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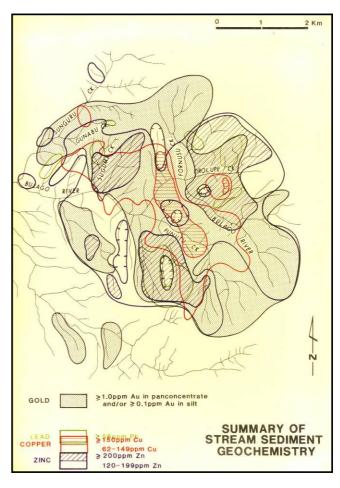
ASX Limited Company Announcements Office

27<sup>th</sup> October 2009

#### TECHNICAL REPORT - QUARTER ENDED 30th SEPTEMBER 2009

Frontier Resources Ltd is pleased to announce that the total raised from the Rights Issue and Shortfall completed during the quarter was \$1,370,878.99.

- ♦ The ASX was advised on 22 September 2009 that the Entitlements Issue (Prospectus dated 14 August 2009) which closed on 15 September 2009 received applications for 19,463,096 shares and 19,463,096 free attaching options, raising \$681,208.36.
- ♦ Part of the shortfall was placed with 35 shareholders and investor and 19,704,875 shares and 19,704,875 options were allotted, raising an additional \$689,670.63, Cash on hand is approximately \$1.5 million (prior to Bulago exploration program costs).
- ♦ The Bulago exploration program was initiated targeting the historic very high grade gold. The initial field crew was mobilised to the project site 7th October and the second field crew was mobilised on 16<sup>th</sup> October.
- ◆ The EL is located in PNG between the World Class OK-Tedi porphyry copper-gold and the Porgera epithermal/intrusive related gold Deposits. Targets are very high-grade epithermal and skarn gold, bulk mineable intrusive related gold deposits. The prospects are located within a large (to 4.5km x 6km), well-defined sub-circular, gold, zinc and copper drainage anomaly covering a recessive intrusive in a circular drainage basin, with anomalism continuing up to the peripheral limestones (demonstrating the skarn potential).
- The Suguma Prospect is located to the north of a large (1km x 1km) copper and disjointed gold in soil anomaly; it has very high gold grades in structures to 7m wide in both the intrusives and the contact aureole sediments. Suguma outcrop channel samples of sulphidic breccia and intrusive (analysed by previous explorers) include 15m of 57.4 g/t gold, 6m of 72.2 g/t gold, 0.85m of 754 g/t gold, 2m of 188 g/t gold and 1.1m of 55 g/t gold (true widths are unknown).

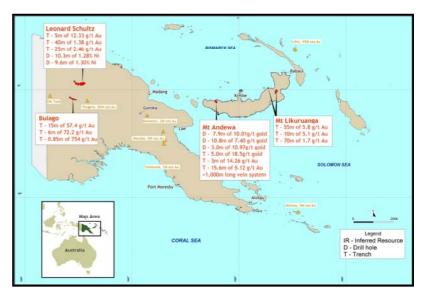


- ◆ Two km to the SE of Suguma, a historic sample of a boulder of skarn assayed 145 g/t gold + 11g/t silver + 0.78% copper + 8.6% zinc + 0.34% lead. The skarn potential of the Bulago region has never been evaluated and further investigation is strongly warranted.
- ♦ Four km to the SE of Suguma is the Funutu Prospect, where very high grade precious and base metal intrusive / breccia rock samples were collected from <u>outcrop</u> by previous explorers, which have never been mapped, soil sampled, trenched or drilled. Results include to 197 g/t gold + 363 g/t silver + 0.55% copper + 5.72% zinc + 5.5% lead, 108 g/t gold + 200 g/t silver + 0.38% copper + 4.8% zinc + 2.63% lead and 43 g/t gold +120 g/t silver + 0.49% copper + 1.7 % zinc + 0.86% lead.

#### **DETAILS**

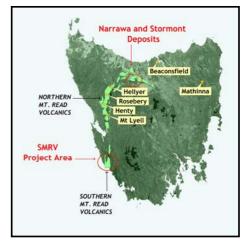
The report that follows is a summary of Frontier's main projects - it is not new information this quarter.

