

# TZMI 2011 Congress Iluka's Exploration & Resource Development Capability

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### Disclaimer - Forward Looking Statements



#### **Forward Looking Statements**

This presentation contains forward-looking statements that are subject to risk factors associated with exploring for, developing, mining, processing and sale of minerals. Forward-looking statements include those containing such words as anticipate, estimates, should, will, expects, plans or similar expressions. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a range of variables and changes in underlying assumptions which could cause actual results or trends to differ materially. These include, but are not limited to: price and currency fluctuations, actual supply versus demand, production results, ore reserve and mineral resource estimates, loss of market, industry competition, environmental risks, physical risks, legislative and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

#### **Specific Risks & Sensitivities**

The information contained in this presentation is subject to, but not exclusively to, the following:

- · changes in exchange rate assumptions;
- changes in product pricing assumptions;
- major changes in mine plans and/or resources;
- · changes in equipment life or capability;
- emergence of previously underestimated technical challenges; and
- environmental or social pressures which impact license to operate.

All currency referred to is Australian denominated unless otherwise indicated.

#### **Competent Person Statement**

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Greg Jones and Chris Lee who are Members of the Australasian Institute of Mining and Metallurgy. Each of Messrs Jones and Lee is a full time employee of Iluka and has sufficient experience which is relevant to the style of mineralisation and the type of deposits 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" (JORC Code). Messrs Jones and Lee consent to the inclusion in this presentation of the matters based on their information in the form and context in which it appears.

#### **Production Potential Assumptions**

Production Potential on slide 26 is predominantly based on a combination of Proved and Probable Ore Reserves and Measured and Indicated Mineral Resources that have been subjected to project studies (Enhanced Production Project - EPP) using Iluka long term cost and pricing estimates and an assessment of risk including access, approval and development timing. A very small portion of the Production Potential is based on Inferred Mineral Resources totalling approximately zero to four per cent of the Production Potential.

## Iluka's Exploration & Resource Development Objective



#### "To create and deliver value for shareholders"

By:

"Discovering and commercialising Tier 1 and 2 ore bodies and finding economic extensions to existing ore bodies"

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- 1 Iluka's Exploration Team
- 2 Australian Presence
- 3 International Presence
- 4 Exploration Track Record
- 5 Mineral Resources & Ore Reserves & Iluka's Production Capability

### Iluka's Exploration Team

#### 340+ years of experience



- 31 geologists
- 340 years of experience, 160 years of which is in mineral sands
- dedicated exploration teams in:
  - Eucla Basin
  - Murray Basin
  - Perth Basin
  - Americas
  - Project Generation
- "Explorer of the Year" in 2006 for the Tier 1 Jacinth-Ambrosia discovery

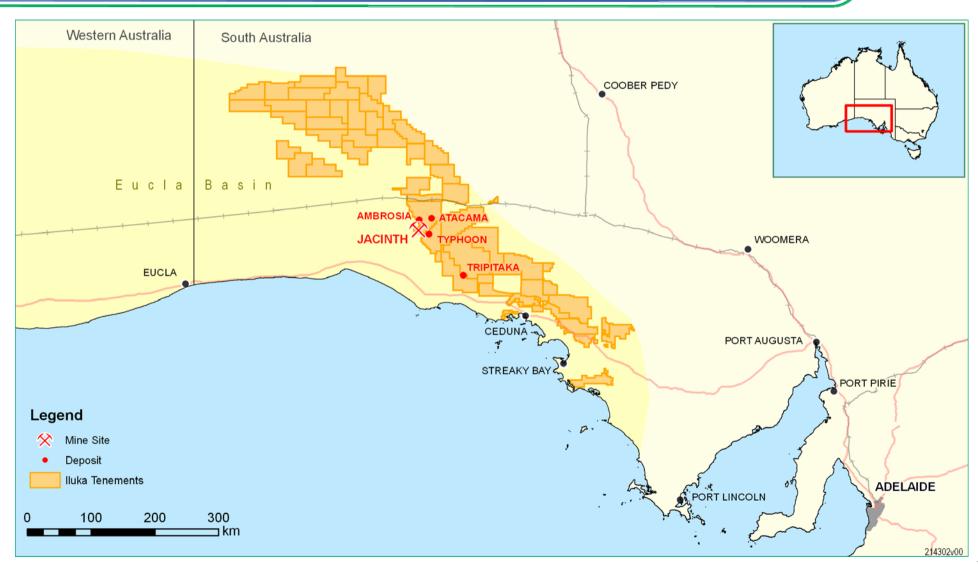
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#### **Eucla Basin**





## Eucla Basin 2011



- 2011 expenditure: ~\$9m
- 90,000m drilled
- Highlights:
  - Typhoon and Atacama;
  - discovery of Sonoran Prospect;
  - high zircon confirmed in the Maralinga area;
  - non HM targets identified in magnetic survey.





