

## QUARTERLY REPORT



### Three Months Ending: 30 June 2012

ASX CODE: MZM  
ISSUED SHARES: 67.66M  
52 WEEK HIGH: \$0.80  
52 WEEK LOW: \$0.16  
CASH ON HAND: \$6.86M

#### CONTACT:

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#### BOARD:

Seamus Cornelius: Chairman  
Justin Brown: MD  
John Ribbons: Non-Exec

#### KEY PROJECTS:

BUTCHERBIRD (100%)  
Manganese, Copper

PEAK HILL (85-100%)  
Gold

DURACK (85%)  
Gold, Copper (VMS)

MT PADBURY (100% of gold)  
Gold, Manganese, Iron

#### KEY SHARE HOLDINGS:

AUVEX MANGANESE LTD  
3,750,000 FPO Shares

BUXTON RESOURCES LTD  
4,762,500 FPO Shares

LITHEX RESOURCES LTD  
1,525,000 FPO Shares

EXTERRA RESOURCES LTD  
2,000,000 FPO Shares

## HIGHLIGHTS

### BUTCHERBIRD MANGANESE:

- Further bulk sampling programme completed to refine the Company's understanding of the high grade surface manganese mineralisation at Bindi Bindi Hill (BBH) and Cadgies Flats (CF).
- Multiple studies completed, commenced, or scheduled to underpin mining approval applications.
- Native Title negotiations initiated in relation to Mining Lease and Miscellaneous Licence applications over the planned Stage 1 Direct Shipping Ore (DSO) production areas at BBH.

### BUTCHERBIRD COPPER:

- RC drilling programme targeting a number of second order IP anomalies completed comprising 12 holes for 3,182m.
- No new zones of mineralisation discovered, however overall results to date confirm the known strike of **high grade copper mineralisation of over 600m**.
- **Mineralisation is open in all directions.**
- Detailed analysis of results to date currently underway, with follow up work to be undertaken in the coming Quarter.

### YALBRA GRAPHITE:

- Completed a deal with Buxton Resources Ltd (Buxton) to dispose 85% of the Yalbra Graphite Project in the North West Gascoyne region of Western Australia.
- Montezuma received 1,000,000 additional Buxton shares in consideration for the sale.

## BUTCHERBIRD (100%)

The Butcherbird Project straddles the Great North Highway approximately 120km south of Newman. Work to date has identified both copper and manganese mineralisation and work is ongoing to assess the commercial potential of these discoveries and to explore for additional deposits within the province.

### BUTCHERBIRD MANGANESE

The Butcherbird Project hosts the largest onshore manganese occurrence in Australia and is further enhanced by its location which straddles the Great Northern Highway and the Goldfields Gas Pipeline.

The manganese mineralisation at Butcherbird occurs in shallow flat lying zones with the ore occurring as discrete high grade bands interbedded with clay waste. These zones are often overlain by a cap of high grade ore which is being targeted as potential DSO material.

The style of the mineralisation at Butcherbird is amenable to relatively low cost beneficiation which contributed to the positive outcome of a Scoping Study completed in 2011.

Feasibility Studies have commenced with aim of confirming the viability of the deposits to provide substantial tonnes of commercial grade manganese oxide ore for export. Production is envisaged in two stages; Stage 1 will exploit the DSO ore identified at several areas within the project, commencing at Bindi Bindi Hill. Bulk sampling studies completed in the previous quarter have demonstrated that the DSO material can produce a high grade concentrate in excess of 40% Mn. Stage 2 will target larger scale production (0.5-1.0Mt p/a) from the larger beneficiable zones of mineralisation at the various resource areas.





## **BULK SAMPLING**

During the Quarter a second round of bulk sampling was undertaken to assess the size and processing characteristics of the BBHDSO body. The program was designed to gather the following information:

1. The depth, nature and lateral extent of the ore body;
2. The continuity of the ore body and the consistency of the grade;
3. The effect of different processing methods (Wet vs. Dry screening); and
4. The bulk in-situ density of the ore body.

