

Highlights

Mount Windsor Joint Venture Project (North Queensland)

- IP geophysical surveys completed at three priority prospects as exploration work ramps up at Mount Windsor
- Anomalies consistent with alteration systems that may be associated with gold mineralisation defined at all three prospects.
- Drill testing of the newly identified IP targets commenced late in the Quarter with deep (>350m) diamond core holes completed at **Mosquito Hill** and **Mt Redan**.

Panhandle Project (North Queensland)

- Acquisition of an additional granted EPM increased the total area of the 100%-owned Panhandle Project to approximately 1,150km².
- Fieldwork commenced on the Project with initial work validating the anomalous gold and silver results of previous explorers.
- Extensive alteration systems typical of breccia-hosted or epithermal gold systems identified by reconnaissance mapping, with follow-up soil sampling completed over a number of areas and planned for others.
- Possible alteration system identified at depth by an IP survey at the **Quartz Ridge prospect**, possibly related to the source of high-grade, gold-silver mineralised vein float.

1.0 Overview

During the September Quarter, Liontown Resources continued to focus on exploration activities in the North Queensland region with exploration programs undertaken at both the Mt Windsor Joint Venture Project (MWJVP) and 100%-owned Panhandle Project (see *Figure 1*).

At Mt Windsor, IP geophysical surveys identified a number of targets which are currently being tested by deep diamond drilling.

At Panhandle, reconnaissance work confirmed the results obtained by previous explorers and follow-up mapping, soil sampling and geophysical surveys commenced with early observations indicating the presence of extensive alteration systems that may be related to gold mineralisation. Exploration on both projects is targeting large-scale breccia-hosted and low sulphidation epithermal gold systems similar to those already discovered and mined in the region.

In North Queensland, Liontown's granted and exclusive EPM applications cover an area of approximately 5,000km², making the Company one of the largest tenement holders in the region.

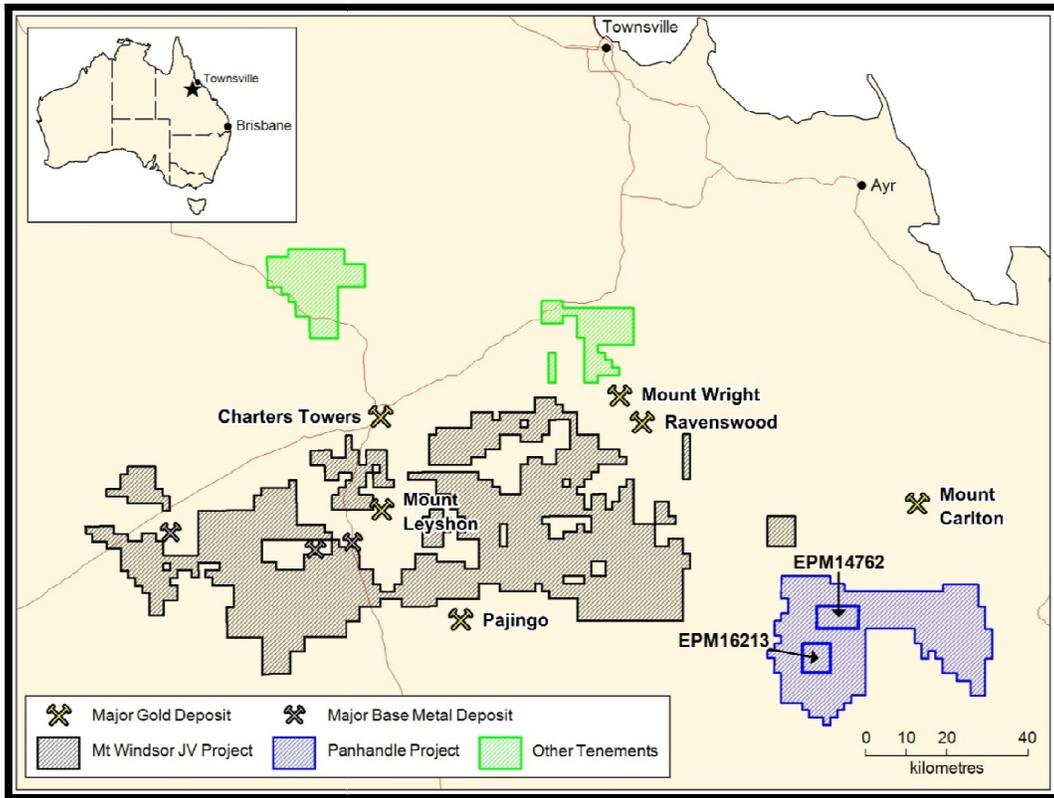


Figure 1: Liontown tenure in North Queensland.

