MT WOODS PROJECT EXPLORATION OVERVIEW
MARCEL VAN ECK

Introduction

- Exploration History
- Discovery of Prominent Hill
- Mine Geology
- Exploration Techniques and Targeting
- Near Mine Exploration Results
- Regional Exploration Results
- 2011 Exploration Program
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MT WOODS PROJECT - LOCATION
• **1961**: Delhi explored the Mt Woods area (approx 50 kilometres to the northwest) for iron ore. Shallow drill holes intersected iron rich mafic units and magnetic granulites.

• **1975**: Olympic Dam discovery. OD Exploration Model: African Copper Belt type of sediment hosted syngenetic copper deposit – basement highs (magnetic and gravity highs).

• **1978**: Newmont and Kennecott: Explored for Olympic Dam-type mineralisation.

• **1979-1981**: Australian Selection and Aquitaine carried out exploration for Olympic Dam style mineralisation in various localities within the Mt Woods area.

• True nature of OD mineralisation poorly understood at his time.
EXPLORATION HISTORY

• **1986-1989**: CRAE carry out drilling in White Hill area.

• Manxman Prospect: Hole DD88EN43 intersects 287 metres at 0.23% copper + anomalous Au, U and REE.

• First indication of large iron oxide-rich breccia and replacement bodies,

• **13 years after the discovery of OD.**
1987: Metals Exploration Limited secures current leases east of the White Hill area in November – containing PH. Ground mag reveals Uranus magnetic anomaly. Burmine JV and drill 90URANRC1; 4m @ 0.2% Cu and 0.09g/t Au.

“Gawler Range Volcanics” + magnetite + chalcopyrite discovered at Neptune prospect.

1991-2000: Normandy. Primary target was Joes Dam – magnetite breccias + ~0.1% Cu.

1993: NOREX drills many other prospects, including one hole at Uranus Prospect: Hole 93DD10 intersects 92m @ 0.12% Cu.
Minotaur Resources (MNR) floats, with Alliance backing from Billiton. World-class base metal deposit search. Target deposits are IOCGs and BHTs.

• High IOCG prospectivity of Mount Woods Inlier indicated to Minotaur by:

  • High magnetic relief – Fe-oxides
  • Presence of known mineralisation and alteration systems; anomalism of REE, F, Ba, Cu and Au,
  • Na, K and Si alteration halos,
  • Evidence of high structural levels (i.e. GRV),
  • Various mafic to felsic intrusive suites & major NE and NW structures
  • Presence of mantle derived mafic rocks and related Hiltaba aged granites, 1580Ma.

• Minotaur approaches Normandy.

• **2000**: Minotaur-Billiton Alliance. Farm-in, Minotaur as operator.

  **25 years after the discovery of OD**
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Discovery
• Barbara Anderson’s systematic data review. Five priority targets identified:

1. Blaze
2. Neptune
3. Uranus
4. Scorch
5. Balta Baltana

• Minotaur select six targets for 3D inversion modeling and drill testing:

1. Armstrong North
2. Blaze
3. Neptune
4. Uranus
5. Peculiar Knob North
6. Manxman B

• No new gravity data obtained: All data used was available to the previous explorer.
Wayne Petit and Chris Moore: 3D inversion modeling at six prospect areas.

Uranus model defined a large dense mass \( \sim 0.5 \text{g cm}^{-3} \) > background.

Heritage clearance obtained

JV agrees to drill all six priority targets. Uranus is the forth to be drilled.
URAN1: Site Pegged on 7 August 2001

(photograph: 27/09/2001)

26 years after the discovery of OD
DISCOVERY OF PROMINENT HILL

• Burmine (1990): Uranus magnetic anomaly was drill tested, returning 4 metres at 0.2% Cu and 0.09 g/t Au, and 4 metres at 0.24% Cu and 0.04 g/t Au in magnetite skarn.
  Missed PH by a few hundred metres!
In 1993 Uranus was revisited by Normandy. Hole 93DD10 also intersected magnetite skarn assemblages - 92 metres at 0.11% Cu. Late-stage carbonate-fluorite-haematite-sulfide veining noted in core.
  Missed PH by a few hundred metres!

