THE CANNINGTON AG-PB-ZN BHT DEPOSIT;

A WORLD CLASS DISCOVERY WITH A SILVER LINING

Presentation to the 16th AGC
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Cannington Mine
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Cannington - Project history

1980s
Conceptual studies on the geological environment for 'BHT' deposits.

1989
Regional aeromagnetic study over large parts of Mt Isa Inlier and surrounding areas under cover.

1990
Cannington anomaly drilled. First hole (ANP3) intersected 20m @ 870g/t silver, 12.1% lead, and 0.6% zinc.
Cannington - Project history

1993
Feasibility study commenced.

1994
Feasibility completed.

1995
Mining Lease granted.

1996
Construction commenced

1997
Mill commissioned.

CANNINGTON DEPOSIT
Reduced to Pole Aeromagnetic Data
pseudocolour over first vertical derivative greyscale with sun angle
Cannington - Project history

Last financial year Cannington processed 1.9Mt averaging 605 g/t Ag, 13.4% Pb, 5.6% Zn to produce 31.6Moz silver metal, 210Kt lead metal, & 77Kt zinc metal.

Cannington is the world’s largest single mine producer of silver and lead.

This financial year we are on track to process 2.1Mt at similar grades.
Deposit Geology in Plan View
(looking down)

Internal
“Bird” Faults
Footwall Fault

Northern Zone
Trepell Fault

1125RL

Southern Zone

Footwall Mineralisation
Hangingwall Mineralisation

Internal “Bird” Faults
Trepell Fault

F2 Fold Axis
F3 Fold Axis

Hamilton Fault

5400N
4700N
Deposit Geology in Cross Section
(looking north)

Approx position of discovery hole

1125RL

F2 Fold Axis

825RL

5400N

Trepell Fault

F3 Fold Axis

4700N
Deposit Geology in Long Section (looking west)

South

North

1800E

2000E
Some Deposit Rock Types

- Gneiss
- Hedenbergite-Magnetite
- Quartzite
- Basal Conglomerate
- Sillimanite- Muscovite Schist
Mineralisation Styles and Trends

Mafic

Core Amphibolite

Burnham

Kheri

Colwell

Nithsdale

Siliceous

Inveravon

Broadlands

Cukadoo

Warenda

F2 Fold

Axis

Ag+Pb

HW Lodes

Zn

Ag+Pb+Zn

FW Lodes

Zn

Ag+Pb

Economic

Sub-non economic
## Mineralogy

<table>
<thead>
<tr>
<th>Min Type</th>
<th>Mafic</th>
<th>Siliceous</th>
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</thead>
<tbody>
<tr>
<td>Burnham, Nithsdale, Kheri, Colwell</td>
<td>Inveravon, Broadlands, Warendra</td>
<td>Glenholme, Cukadoo</td>
</tr>
<tr>
<td>Fe</td>
<td>&gt;15%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Mn</td>
<td>1-3%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>As &amp; Cu</td>
<td>Local highs</td>
<td>Local highs</td>
</tr>
<tr>
<td>F</td>
<td>As fluorite</td>
<td>Fluorite &amp; silicate</td>
</tr>
<tr>
<td>Gangue</td>
<td>Hedenbergite, olivine, pyroxmangite, pyrrhotite</td>
<td>Siliceous with pyroxenenes</td>
</tr>
<tr>
<td>Magnetite</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Silver</td>
<td>As Freibergite, in solid solution with galena, and Pyrargyrite (rare native silver)</td>
<td></td>
</tr>
</tbody>
</table>
Mineralogy

Mafic
(Burnham)

Siliceous
(Broadlands)
(Glenholme)

4 cm
• Stage 1

  Initial zonation involving Zn-dominant and Ag-Pb dominant mineralised protoliths within a stratabound alteration halo.

  The D1 regional event produced localised schistosity

• Stage 2

  Generation of large scale tight N-S aligned D2 fold structures that generate the fold repetition of the Stage 1 geometry to give Hangingwall-Footwall lode geometry.

  With exception of Glenholme and Cukadoo mineralisation, other mineralisation maintained on both limbs of fold

• Stage 3

  Postpeak metamorphic anhydrous metasomatism (hedenbergite-garnet alteration) followed by low temperature hydrous metasomatism both of which upgrade mineralisation.
Genesis

• Stage 4
  Major silicification event related to Glenholme and Cukadoo mineralisation that is associated with brecciation and strain partitioning around the termination of the Core Amphibolite.
  D3 Localised open folding

• Stage 5
  D4 brittle faulting reactivating Footwall Fault, generating Trepell and Hamilton Faults and internal Bird Faults

Finally there is a period of energetic erosion and rapid deposition of Cretaceous black shales and sands as evidenced by
- The lack of any gossanous material
- The location of mineralised and altered proterozoic material in the basal Cretaceous sands adjacent to the deposit.
How does Cannington compare to other BHT’s?

<table>
<thead>
<tr>
<th>Deposit</th>
<th>Tonnes (M)</th>
<th>Ag (g/t)</th>
<th>Pb (%)</th>
<th>Zn (%)</th>
<th>Pb+Zn (%)</th>
<th>Ag/Pb</th>
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</thead>
<tbody>
<tr>
<td>Cannington (Qld)</td>
<td>45</td>
<td>520</td>
<td>11.9</td>
<td>4.8</td>
<td>16.7</td>
<td>44</td>
</tr>
<tr>
<td>Broken Hill (NSW)</td>
<td>280</td>
<td>148</td>
<td>10.0</td>
<td>8.5</td>
<td>18.5</td>
<td>15</td>
</tr>
<tr>
<td>Zinkgruvan (Sweden)</td>
<td>40</td>
<td>100</td>
<td>5.5</td>
<td>10.0</td>
<td>15.5</td>
<td>18</td>
</tr>
<tr>
<td>Broken Hill (SAf)</td>
<td>38</td>
<td>82</td>
<td>6.4</td>
<td>2.9</td>
<td>9.3</td>
<td>13</td>
</tr>
<tr>
<td>Pegmont (Qld)</td>
<td>11</td>
<td>11</td>
<td>8.4</td>
<td>3.7</td>
<td>12.0</td>
<td>1</td>
</tr>
<tr>
<td>Gamsberg (SAf)</td>
<td>150</td>
<td>6</td>
<td>0.6</td>
<td>7.1</td>
<td>7.7</td>
<td>11</td>
</tr>
<tr>
<td>Big Syncline (SAf)</td>
<td>101</td>
<td>13</td>
<td>1.0</td>
<td>2.5</td>
<td>3.5</td>
<td>13</td>
</tr>
<tr>
<td>Black Mt (SAf)</td>
<td>82</td>
<td>30</td>
<td>2.7</td>
<td>0.6</td>
<td>3.3</td>
<td>11</td>
</tr>
</tbody>
</table>
Why is Cannington “World Class”? 

At the end of the day it’s about geology, how you extract the resource, what recoveries you can achieve, people, and using all that (and some) to create and maintain business margins.