 hectares, which are positioned over gold-bearing alluvials within Tabletop Creek and the headwaters of the adjacent Western Creek.



ERO gold trommel wash plant showing alluvial gravels from excavator to conveyors, November 2010.

During the quarter, the gold recovery plant worked the western limits of ML30091 with all mining activities occurring entirely within this tenement. ML30091 has sufficient gold-bearing alluvial gravels for continuing mining activities into 2011. However, due to the onset of the wet season the gold recovery plant and site operations shut down effective 1 December 2010 and all plant and equipment were relocated to high ground away from flood prone areas or taken off site for scheduled maintenance. During the December quarter, gold sales totalled \$53,456 from the production of 37 ounces of fine gold.

As previously reported, the Company is reviewing options for the Georgetown operations and is in discussions with a number of interested parties.

Northern Territory

TANAMI EXPLORATION

The Tanami region, located approximately 600 km NW of Alice Springs, has become Australia's premier Proterozoic Gold Province and is one of the remaining provinces in Australia capable of hosting multi-million ounce gold deposits. The Tanami is currently the host to the Callie Gold Mine, containing 7 Mozs of gold, and several other 0.5 Mozs to 1 Mozs deposits. The release, by major gold companies, of large areas of highly prospective land in the Tanami has resulted in a significant increase in exploration activity across the Tanami and further supports the Company's exploration strategy in the region. The Company has assembled a

portfolio of one exploration licence and seven exploration licence application project areas comprising 1155 square kilometres (sq km). During the quarter no significant ground based exploration activities were undertaken on the Tanami Projects.

Subsequent to the end of the quarter, ERO received advice from the NT Department of Resources that its competing application, ELA28493, for the prospective area between ERO's 100% owned ELA27921 and Newmont Tanami Pty Ltd's ML22934 had been successful.

Suplejack

ERO Mining 100% in ELA26625

The Suplejack Project covers an area of 168 sq km and is situated approximately 30 km east of the Tanami Gold Mine owned by Tanami Gold. The Company considers this tenement to be prospective for high grade, unconformity uranium and gold of the Ranger and Callie styles respectively.

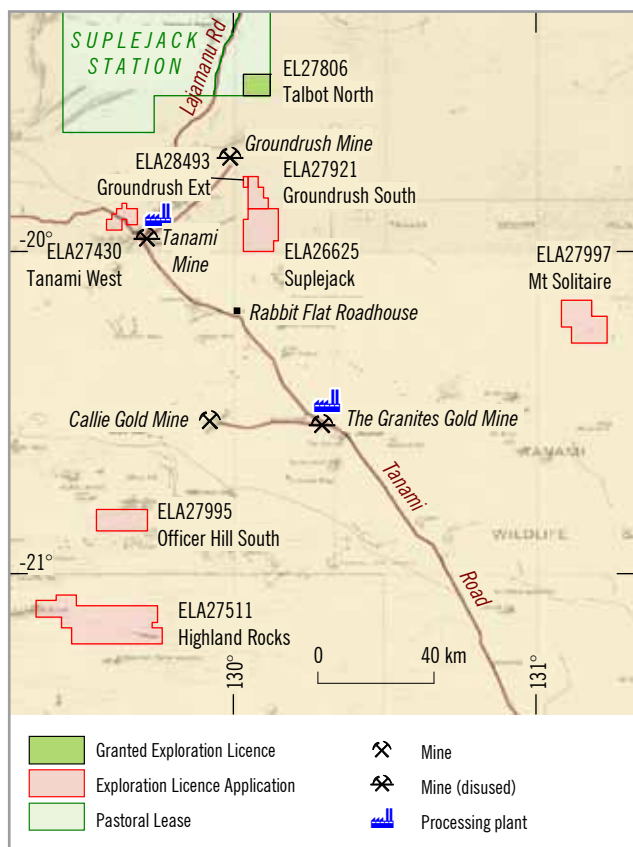
Following a consultation, the Traditional Owners submitted a Deed for Exploration consenting to grant an exploration licence over the prospective Suplejack tenement (ELA26625) that was presented to the Executive Council of the Central Lands Council for signing in December 2010. The Suplejack project is the Company's first foray into the high discovery potential of the Tanami.