• High-grade copper-gold mineralization at Prominent Hill was discovered in October 2001 through drill testing of a high frequency, non-magnetic portion of gravity anomaly. Results of URAN1 included; 20 metres @ 3.0g/t Au, 107 metres @ 1.9% Cu and 0.65g/t Au and, deeper, 152 metres @ 1.1% Cu and 0.6g/t Au.
Photographer stands on Burmine drill site, 90URANRC1.
GEOPHYSICS AND FOLLOW-UP DRILLING OF PROMINENT HILL

Drilling February to July, 2002

- Infill gravity (contours – 2nd horizontal derivative)
- Ground Magnetics (image).
- Downhole IP and Dipole - dipole IP. Strong IP anomaly coincides with peak of gravity anomaly – not magnetic anomaly.
- 14 diamond drill holes. First follow up hole targeted peak of IP/gravity - barren.
  DP 003: 30m @ 2.72%Cu, 0.45g/tAu. DP 005: 209m @ 1.54%Cu, 0.93g/tAu.
- High-grade Cu mineralization confined to area adjacent to & immediately south of the magnetic anomaly.
- ‘Gold-only’ mineralization identified.
PROMINENT HILL MINE AREA 2010

Prominent Hill - September 2010
MT WOODS PROJECT EXPLORATION OVERVIEW
JIM HODGKISON

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GEOLOGY REVIEW

- Geology of the Deposit
- Mineral Resource
- Underground Exploration
PROMINENT HILL
- INTERPRETED GEOLOGY AT THE UNCONFORMITY

Ankata Deposit (at depth)

Sandstone/Conglomerate

Calc-silicate

Basalt/Andesite (Gawler Range Volcanics)

Meta-sandstone

Felsic Volcanic

Argillite

Dolomite

Granitoid

Skarn

Cu ore

Malu Pit outline

Basalt/Andesite (Gawler Range Volcanics)
Copper Ore
Gold Ore
N
CROSS SECTION - 55500mE LOOKING WEST

- Cover Sequence
  - Hangingwall Fault Zone (HWFZ)
    - Chloritic & Carbonate fault gouge
  - Hangingwall - Granitoid / Skarn
    - Localised high grade Au within carbonate veins (Highly erratic)

- Foot Wall Volcanics
  - Discontinuous high grade Cu - Tabular in nature

- Fault Related Breccias
  - Often with Au dominant mineralisation wrapping around high grade Cu core.

- Prominent Hill Shear Zone (PHSZ)
  - Largest mineralised domain
    - Average true thickness ~30m.
    - Encompasses 3 Cu domains & 2 barren domains

- Volcano-sedimentary Sequence
  - Cu-rich core
  - Late stage unmineralised Dolerite Dykes

Section 55500mE
### Ore Type Details - March 2011

<table>
<thead>
<tr>
<th>Ore Type</th>
<th>Tonnes (kt)</th>
<th>Cu (%)</th>
<th>Au (g/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalcocite (CC)</td>
<td>850</td>
<td>1.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Bornite (BN)</td>
<td>1,344</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Chalcopyrite (CP)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Total Copper</strong></td>
<td><strong>2,194</strong></td>
<td><strong>1.1</strong></td>
<td><strong>0.4</strong></td>
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<tr>
<td>Gold (AU)</td>
<td>6,869</td>
<td>0.1</td>
<td>1.0</td>
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<td><strong>Total Ore</strong></td>
<td><strong>9,063</strong></td>
<td><strong>0.3</strong></td>
<td><strong>0.8</strong></td>
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</table>

*LG Denotes Low Grade*
MALU RESERVES (June 2010)

<table>
<thead>
<tr>
<th>Mt</th>
<th>Cu%</th>
<th>Au g/t</th>
<th>kt Cu</th>
<th>Moz Au</th>
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<tbody>
<tr>
<td>69.6</td>
<td>1.23</td>
<td>0.7</td>
<td>781</td>
<td>1.5</td>
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</table>

ANKATA DEPOSIT

ANKATA RESERVES (June 2010)

<table>
<thead>
<tr>
<th>Mt</th>
<th>Cu%</th>
<th>Au g/t</th>
<th>kt Cu</th>
<th>Koz Au</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.9</td>
<td>2.52</td>
<td>0.5</td>
<td>124</td>
<td>76</td>
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</tbody>
</table>

MUNDA ZONE

MALU DEPOSIT

PAPA

TOTAL GLOBAL RESOURCE (June 2010)

Copper Resources

<table>
<thead>
<tr>
<th>Mt</th>
<th>Cu%</th>
<th>Au g/t</th>
<th>kt Cu</th>
<th>Moz Au</th>
</tr>
</thead>
<tbody>
<tr>
<td>200.3</td>
<td>1.23</td>
<td>0.5</td>
<td>2,473</td>
<td>3.1</td>
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</table>