Frontier holds a carefully selected and diverse portfolio of high potential projects, comprising 2 Retention Licences (7km² - 100% interest) and 1 Exploration Licence (11Km² - 90% interest) in Tasmania (Figure 1), plus 4 Exploration Licences (1,139 km² - 100% interest) in PNG. Two EL applications have been lodged in PNG and one will be lodged in November in Tasmania.



The portfolio offers excellent mineral deposit potential, with primary targets being World Class gold-silver epithermal, gold-base metal skarns, copper-gold-molybdenum porphyry and polymetallic VHMS (zinc-lead-silver-gold) deposits. The projects <u>all</u> have high-grade exploration results in rock, trenches and/or drill hole and are in the same or similar geological terranes as existing World Class and/or major mines.

Frontier is concentrating on future development of the northern Tasmanian gold and base metal resources, while continuing to explore the highly mineralised Pacific 'Rim of Fire' in Papua New Guinea (PNG) for "Company Maker" World Class copper and gold Deposits (since having the Kodu coppergold-moly Deposit expropriated by the PNG Government).



Frontier's ongoing strategy consists of:

- Completing surface exploration and extensive hand trenching on the multiple very high-grade gold targets at Bulago in PNG to define the mineralised horizons and future drilling targets;
- Advancing the Narrawa and Stormont Deposits in Tasmania toward development;
- Drill testing and defining resources at the Esis porphyry copper deposit on the island of New Britain in PNG. The targets are a World Class primary copper deposit and/or a more easily developed, near surface and higher average grade, secondary (supergene) copper deposit (it is likely additional capital will be needed to undertake this drilling); and
- Advancing the remaining tenements held by Frontier in PNG and Tasmania with cost effective exploration and/or by joint ventures.

#### Narrawa Deposit

The precious and base metal resource for the Narrawa Deposit was upgraded to Indicated and

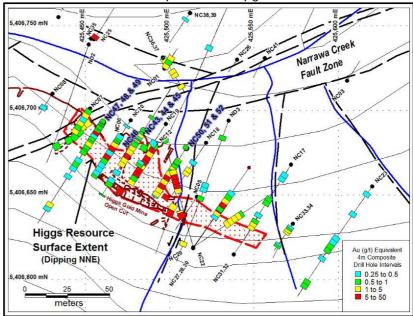
Inferred, containing 23,550 ounces of gold equivalent grading 3.5 g/t gold equivalent (0.5g/t gold cut-off grade). The resource consists of 14,125 ounces of gold, plus 131,300 ounces of silver, 2,765 tonnes of lead and 2,335 tonnes of zinc. The mineralisation is contained within 209,330 tonnes of rock grading 2.10 g/t gold, 19.5 g/t silver, 1.32% lead and 1.12% zinc.

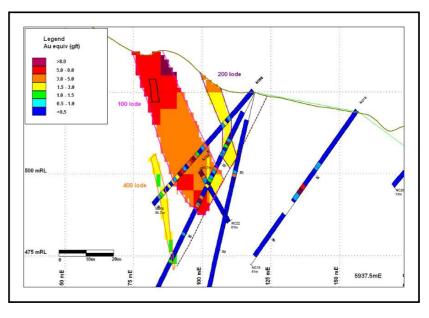
An Indicated Resource was estimated for the first time and it consists of 162,755 tonnes grading 3.61 g/t gold equivalent (2.11 g/t gold, 20.5 g/t silver, 1.42% lead and 1.2% zinc).

Narrawa is a steeply dipping, on/near surface, stratabound/ stratiform skarn deposit hosted within 4 lodes which are near surface and can be mined by open pit mining methods. The Indicated and Inferred Resource is up to 220m long, 20m wide and 60m deep.

Figure 4: Plan of the Narrawa Deposit drill hole traces showing downhole gold equivalent assays and Figure 5: Section 5937.5mE

Good scope exists to continue to increase the Narrawa Resource along strike in both directions, within the fault offset dip component and in other relatively





untested sectors of the project area. Mineralisation potential exists along strike to the southeast, with additional drillholes yielding 3.7m of 1.11 g/t gold (NC016) and 1.35m of 0.19g/t gold + 42 g/t silver+ 2.0% lead + 1.46% zinc + 0.25% copper (also NC016) and 2.2m of 0.12g/t gold + 15 g/t silver+ 0.79% lead + 3.26% zinc + 0.25% copper associated with a UTEM anomaly (NC017).