The Company also assessed a number of more advanced exploration properties in Australia and Africa for possible acquisition. A number of these warrant more detailed analyses and reviews are continuing.

2.0 Mount Windsor Joint Venture Project (Liontown 100%, Ramelius earning 60%)

The Mount Windsor Joint Venture Project comprises an extensive tenement package located in the prolific Charters Towers gold field of North Queensland (see Figure 2) which has yielded over 15 million ounces of gold from world-class mines such as Charters Towers (+6Moz), Kidston (+4Moz), Pajingo (+3Moz), Ravenswood (+2Moz) and Mt Leyshon (2.7Moz). In April 2010, Liontown entered into a Joint Venture agreement with ASX-listed gold company Ramelius Resources Limited (Ramelius; ASX: RMS) under which Ramelius can earn up to a 60% interest in the Mt Windsor Project by spending \$7 million over 4 years with a minimum commitment of \$1.25 million in the first year.

The level of exploration activity at Mt Windsor increased substantially during the Quarter with the manager of the Joint Venture, Ramelius Resources, completing Induced Polarisation (IP) geophysical surveys over three priority prospects (G14, G20, G22) and commencing drill testing of the targets defined by the surveys.

The IP surveys were designed to define chargeable and/or resistive anomalies more than 100m below the surface that may be associated with gold-mineralised alteration systems. Chargeable anomalies can be caused by disseminated sulphide minerals while resistive responses are caused by quartz veining or strong silica alteration. IP anomalies warranting drill testing were defined at all three prospects.

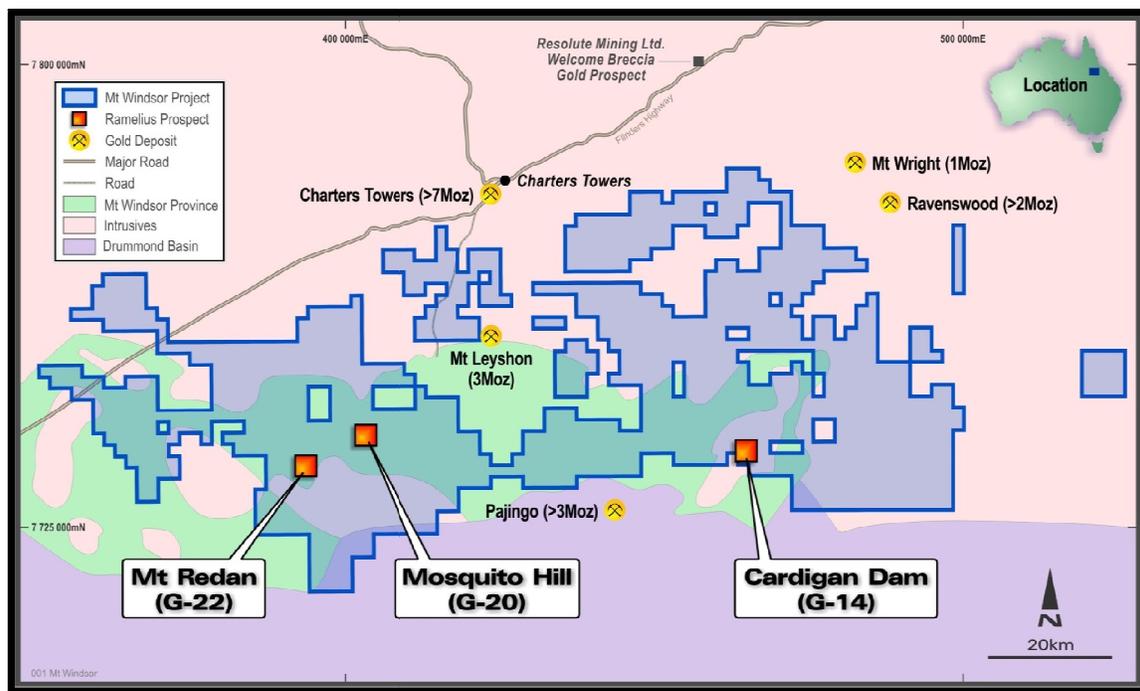


Figure 2: Mt Windsor Gold Project - Regional Geology and Priority Prospects

Target G-14 (Cardigan Dam)