#### **Eucla Basin**

#### 2012 Areas of Focus



#### 2012 focus areas:

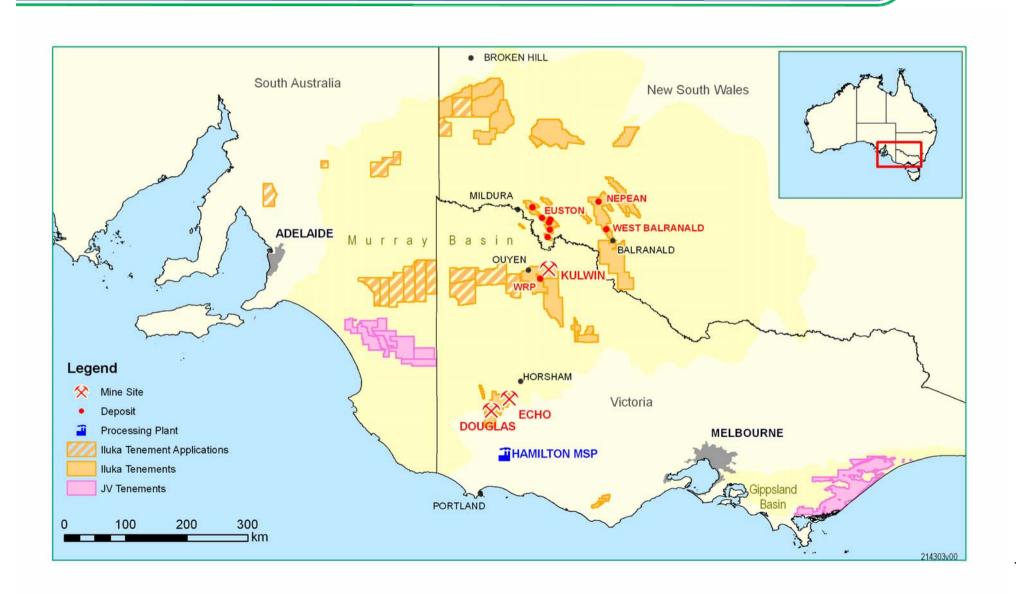
- 66% greenfields drilling, focussing:
  - within 100km of JA and Tripitaka; and
  - the Maralinga area.
- Tripitaka & Atacama resource upgrade drilling
- 33% expenditure increase to ~\$12m
- 33% increase in metres to ~120,000m





## Murray Basin





#### Murray Basin 2012 Areas of Focus



- 66% greenfields drilling, focussing:
  - new search spaces Gippsland & Otway Basin
  - Central region of Murray Basin
- Focus around existing resources to define any remaining potential e.g. Balranald / Nepean region
- 28% expenditure increase to ~\$8m
- 40% increase in metres to ~100,000m





#### Perth Basin





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#### **International Presence**





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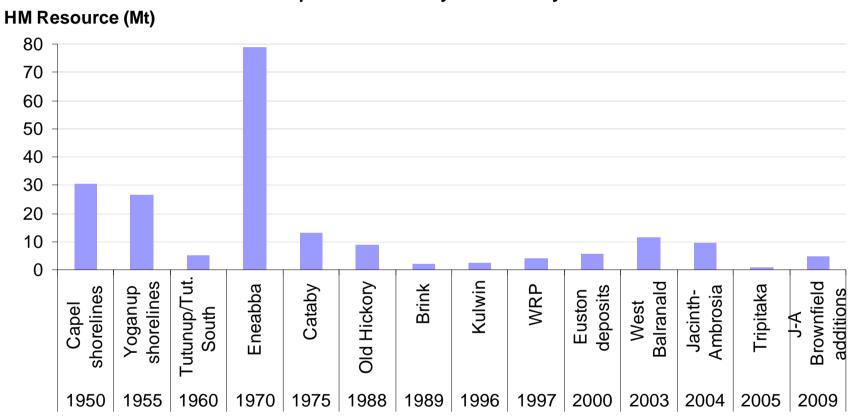
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## Iluka Exploration

