



ILUKA

Murray Basin Final Investment Decision

**Investor and Financial Media Briefing
Melbourne – 24 June 2004**

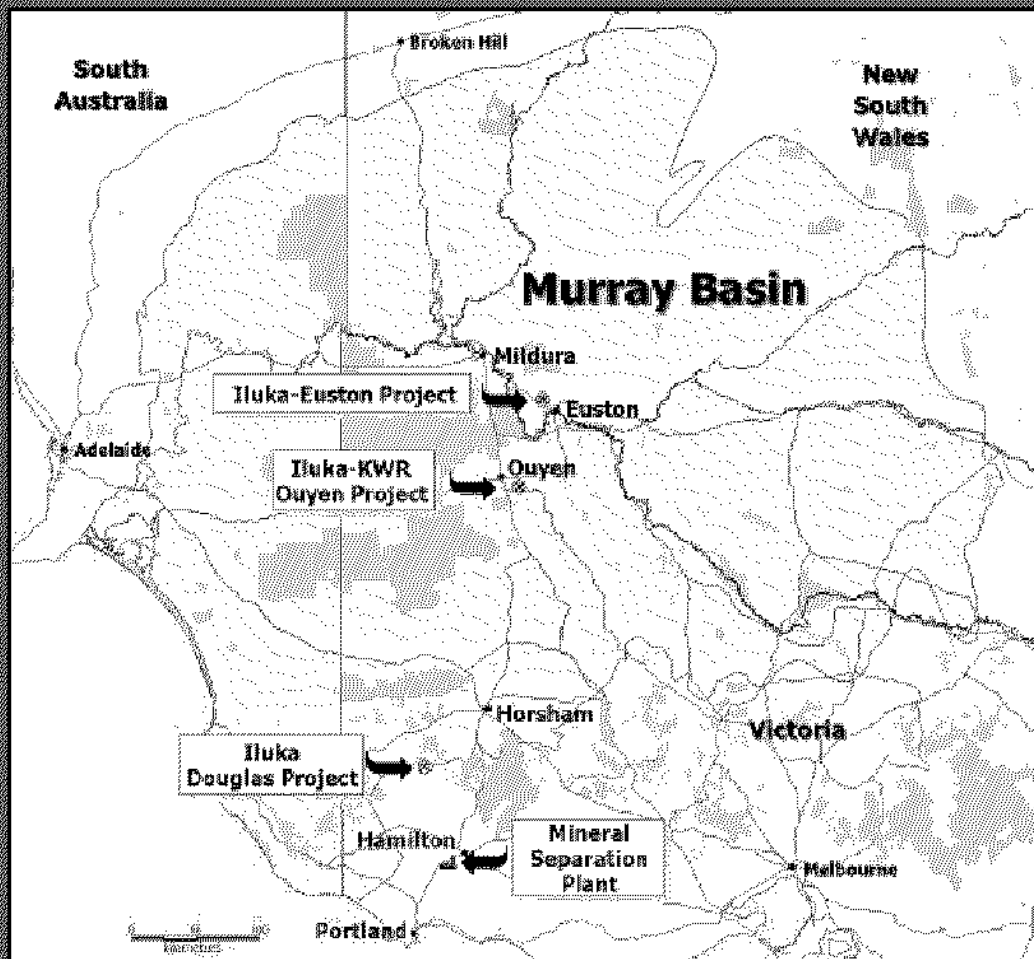
Murray Basin – Strategic Rationale

- **Murray Basin underpins Iluka's strategy to**
 - **grow its high-TiO₂ feed stock market share and maintain or expand its zircon market share**
 - **capitalise on expected market opportunity gaps/pricing upside**
- **Source of competitive advantages in the form of**
 - **minimal country and political risks**
 - **existing high margin mineral assemblage**
 - **being the "first committed new R & Z project"**
- **Potential for additional value creation from**
 - **upgrading ilmenite**
 - **further exploration success**

Initial Investment

- **A larger Douglas project has been approved to**
 - **provide additional short-to-medium term production**
 - **expansion opportunities in the longer-term**
 - **maximise returns from Iluka's suite of R & Z resources**
- **Initial investment of A\$270 million to build and commission**
 - **the Douglas mine and minerals concentrator**
 - **expanded MSP (up from 30 to 55 tonnes per hr)**
 - **project infrastructure e.g. power, water, gas, road, workshops and laboratories**

Development Focus Areas



- Up to three R & Z projects planned by 2010
- Douglas committed, first production Q4 2005
- KWR commitment mid-2006, first production Q3 2007
- Euston emerging as 3rd project focus area
 - low clay content
 - attractive R&Z assemblage

Investment Profile

- **Key elements of A\$270 million commitment**
 - **55 tonne per hr MSP - A\$130 million**
 - **Douglas wet concentrator/mining unit - A\$37 million**
 - **infrastructure, project management costs and contingency allowance - A\$103 million**
- **Key elements of planned A\$150-200 million KWR investment**
 - **wet concentrator, dredge and mining unit**
 - **infrastructure items, land purchases, project management costs and contingency**
- **KWR estimate remains subject to completion of Pre-feasibility (PFS) and Detailed feasibility (DFS) studies**