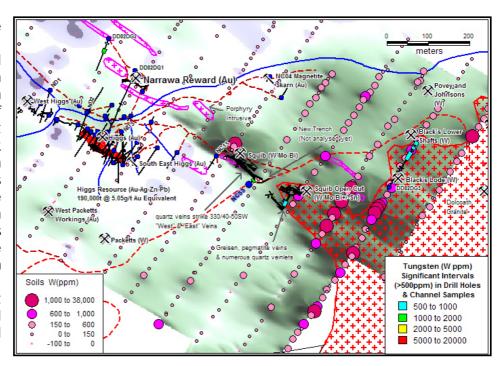
In addition, across strike from Narrawa in the 666 lode there are mineralised holes returning 1.5m of 25.2 g/t gold (NC025), 2m of 14.98 g/t gold (NC035), 7m of 2.13 g/t gold and 4.5m of 3.26 g/t gold (NC036), that are not included in the resource estimation.

#### Narrawa Tungsten Prospect (RL 4/2005)

The tungsten potential of Narrawa was evaluated by a targeted drill hole (NC53) and by undertaking selected drill hole re-analysis (NC 48). NC48 returned 1m grading 1.98% tungsten, within 16m grading 0.178% tungsten, from 29.6m downhole.

This is a higher tenor of mineralisation than that demonstrated in hole NC53, being 0.65m grading 1.04% WO3, within 10.5m grading 0.228% WO3 (which was only proximal to the target zone due to drilling into the old adit - i.e. the best mineralisation was mined out!).

results documented structurally controlled higher grade tungsten within significant widths of **lower** grade, but potentially bulk mineable tungsten mineralisation. Holes NC 48 and NC53 are located more than 400m apart across strike but on the same tungsten general anomalous trend, significant indicating strike potential and mineralised multiple lodes.



Soil assays and historic drilling have demonstrated a large area of tungsten anomalism and the +800m known strike length between holes containing tungsten anomalism <u>remains untested (see</u> Figure 6).

Six historic holes drilled for gold also returned potentially economic grades of tungsten, peaking at 0.5m of 1.26% tungsten (WO $_3$ ) with 0.12% molybdenum. Five channel samples also returned anomalous tungsten with up to 1.5m grading 0.70% tungsten (WO $_3$ ) and also 3m grading 1.17 g/t gold + 0.1% tungsten (WO $_3$ ). The historic Squib Mine produced 34.5 tonnes of tungsten. Dump samples have analysed up to 5% tungsten (WO $_3$ ) and a sample from a lode in a drive returned 3.19% tungsten (WO $_3$ ).

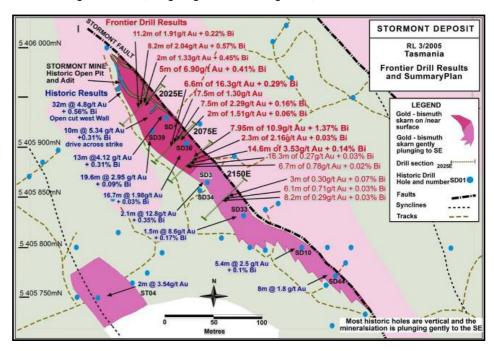
Note that calculations for FerroTungsten herein assume all concentrate is FeW, equating to 76.7% tungsten, whereas commercial concentrate typically contains 70 to 75% tungstic oxide ( $WO_3$ ) or 55 to 63% tungsten.

#### **Stormont Deposit**

The maiden Inferred Resource for the 'high grade' zone at Stormont contains 13,430 ounces gold, 27.7 tonnes bismuth and 10,340 ounces silver, within 91,400 tonnes of mineralised rock grading 4.57g/t gold, 0.30% bismuth and 3.52g/t silver (1.5g/t gold cut-off grade).

Stormont is a skarn-style stratiform deposit located in the core and limbs the of a shallowly southeasterly plunging syncline at its northwestern end. The deposit is located on or very near surface and ranges in stratigraphic thickness between 10m and 15m. A consistently mineralised resource is modelled in the 150m long, NW part of the central syncline, referred to as the high grade zone.