The G-14 prospect was originally defined by a large (1.6 x 0.5km), high-order (>500ppb), silver-in soil anomaly coincident with a discrete magnetic low. The magnetic low is caused by a rhyolite breccia intruding granite; a geological setting analogous to the plus 1Moz Mt Wright gold deposit located 50km to the north northeast.

The IP defined several shallow resistive and chargeable responses, one of which is spatially related to the eastern contact of the rhyolite breccia and the silver anomaly (see Figure 3). An RC drill program is planned to test the prospect before the end of the year.

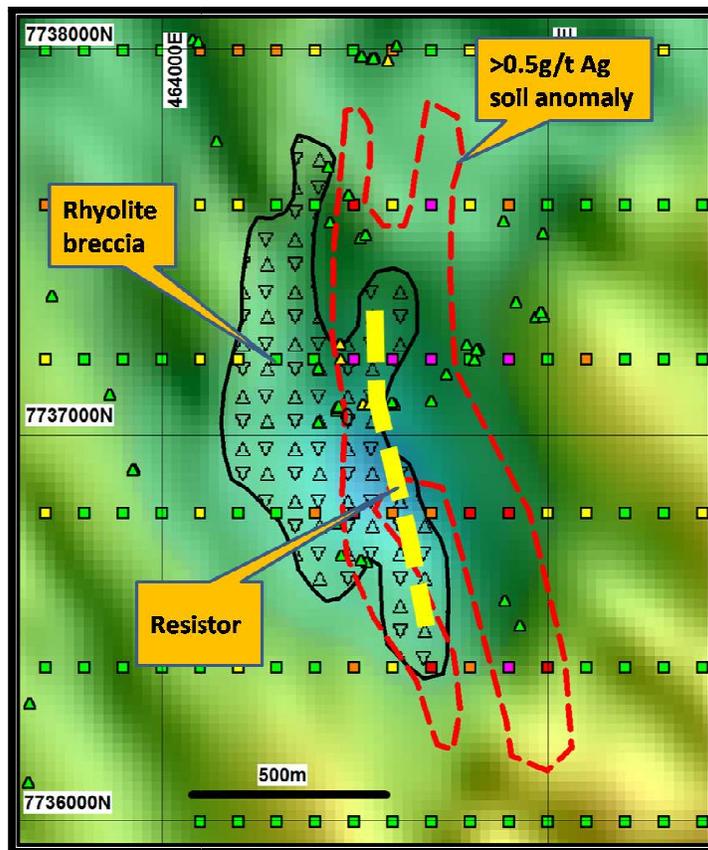


Figure 3: Magnetic image of G-14 prospect showing rhyolite breccia, soil anomaly and coincident resistive response

Target G-20 (Mosquito Hill)

The G-20 prospect comprises a low-order but anomalous pathfinder geochemical anomaly associated with a topographic high and circular/ring like magnetic feature. The IP survey defined two strong chargeable responses 200m below the surface, one vertically below the hill and another located below the northern margin of the magnetic ring (see Figure 4).

One diamond core hole (MHD0001) was drilled during the Quarter to test for the source of the chargeable response beneath the hill and a second hole is planned to test the anomaly under the margin of the magnetic ring feature.

MHD0001 was drilled to 384.7m depth and intersected pyritic shale from approximately 300m which adequately explains the cause of the chargeable anomaly. Samples for the entire hole have been submitted for analyses with results pending.