#### A History of Discovery



#### **Iluka Exploration - History of Discovery**

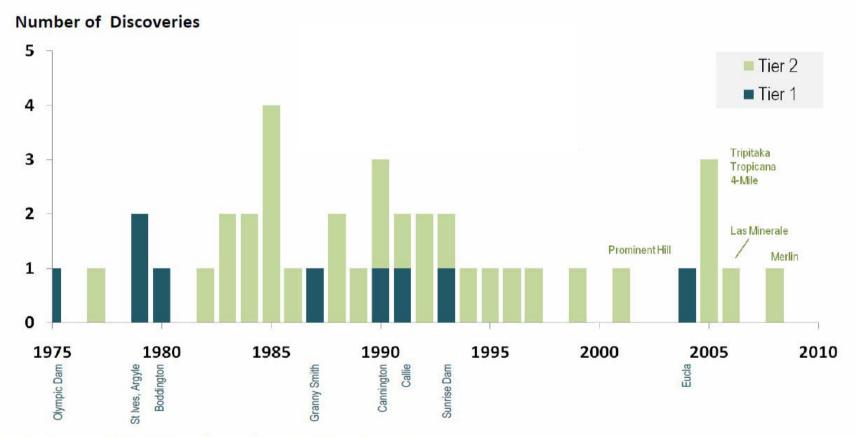


- Only significant discoveries shown
- For simplicity only Heavy Mineral (HM) shown
- Economics dependent on grade, assemblage, overburden & distance from infrastructure

## Jacinth Ambrosia Tier 1 Discovery



## Tier 1&2 Discoveries: Australia



Tier 1 = "Company Making" Mines. They are large, long life and low cost

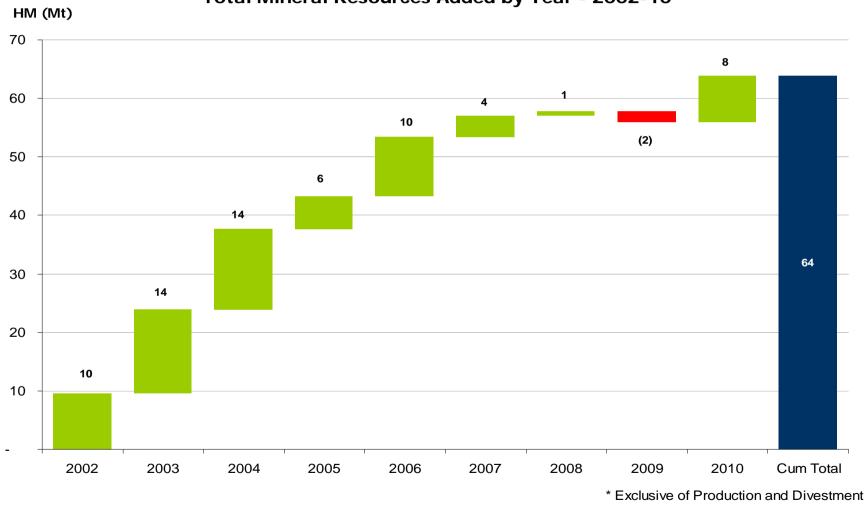
Tier 2 = "Significant" Deposits. Has some, but not all, of the characteristics of a Tier 1