Over the course of two weeks thirty four test pits were completed. The pits were spread mostly over BBH but five pits were spread over CF as a preliminary investigation of the area's potential.

The pits were dug from a 400mm x 400mm area to variable depth depending on the ore depth. This resulted in sample volumes of 2-7 20L buckets of material. Each sample will be assayed for head grade but five priority samples have been sent to Nagrom Laboratories for a full processing analysis.

Each pit allowed for observation of the basic lithology, colour, visual grade estimates, texture, friability, weight and ore-depth. This information will allow for the definition of the resource in terms of its grade, volume and density.

The program resulted in the identification of three “mineralisation styles”

- Manganese cap with some lenses in mostly weathered shale, likely to require wet screening (Green area on Figure 1.);
- Manganese lenses under 10-20cm of soil held within a soil to clay matrix, this material maybe dry screen able (Pink area on Figure 1.); and
- Manganiferous chips were identified in a clay matrix. This material was founded in eroded low lying areas of the deposit and looks to require wet screening (Orange area on Figure 1.).

Further preliminary analysis based on the observations made in the field suggests the ore body improves to the east. The east portion shows a greater thickness of mineralisation and more continuous lenses of high grade material. The north-east shows potential for genuine DSO product.

## **MINING APPROVALS**

Mining Lease applications are in place for the DSO ore at BBH, as well as a number of Miscellaneous Licence applications to accommodate associated infrastructure including, but not limited to haul roads and water bores.

A number of studies have been completed, scheduled or are about to commence at Butcherbird with the aim of collecting and analysing the information required to support mining approval applications, primarily in relation to the proposed DSO production operation.

Studies that have been completed, are underway or are due to commence in the coming quarter include:

- Native Title Negotiations;
- Fauna vertebrate surveys;
- Subterranean fauna surveys;
- Hydrology;
- Flora Level 2 survey; and
- Approvals Regulatory Submissions and Management Plans for BBH..

## BUTCHERBIRD COPPER

During the quarter, the second half of a rain interrupted RC drilling programme was completed at the Company's 100% owned Butcherbird Copper Project. A total of twelve holes were completed for 3,182m. The drilling was designed to test a number of geophysical targets away from the main shear hosted mineralisation which has been the focus to date.



