



## blackmountain resources limited

9 October 2013

Manager of Company Announcements  
Australian Securities Exchange  
Level 6, 20 Bridge Street  
Sydney NSW 2000

*By E-Lodgement*

### **Samples in newly opened up level return over 5,000 g/t silver grades**

Black Mountain Resources Limited (ASX | AIM: BMZ), the silver focused development company with interests in the US, is delighted to announce that further multiple grab samples returned up to 5,194 g/t silver grades at the Company's New Departure Silver Project located in Montana, US. Importantly the samples were taken from the newly opened up Blue Dot Level which will access both the Bonanza Zone and Main Zone historical mining blocks (see Figure 1 below) and will form a key part of production moving forward.

#### **Highlights**

- **Additional grab samples confirm bonanza silver grades of up to 5,194g/t from samples from the Blue Dot Level**
- **High grades further underpin prospectivity of the Bonanza Zone and are in line with the extensive historic data**
- **Development drives now provide access to three historic mineralisation blocks, with the main decline continuing to be developed towards the Main Zone**
- **Increased silver recoveries to over 85% from optimized flotation metallurgical testing anticipated to improve to over 90% recovery in the near term**
- **Potential for CIL with tests yielding 89.51% silver recovery with low NaCN and lime consumption**
- **First phase of underground surveying completed**
- **3-D mine model being finalised with results expected in the coming weeks**

Black Mountain Chairman Pete Landau said, *"We are delighted with the consistent high silver grades being returned from grab samples from all of the targeted zones at our New Departure project. The results are in line with the extensive historic data and underpin our high grade, low cost production model which we are working towards in the near term. We look forward to providing further updates on the completion of metallurgical testing, toll treat arrangements, the 3-D mine model and commencing development ore over the coming weeks. These will represent key milestones as we focus on first cash flow from the New Departure Silver Project."*

#### **High Grade Silver Sample Results**

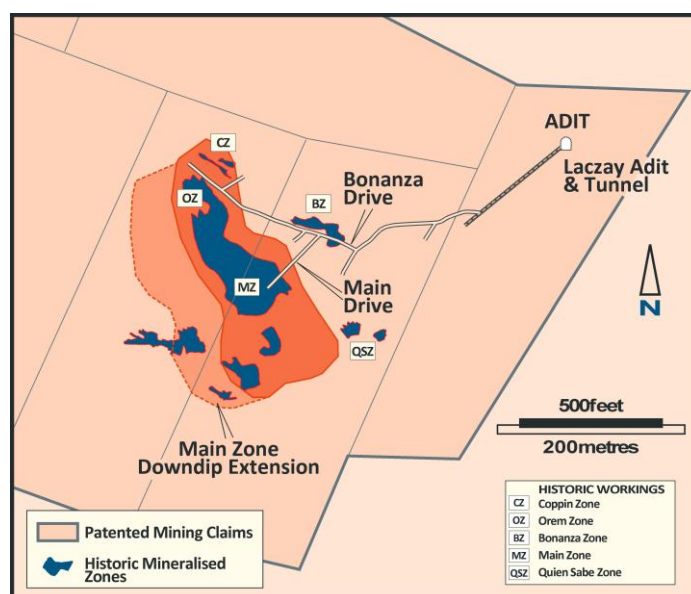
The recent samples were collected at the Blue Dot level from the Bonanza Zone, which was initially entered through the eastern area from beneath the historic workings. The drive has been continued through the

historic Bonanza Zone opening access to various levels of historic workings, including the Blue Dot level. These high grade silver results further underpin the project's credentials and are in line with the extensive historic data available for the New Departure Silver Project.

Grab Sample	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Location
432651	0.155	2,814.9	0.628	2.12	4.32	Blue Dot Level
432654	0.28	780.7	0.083	0.66	0.596	Blue Dot Level
432657	0.653	4,914.3	0.824	5.88	2.94	Blue Dot Level
432658	0.28	1,993.7	0.272	1.96	1.51	Blue Dot Level
432660	0.933	5,194.3	0.984	3.1	4.56	Blue Dot Level
432662	NA	1,334.3	0.156	0.66	0.282	Blue Dot Level

*Table: Sample results from the Blue Dot Level. The tabulated grab samples are 6 face samples of visual mineralisation - 5 additional control and test samples were taken having lower or insignificant grades*

In recent months, the Company has undertaken a comprehensive sampling programme, underground and surface surveying, and geologic mapping which, in conjunction with new drifts being developed, have opened access to various levels of historic workings to enable greater and more cost effective access to known historic mineralization zones as well as new mineralization areas. As a result of significant progress made so far, the development drives now access three historical mineralisation blocks, in addition to the decline currently being developed towards the Main Zone.



*Figure 1: New Departure Silver Project*

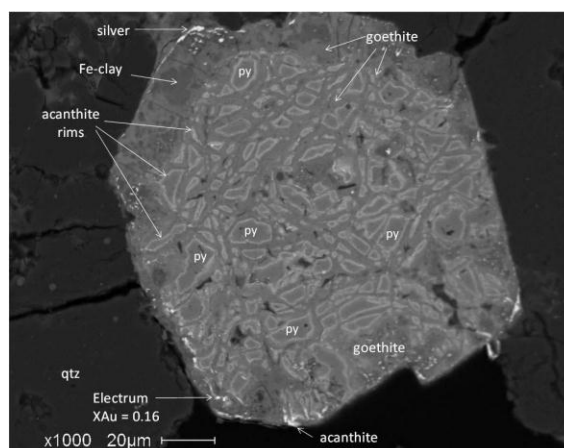
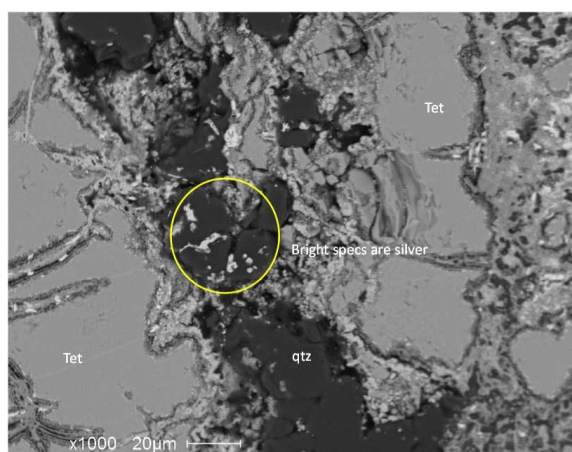
The latest grab sample results follow on the back of previous results from sampling at the historic Coppin and Bonanza Zones, which reported grades of up to 3,452 g/t and 1,684 g/t, respectively (refer to previous announcements made on 1 August 2013 and 27 June 2013 for full result details).