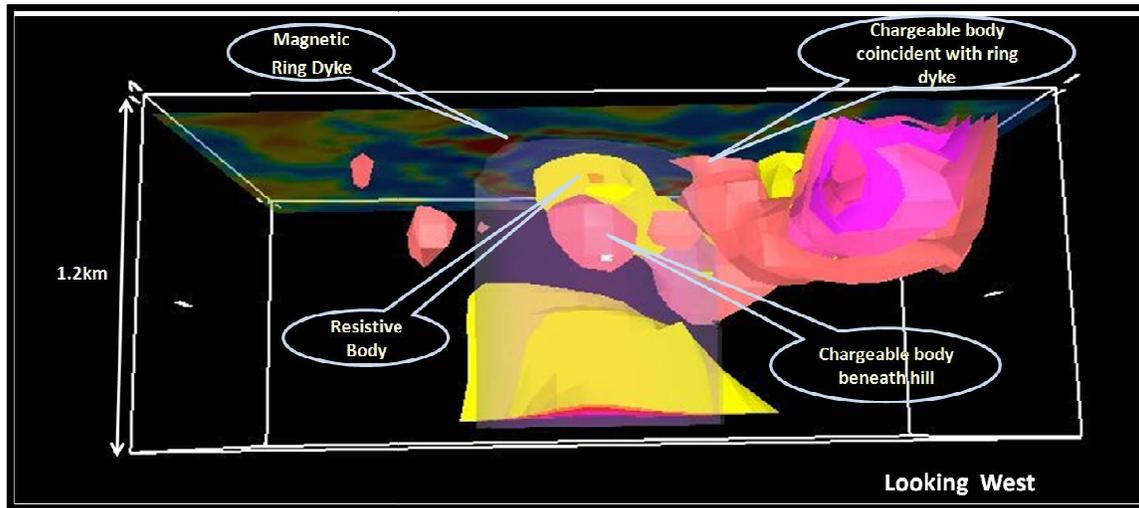


Figure 4: 3D IP image showing chargeable and resistive anomalies beneath G-20 prospect

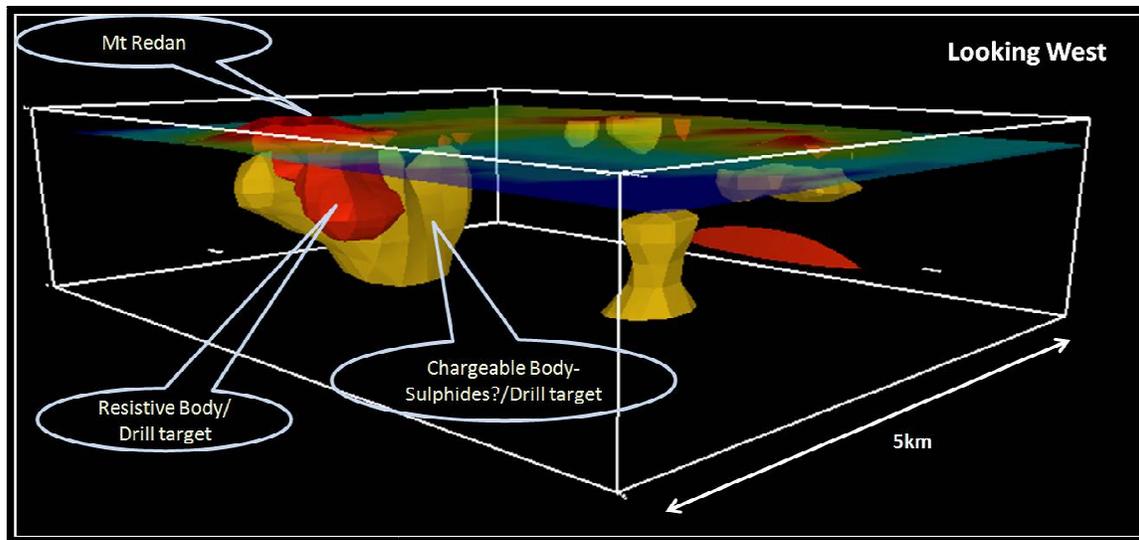


Figure 5: 3D IP image showing chargeable and resistive anomalies beneath G-22 prospect

Target G-22 (Mt Redan)

The G-22 prospect is not underlain by an obvious related magnetic feature; however, reconnaissance work recorded anomalous pathfinder geochemistry and follow-up soil sampling defined a large (2x2km), strong arsenic-antimony-mercury anomaly on the north eastern flank of Mt Redan, a distinct topographic high.