Gold Resources

<table>
<thead>
<tr>
<th>Mt</th>
<th>Cu%</th>
<th>Au g/t</th>
<th>kt Cu</th>
<th>Moz Au</th>
</tr>
</thead>
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<tr>
<td>85.2</td>
<td>0.08</td>
<td>1.5</td>
<td>69</td>
<td>4.1</td>
</tr>
</tbody>
</table>

LEGEND

- Measured Resource
- Indicated Resource
- Inferred Resource
- Total Mined as of June, 2010
Proposed underground drilling commitment over 4.5 years – minimum 135km

Initially drill from decline stockpiles then establish dedicated exploration drill platforms
UNDERGROUND DRILLING
- TIMING OF DRILL PROGRAMS

ANKATA DEPOSIT
MALU DEPOSIT
MUNDA ZONE

PAPA ZONE

Plan View

Ankata underground access

2011-12
2011-12
2012
2012-13

Remaining Resource tested beyond 2013

LEGEND
- Gold Domains
- Copper/Gold Domains
- Low Grade Copper Domains (Ankata Deposit Only)
- Conceptual underground exploration development

Surface

Cover Sequence

Total Mined as of June, 2010

10,000RL
9,500RL
9,000RL

64.500 E
55.500 E
56.500 E
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State-Scale Magnetics

SOUTH AUSTRALIA TMI

Exploration Techniques and Targeting
O’Driscoll lineaments G2 & G9.
- Steeply dipping major crustal sutures
INTERPRETATION OF GEOLOGY

District-Scale Magnetics and Gravity

Outcrop
Drilling
Magnetic signatures
Gravity signatures
Regional geology data
Airborne gravity gradient (AGG) and current ground gravity comparison;

- Greatly improved detail defining new targets and important structures.
- AGG survey flown in 8 weeks, equivalent ground data requires 2-3 years to collect.

- 1st vertical derivative (1VD) of ground gravity (~800m line spacing).
- Airborne gravity gradient (AGG) data (200m line spacing).
**Exploration Techniques and Targeting**

**First Vertical Derivative (1VD BC267)** – Derivative of the BC267 grid to highlight high frequencies. Defines anomaly edges.

**Observed Gravity (gObs)** – Raw data as measured by a gravity meter and tied to known values.

**Reduction to Pole (RTP)** – TMI processed to turn dipole response into a monopole. Moves peak of response over centre of source.

**Total Magnetic Intensity (TMI)** – Raw data as measured by a magnetometer. A dipole response from each source.

**Gravity**

**Magnetics**
TARGETING

Magnetic profile (diagrammatic)

Gravity profile (diagrammatic)

Prominent Hill Geophysical Response

Exploration Techniques and Targeting
GEOPHYSICAL TARGET GENERATION PROCESS – POTENTIAL FIELD DATA (GRAVITY AND MAGNETICS)

- Data collection – Airborne and ground surveys.
- Data processing – QAQC, gridding and filtering.
- Modeling – 2 and 3D inversion of grids.
- Drill hole planning

- **Geology** interpretation dictates area selection and data interpretation.
- **Geophysical** information guides target generation and drill hole planning.
GEOPHYSICAL TARGETING – 2D AND 3D

Gravity

Magnetics

(above) Planned IP lines over 2D airborne gravity gradient (AGD) and 2D Reduced to Pole magnetic grids.

(below) Inversion model through section 674600mN (+/-25m window). Gravity isosurfaces in warm colours and magnetic isosurfaces in cool colours.

Target

- Complex structural zone.
- Interpreted fault and simple offset magnetic susceptibility and density reconnects.

Plans

- Follow up reconnaissance IP survey (31.4km).
- Partial detailed airborne magnetic survey.
- Further work on demagnetisation modelling problem, hole plan and drill.
GEOPHYSICAL TARGETING – 2D IP (INDUCED POLARISATION)
Interpretation of Regional Magnetics and Gravity
Innovative use of IP
Technical Support and Research Group
Basement Geology Map
Regional Structure
Detailed Structural Setting
Geochronology
Geochemical Studies Cover (post-Doc)
Geochemical Targeting
Sedimentology
Ore Fluid Studies (MSc, PhD)
Alteration Studies (BSc Hons)  Targeting
Isotopic Studies
Paragenetic Studies
Structure and Metamorphic Setting (BSc Hons)
Area-specific studies (BSc Hons)
SYSTEMATIC EXPLORATION IS ESSENTIAL

