

Highlights

Significant new gold potential identified in North Queensland:

- Numerous discrete intrusive-related gold targets identified at Mount Windsor Volcanics Project
- Field-checking so far confirms potential of 12 targets within Liontown's extensive tenement package in the Charters Towers gold district (+15Moz historical production)
- Prospects include breccia and intrusive-style mineralisation, with gold intersections in historical drilling by Esso Minerals and City Resources including 89m @ 1.57g/t, 10m @ 5.01g/t, 8m @ 3.03g/t and 9m @ 2.2g/t
- Ongoing work planned to refine and rank targets ahead of drilling

Base metals projects advancing...

- Tenement position further expanded at Sheep Mountain Copper-Molybdenum Project in Arizona, USA
- New applications cover possible strike extensions to existing supergene resource (40.3Mt @ 1.4% copper and 0.035% molybdenum) and underlying primary porphyry mineralisation
- Further work being planned to generate follow-up exploration targets at Liontown base metal deposit, North Queensland (1.85Mt @ 7.5% zinc, 2.4% lead, 0.6% copper, 28g/t silver and 0.6g/t gold

1.0 Mount Windsor Volcanics Project (Liontown 100%)

Exploration on the Mount Windsor Volcanics Project ("MWV Project") during the quarter has continued to focus on the gold potential of the area. A geological interpretation and exploration targeting exercise was completed by the Company's consultants using a new regional aeromagnetic and radiometric dataset to identify potential gold-bearing Carbo-Permian breccia, intrusive or epithermal systems.

Discrete Carbo-Permian intrusive related gold targets were identified within Liontown Resources' tenements or applications. To date, twelve targets have now been checked in the field, and sampled where appropriate.



Figure 1: Intrusion related gold targets, Mt Windsor Volcanics Project.

Five targets reported anomalous gold results, either in Liontown Resources' sampling, or historical exploration work. These targets, shown on Figure 1, include:

- 1. Target G-13 (Plateau Prospect) previous work has outlined a sulphide-bearing breccia system located around the margin of a Carbo-Permian felsic intrusive associated with a discrete magnetic low (Figure 2). Historical drilling by Esso Minerals and City Resources in the mid 1980's at Plateau recorded intersections including:
 - 8 metres @ 3.03 grams per tonne gold (RC drilling);
 - 9 metres @ 2.2 grams per tonne gold (RC drilling);
 - 10 metres @ 5.01 grams per tonne gold (RC drilling);
 - 6 metres @ 3.2 grams per tonne gold (RC drilling); and
 - 89 metres @ 1.57 grams per tonne gold (open hole percussion hence

potentially subject to down-hole smearing).

Historical rock chip sampling from the same area has reported gold values to 14.2g/t gold.

Future work at Plateau will target both the undrilled northern part plus strike and depth extensions of the southern breccia zone.



Figure 2: G-13 (Plateau) and G-14 targets on Reduced to Pole magnetics.

2. Target G-5 - Liontown Resources' sampling has located float samples of quartzsulphide breccia assaying 6.12 grams per tonne gold and 97 grams per tonne silver, with strong base metal (copper, lead, zinc) and pathfinder element (arsenic, antimony, molybdenum) signatures. Other samples contained anomalous gold in quartz veining. These are associated with a felsic intrusive reflected in a discrete magnetic low (Figure 4).

Further work will be directed towards locating the source of the anomalism, in particular testing the margins of the intrusive body.