The IP survey defined two strong responses 150-250m below surface: a 1.6km long, northeast trending chargeable zone beneath the peak of Mt Redan and a 600m long resistive zone, up to 250m wide which straddles the south-eastern part of the chargeable zone immediately beneath the core of the soil anomaly (see Figure 5).

A 525.6m diamond core hole (MRDH0001) was completed into the strongest part of the chargeable zone subsequent to the end of the Quarter. The hole intersected mainly sediments in the top 380 metres followed predominantly by rhyolite until the end of the hole. Minor but multiple zones of veining and brecciation with associated sulphides including pyrite, sphalerite and galena have been reported from the hole.

The data is currently being assessed to determine whether the cause of the geophysical anomaly has been adequately explained. Samples for the entire hole have been submitted for analyses with results pending.

A diamond core hole (MRDH0002) targeting the resistive anomaly also commenced subsequent to the end of the Quarter.

3.0 Panhandle Project (Liontown 100%)

The Panhandle Project (formerly referred to as the Burdekin Project) is located in North Queensland and is considered prospective for a number of different styles of gold deposits similar to those found elsewhere in the region at Pajingo, Mt Leyshon, Mt Wright and Mt Carlton.

The 100%-owned Project, which was established last Quarter, is located approximately 150 kilometres south-southeast of Townsville and 40 kilometres east of the MWJVP (Figure 1). The Project consists of 6 EPMs (Figure 6) including four applications (EPMS 18269-18271, 18690) and two granted tenements (14762 and 16213). The Company acquired EPM 16213 during the Quarter from Sexton Developments Pty Ltd for consideration comprising 1,000,000 Liontown shares.

Fieldwork commenced on the Project during the Quarter with the initial phase of work designed to validate previous exploration results on EPM14762 and EPM16213 and then define targets for drill testing.

EPM14762

Previous exploration on EPM14762 has defined a conglomerate-filled, fault-bound basin containing extensive epithermal quartz veining (the Quartz Ridge Prospect) and two areas containing high level epithermal “sinters” (the Sinter and NW Sinter Prospects) - old hot spring deposits characteristic of the tops of well preserved epithermal gold deposits.

Mapping at Quartz Ridge had defined two epithermal vein systems: a dominant, well-exposed northwest trending set within the conglomerate and a poorly exposed northeast trending set associated with the eastern margin of the basin.

