

# Quarterly Report

for the period ended 31 December 2009



## Highlights

### GOLD - North Queensland: Mount Windsor Volcanics Project

- Prospectivity for vertically zoned epithermal gold systems enhanced by new rock chip sample results and newly recovered historical drilling results
- Discrete drilling targets identified at the G-5 Target from a recently completed Induced Polarisation (IP) survey - drilling planned for the next quarter

### CORPORATE

- Liontown base metal deposit (North Queensland) sold to Kagara Ltd for \$4.5M, satisfied by 2,244,837 Kagara shares and a further \$2.25M upon a decision to mine or sale by Kagara
- Cash on hand increased to ~\$3.8M following successful \$1M capital raising, combined with the proceeds from the sale of the Kagara shares received for the Liontown deposit

## 1. Overview

The December 2009 Quarter saw continued solid progress with exploration activities at Liontown's **Mount Windsor Volcanics Gold Project** in North Queensland as well as a significant corporate development with the sale of the Company's **Liontown base metals deposit** to the diversified Australian mining company, Kagara Limited (ASX: KZL).

The initial proceeds of this sale - in the form of Kagara shares which have since been sold on market - have significantly strengthened Liontown's cash resources to approximately \$3.8 million. This provides a solid foundation for the Company to move forward and progress the exploration and development of its North Queensland gold assets as well as pursue other opportunities.

At the Mount Windsor Volcanics Project, the Company continues to work up a series of priority gold targets with potential for the discovery of vertically zoned gold systems similar to the nearby multi-million ounce Mt Leyshon and Pajingo gold deposits.

## 2. Mount Windsor Volcanics Project (Liontown 100%)

*The Mount Windsor Volcanics Project comprises an extensive tenement package covering an area of approximately 3,900km<sup>2</sup> located in the prolific Charters Towers gold field of North Queensland which has yielded approximately 18 million ounces of gold to date from world-class mines such as Charters Towers (+6Moz), Kidston (+4Moz), Pajingo (+3Moz), Ravenswood (+2Moz) and Mt Leyshon (2.7Moz).*

## Rock Chip Sampling and Historical Drilling Results at G-5 and Mt Redan

The Company continued to report encouraging results from a program of early-stage exploration designed to further assess the previously identified gold potential of its 100%-owned Mount Windsor Volcanics Project.

Results were received from a program of rock chip sampling conducted at the **G-5 Gold Target** (see *Figure 1*) - one of approximately 40 discrete Carbo-Permian intrusive-related gold targets at the project.

Three samples out of a total of 24 collected from an area of chalcedonic quartz veining located on the margin of the G-5 target reported **greater than 100 g/t silver** (with a maximum assay of 701 g/t silver), with a further seven samples reporting greater than 1 g/t silver. The samples are from vein lag covering an area of around 500m x 100m, and confirm recent Liontown sampling (124 g/t silver and 0.90 g/t gold).

The results are considered significant and encouraging for this early stage of exploration.

Target G-5 comprises a near-circular granitic stock of probable Carbo-Permian age hosted in older granodiorite located approximately 30km south east of Charters Towers and 25km east of the historical Mt Leyshon Gold Mine.

The new phase of rock chip sampling was designed to define the extent of gold and silver anomalous veining detected in sampling by the Company earlier in 2009. Chalcedonic quartz veining (with minor coarse crystalline veining) was mapped over an area of 500m x 100m, comprising in-fill to a breccia developed within the marginal granodiorite. The vein envelope trends northwest, and is associated with a discrete linear demagnetised zone.

Significant silver, gold and pathfinder element levels were returned from samples within a 285m x 100m area within the broader vein envelope, as shown in Table 1.

The high silver-to-gold ratios and the high arsenic, antimony and mercury association with chalcedony veins suggests that the mineralisation is located at a relatively high level within a vertically zoned breccia pipe and above the main zone of gold deposition.

Sample	Au g/t	Ag g/t	As ppm	Sb ppm	Hg ppm	Pb ppm	Bi ppm	Mo ppm
110783	0.29	243	2,130	361	3.19	10,200	1.08	162.5
110784	3.56	192	3,680	192.5	8.34	21,000	0.45	144
110785	0.42	42.8	515	37.5	1.44	1,080	0.42	127.5
110786	1.98	701	1,645	148.5	12.45	16,750	1.66	59.4

Table 1: Significant rock chip sample results, Target G-5

The Company has also recovered results from historical drilling at the **G-22 or Mt Redan** prospect (see *Figure 1*).