- 3. Target G-14 historical rock chip sampling returned anomalous gold, copper, lead and zinc (results to 0.68 grams per tonne gold, 490 parts per million arsenic, 490 parts per million copper, 2.71% lead and 2630 parts per million zinc) in gossanous veins on the margins of a felsic intrusive, and gold to 0.36 grams per tonne in veins 600 metres southeast. The intrusive is associated with a discrete magnetic low as shown in Figure 2. The only drilling reported comprises two traverses of shallow RAB (21 holes for 206 metres), with anomalous gold and base metals reported from both traverses.
- 4. Target G-4 (Brolga Prospect) anomalous gold has been reported from sampling and drilling marginal to a felsic intrusive emplaced along an interpreted Carbo-Permian fault structure. Rock chip sampling suggests gold is associated with high base metal values. While previous explorers have drilled under areas of anomalous quartz breccia float, areas of high lead values outlined in shallow RAB drilling (under later Campaspe cover) have not been tested by deep RC drilling. These areas of high lead anomalism will be the target of further work.
- 5. **Target G-1** anomalous gold values have been reported from historical work in this area. Further work, including systematic testing of the margins of this intrusive, is warranted.

A further four targets have reported strong pathfinder element anomalism and/or alteration assemblages, suggesting they are part of a vertically zoned, breccia-related mineralising system, with more work warranted to identify the potentially gold enriched parts of the systems. A schematic model, based on the Mosquito Hill Prospect, is shown in Figure 2.

The targets include:

- 6. Mosquito Hill a prominent topographic high is developed over silicified shale and siltstone, and centred over a positive magnetic annulus interpreted to be a Carbo-Permian ring dyke. Liontown Resources' rock chip sampling has reported significant arsenic and antimony anomalism, with trace silver, from selected breccia zones in the siltstone. These are interpreted to represent the possible top of a vertically zoned breccia system, with potential gold enriched zones developed at depth beneath this cap, as is observed in Mt Wright breccia system at Ravenswood.
- 7. Target G-22 (Mt Redan) a prominent ridge is developed along a Carbo-Permian basinbounding fault where sampling of narrow breccias in Seventy Mile Range Group sediments and overlying younger conglomerates has reported values to 1920 parts per million arsenic and 130.5 parts per million antimony. This zone lies marginal to a distinct intrusive-style magnetic signature (Figure 3).



Figure 3: G-22 (Mt Redan) target on Reduced to Pole magnetics.

The younger conglomerates are of probable basal Drummond Basin age, suggesting potential for epithermal mineralisation analogous to that at the nearby multi-million ounce Pajingo gold deposit.

8. Target G-17 - a significant remanently magnetised low (Figure 4) is associated with a felsic dyke swarm containing high antimony and tungsten values associated with low order gold values in historical soil sampling, with small gold workings mapped along strike to the west. Further work is warranted in this system.



Figure 4: G-5 and G-17 targets on Reduced to Pole magnetics.

9. Sunset Prospect - Liontown Resources' sampling has outlined an extensive zone of molybdenum mineralisation associated with brecciated and veined, silica-sericite altered quartz porphyry interpreted to be of Carbo-Permian age. The molybdenum anomalism may reflect the core of a breccia related mineralised system, and further exploration is warranted around the flanks of the porphyry for gold or copper mineralised parts of the system.

Sixteen blocks of stratigraphy prospective for VHMS style base metal and gold mineralisation have also been identified within Liontown Resources' tenure. These targets are in addition to those previously reported around the Liontown Prospect area. The regional targets include possible newly identified thrust repeats of the prospective Mt Windsor Volcanics/ Trooper Creek volcanic packages. At this stage the regional targets are necessarily large, and will require further refinement to reduce the target areas.

Further follow-up of these targets in addition to others not checked in the initial program is planned to commence immediately.

The results of this initial follow up and ground truthing of what were essentially conceptual targets has confirmed the Company's belief that its tenements hold exciting gold potential in addition to the well known base metal potential. The Company is looking forward to its ongoing field programmes rapidly defining further gold prospects that will provide a focus for future drilling.



Figure 5: Schematic showing vertical zonation through a breccia-hosted gold deposit, based on the Mosquito Hill Prospect.