There is good scope to increase the resource



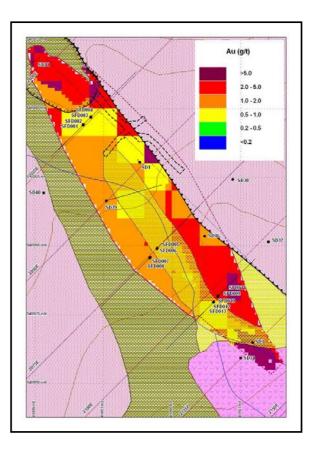
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with additional drilling in the SE of the central syncline, the untested western sector of the western syncline and proximal to the eastern thrust. Significant high grade gold+/-bismuth intersections have been demonstrated over the entire 300m known length of the central syncline, with drillholes SD8, SD10, SD33 and SD44, returning up to 4m of 12.7 g/t gold, that is not included in the resource estimation.

Figure 7 shows Stormont drill holes locations and weighted average assay results, figure 8 shows geology and the high grade resource and figure 9 shows section 2075E looking to 325 degrees AMG.

#### Esis

The objective is to drill test and define resources at the Esis porphyry copper Deposit on the island of New Britain in PNG. The targets are a possible World Class primary copper deposit and/or a more easily developed, near surface and higher average grade secondary (supergene) copper deposit. The strongly copper mineralised zone is more than 1,400m long before going under volcanic rocks to the north and is generally about 400m wide (but is up to 1,000m wide).



Fifteen very shallow 'Winkie' reconnaissance holes and four deeper diamond core holes were drilled into primary mineralisation about 35 years ago. Six had a weighted copper average for

their entire length greater than 0.2% and were terminated in copper mineralisation. The best holes included DW7 with 21.6m grading 0.50% copper and DW15 with 30.3m grading 0.41% copper. These holes cover 1,000m of strike extent with the mineralized zone open to the north and south.

The best results from the 4 hole diamond drilling program was from MD23, with 27m of supergene grading 0.71% copper (from 33m depth), plus 66m of primary grading 0.42% copper (from 86.6m to end of hole), with the last 7.6m of the hole grading 0.49% copper.

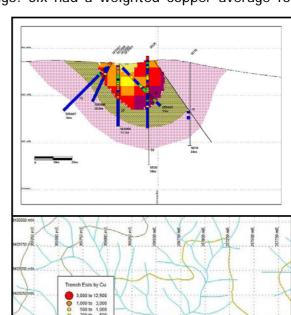
Esis is a breccia related porphyry copper deposit and these systems often have extensive vertical mineralisation and high associated tonnages (Figure 10).

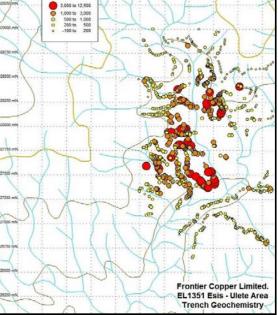
#### **Leonard Schultz**

EL 1597 in the Highlands of Papua New Guinea was granted to the Company, finalising Frontier's geographic and commodity focus on gold exploration in the district. Targets include high-grade & bulk mineable gold, porphyry copper-gold & lateritic nickel.

Historic exploration results include:

Hand trenching for gold at the Kru Prospect, with assays to 5m of 12.33 g/t gold, 5m of 7.00 g/t gold, 15m of 3.70 g/t gold, 15m of 1.69 g/t gold, 20m of 2.4 g/t gold, 40 metres at 1.38 g/t gold and 5 metres at 3.86 g/t gold. No exploration has been completed





in more than 10 years.

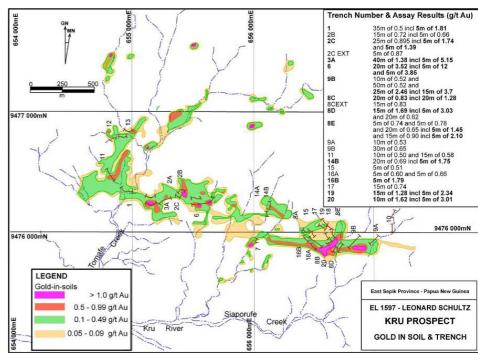
Soil samples to 51.1 g/t gold, quartz rock float samples to 17.6 g/t gold and outcrop/float samples with up to 2.75 oz/t silver and to 1.4% copper.