This area was identified from the Company's interpretation of regional aeromagnetic data and follow-up soil sampling which outlined an extensive arsenic and antimony anomaly covering an area approximately 2,000m x 1,800m in size, with rock chip sampling returning grades of up to 3,890ppm arsenic and 443ppm antimony.

The Company has now recovered results from three shallow (maximum 50m depth) RC drill holes completed by Battle Mountain Australia in 1987.

Two of these had significantly anomalous levels of gold and silver (>0.1 g/t gold, >1 g/t silver) as well as arsenic, as shown in Table 2 below:

Hole ID	From	To	Interval (m)	Ag ppm	Au ppm	As ppm
MRR0002	56	68	12	BDL	0.049	303
	72	73	1	BDL	0.13	330
	78	88	10	3.3	0.096	671
incl.	84	88	4	3	0.137	450
MRR0003	42	43	2	6	0.288	
incl.	42	43	1	9	0.419	

Table 2: Significant Intersections, Battle Mountain Drilling, Mt Redan

As at G-5, the results at Mt Redan are consistent with a position relatively high in a vertically zoned epithermal gold system similar to the nearby Pajingo deposit, with the gold-rich portion of the system potentially preserved at depth.

#### IP Results at G-5

Three lines (9km) of the planned six lines of a 150m dipole-dipole Induced Polarisation (IP) survey have now been completed over the G-5 Target. The survey was designed to test for down-dip extensions of the high grade gold and silver results associated with chalcedonic veining from the G-5 area as outlined above (*Figure 2*).

Initial results suggest the gold and silver bearing chalcedonic and crystalline veining located on line 7759800mN (*Figure 3*) is the up-dip expression of a shallow, east-dipping, weakly resistive and variably chargeable structure ("Resistor 1"), truncated to the east by a steeply west dipping fault.

The resistive structure is interpreted as a zone of stronger silicification or veining, and the chargeable material as zones with more sulphide.

Based on the vertical zonation model for gold mineralisation within a breccia system, the down-dip section of the structure represents a target for better gold +/- silver mineralisation.

The preliminary data suggests that a second shallow east-dipping structure (“Resistor 2”) is developed at depth to the west of Resistor 1. This structure is truncated by a fault on the west or up-dip side, and does not outcrop. In three dimensions the two resistors are interpreted to represent two stacked structures located between the bounding faults to the east and west, and terminating to the south against the interpreted Carbo-Permian muscovite granite.

These two structures warrant drill testing, which is planned for later in the next quarter.