Source: MinEx Consulting May 2010

#### Mineral Resources Additions

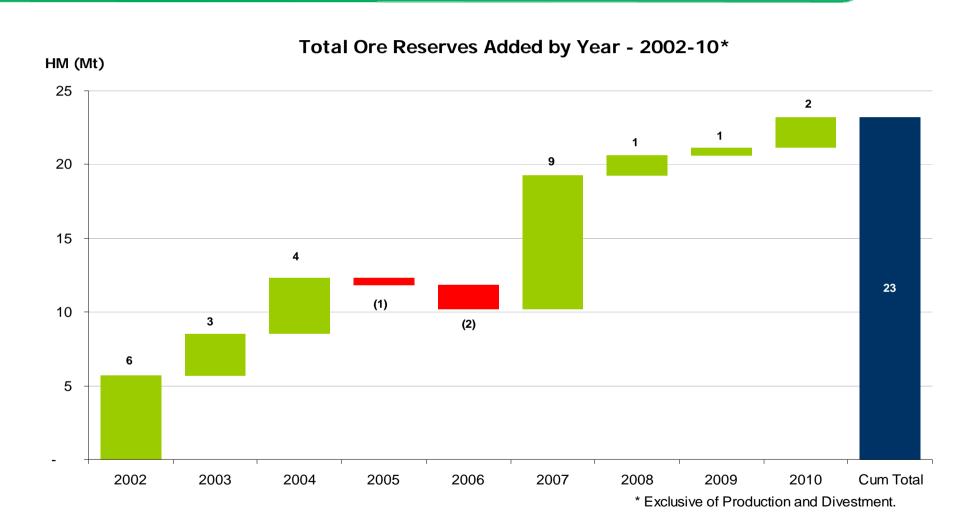






#### Ore Reserves Additions

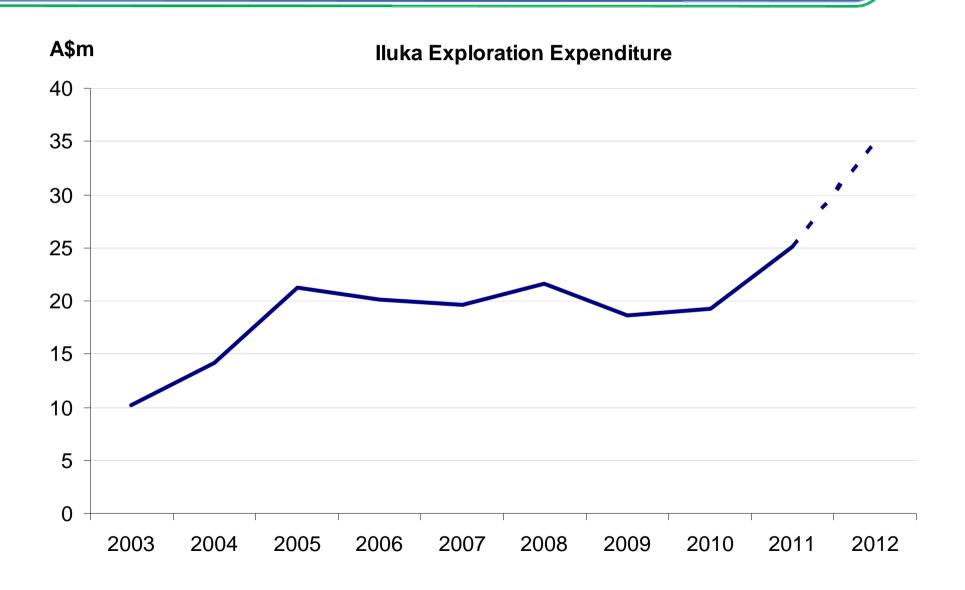




• Refer to the Iluka website www.iluka.com for ASX releases and investor presentations

## **Exploration Expenditure**





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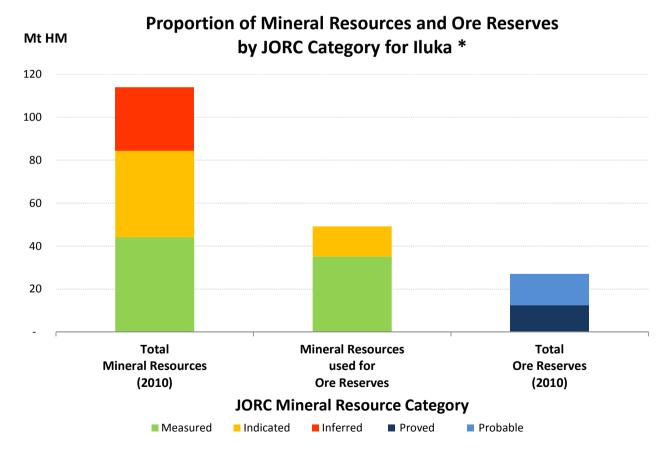


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#### Conversion of Mineral Resources to Ore Reserves