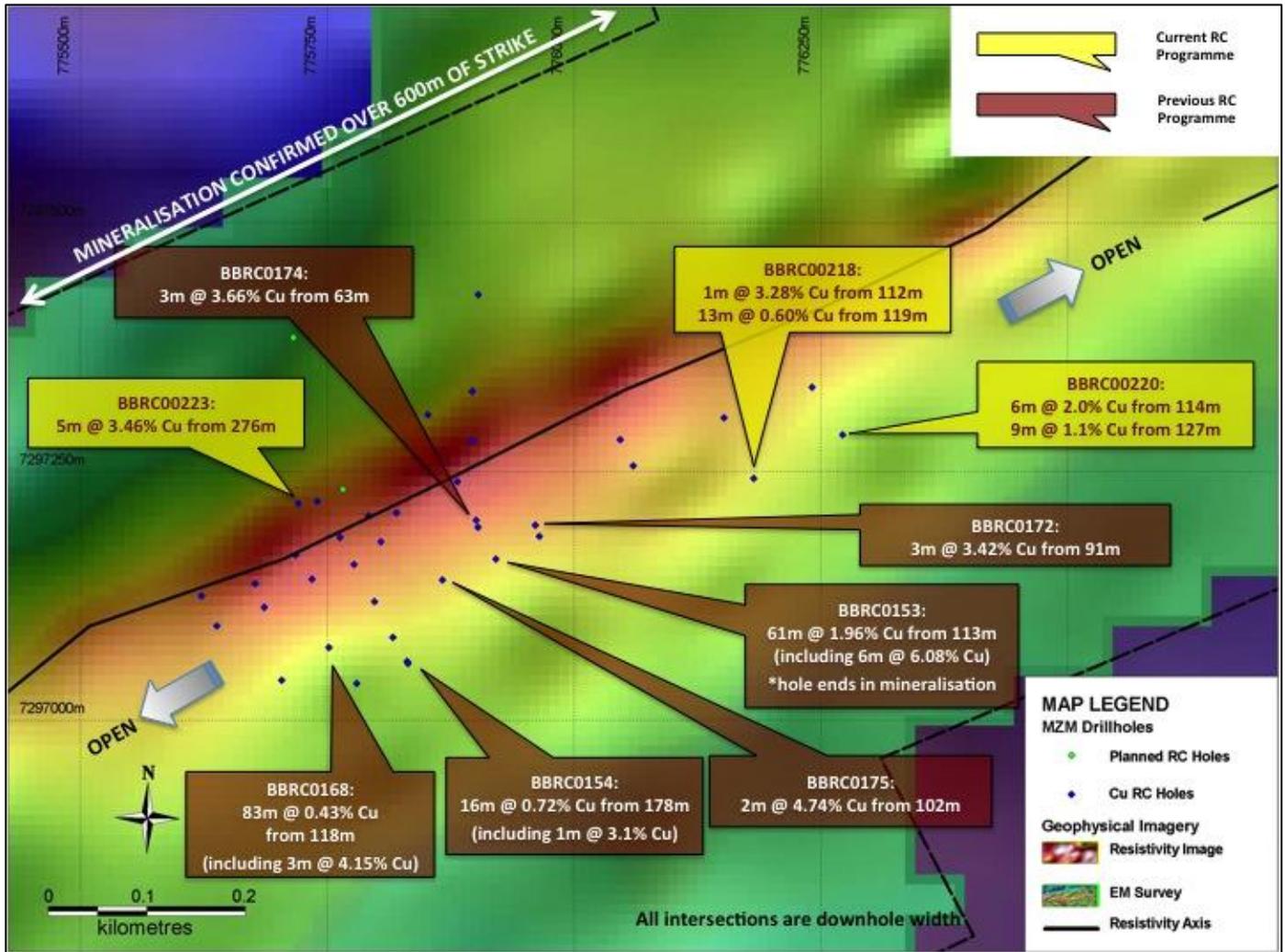
The current round of drilling did not intersect any new mineralisation, however overall work to date has confirmed that the copper mineralisation at Butcherbird extends for a strike length of at least 600m along or adjacent to the Butcherbird shear zone, confirming the discovery as a significant copper mineralised system with excellent upside potential.

Detailed geological and structural analysis of results are underway to better understand the distribution of copper mineralisation within the highly prospective Butcherbird shear zone in order to optimise the targeting of the next round of drilling.

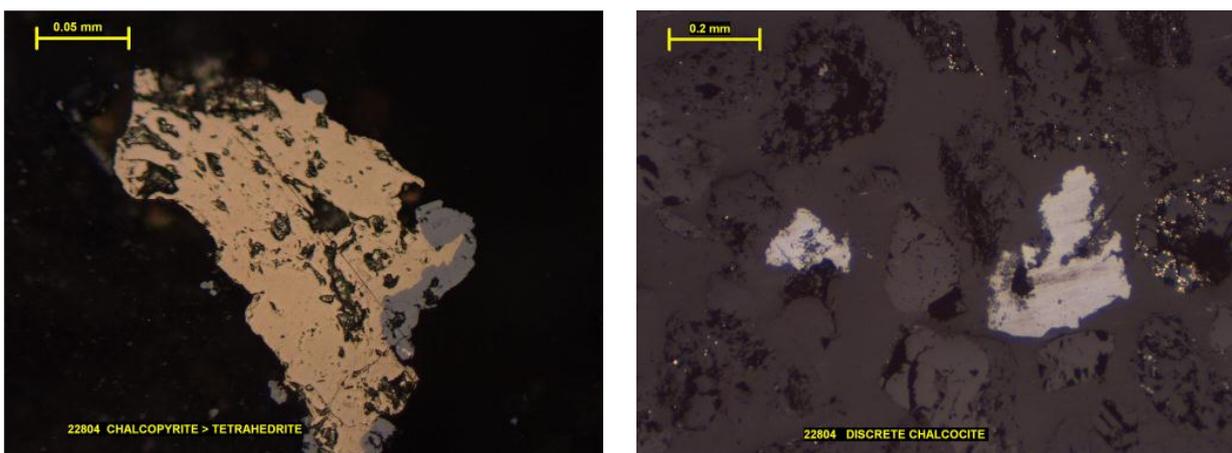
Follow up work is likely to comprise a programme of extensional drilling as well as an infill programme to better define the geometry and geological controls on mineralisation within the system. Additionally, sporadic lead and zinc anomalism has been identified in certain zones and this will be investigated as a possible pathfinder to high grade copper mineralisation.