The Wasi porphyry copper system covers an area of 3.5 km by 1.5 km, with local higher grades (to 0.92% copper in limited drilling) and peripheral mesothermal base metal sulphide-gold veins. Previous work completed at Wasi suggested that the distribution of alteration points to higher copper grades remaining unexposed at shallow depths. Gold appears to occur in close association with copper mineralisation and strongly warrants evaluation. There has been no effective exploration completed in 37 years.

Auger drilling for lateritic nickel at the Sitipa Prospect, to 10.3m of 1.28% nickel and 9.6m of 1.30% nickel 0.13% cobalt (holes located approximately 2km apart, with only 6 drilled in the area). Figure 11 shows the Kru Prospect with contours of gold in soil samples and trenches, plus trench locations and weighted assays.

#### Corporate

The ASX was advised on 22 September 2009 that the Entitlements Issue



(Prospectus dated 14 August 2009) which closed on 15 September 2009 received applications for 19,463,096 shares and 19,463,096 free attaching options, raising \$681,208.36. Part of the shortfall was placed with 35 shareholders and investor and 19,704,875 shares and 19,704,875 options were allotted, raising an additional \$689,670.63, The total raised was \$1,370,878.99. Cash on hand is approximately \$1.5 million (prior to Bulago exploration program costs).

#### **ASX Releases**

26<sup>th</sup> October Notice of AGM/Proxy Form

19<sup>th</sup> October Allotment of Securities

13<sup>th</sup> October Close of Shortfall

2<sup>nd</sup> October Annual Report

22<sup>nd</sup> September Letter to Shareholders

14<sup>th</sup> September High Grade Gold Program Initiated at Bulago PNG

26<sup>th</sup> August Mail out to Shareholders 24<sup>th</sup> August Sale of EL1596 Finalised

14<sup>th</sup> August Response to ASX

13<sup>th</sup> August Rights Issue Prospectus

12<sup>th</sup> August CMS Shows Positive Cash Flow

30<sup>th</sup> July Quarterly Report

Please visit our website at <a href="www.frontierresources.com.au">www.frontierresources.com.au</a> and/or refer ASX announcements released during the September 2009 quarter for additional detailed information relating to the Company and its projects and/or feel free to contact me.

#### FRONTIER RESOURCES LTD

P.A.McNeil, M.Sc.

MANAGING DIRECTOR

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by, or compiled under the supervision of Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Managing Director of Frontier Resources, who consults to the Company. Peter McNeil has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter McNeil consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

#### **About Frontier Resources**

- > Frontier is focused on exploring for and developing mineral deposits in the highly mineralised Pacific 'Rim of Fire' in Papua New Guinea and the highly prospective Dolcoath Granite and Mt Read Volcanics of Tasmania.
- Frontier has a 100% interest in 4 Exploration Licences covering approx. 1,139 km² in PNG and 1 Exploration Licence + 2 Retention Licences covering 18 km² in Tasmania.
- The portfolio offers excellent mineral deposit potential, with primary targets being World Class gold/silver epithermal, gold- base metal skarn, copper-gold-molybdenum porphyry and polymetallic VMS (zinc-lead-silver-gold) deposits.
- > The projects <u>all</u> have high-grade exploration results in rock, trenches and/or drill hole and are in the same or similar geological terranes as existing World Class and/or major mines.
- > Frontier's Directors have more than 150 years combined experience in PNG and Australia to serve the interests of the Company and its shareholders.
- > Frontier operates with a general policy of 'DRILLING' our quality projects using our purpose built and self manufactured, cost effective, environmentally friendly, man-portable diamond core rig.
- The Company is an ASX listed junior mineral explorer whose shares also trade on the Frankfurt, Berlin and Munich Stock Exchanges.