Talbot North

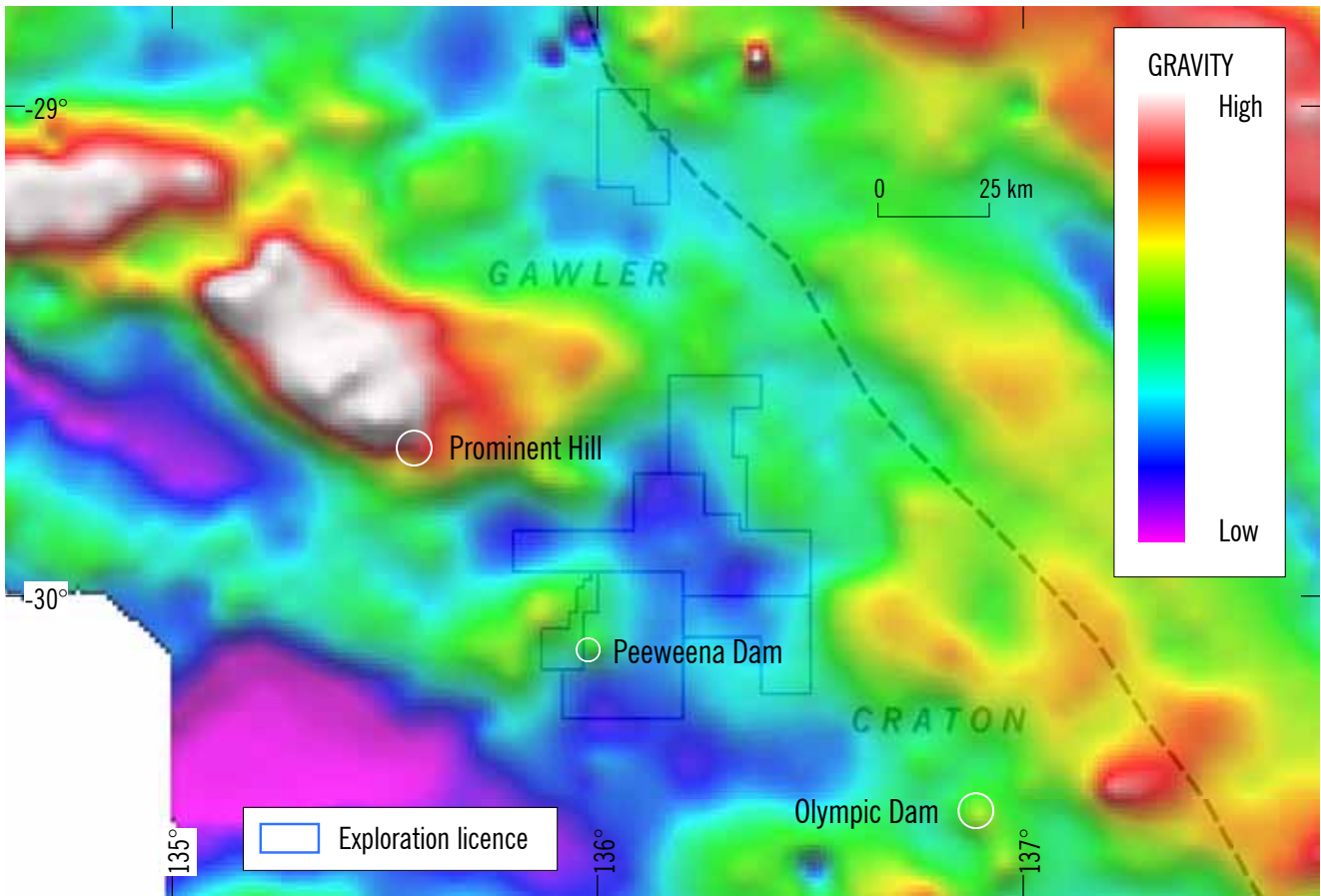
ERO Mining 100% in EL27806

The Talbot North Project covers an area of 69 sq km and is located on Suplejack Downs Pastoral Lease. The lease area is along strike to the north of ABN Resources Hyperion Project where the Company has recently announced encouraging results from their review of previous exploration data. This earlier work identified multiple areas of significant gold mineralisation, including an intersection of 28 m @ 5.07 g/t gold at the Hyperion Prospect. ERO Mining will be targeting de-magnetised zones within favourable portions of this gold bearing sequence.

ERO's exploration licence application over the Talbot North Project has now been granted. As the licence area is entirely within Pastoral Lease, rather than Aboriginal Freehold, the processes required for