| Hole Id   | Easting | Northing | RL  | Depth | Azim | Dip |
|-----------|---------|----------|-----|-------|------|-----|
| BBRC00225 | 775719  | 7297385  | 617 | 300   | 180  | -60 |
| BBRC00226 | 777302  | 7297923  | 616 | 126   | 360  | -60 |
| BBRC00227 | 777301  | 7298083  | 619 | 156   | 180  | -60 |
| BBRC00228 | 777301  | 7298297  | 625 | 246   | 180  | -60 |
| BBRC00229 | 777306  | 7298351  | 620 | 246   | 180  | -60 |
| BBRC00230 | 777709  | 7298709  | 623 | 300   | 180  | -60 |
| BBRC00231 | 777713  | 7298765  | 621 | 330   | 180  | -60 |
| BBRC00232 | 774005  | 7296106  | 621 | 348   | 330  | -60 |
| BBRC00233 | 773920  | 7296284  | 619 | 318   | 150  | -60 |
| BBRC00234 | 774121  | 7296333  | 619 | 300   | 150  | -60 |
| BBRC00235 | 772553  | 7295489  | 613 | 126   | 150  | -60 |
| BBRC00236 | 772553  | 7295489  | 613 | 386   | 150  | -60 |

**Table 1.** Collar details for holes that returned no significant results.



**Figure 1:** Selected downhole intersections from RC drilling programmes at the Butcherbird Copper Prospect.



**Figure 2.** Photomicrographs showing chalcocite (dominant), chalcopyrite and tetrahedrite mineralisation from BBRC00153.

## **YALBRA GRAPHITE PROJECT (15%)**

The Yalbra Graphite Project is located 250km north west of Meekatharra and 280km east of Carnarvon, Western Australia. The tenement E09/1985 is in the application stage and covers an area of approximately 37 square kilometres.

The tenement covers known graphite occurrences where historical drilling results indicate that six discreet zones of graphite mineralisation occur in a broad zone that extends over a strike length of at least 4km. Historical drilling shows that all of the zones are open at depth, and in most cases, are also open along strike.

During the Quarter, Buxton acquired an 85% interest in the project, issuing Montezuma 1,000,000 shares in the capital of Buxton. Montezuma will retain a 15% free-carried interest up to a decision to mine, then will elect to either contribute on a pro-rata basis, or dilute to a 1% gross revenue royalty. Buxton will be responsible for keeping the tenement in good standing

## **PEAK HILL/DURACK (85-100%)**

Work at the Peak Hill and Durack Projects during the quarter comprised ongoing data generation and target review.

Discussions are ongoing with a number of parties in relation to potential avenues to realise value from this asset through a sale or alternative mechanism.

## **Investor Coverage**

Recent investor relations, corporate videos and broker/media coverage on the Company's projects can be viewed on the Company's website at <http://www.montezumamining.com.au>.

## **About Montezuma Mining Company Ltd**

Listed in 2006, Montezuma (ASX: MZM) is a diversified explorer primarily focused on manganese, copper and gold. Montezuma has a 100% interest in the Butcherbird Manganese/Copper Project and an 85-100% interest in the Peak Hill and Durack Gold Projects in the Murchison region of Western Australia.

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## **More Information**

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The Information in this report that relates to exploration results is based on information compiled by Mr Justin Brown, who is a member of the Australian Institute of Mining and Metallurgy. Mr Brown is a geologist who is a full time employee of Montezuma Mining Company Ltd and has sufficient experience which is relevant to the style of mineralisation 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 Brown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.