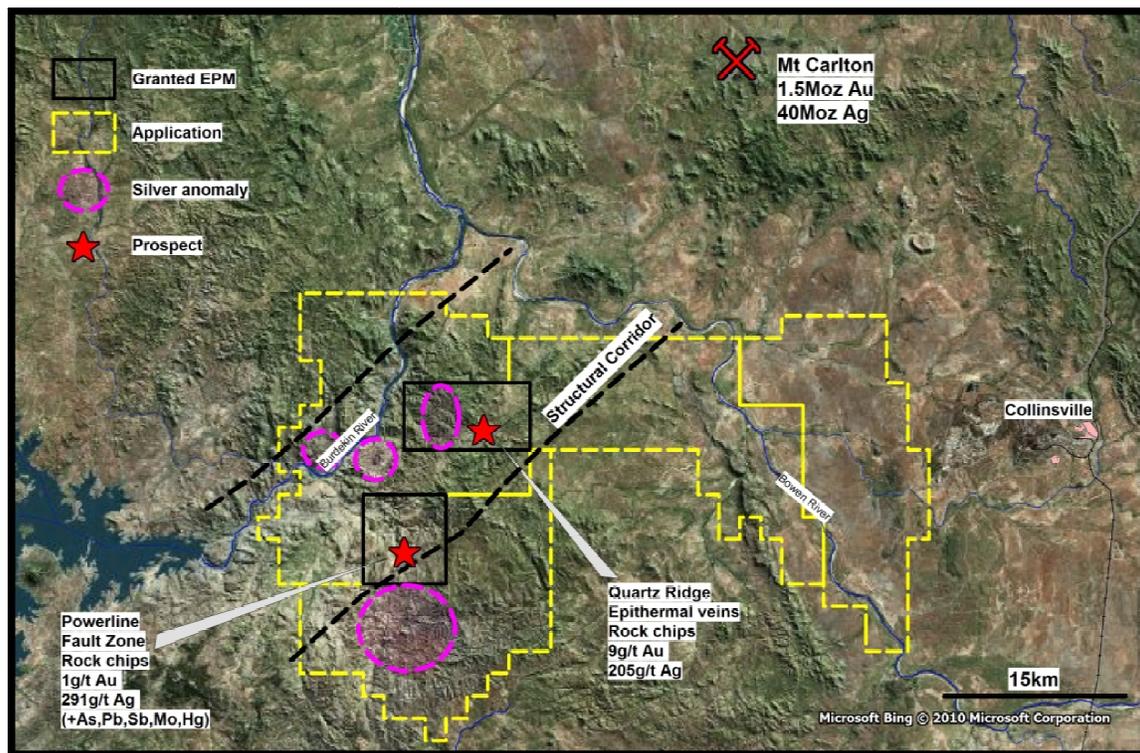


Figure 6: Aerial photograph of Panhandle Project showing main prospects.

Sampling of the northwest trending veining did not return any significant gold values; however, the quartz vein float defining the northeast trend reported multiple samples returning plus 1g/t gold values (up to 9.5g/t) and strongly anomalous silver (up to 201g/t) over a 150 metre strike.

Five historic drill holes are reported for Quartz Ridge, principally testing the northwest trending vein systems within the conglomerate. No significant mineralisation was intersected; however, minor, narrow (<0.5m) epithermal veins were reported containing up to 52g/t silver, within a broader halo of silver-arsenic anomalous alteration.

In order to better locate the source of the north-east trending vein float and define the northwest trending veining within and below the conglomerate, Liontown completed an IP survey across the basin structure. The IP survey, which comprised eight lines covering 1km of strike, defined a northeast trending, strongly resistive body approximately 100m below the surface in faulted contact with a non-resistive, possible clay altered zone and offset less than 100m northwest of the mineralised float samples (Beta Zone/Figure 7).

This combined structural/alteration zone was not tested by previous drilling and represents an immediate drill target.

Alteration mapping was also undertaken at the Quartz Ridge, Sinter and Northwest Sinter prospects during the Quarter. The results support the original interpretation that Quartz Ridge area is proximal to an epithermal system while the other prospects are more distal.

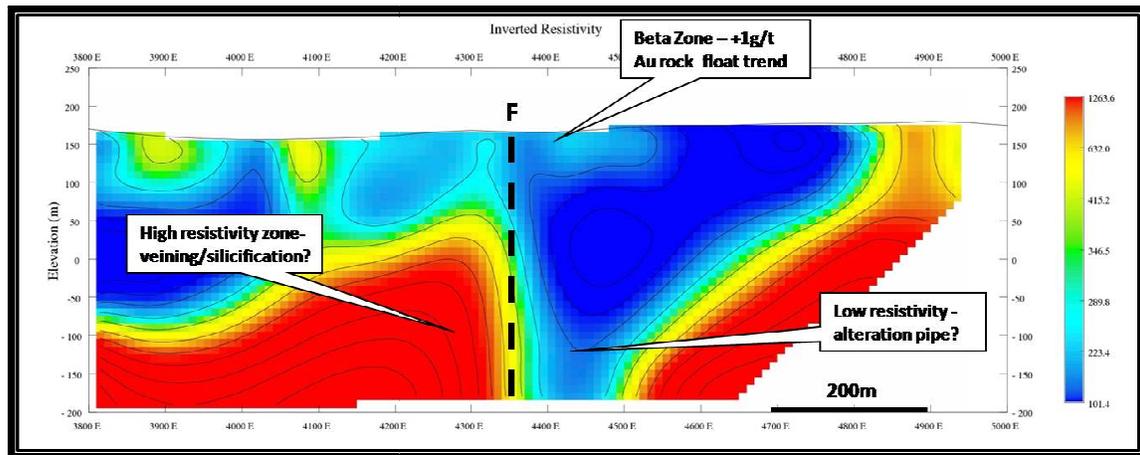


Figure 7: IP section from Quartz Ridge showing possible structure and alteration zone at depth beneath mineralised vein float.

