Developing Australia’s Largest Onshore Manganese Resource

Producing High Purity Manganese for Li-Ion Batteries.

LARGE MANGANESE RESOURCE
INNOVATIVE PROCESSING
HIGH PURITY MANGANESE PRODUCTS
Disclaimer

This presentation contains only a brief overview of Montezuma Mining Company Ltd and its associated entities ("Montezuma") and their respective activities and operations. The contents of this presentation, including matters relating to the geology of Montezuma’s projects, may rely on various assumptions and subjective interpretations which it is not possible to detail in this presentation and which have not been subject to any independent verification.

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CORPORATE OVERVIEW

Tight Capital Structure Strong Balance Sheet

Financial Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASX Ticker</td>
<td>MZM</td>
</tr>
<tr>
<td>Shares on Issue</td>
<td>83.5M</td>
</tr>
<tr>
<td>Share Price</td>
<td>$0.285</td>
</tr>
<tr>
<td>Market Capitalisation</td>
<td>$23.8M</td>
</tr>
<tr>
<td>Cash &amp; Investments (30 Sept 17)</td>
<td>~12M</td>
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<tr>
<td>Debt</td>
<td>Nil</td>
</tr>
<tr>
<td>Enterprise Value</td>
<td>~$12.8M</td>
</tr>
<tr>
<td>Top 20 Shareholders</td>
<td>~67%</td>
</tr>
</tbody>
</table>

Board and Management

Seamus Cornelius  Chairman
Justin Brown      Executive Director
John Ribbons      Non Executive Director
Dave O’Neill      Exploration Manager

Share Price Performance

Major Shareholders

- Top 20 Shareholders 67%
- Board and Management 8.2%
- JP Morgan Nominees Australia 11.4%
- Duketon Mining Ltd 6.5%
Strong Li-Ion market growth will drive demand for Tech Metals

- Over 15M electric vehicles forecast by 2025.
- Non EV Li-Ion battery demand to also grow strongly including:
  - Grid Storage
  - Cellular Phones
  - Power tools, E Bikes, medical applications etc
- Forecast CAGR of 6.1% to 2021.
- A lot more high purity manganese is needed for this to happen.

\[ \text{Growth in Battery EV's} \]

\[ \text{Growth in Battery Sales (GWh)} \]

\[ \text{Steep part of the s-curve begins \text{~2020}} \]

\[ \text{For personal use only} \]

1 Source: UBS Global Research May 2017

2 Avicenne Energy Analysis 2014 et al as indicated. Avicenne estimates include China Auto Upside case
Manganese is a big part of a battery powered future

- 3M has its own patented NMC, based on work done at Dalhousie University.
- LG Chem makes NMC batteries used in the Chevy Volt and Nissan Leaf.
- General Electric uses the Li-MnO\(_2\) system as it offers the best balance of safety and performance.
- BMW i3 also use NMC batteries.
- Tesla signed 5-year exclusive partnership with Dr. Jeff Dahn, a prominent NMC battery researcher.

“M” is for Manganese

https://media.gm.com/content/dam/Media/microsites/product/Volt_2016/doc/VOLT_BATTERY.pdf
http://batteryuniversity.com/learn/article/electric_vehicle_ev
http://fortune.com/2015/06/17/meet-teslas-new-weapon-a-battery-scientist/
A premium product

High purity manganese makes up;

- 10% of the global manganese market by volume but;
- 40% of the global market by value.

At 100% electric car penetration, market forecast to grow by 240%\(^1\), equivalent to +$5B

\(^1\)UBS Global Research May 2017
Assumes EMM price of USD$2,000/t Ref: https://www.metalbulletin.com/My-price-book.html?price=34473
- Australia’s largest onshore manganese deposit.
- >180 Mt of manganese ore\(^1\).
- Excellent local infrastructure.
- Moving towards development.
- 100% owned by Montezuma.
- Low risk mining jurisdiction.