- District-scale Magnetics and Gravity data
- Discrete Magnetic and Gravity anomalies
- Coincident Magnetic and Gravity anomalies
- Linear features (large and small) with contained or adjacent anomalies
- Intersections of linear features with contained anomalies
- Induced Polarisation (IP) anomalies over magnetic or gravity features
- Ground gravity surveys to detail selected features
- Geophysical (3D) modelling using drill or petrophysical inputs
- Review by geologists and geophysicist (including old holes)
- Prioritising of anomalies or prospects
- Planning of drill holes (often using 3D information)
- Drilling of hole(s)
- Review of drill core and results
- Time to analyse
- Re-prioritise
- More drilling

- Continued research to assist with exploration assessment and targeting
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NEAR-MINE EXPLORATION 2009 TO DATE

IP Surveys Completed

Ankata Deposit

New Copper Discoveries
‘Kalaya Zone’, near ‘Munda Zone’

Neptune-Triton-Proteus
Prospect Drilling 2009-10

Drill holes Completed – 2010-11

Ground Gravity Surveys Completed

2.5 km
NEW HW COPPER INTERSECTIONS

INTERPRETED CONTINUITY
Drilling in Progress to 100m by 100m centres

Ankata Decline
PROMINENT HILL – CROSS SECTION (INDICATIVE)
Near Mine Exploration Results

Near Mine Metres Drilled

<table>
<thead>
<tr>
<th>Year</th>
<th>Metres Drilled</th>
<th>Rigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>26,000m</td>
<td>4 (AKT)</td>
</tr>
<tr>
<td>2010</td>
<td>48,000m</td>
<td>4 (AKT, NM)</td>
</tr>
<tr>
<td>2011</td>
<td>12,000m *</td>
<td>4 (NM, AKT)</td>
</tr>
</tbody>
</table>
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OZ MINERALS GEOPHYSICAL WORK COMPLETED - 2009

- Ground Gravity Surveys
- IP Test Lines
OZ MINERALS GEOPHYSICAL WORK COMPLETED - 2010

- Airborne Magnetic Survey +1,500 sq km
- Airborne Gravity Survey +1,800 sq km
- Ground Gravity Surveys
- IP Surveys

Regional Exploration Results
Regional drilling metres - OZ Minerals Tenements

Year
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010

Metres
0
5,000
10,000
15,000
20,000
25,000
30,000
35,000
40,000
OZ MINERALS REGIONAL EXPLORATION RESULTS TO DATE

Magnetics

Regions:
- Pluto: drilled prospect 2009-2010
- Proposed drilling 2010-2011: Regional, Near-Mine

Metres Drilled:
- 2009: 13,000m
- 2010: 34,000m
- 2011: 13,000m *

Rigs:
- 2009: 2
- 2010: 2 - 4
- 2011: 5

Highlights:
- Nicholls Well: 27m @ 0.37% Cu
- Proteus: 10m @ 0.57% Cu, 0.23g/t Au
- Triton: 44m @ 0.42% Cu, 15.8m @ 0.49% Cu
- Epsilon: 16m @ 0.3% Cu, 23m @ 0.8% Cu incl 2m @ 4.8% Cu, 4m @ 2.1% Zn, 2% Pb
- Joes Dam: 64m @ 0.19% Cu
- Manxman: 287m @ 0.23% Cu
- Caliban: 14m @ 0.57% Cu, 0.24g/t Au
- Aphrodite: 11m @ 1.2% Cu
- Taurus: 107m @ 0.13% Cu, 0.15g/t PGE, 121m @ 0.5g/t PGE, 15m @ 1.0g/t Pt, 0.66g/t Pd
- Atlantis: 2m @ 4.8% Cu, 4m @ 2.1% Zn, 2% Pb
- Neptune: 7.5m @ 0.16% Cu
- Proteus: 10m @ 0.57% Cu, 0.23g/t Au
- Triton: 44m @ 0.42% Cu, 15.8m @ 0.49% Cu

Legend:
- Pluto: drilled prospect 2009-2011
- Proposed drilling area 2010-2011

Regional Exploration Results

Regional Metres Drilled
2009 13,000m 2
2010 34,000m 2 - 4
2011 13,000m * 5
IMX JV REGIONAL EXPLORATION WORK 2010-2011

IMX JV

- Airborne Gravity Gradient Survey (2,200 sq km).
- Airborne Magnetic Survey (800 sq km).
- IP Surveys.
- Ground Gravity Surveys.
- Rouse Prospect (1,900m drilled).
- Arapiles Prospect (400m drilled).
- Develop More Prospects.