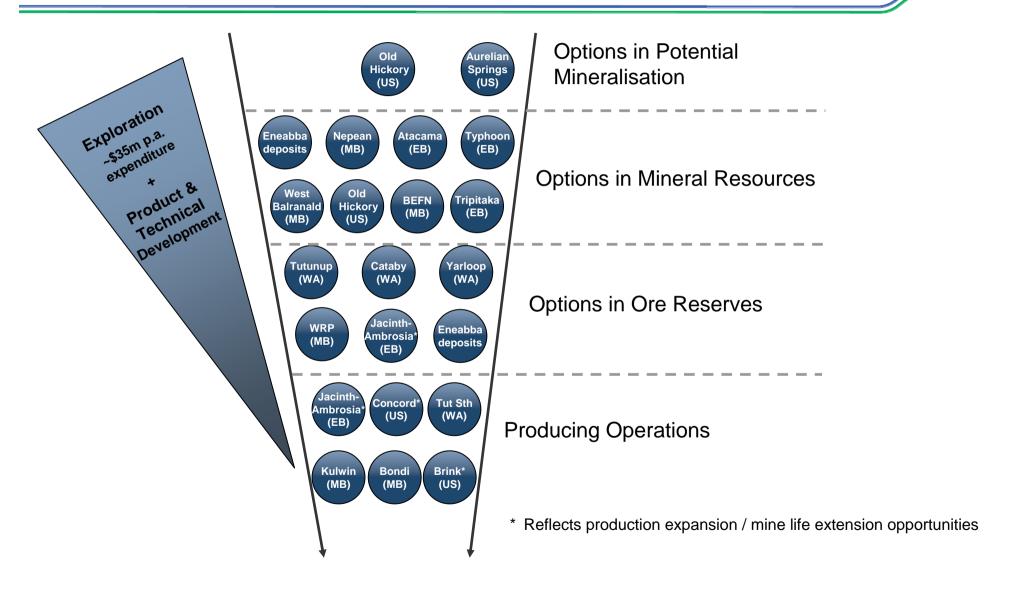
- Breakdown of Mineral Resources for Iluka\*
- Breakdown of those Mineral Resources used for conversion to Ore Reserves\*



<sup>\*</sup> Refer to the Iluka Resources Limited Concise Annual Report, 2010

#### Iluka's Production Potential





### Key Focus of Iluka's Production Options



#### Alignment with objective: create and deliver value for shareholders

Financial metrics - IRR, payback period, unit costs/margins, ROC, NPV

and

Market considerations – assessment of implications for supply/demand under various scenarios

Options available:

Extend economic life of some deposits and/or

Increase near to medium term production

#### **Enhanced Production Overview**

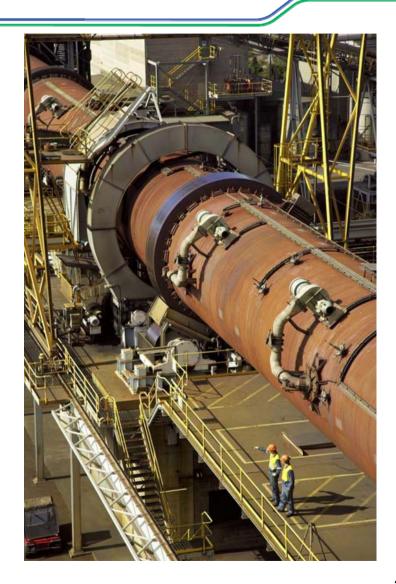


- Extensive assessment of production response options
  - 30+ opportunities identified
  - 10+ subject to detailed evaluation
- Focus on zircon and rutile
- Further work on technical, regulatory and other delivery risk factors required
- Decision on higher production vs longer economic lives
- Supply & demand outlook factored in

### Potential Implications for Ilmenite Production and SR Kilns



- Subject to the economics of RZ expansion options, Iluka has the potential to produce sufficient ilmenite to support a 4 kiln operation\*
- Additional chloride ilmenite available for expansion of upgrading capacity and sulphate ilmenite for external sales if warranted
- SR production volume and product mix optionality available
- 1 or more kilns potentially devoted to producing high grade sulphate pigment feedstock



<sup>\*</sup> Production Potential is predominantly based on a combination of Proved and Probable Ore Reserves and Measured and Indicated Mineral Resources that have been subjected to project studies (Enhanced Production Project - EPP) using Iluka long term cost and pricing estimates and an assessment of risk including access, approval and development timing. A very small portion of the Production Potential is based on Inferred Mineral Resources totalling approximately zero to four per cent of the Production Potential.

#### Conclusion



- Large, very experienced exploration team with a global focus
- A track record of discovery
- Exploring in 'Elephant Country' for RZ deposits (eg. Eucla and Murray Basins)
- Significant ramp up in activity levels planned (~\$35m \$40m in 2012)
- Iluka has a very large Mineral Resource base (114Mt HM)
- Iluka has the ability to respond to anticipated future supply deficits



#### **Iluka Resources Limited**

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