Heritage Clearance and approval for on ground exploration are greatly accelerated. The first stage of exploration will be a focused airborne EM survey to better define the non-magnetic stratigraphy and assist in identification of follow-up drill targets.



Location of ERO Mining tenements in the Tanami region.



Peeweena Dam single point gravity anomaly.

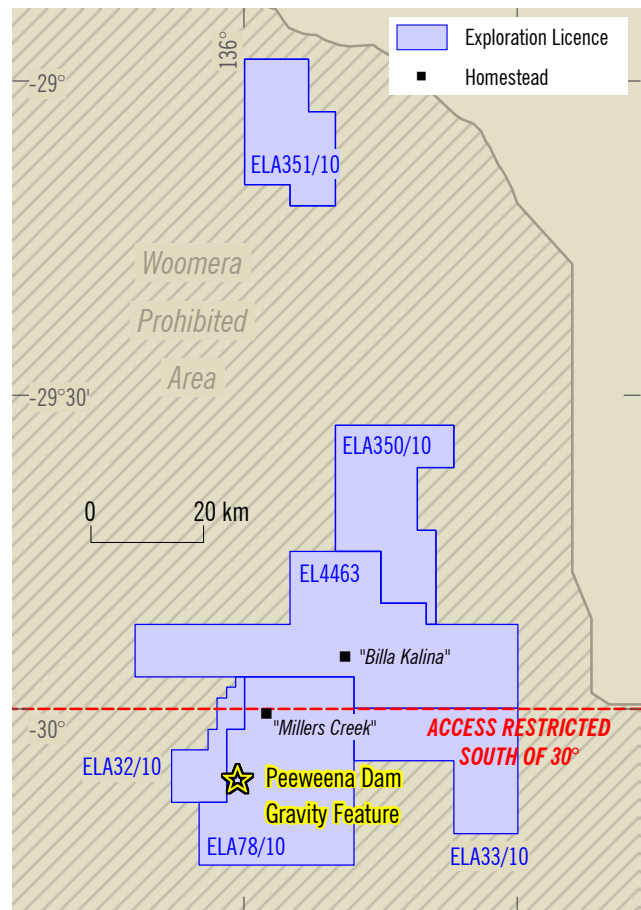
South Australia BILLA KALINA JV

ERO Mining earning 50% under the terms of the Billa Kalina JV from Maximus Resources Ltd in EL 4468, ELAs 351/10, 350/10, 78/10, 32/10 and 33/10, ERO Mining 100% in ELA 32/10

The Billa Kalina Project is located 70 km NNW of the Olympic Dam mine, and 45 km east of the Prominent Hill mine. The project area is situated within the recently defined Restricted Zone of the larger Woomera Prohibited Area (WPA).