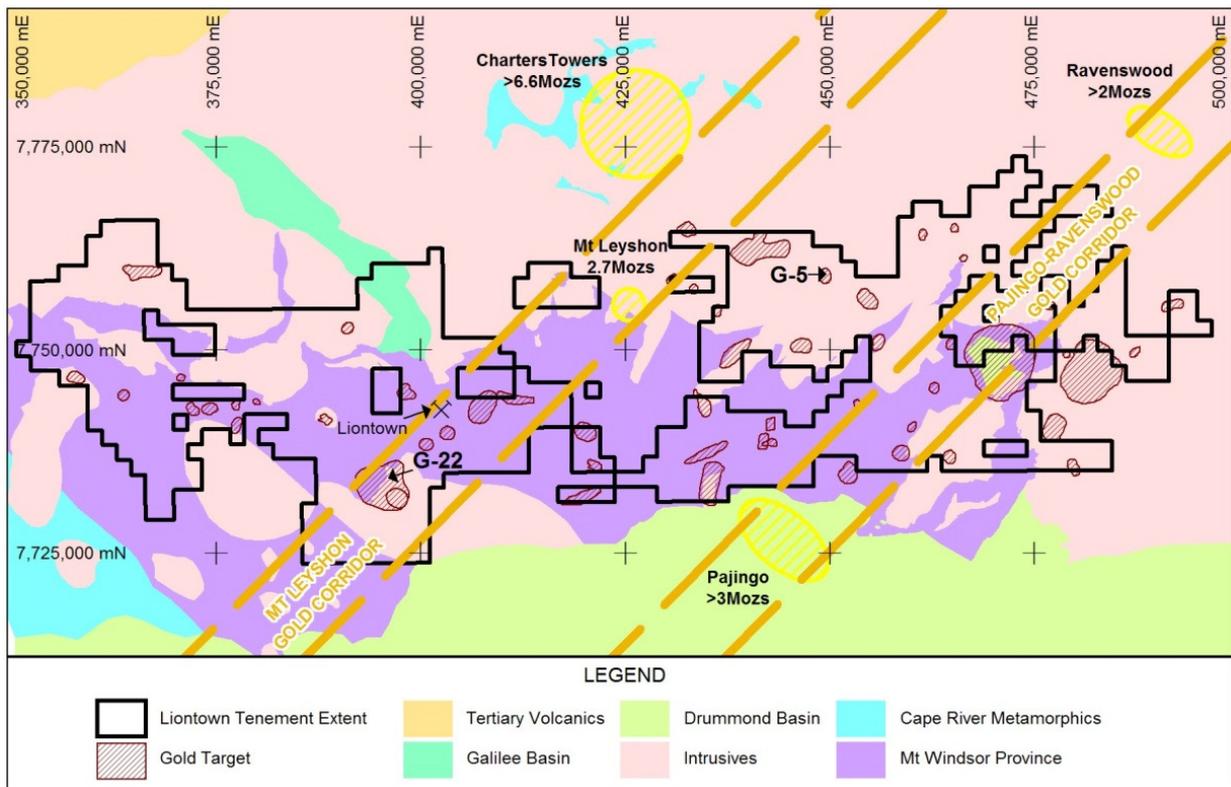


Figure 1: Liontown Mount Windsor Project tenements and applications with gold targets G-5 and G-22 (Mt Redan) highlighted.

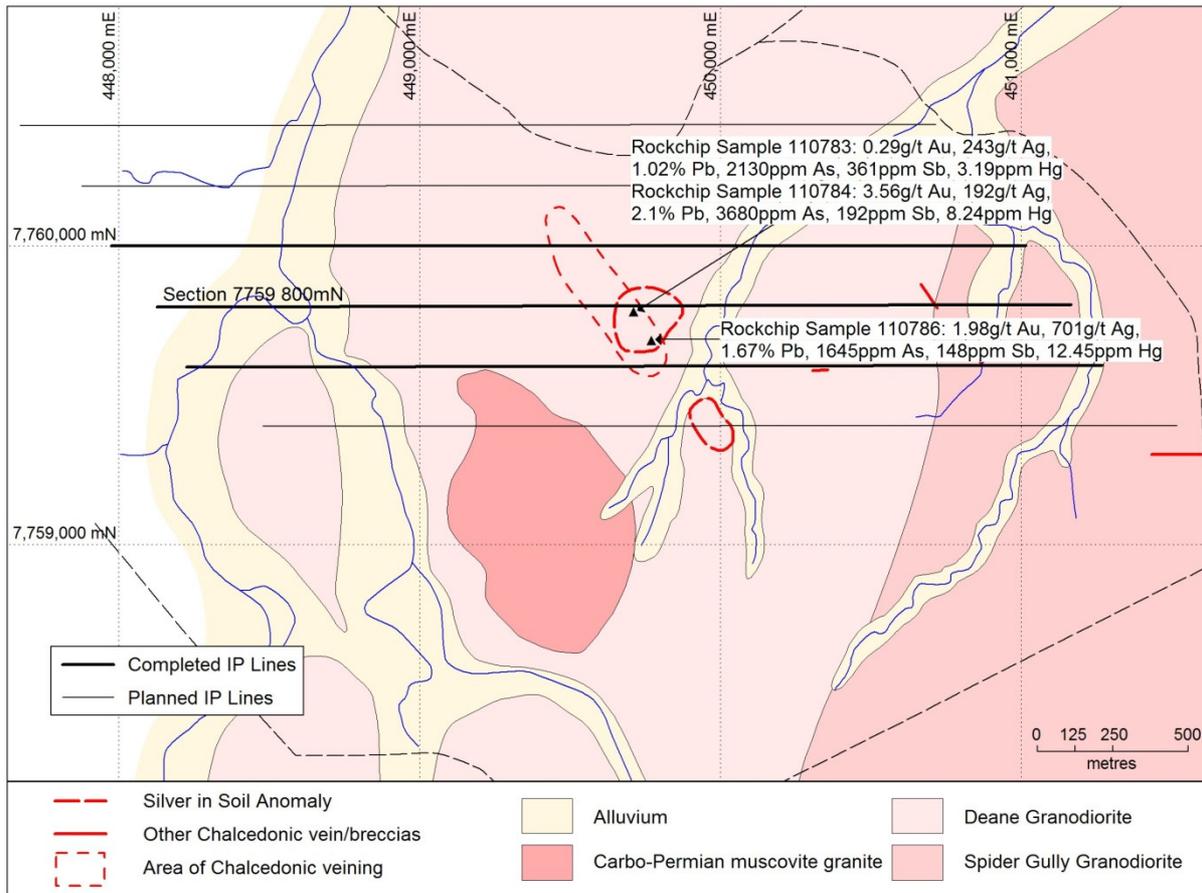


Figure 2: Planned IP lines over Target G-5 showing the location of line 7759800mN (see Figure 3 below) and zones of chalcedonic veining and anomalous soil and rock chip geochemistry