### **Increased Silver Recoveries of Over 85% from Optimized Flotation Metallurgical Testing**

As previously announced, the initial phase of metallurgical test work was completed and yielded up to 79% silver recovery, producing 359 oz/t (11,160 g/t) silver concentrate from flotation processing. Following

optimization of reagents and gravity separation of tails, the Company is very pleased to report that the results show the flotation test improved to around 85% silver recovery.

A representative composite sample selected from a 500lb (227kg) bulk sample extracted from the upper Coppin Ore Zone on which flotation and bottle roll cyanide leach testing was undertaken to determine the potential recovery. The material comes from the upper mine workings where the ore zone is strongly oxidised and is composed of silver chlorides and base metal carbonates. A mineralogy study was undertaken to characterize the Coppin Zone material that was used for the metallurgical testing. Ore minerals were identified using scanning electron microscopy, reflected light and thin section petrographic analysis. Results show that silver from the New Departure mine occurs as acanthite, tetrahedrite, native silver and electrum. The study aids in the identification of ore and in the selection of mineral processing routes and parameters.



*Figures 2 and 3: Images from New Departure's ore mineralogy study*

The Company anticipates flotation recoveries to improve further (to over 90%) as the mining operations move into fresh sulphide zones where the bulk of the historic ounces are contained, as opposed to older oxidised areas where the bulk samples were taken.

The Company is currently completing metallurgical testing in order to finalise toll treat arrangements with nearby mills, as well as completing 3-D geological mapping, which will be announced to the market shortly.

For and on behalf of the Board



Peter Landau  
Executive Chairman

For further information please visit [www.blackmountainresources.com.au](http://www.blackmountainresources.com.au) or contact:

**Black Mountain Resources Limited**

Shannon Robinson  
Executive Director | Corporate Relations  
E: [shannon@blackmountainresources.com.au](mailto:shannon@blackmountainresources.com.au)  
T: +61 (8) 9488 5220

**Black Mountain Resources Limited**

Eva Bezruchko  
Investor Relations  
E: [eva@blackmountainresources.com.au](mailto:eva@blackmountainresources.com.au)  
T: +44 (0) 207 025 7040

**Media (Australia)**

PPR  
David Tasker  
T: +61 (8) 9388 0944

**Media (UK)**

St Brides Media & Finance Limited  
Elisabeth Cowell  
T: +44 (0) 207 236 1177

**Joint Broker (UK)**

Westhouse Securities Limited  
Martin Davison  
T: +44 (0) 20 7601 6100

**Joint Broker (UK)**

Xcap Securities  
Jon Belliss  
T: +44 (0) 203 216 2630

**Nominated Advisor (UK)**

RFC Ambrian Limited  
Stuart Laing  
T: +61 (8) 9480 2500

**About Black Mountain Resources Limited**

Black Mountain Resources Limited is a dual listed (ASX | AIM: BMZ) silver and gold focused development company focussed on the advancement of three highly prospective previously operating assets located in two of the world's most developed and proven silver and gold mining regions of Idaho and Montana, USA.

The Company holds a 70% interest in the New Departure Silver Project, the Conjecture Silver Project and the Tabor Gold and Silver Project pursuant to 45 year leases from Chester Mining Company, Lucky Friday Extension Mining Company and Brush Prairie Minerals respectively. Black Mountain plans to implement low cost production and development programmes across all three assets. It is also implementing exploration programmes to capitalise on the exploration upside potential apparent across its portfolio.

Black Mountain Resources Limited was incorporated on 29 October 2010 and is listed on the Australian Securities Exchange (ASX) and London's AIM Market – trading codes BMZ and BMZO.

**Competent Persons Statement**

The information included in this release that relates to historical mining data and exploration results is based on information compiled by Mr. Gregory Schifrin, a technical consultant to the Company. Mr. Schifrin has worked as a geologist in exploration and mine development for 29 years in precious and base metal exploration and is a professional member (SME Registered Member) of the Society of Mining, Metallurgy and Exploration (SME) #4053449, a 'Recognized Overseas Professional Organization' ('ROPO') included in a list promulgated by the ASX from time to time. Mr. Schifrin has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which 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'. Mr. Schifrin has reviewed this release and consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.

**Forward Looking Statement**

Certain statements made during or in connection with this communication, including, without limitation, those concerning the economic outlook for the silver market, expectations regarding silver ore prices, production, cash costs and other operating results growth prospects and the outlook of the Company's operations including the likely commencement of commercial operations of the New Departure and Conjecture Silver Projects, its liquidity and the capital resources and expenditure, contain or comprise certain forward-looking statements regarding the Company's

development and exploration operations economic performance and financial condition. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in silver ore prices and exchange rates and business and operational risk management. For a discussion of such factors refer to the Company's most recent annual report and half year report. The Company undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.