A review of previous explorer’s soil and stream geochemistry indicates a very high silver background within EPM14762 with numerous +100ppb values and a number of anomalous trends not yet closed off. Check, -80# soil sampling at Quartz Ridge recorded up to 21.4g/t Ag with associated gold (up to 23ppb), arsenic (up to 97ppm), antimony (up to 12ppm) and mercury (up to 106ppb), indicative of the upper part of an epithermal system.

It is apparent that the extent of the alteration system and possible associated mineralisation on EPM14762 has not yet been delineated and the Company proposes to undertake a major soil sampling program on 400 x 100m centres over a 7 x 5 km area. This program will fill in between the existing prospects and is designed define the extent of system.

EPM16213

Exploration during 1990s identified the Powerline prospect where a plus 500m long, north-south trending “shear” zone returned rock chip values up to 1.04g/t gold, 291g/t silver, 2.2% arsenic, 3.8% lead, 850ppm antimony, 560ppm molybdenum and 2.5ppm mercury (see Figure 8).

Check sampling by Liontown confirmed the strongly anomalous multi-element geochemistry; however, rather than being a “shear” zone, the mineralisation appears controlled by a north-south, faulted contact between two rhyolite units.

No follow up geochemical surveys or drilling were undertaken by previous explorers.

The contact spatially associated with the Powerline mineralisation has been traced over a strike length of 8km within EPM16213 and, during the Quarter, Liontown completed 1km spaced mapping, prospecting and soil sampling traverses to identify areas for more detailed work.

Closer-spaced soil traverses on 200m spaced lines were completed across the original zone identified by historic work. Assays are pending for all samples collected; however, the mapping recorded extensive alteration systems including clay and clay pyrite assemblages in the eastern rhyolite unit that is the probable hanging wall to the Powerline fault zone which is now interpreted as a possible feeder zone.

Further work will be planned once assays are received for the rock and soil samples.