#### Notes:

- The gold equivalent formula used to calculate the gold equivalent values is as follows: gold Equivalent (g/t) = gold g/t + (lead% x 0.46269) + (zinc% x 0.4644) + (silver g/t x 0.01386)
- This formula is based on metal prices obtained on 7th April 2009, these being US\$884/oz gold, US\$0.5965/lb lead, US\$0.5987/lb zinc and US\$12.26/oz silver.
- Skarn gold- silver -basemetal deposits such as the Narrawa Deposit typically recover contained gold, silver and basemetals if in sufficient quantities (subject to metallurgical characteristics and prevailing metal prices).
- The ASX requires metallurgical recovery be specified for each metal and they are: 96.7% for gold, 98.5% for zinc, 95.6% for lead and 92.4% for silver.
- It is the Company's opinion that each of the elements included in the Narrawa metal equivalent calculations have a reasonable potential to be recovered if the project proceeds to mining.

*Rule 5.3* 

# Appendix 5B

## Mining exploration entity quarterly report

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

Name of entity	
FRONTIER RESOURCES LIMITED	
ACN	Opportunian and ad ("assument assertes")
	Quarter ended ("current quarter")
095 684 389	Sept 09

### Consolidated statement of cash flows

Cash f	lows related to operating activities	Current quarter \$A'000	Year to date 3 Months \$A'000
1.1	Receipts from product sales and related debtors	2	2
1.2	Payments for (a) exploration and evaluation (b) development	(130)	(130)
1.3	(c) production (d) administration Dividends received	(220)	(220)
1.4	Interest and other items of a similar nature received	1	1
1.5 1.6	Interest and other costs of finance paid Income taxes paid		
1.7	Other Expenditure reimbursable by others		
	Net Operating Cash Flows	(347)	(347)
1.8 1.9 1.10 1.11	Cash flows related to investing activities Payment for purchases of: (a)prospects (b)equity investments (c) other fixed assets Proceeds from sale of: (a)prospects (b)equity investments (c)other fixed assets Loans to other entities	300	300
1.11	Loans repaid by other entities Other (provide details if material)		
	Net investing cash flows	300	300
1.13	Total operating and investing cash flows (carried forward)	(47)	(47)

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

1.13	Total operating and investing cash flows (brought forward)	(47)	(47)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc. net of costs	893	893
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	893	893
	Net increase (decrease) in cash held	846	846
1.20	Cash at beginning of quarter/year to date	190	190
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	1,036	1,036

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	140
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25	Explanation necessary for an understanding of the transactions
	Director Fees and Consulting Fees

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

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

### Financing facilities available

Add notes as necessary for an understanding of the position.

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

Estimated cash outflows for next quarter

	Total	150
4.2	Development	
4.1	Exploration and evaluation	\$A'000 150

### **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	194	22
5.2	Deposits at call	842	168
5.3	Bank overdraft		
5.4	Other (provide details)		
	Total: cash at end of quarter (item 1.22)	1,036	190

### 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	EL1596	Granted Tenement	100%	0%
6.2	Interests in mining tenements acquired or increased				

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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	Nil	Nil	2) (3333)	(4333)
7.2	(description) Changes during quarter (a) Increases through issues (b) Decreases				
	through returns of capital, buy- backs, redemptions				
7.3	+Ordinary securities	174,382,976	174,382,976		
7.4	Changes during quarter (a) Increases	25,516,697	25,516,697		
	through issues (b) Decreases through returns of capital, buy- backs				
7.5	+Convertible debt securities (description)	Nil	Nil		
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	Options (description and conversion			Exercise price	Expiry date
	factor)	28,565,196	28,565,196	4.5 cents	03-Dec-10
		180,000 270,000 3,200,000 100,000		14 cents 16 cents 20 cents 15 cents	20-Oct-11 19-Oct-10 30-Nov-10 11-Dec-10
7.8	Issued during quarter	25,516,697	25,516,697	4.5 cents	03-Dec-10
7.9	Exercised during quarter				
7.10	Expired during quarter				

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

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7.11	<b>Debentures</b> (totals only)	Nil	Nil
7.12	Unsecured notes (totals only)	Nil	Nil

### **Compliance statement**

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



Sign here:		Date: 30 October	2009
	(Director/Company secretary)		

Print name: Jay Stephenson

### **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.
- 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
- The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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