Investor Update

Lumwana West, Zambia, plus Australian copper projects

LINDSAY OWLER, Director – May 2014
CORPORATE OVERVIEW

Company
Registered Office: Sydney
Operations Offices:
   Adelaide, South Australia
   Lusaka, Zambia
ASX Code: ARE
Market cap: A$8.8 million
Price: 2.2c
Issued shares: 398,495,578
Options (10c, 15c): 17,000,000
Options (6c): 22,906,372
Top 20 shareholders: hold 53%
Cash: A$1.3 million (plus imminent rights issue and asset sale)

Argonaut is a prudent mining company which makes sensible decisions to maximise its limited funds for the long-term benefit of its shareholders.

Board
Pat Elliott Non-Executive Chairman
Lindsay Owler CEO/Director
Andrew Bursill Director/Secretary
Malcolm Richmond Non-Executive Director

Management
Tim Birt Exploration Manager
# SHARE CAPITAL

**Top 5 Registered Shareholders as at 27 May 2014**

<table>
<thead>
<tr>
<th>Top 5</th>
<th>Entity</th>
<th>Holding</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Antofagasta (held by Citicorp Nominees Pty Ltd)</td>
<td>54,899,991</td>
<td>13.8</td>
</tr>
<tr>
<td>2</td>
<td>Tattersfield Securities Limited</td>
<td>28,738,226</td>
<td>7.2</td>
</tr>
<tr>
<td>3</td>
<td>HSBC Custody Nominees (Australia) Limited</td>
<td>23,420,224</td>
<td>5.9</td>
</tr>
<tr>
<td>4</td>
<td>BDO Zambia Trust Company Limited</td>
<td>20,000,000</td>
<td>5.0</td>
</tr>
<tr>
<td>5</td>
<td>Glenden Nominees Pty Limited</td>
<td>13,315,160</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>140,373,601</strong></td>
<td><strong>35.2</strong></td>
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Argonaut is focused on large copper targets

Lumwana West, Zambia
  • Large tonnage, shear-hosted copper in mineralised copper province
  • Rapidly delineating large-scale copper deposits/targets
  • Mature copper mining jurisdiction
  • Signed agreement with a subsidiary of Antofagasta plc in April 2014 to explore and develop:
    » Lumwana West project is fully funded to production
    » Antofagasta is now a cornerstone shareholder in Argonaut Resources

Torrens, South Australia
  • One of the largest under-tested iron oxide copper-gold (IOCG) systems in Australia

Alford, South Australia
  • Farm-in partner Sandfire Resources actively exploring for IOCG systems
LUMWANA WEST, ZAMBIA – OWNERSHIP

Setting the stage for a development partner

Underlying Joint Venture
• Argonaut completed the second earn-in of the underlying Lumwana West joint venture agreement to increase project ownership from 51% to 90%
• Increased project ownership facilitates the overlying option agreement with Antofagasta*
• Earn-in completed well ahead of schedule due to technical credentials and Argonaut Board’s determination to realise project’s value

Overlying option agreement with Antofagasta
• Antofagasta can earn a 70% project interest by spending US$18.9M on exploration plus the amount required to complete a feasibility study to international standards
• If the project is feasible and Argonaut elects not to contribute pro-rata, Argonaut is either carried into production or bought-out prior to construction

* The Antofagasta group is a Chilean-based copper mining group with significant by-product production and interests in transport and water distribution. Antofagasta Minerals SA is a wholly-owned subsidiary of Antofagasta plc.

Antofagasta is listed on the London Stock Exchange (LON: ANTO) and has a current market capitalisation of GBP 7.9 billion.
## Development timeline: Pipeline of newsflow and price catalysts

<table>
<thead>
<tr>
<th>Phase</th>
<th>Work period</th>
<th>Expenditure</th>
<th>Interest at completion</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exploration</td>
<td>US$3.9M by ANTO within 1 year</td>
<td>ARE 65% – ANTO 25%</td>
<td>Drilling starting May 2014 ARE operator</td>
</tr>
<tr>
<td>2</td>
<td>Exploration &amp; Resource Definition</td>
<td>US$15M by ANTO up to 4 years</td>
<td>ARE 39% – ANTO 51%</td>
<td>ARE operator until ANTO elects to become operator</td>
</tr>
<tr>
<td>3</td>
<td>Pre-Feasibility &amp; Feasibility</td>
<td>As required by ANTO up to 2 and 4 years</td>
<td>ARE 20% – ANTO 70%</td>
<td>Feasibility Study to international standards</td>
</tr>
<tr>
<td>4</td>
<td>After Feasibility Study</td>
<td></td>
<td>ARE 20% – ANTO 70%</td>
<td>No dilution by ARE</td>
</tr>
<tr>
<td>5</td>
<td>Construction &amp; Production</td>
<td>Project capital expenditure</td>
<td>ARE election +/- ANTO election</td>
<td>ARE may contribute pro-rata. If not, ANTO may elect to either: • carry ARE into production, with ARE’s costs being funded by 60% of future dividends, or; • buy-out ARE for its pro rata share of the Project’s NPV</td>
</tr>
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*Note: Antofagasta may elect to stop contributing at certain stages in which case standard dilution and drag-along/tag-along rights will apply.*
The Domes Region has an international-scale copper endowment and is host to the new generation of copper mines in the Central African Copperbelt.
WEST LUMWANA SURROUNDING MINES AND PROJECTS