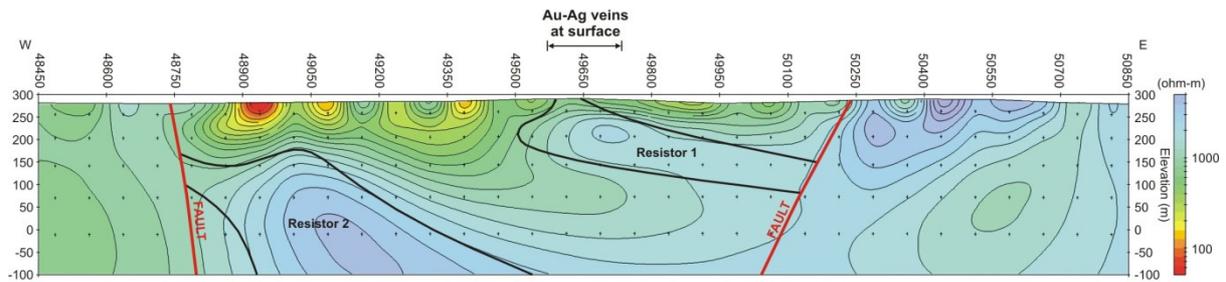


Figure 3: Section 7759800mN showing resistivity in version model from the IP survey data

## 2. Sale of Liontown Base Metal Deposit

In December 2009, the Company agreed to sell its 100%-owned **Liontown base metals deposit** in North Queensland to Kagara Ltd (“Kagara”) for \$4.5 million comprising 2,244,837 Kagara shares and \$2.25 million in cash payable upon either a decision to mine or the sale of the purchased assets by Kagara.

The sale included Mining Lease 10277 and 16 sub-blocks (51.5 square kilometres) of the surrounding Exploration Permit (EPM 14161) which contains the 1.8 million tonne Liontown zinc-lead deposit.

Completion occurred on 6 January 2010 and all the shares in Kagara were subsequently sold for proceeds of approximately \$2.7 million.

## 3. Capital Raising

During the Quarter, the Company successfully raised \$1 million before issue costs through a placement of 20 million shares at 5 cents. The capital raising and the subsequent sale of all the Kagara shares received as proceeds from the sale of the Liontown base metal assets has significantly strengthened the Company’s financial position with a cash balance of approximately \$3.8 million subsequent to Quarter end.

## 4. Sheep Mountain Copper-Molybdenum Project (Liontown option to acquire 100%)

*Sheep Mountain is a large-scale copper-molybdenum project located in Arizona, USA.*

The Company continues to examine various options to advance its Sheep Mountain Project, including bringing in a partner to fund a major drilling programme.

The Sheep Mountain deposit contains an Inferred Resource of **40,300,000 tonnes at an average copper grade of 1.4% and an average molybdenum grade of 0.035% above a cut-off grade of 0.8% copper equivalent** (equating to approximately 1.2 billion lb of copper and 31 million lb of molybdenum).

## 5. Corporate

Please refer to the attached Form 5B for details of cash flow for the Quarter ended 31 December 2009.



Dr Douglas A Jones  
Managing Director

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*The information in this report that relates to Exploration Results is based on information compiled by Dr Douglas A Jones, a full-time employee and Director of Liontown Resources Limited, who is a Member of the Australian Institute of Mining and Metallurgy and is a Chartered Professional Geologist. Dr Jones has sufficient experience in the field of activity being reported to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, and consents to the release of information in the form and context in which it appears here.*

*The resource estimation quoted herein for the Sheep Mountain Project has been carried out by Denver, Colorado based Geological Consultant, William F Tanaka. Mr Tanaka is a Member of the Australasian Institute of Mining and Metallurgy and has extensive experience in the area of porphyry copper deposits from both a consulting and operational perspective. As such he is qualified to be considered a Competent Person as defined in the December 2004 edition of the JORC Code. Mr Tanaka consents to the release of the information in the form and context in which it appears here.*

# 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

LIONTOWN RESOURCES LIMITED

ABN

39 118 153 825

Quarter ended ("current quarter")

31 DECEMBER 2009

### Consolidated statement of cash flows

	Current quarter \$A	Year to date (6 months) \$A
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for		
(a) exploration and evaluation	(244,383)	(614,066)
(b) development	-	-
(c) production	-	-
(d) administration	(107,325)	(197,552)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	4,220	10,083
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other – Goods and Services Tax (net)	(6,653)	(19,114)
<b>Net Operating Cash Flows</b>	<b>(354,141)</b>	<b>(820,649)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of:		
(a)prospects	-	-
(b)equity investments	-	-
(c)other fixed assets	-	(505)
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	-	-
1.12 Other (provide details if material)	-	-
<b>Net investing cash flows</b>	<b>-</b>	<b>(505)</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(354,141)</b>	<b>(821,154)</b>

+ See chapter 19 for defined terms.