2.0 Liontown Mineral Resource at the Mount Windsor Volcanics Project (Liontown 100%)

In December 2007, independent consultants, McDonald Speijers provided an initial Indicated and Inferred JORC Mineral Resource estimate for the Liontown Deposit of **1.85 million tonnes at 7.5% zinc**, **2.4% lead**, **0.6% copper**, **28 g/t silver and 0.6 g/t gold**. This equates to 138,750 tonnes of contained zinc metal, or 194,250 tonnes of contained zinc-lead-copper metal.

In addition to the exciting gold potential highlighted above, the Mount Windsor Volcanics Project remains highly prospective for base metals. The project features substantial coverage of the Thalanga and Waterloo Horizons, which host major base metal mineralisation and past producing mines. Targets identified in the recent regional geophysical interpretation include possible newly identified thrust repeats of the prospective Mt Windsor Volcanics/ Trooper Creek package. At this stage the regional targets are necessarily large, and further work is planned to identify high priority target zones for follow up.

3.0 Sheep Mountain Copper Molybdenum Project, USA (Liontown option to acquire 100%)

Following the announcement to ASX on January 23, 2009, of an independent initial Mineral Resource estimate 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's copper and 31 million lb's of molybdenum), the Company has focussed on consolidating its land position in the Sheep Mountain area.

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During the quarter, a further 59 hard rock claims have been staked, comprising an additional 536 Ha. This significantly adds to our position in the district, which now totals 1645 Ha covering the supergene resource quoted above plus large parts of the underlying primary porphyry copper-molybdenum mineralisation. It also covers possible strike extensions of the system to the north-east where epithermal style veins have been identified by the Company's consultant geologists.

4.0 Corporate

The Company has approximately \$1.0 million cash at bank at 30 June 2009. Please refer to the attached quarterly cash flow for the quarter ended 30 June 2009.

Yours faithfully

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Dr Douglas A Jones Managing Director 23 July 2009

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.

The resource estimation and associated work related to the Liontown Deposit and described above has been carried out by Diederik Speijers of McDonald Speijers. Mr Speijers is a Fellow of the Australasian Institute of Mining and Metallurgy and has the necessary experience in deposits of similar style to Liontown to be considered as a Competent Person under the December 2004 edition of the JORC Code and consents to the release of information in the form and context in which is appears here.

Appendix 5B

Rule 5.3

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")

30 JUNE 2009

Consolidated statement of cash flows

COL	sonualcu statemen	t of cash nows	r	·
	Cash flows related to op	perating activities	Current quarter \$A	Year to date (12 months) \$A
1.1	Receipts from product sal	es and related debtors	-	-
1.2	•	loration and evaluation	(196,505)	(1,802,009)
		velopment	-	-
		duction ninistration	(48,406)	(717,010)
1.3	Dividends received	linistration	(40,400)	(/1/,010)
1.4		f a similar nature received	1,845	42,343
1.5	Interest and other costs of			
1.6	Income taxes paid	I I I I	-	-
1.7	Other – Goods and Service	ces Tax (net)	(3,259)	30,542
	Net Operating Cash Flo	ws	(246,325)	(2,446,134)
	Cash flows related to in	vesting activities		
1.8	Payment for purchases of		_	-
	.,	(b)equity investments	-	-
		(c)other fixed assets	-	(12,498)
1.9	Proceeds from sale of:	(a)prospects	-	1,582,500
		(b)equity investments	-	-
		(c)other fixed assets	35,000	137,237
1.10	Loans to other entities		-	-
1.11	Loans repaid by other ent		-	-
1.12	Other (provide details if r	naterial)	-	-
	Net investing cash flows		35,000	1,707,239
1.13	Total operating and inves	ting cash flows (carried		
	forward)		(211,325)	(738,895)

⁺ See chapter 19 for defined terms.