The Federal Government initiated a review into the long-term use of the WPA. The review will conduct broad consultation with stakeholders including the South Australian Government, the resource sector, pastoral and indigenous groups, and relevant Australian Government agencies. ERO has submitted comment on the Government Review of the WPA Interim Report. ERO's submission has been posted on the Defence website and can be accessed at: defence.gov.au/woomerareview/comments/ERO.pdf

Recent detailed analysis of all previous gravity survey data at Billa Kalina has highlighted a potentially significant single point gravity anomaly at Peeweena Dam, proximal to the western margin of ELA78/10. The anomalous point has amplitude of approximately 10 mgal and was originally recorded within a 6–7 km spaced gravity survey completed



Location of Peeweena Dam showing the gravity feature.

by the Bureau of Mineral Resources. Based upon nearby drilling, undertaken by ERO, the Company interprets the anomaly to lie adjacent to a major structurally controlled contact between Archaean basement to the west and Proterozoic/Palaeozoic sediments to the east and believes it is prospective for IOCGU mineralisation.

EROMANGA BASIN JV

ERO Mining earning 70% under the Eromanga Basin JV Agreement with Maximus Resources Limited in the Abminga, Marree and Kingoonya Projects

Abminga and Marree Projects

During the quarter no ground based exploration activities were undertaken at the Abminga and Marree Projects. The Company is in the process of review of the Abminga and Marree Projects.

NACKARA ARC GOLD PROJECT

ERO Mining earning 80% in EL3692

The Joint Venture agreement covers EL3692 (375 sq km) located approximately 35 km east of Peterborough, South Australia. Exploration of the Nackara Arc Gold Project has focused on an ongoing review of the results from the drilling program, and rehabilitation of drill sites.



Shane Gale

CHIEF EXECUTIVE OFFICER

31 January 2011

For further information please contact:

ERO Mining on 08 8132 7970, or

Investor relations:

Mr Duncan Gordon,

Executive Director, Adelaide Equity Partners
on 08 8232 8800 or 0404 006 444

Further information relating to ERO Mining Limited and its various exploration projects can be found on its website:

www.eromining.com

DISCLAIMER

This report contains forward looking statements that are subject to risk factors associated with the exploration and mining industry.

It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a variety of variables which could cause actual results or trends to differ materially.

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Stephen Hogan (who is a Member of the Australasian Institute of Mining and Metallurgy). Mr Hogan is Exploration Manager of the Company and has sufficient experience that is relevant to the style of mineralisation and types of deposit under consideration and the activity 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 (the JORC Code). Mr Hogan consents to inclusion of the information in this report in the form and context in which it appears.

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.

Name of entity

ERO Mining Limited

ABN

40 119 031 864

Quarter ended ("current quarter")

31 December 2010

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	54	197
1.2 Payments for		
(a) exploration & evaluation	(203)	(344)
(b) development		
(c) production	(108)	(167)
(d) administration	(361)	(526)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	7	8
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material)	263	263
Net Operating Cash Flows	(348)	(569)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a) prospects		
(b) equity investments		
(c) other fixed assets		
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	-	75
1.12 Other (provide details if material)		
Net investing cash flows	-	75
1.13 Total operating and investing cash flows (carried forward)	(348)	(494)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(348)	(494)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	423	423
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	423	423
	Net increase (decrease) in cash held	75	(71)
1.20	Cash at beginning of quarter/year to date	215	361
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	290	290

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

1.25 Explanation necessary for an understanding of the transactions

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

+ 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		
3.2 Credit standby arrangements		

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	100
4.2 Development	
4.3 Production	-
4.4 Administration	30
Total	130

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	290	215
5.2 Deposits at call		
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	290	215

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			
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

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	171,425,576	171,425,576		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	11,250,000	11,250,000	\$0.04	\$0.04
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>	26,785,714 228,000 225,000 553,000 941,666 11,250,000		<i>Exercise price</i> \$0.30 \$0.22 \$0.22 \$0.165 \$0.028 \$0.05	<i>Expiry date</i> 30/06/2011 20/03/2012 19/11/2012 05/03/2013 03/02/2014 31/10/2011
7.8 Issued during quarter	11,250,000		\$0.05	31/10/2011
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				

+ See chapter 19 for defined terms.

7.12	Unsecured notes (<i>totals only</i>)		
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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 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:

(Company Secretary)

Date: 31 January 2011

Print name: David W Godfrey

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.
- 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.

+ See chapter 19 for defined terms.