<b>Cash flows related to financing activities</b>			
1.14	Proceeds from issues of shares, options, etc. (net)	950,000	950,000
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	-	-
	<b>Net financing cash flows</b>	<b>950,000</b>	<b>950,000</b>
<b>Net increase (decrease) in cash held</b>		<b>595,859</b>	<b>128,846</b>
1.20	Cash at beginning of quarter/year to date	<b>552,760</b>	<b>1,019,773</b>
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	<b>1,148,619</b>	<b>1,148,619</b>

**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
1.23	Aggregate amount of payments to the parties included in item 1.2	104,267
1.24	Aggregate amount of loans to the parties included in item 1.10	Nil

1.25 Explanation necessary for an understanding of the transactions

Item 1.23 consists of legal fees paid to a director for the provision of legal services (\$4,200), the net salary and superannuation paid to the Managing Director (\$22,436) and service charges paid to a director related entity (Chalice Gold Mines Limited) for the provision of corporate services, office rent and technical personnel (\$77,631). All transactions are on commercial terms and conditions.

**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

On 30 December 2009, the Company agreed to sell its Liontown base metal deposit to Kagara Ltd for \$2.25m in Kagara Ltd shares and a further \$2.25m on a decision to mine or sale by Kagara Ltd. Subsequent to quarter end, all the shares in Kagara were sold for approximately \$2.7 million.

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

N/A

### Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A	Amount used \$A
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

### Estimated cash outflows for next quarter

	\$A
4.1 Exploration and evaluation	150,000
4.2 Development	Nil
<b>Total</b>	<b>150,000</b>

### 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	Previous quarter \$A
5.1 Cash on hand and at bank	1,138,208	542,349
5.2 Deposits at call	10,411	10,411
5.3 Bank overdraft	-	-
5.4 Other (Bank Guarantee)	-	-
<b>Total: cash at end of quarter</b> (item 1.22)	<b>1,148,619</b>	<b>552,760</b>

### Changes in interests in mining tenements

6.1 Interests in mining tenements relinquished, reduced or lapsed	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
	ML10277	Sale to Kagara Ltd	100%	0%
	16 sub-blocks of EPM14161	Sale to Kagara Ltd	100%	0%

+ See chapter 19 for defined terms.

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
	E80/4317	Application	0%	0%
	EPM 18311	Application	0%	0%
	EPM 18352	Application	0%	0%
	EPM 18376	Application	0%	0%
	EPM 18422	Application	0%	0%

**(1) 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 <b>Preference securities</b> (description)	Nil	Nil	N/A	N/A
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs.	N/A	N/A	N/A	N/A
7.3 <b>+Ordinary securities</b>	210,073,581	210,073,581	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital.	22,873,563 Nil	22,873,563 Nil	N/A N/A	N/A N/A
7.5 <b>+Convertible debt securities</b> (description)	Nil	Nil	N/A	N/A
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured.	Nil	Nil	N/A	N/A

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

7.7	<b>Options</b>			Exercise price	Expiry date
	Share Options	250,000	Nil	\$0.35	6.8.2010
		310,000	Nil	\$0.35	1.11.2010
		4,000,000	Nil	\$0.35	1.12.2012
		1,250,000	Nil	\$0.225	14.07.2010
		500,000	Nil	\$0.20	31.07.2013
		3,000,000	Nil	\$0.20	02.12.2013
7.8	Issued during quarter				
	Share Options	Nil	Nil	N/A	N/A
7.9	Exercised during quarter	Nil	Nil	N/A	N/A
7.10	Expired/Forfeited during quarter	6,325,000	Nil	N/A	N/A
7.11	<b>Debentures</b> <i>(totals only)</i>	Nil	Nil		
7.12	<b>Unsecured notes</b> <i>(totals only)</i>	Nil	Nil		

+ See chapter 19 for defined terms.

## 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.

Sign here:   
Company Secretary

Date: 22 January 2010

Print name: Richard Hacker

## 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.

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