Current quarter

1.14 1.15 1.16 1.17 1.18 1.19	Cash flows related to financing activities Proceeds from issues of shares, options, etc. (net) Proceeds from sale of forfeited shares Proceeds from borrowings Repayment of borrowings Dividends paid Other	867,107 - - - 1,446	1,183,357 (157,632) (2,433)
	Net financing cash flows	868,553	1,023,292
	Net increase (decrease) in cash held	657,228	284,397
1.20 1.21	Cash at beginning of quarter/year to date Exchange rate adjustments to item 1.20	362,545	735,376
1.22	Cash at end of quarter	1,019,773	1,019,773

Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		\$A
1.23	Aggregate amount of payments to the parties included in item 1.2	106,424
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 1.9a is the proceeds for the sale of the Cowan Nickel project tenements to Pindan Exploration Company Pty Ltd.

Item 1.9c is the proceeds for the sale of motor vehicles.

Item 1.23 consists of legal fees paid to a director for the provision of legal services (\$8,400), the net salary and superannuation paid to the Managing Director (40,713) and service charges paid to a director related entity (Chalice Gold Mines Limited) for the provision of corporate services, office rent and technical personnel (\$57,311). 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

 N/A
- 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

⁺ See chapter 19 for defined terms.

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

	Total	\$195,000
4.2	Development	Nil
4.1	Exploration and evaluation	195,000
		\$A

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	1,009,457	362,545
5.2	Deposits at call	10,316	-
5.3	Bank overdraft	-	-
5.4	Other (Bank Guarantee)	-	-
	Total: cash at end of quarter (item 1.22)	1,019,773	362,545

Changes in interests in mining tenements

6.1	Interests in mining	Tenement reference	Nature of interest (note (2))	Interest at beginning of	Interest at end of
	tenements			quarter	quarter
	relinquished,				
	reduced or lapsed				
		EPM17309	Application withdrawn	0%	0%
		EPM17630	Application withdrawn	0%	0%
6.2	Interests in	Tenement	Nature of interest	Interest at	Interest at
	mining tenements	reference	(note (2))	beginning of	end of
	acquired or			quarter	quarter
	increased				
		EPM18147	Application	0%	0%
		EPM18148	Application	0%	0%
		EPM18151	Application	0%	0%
		EPM18154	Application	0%	0%
		•		•	

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(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	Amount paid up per
			Ĩ	security (see note 3) (cents)	security (see note 3) (cents)
7.1	Preference	Nil	Nil	N/A	N/A
	+securities				
	(description)				
7.2	Changes during	N/A	N/A	N/A	N/A
	quarter				
	(a) Increases				
	through issues (b) Decreases				
	through returns of				
	capital, buy-				
	backs.				
7.3	+Ordinary	187,200,018	187,200,018	N/A	N/A
	securities				
7.4	Changes during				
	quarter				
	(a) Increases	Nil	Nil	N/A	N/A
	through issues	N1:1	NT:1	NT/A	NT/A
	(b) Decreases through returns of	Nil	Nil	N/A	N/A
	capital.				
7.5	+Convertible	Nil	Nil	N/A	N/A
	debt securities				
	(description)				
7.6	Changes during	Nil	Nil	N/A	N/A
	quarter				
	(a) Increases				
	through issues				
	(b) Decreases				
	through securities matured.				
7.7	Options			Exercise price	Expiry date
	Share Options	4,825,000	Nil	\$0.25	18.12.2009
	1	1,500,000	Nil	\$0.25	31.12.2009
		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 3,000,000	Nil Nil	\$0.20 \$0.20	31.07.2013 02.12.2013
7.8	Issued during	3,000,000	1111	φ0.20	02.12.2013
7.0	quarter				
	Share Options	Nil	Nil	N/A	N/A
7.9	Exercised during	Nil	Nil	N/A	N/A
	quarter				
7.10	Expired/Forfeited during quarter	Nil	Nil	N/A	N/A
7.11	Debentures (totals only)	Nil	Nil		1
7.12	Unsecured notes	Nil	Nil	1	
	(totals only)	1,11	1,11		

⁺ 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.

1/ Hucker

Date: 23 July 2009

Company Secretary

Print name: Richard Hacker

Notes

Sign here:

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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