\(^1\text{Reference: Montezuma Mining Company Ltd ASX release dated 12 October 2017}\)
World Class Manganese Resource

<table>
<thead>
<tr>
<th>Prospect</th>
<th>Tonnes (Mt)</th>
<th>Mn (%)</th>
<th>SiO₂ (%)</th>
<th>Fe (%)</th>
<th>P₂O₅ (%)</th>
<th>Al₂O₃ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yanneri Ridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Inferred</td>
<td>48.0</td>
<td>10.7</td>
<td>43.0</td>
<td>11.1</td>
<td>0.262</td>
<td>10.7</td>
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<tr>
<td>Indicated</td>
<td>22.5</td>
<td>12.0</td>
<td>43.8</td>
<td>11.6</td>
<td>0.297</td>
<td>10.6</td>
</tr>
<tr>
<td>Additional Deposits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inferred</td>
<td>110.3</td>
<td>10.6</td>
<td>44.4</td>
<td>11.9</td>
<td>0.3</td>
<td>11.0</td>
</tr>
<tr>
<td>Total</td>
<td>180.8</td>
<td>10.8</td>
<td>43.9</td>
<td>11.7</td>
<td>0.3</td>
<td>10.9</td>
</tr>
</tbody>
</table>

- Inferred Resource Estimates completed for eight deposits.
- Significant upside potential to increase the resource with further drilling.
- Scale of development not resource constrained.

Reference: Montezuma Mining Company Ltd ASX release dated 12 October 2017
Simple Geology/Favourable Infrastructure

Ore starts at surface;
- low strip ratio
- low mining cost

Gas pipeline;
- low energy cost

Straddles bitumen highway;
- low infrastructure cost

Port Headland 550km north;
- logistics solution in place

Note: All intersections are approximately true width
Breakthrough Technology

- CSIRO designing flowsheet targeting high purity (>99.7%) battery grade manganese.
- Potential products include Electrolytic Manganese Dioxide ("EMD"), Metal ("EMM"), and/or manganese sulphate.
- High purity manganese is a high value product which sells for >USD$2,000/dmt*.

LOW COST PLANT FEED FROM 100% OWNED MANGANESE RESOURCES

DEVELOPING INNOVATIVE, NOVEL PROCESS TO PURIFY ORE TO >99.7%

HIGH PURITY PRODUCTS FOR Li-Ion BATTERIES, HIGH VALUE: >US$2000/t*

Key differentiators

**Butcherbird Project**

- Benign leach conditions and rapid leach kinetics in a simple, single stage leach process:
  - >95% of manganese leached in 30 minutes.
  - >90% Mn purity after single leach stage.
  - Ambient temperature and atmospheric pressure.
  - Exothermic reaction produces energy.
  - No sulphuric acid.
  - Excellent leach selectivity.
  - Simple, industry proven purification pathway.

**Current Producers (China/South Africa)**

- Complex leach conditions, multi stage, expensive process:
  - Requires high grade manganese ore.
  - Reduction Roasting to 800-1000ºC.
  - Sulphuric acid leach.
  - Purification.
  - Production of final product using toxic selenium.
  - High cost energy input ~7000 Kwh for EMM
Investment Case Summary

- World class, very large manganese deposit.
- Technology breakthrough on processing.
- Simple geology and flowsheet.
- Low production costs anticipated.
- Strong demand growth from battery revolution.
- Commercial studies underway.
- Strong balance sheet, tight capital structure.
- The only ASX listed exposure to this sector.
Note: The information in this presentation that relates to Exploration Results, and Mineral Resources is based on information compiled by Mr Justin Brown who is a full-time employee of the Company and is a member of the Australasian Institute of Mining and Metallurgy.

Justin Brown 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 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Justin Brown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Please note with regard to exploration targets, the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Mark Glassock who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Mineral Resources were compiled, Mr Glassock was a consultant to Montezuma Mining Company Ltd. Mr Glassock is a geologist 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 2012 edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Glassock consents to the inclusion of this information in the form and context in which it appears in this report.