- Diamond Drilling – 1 (2) rig
- 2010-2011 First JV Year (31 Apr 11) 2,300m completed

Year One expenditure requirement met.
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OZ MINERALS NEAR-MINE 2011 EXPLORATION PROGRAM

- **Ankata Deposit Check-Drilling**
- **Surface Drilling** ‘Kalaya Zone’, ‘Munda Zone’ Inferred Resource’
- **Drill hole Assessment**
- **Diamond Drilling**
- **Neptune-Triton-Proteus Prospects Drilling Assessment**

**40,000m Near Mine (10,000m completed) 3-4 rigs**

**5,000m Ankata (4,000m completed) 1 rigs**
OZ MINERALS NEAR-MINE 2011 EXPLORATION PROGRAM

Drilling in Progress to 100m by 100m H1

Ankata Decline

Modelling and Resource Estimation H2
Ground gravity surveys – in progress/planned

Potential for:
- Copper, Gold
- Nickel
- Platinum
- Palladium

Potential for:
- Copper, Gold
- Lead-Zinc-Silver

Potential for:
- Copper, Gold
- Lead-Zinc-Silver

Potential for:
- Copper, Gold
- Nickel
- Platinum
- Palladium

OZ MINERALS REGIONAL 2011 EXPLORATION PROGRAM

2011 Exploration Programme
**OZ Minerals**

- Airborne Magnetic Survey – targets.
- IP Surveys.
- Ground Gravity Surveys.
- Develop and Explore Northern Prospects.
- Diamond Drilling – 5 rigs.
- 80,000m drilling 2011.
2011 EXPLORATION PROGRAM – GROUND GRAVITY

Tenements
- OZL 100%
- IMX JV

Ground Gravity
- 2010 Station
- Dec 2009/2010 Station
- Airborne gravity gradient (AGG) survey (200m line spacing)

Planned Gravity
- 100m x 100m detailed grids following airborne prospects
- 200m x 400m grids
IMX JV

- Airborne Magnetic Survey assessment
- IP Surveys.
- Ground Gravity Surveys.
- Develop More Prospects.

- Diamond Drilling – 1 rig
- 5,000m 2010-2011 First JV Year (31 Apr 11) +3,000m completed
- 15,000m 2011-2012 Second JV Year.
IMX JV 2011 EXPLORATION PROGRAM – IP SURVEYS

IMX JV IP program
Transmitter lines - Blue
Receiver lines - Red
*Subject to heritage clearances
2011 EXPLORATION PROGRAM - SUMMARY

OZ MINERALS
• 4,150 sq km total area
• 9 rigs including Near-Mine work
• 120,000m in 2011 including Near-Mine
• Continued IP, ground techniques
• Aeromagnetic survey assessment
• Continue prospect generation
• Continue Technical/Research Group input
• Copper-focus - IOCG

IMX JV
• 3,200 sq km total area
• One rig – 5,000m 2010-2011 JV Year 1
• One rig – 15,000m 2011-2012 JV Year 2
• Continue/complete initial prospect testing
• Continued prospect generation
• IP and ground geophysical follow-up
• Aeromagnetic survey assessment
• Assess other JV tenements (North and NE)
Information in this presentation which refers to Minerals Resources at Prominent Hill is a summary of the information relating to Mineral Resources set out in the Prominent Hill Mineral Resources and Ore Reserves explanatory notes as at 30 June 2010 that was summarised in the announcement released to ASX on 9 November 2010 (and available at www.ozminerals.com/operations/Resources-Reserves) which was compiled by Mr Jim Hodgkison MAusIMM who is a full time employee of OZ Minerals and a Competent Person as defined in the 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Hodgkison consents to the inclusion of the material in the form and content in which it appears.

Information in this presentation which refers to Prominent Hill Ore Reserves is a summary of information relating to Ore Reserves set out in the Prominent Hill Mineral Resources and Ore Reserves Statement as at 30 June 2010 (available at www.ozminerals.com/operations/Resources-Reserves). This information has been approved for release in the form and context in which it appears by Mr David Goodchild who is a full time employee of OZ Minerals and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken 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’.

Within this statement (or presentation) references to exploration results relating to Prominent Hill are based on information compiled by Mr Marcel Van Eck Msc who is a full-time employee of OZ Minerals, is a member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities undertaken to qualify as a competent person as defined by the 2004 edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Van Eck has consented to the inclusion of the material in the form and context in which it appears.