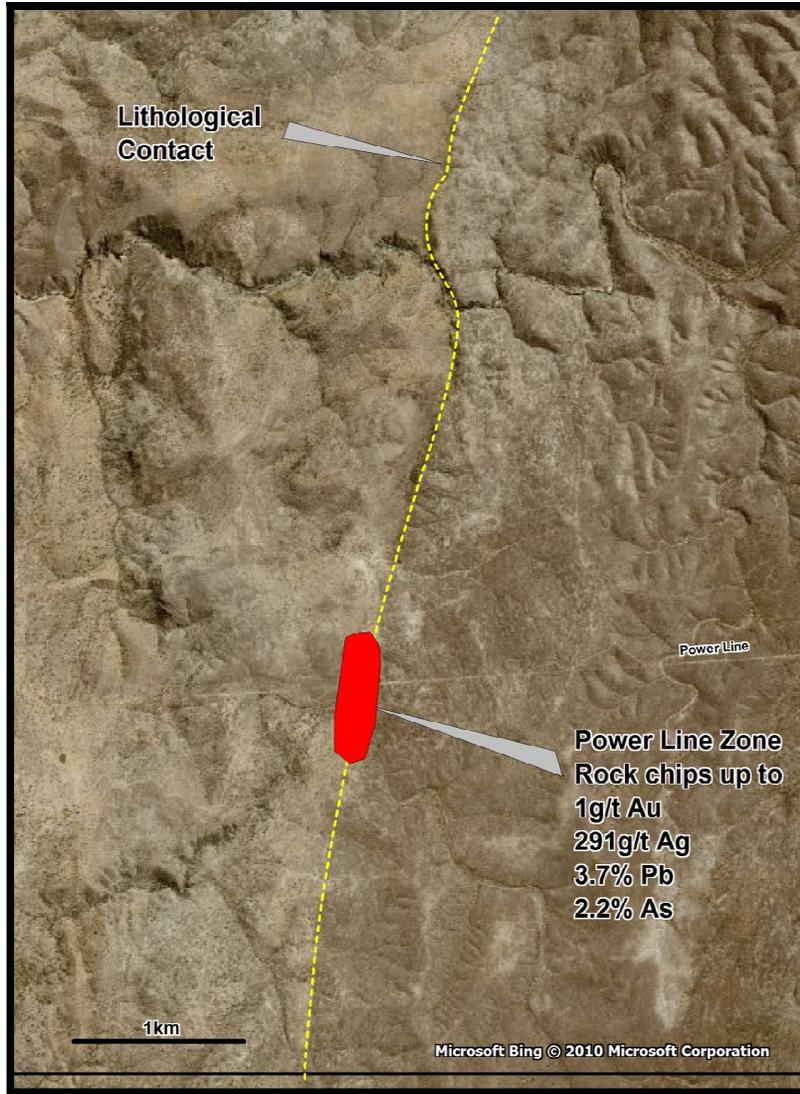


Figure 8: Aerial photograph of Powerline prospect area showing trace of mineralised contact.

4.0 Fort Constantine South (Liontown 100%)

The Fort Constantine South Project is located in the Mt Isa region of western Queensland and is subject to a Farm-in Agreement with Exco Resources Limited, which is exploring for IOCG mineralisation similar to the nearby Ernest Henry deposit.

No activity was reported during the Quarter.

5.0 Corporate

Please refer to the attached Form 5B for details of cash flow for the Quarter ended 30 September 2010.

DAVID RICHARDS
Managing Director

28 October 2010

The information in this report that relates to Exploration Results is based on information compiled by Mr David Richards, a full time employee of Liontown Resources Limited, who is a Member of the Australian Institute of Geoscientists. Mr Richards 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.

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")

30 September 2010

Consolidated statement of cash flows

	Current quarter \$A	Year to date (3 months) \$A
Cash flows related to operating activities		
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration and evaluation	(377,182)	(377,182)
(b) development	-	-
(c) production	-	-
(d) administration	(176,153)	(176,153)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	30,739	30,739
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other – Goods and Services Tax (net)	(8,260)	(8,260)
Net Operating Cash Flows	(530,856)	(530,856)
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	-	-
1.12 Other (provide details if material)	-	-
Net investing cash flows	-	-
1.13 Total operating and investing cash flows (carried forward)	(530,856)	(530,856)

+ See chapter 19 for defined terms.

Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc. (net)	-	-
1.15	Proceeds from sale of shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other	-	-
Net financing cash flows		-	-
Net increase (decrease) in cash held		(530,856)	(530,856)
1.20	Cash at beginning of quarter/year to date	3,118,760	3,118,760
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	2,587,904	2,587,904

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	189,805
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 (\$8,400), the salary and superannuation paid to the Managing Director (\$61,313) and service charges paid to a director related entity (Chalice Gold Mines Limited) for the provision for corporate services, office rent and technical personnel (\$56,760). 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 the 31 August 2010 Liantown Resources acquired tenement EPM 16213 from privately owned company Sexton Developments Pty Ltd for a consideration of 1 million shares.

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	370,000
4.2 Development	Nil
4.3 Production	Nil
4.4 Administration	185,000
Total	555,000

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	2,576,900	3,108,126
5.2 Deposits at call	11,004	10,634
5.3 Bank overdraft	-	-
5.4 Other (Bank Guarantee)	-	-
Total: cash at end of quarter (item 1.22)	2,587,904	3,118,760

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	Nil			

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

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
	EPM16213	Acquired	0%	100%
	EPM18774	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 Preference +securities <i>(description)</i>	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 +Ordinary securities	211,073,581	211,073,581	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital.	1,000,000 Nil	1,000,000 Nil	N/A N/A	N/A N/A
7.5 +Convertible debt securities <i>(description)</i>	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
7.7 Options Share Options	310,000 4,000,000 500,000 3,000,000	Nil Nil Nil Nil	Exercise price \$0.35 \$0.35 \$0.20 \$0.20	Expiry date 1. November 2010 1 December 2012 31 July 2013 2 February 2013

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

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	1,250,000	Nil	\$0.23	14 July 2010
		250,000	Nil	\$0.35	6 August 2010
		1,000,000	Nil	\$0.10	31 January 2014
7.11	Debentures <i>(totals only)</i>	Nil	Nil		
7.12	Unsecured notes <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:  Date: 28 October 2010
Company Secretary

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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