Geologically comparable copper deposits

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<tr>
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<th>Barrick LUMWANA</th>
<th>First Quantum KANSANSHI</th>
<th>First Quantum SENTINEL</th>
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<tr>
<td><strong>Resource</strong></td>
<td>1.1Bt at 0.50% Cu</td>
<td>1.0Bt at 0.79% Cu</td>
<td>1.2Bt at 0.50% Cu</td>
</tr>
<tr>
<td><strong>Reserves</strong></td>
<td>594Mt at 0.56% Cu</td>
<td>711Mt at 0.74% Cu</td>
<td>774Mt at 0.50% Cu</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>120,000t in 2013 170,000tpa nameplate</td>
<td>271,000t in 2013 Expansion to 400,000tpa</td>
<td>Commissioning mid 2014 300,000tpa nameplate</td>
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- Neighbouring deposits over 1 billion tonnes
- Neighbouring production approaching 1 million tonnes copper per annum
- Local production began in 2005 – rapidly developing, world-class copper province

*Mineral Resource at 31 December 2013
* Measured, Indicated and Inferred Resource estimations combined by weighted average
Recent mine developments at Kansanshi, Lumwana and Sentinel is bringing essential infrastructure to North Western Zambia.
CENTRAL AFRICAN COPPERBELT DEPOSITS

Source: Lincoln Crowne & Co
LUMWANA WEST, ZAMBIA

Nyungu

- **Nyungu Central** deposit defined by 46 modern drill holes – significant mineralised copper body with strong potential for extensions and repetitions.

**Demonstrated strike length: 1,700m**

- **Nyungu South**: edge of mineralised body intercepted by Argonaut drilling. Vast, undrilled IP anomaly to be tested in 2014

- **Nyungu West** and **Nyungu North**: drilling to date has not pierced IP anomalies. 2014 drilling will test these anomalies

Major copper deposit with potential for large extensions and repetitions
LUMWANA WEST, ZAMBIA

West Mwombezhi Target
- Over 2.5km of coincident IP chargeability and copper in soil anomaly
- Strongest and largest geochemical and geophysical target defined at Lumwana West to date
- Highest priority drill target at Lumwana West
- Road construction and site preparation underway
- Drilling on 400m traverses planned to test target
- Drilling commencing late May 2014

West Mwombezhi strike length: 2,500m

High impact drilling from May 2014
**LUMWANA WEST, ZAMBIA**

**Kavipopo Target**
- Over 1.9km of coincident IP chargeability and copper in soil anomaly
- Strong, coherent geochemical and geophysical target
- IP anomaly open to the north and east
- Limited historical drilling supports IP mineralisation model
- Drilling on 400m spaced traves planned for June 2014

**Kavipopo strike length: 1,900m**

**Large coincident copper/chargeability target**
**TORRENS, SOUTH AUSTRALIA**

**Torrens Project Summary**
- Targeting Olympic Dam style iron oxide-copper-gold (IOCG) mineralisation
- Three holes drilled 2007–2008
- Geology and alteration confirmed
- Copper-gold mineralisation confirmed
- 30/70 joint venture with Straits Resources Limited
- Access litigation proceeding
TORRENS, SOUTH AUSTRALIA

Proposed Exploration Program
• Initial seven diamond drillholes to 1,200m
• Holes targeting high density/low magnetic susceptibility ‘bodies’ in IOCG system
• Commencement subject to access litigation

Olympic Dam style geophysical signature – only bigger footprint
ALFORD, SOUTH AUSTRALIA

Alford Joint Venture

Alford Farm-in Joint Venture

• **First earn-in:** Sandfire to earn a 49% interest by spending $4M on exploration within three years

• **Second earn-in:** Sandfire has the right to jointly explore the tenement or earn an additional 26% interest by spending a further $4M on exploration within an additional three years

• **Total potential earn-in expenditure of $8M for a 75% interest**

Exploration Activities

• Sandfire has now completed over 22,000m of regional aircore drilling and 2,300m deep diamond drilling at Alford

• Major mineralised system confirmed

• Major IP and gravity geophysics programs completed

• **2014 diamond core drilling recently completed and results are pending analysis**
NEAR-TERM CATALYSTS FOR SHARE PRICE

Argonaut Resources NL  ASX:  ARE

Drilling in May–June 2014 of large footprint copper targets at:
• West Mwombezhi
• Kavipopo

Nyungu development:
• Test mineralisation extensions and repetitions at Nyungu South, West and North
• Progress to Resource status
• Scoping Study

Torrens Project:
• Finalise access litigation
• Commencement of drilling

Drilling results from Alford
COPPER MARKET

- Decreasing metal inventories
- Stabilising copper prices
- Strong Chinese imports – Q1 +38%
- 2014 expected market surplus questionable

Source: Lincoln Crowne & Co
COPPER MARKET – SUPPLY AND DEMAND OUTLOOK

• Demand is into the Possible Projects
• Current resources equity market downturn means project delays

Source: CRU
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