Douglas Development Schedule

- **2004**

- **completion of initial road and site earthworks - Q3**
- **start construction of mine, concentrator and MSP - Q3**
- **complete water pipeline from Rocklands reservoir - Q4**
- **start up of mining operations - Q4**

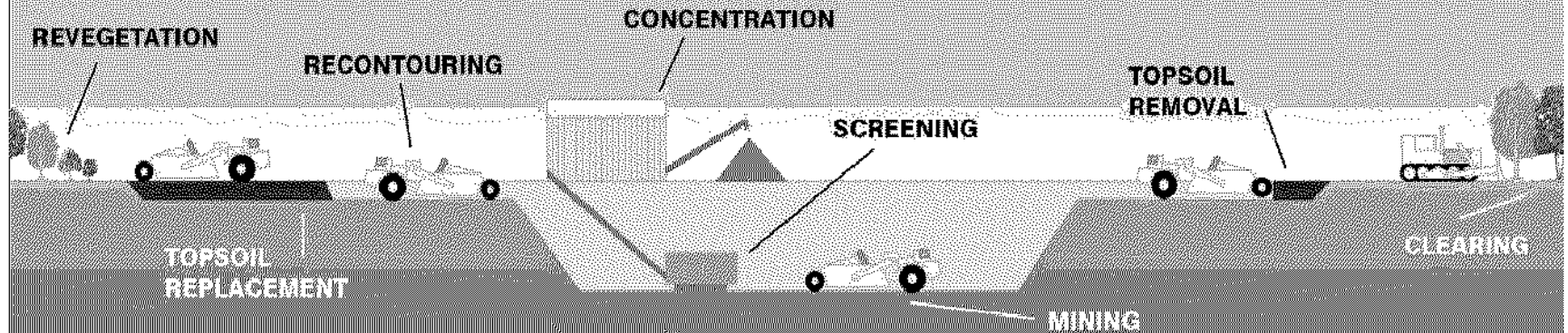
- **2005**

- **start commissioning wet concentrator - Q1**
- **start commissioning expanded MSP - Q3**
- **finished product available from MSP - Q4**

KWR Development Schedule

- **2004**
 - **Environment effects statement (EES) - underway**
 - **test pit construction - Q3**
- **2005**
 - **complete PFS - Q3**
- **2006**
 - **complete DFS - Q2**
 - **final investment decision - Q2**
 - **finished product available - Q3**
- **Euston PFS being carried out in parallel to KWR**

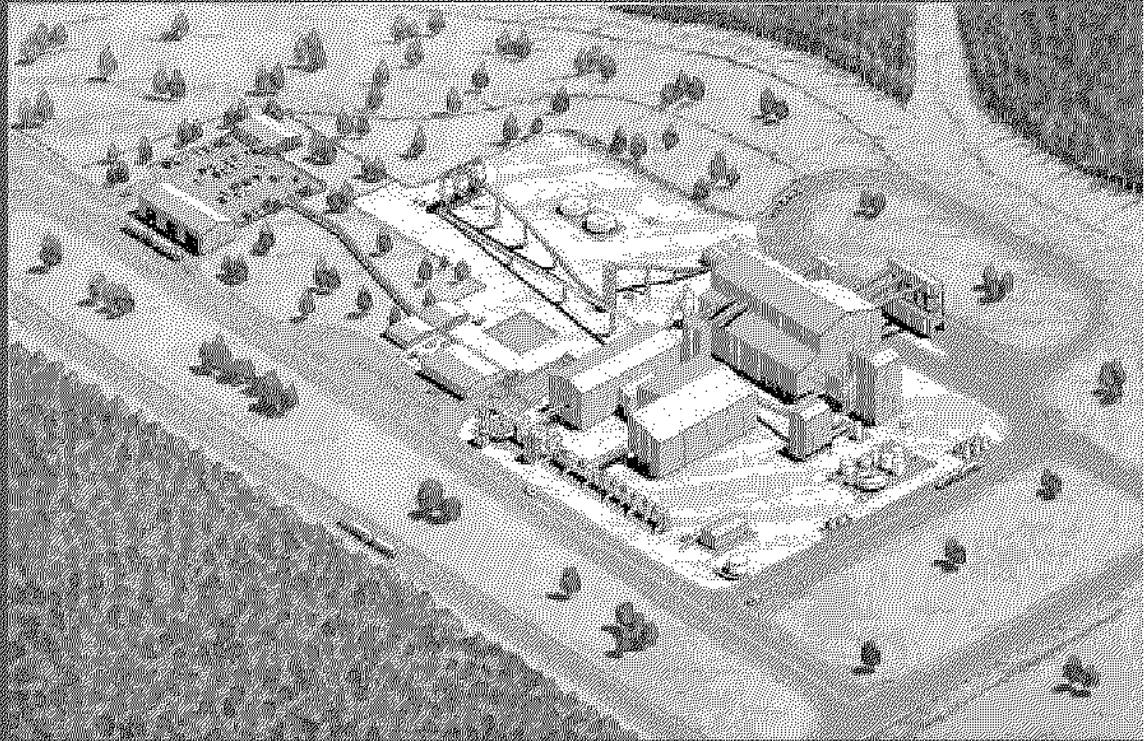
Douglas Mining/Concentrating Process



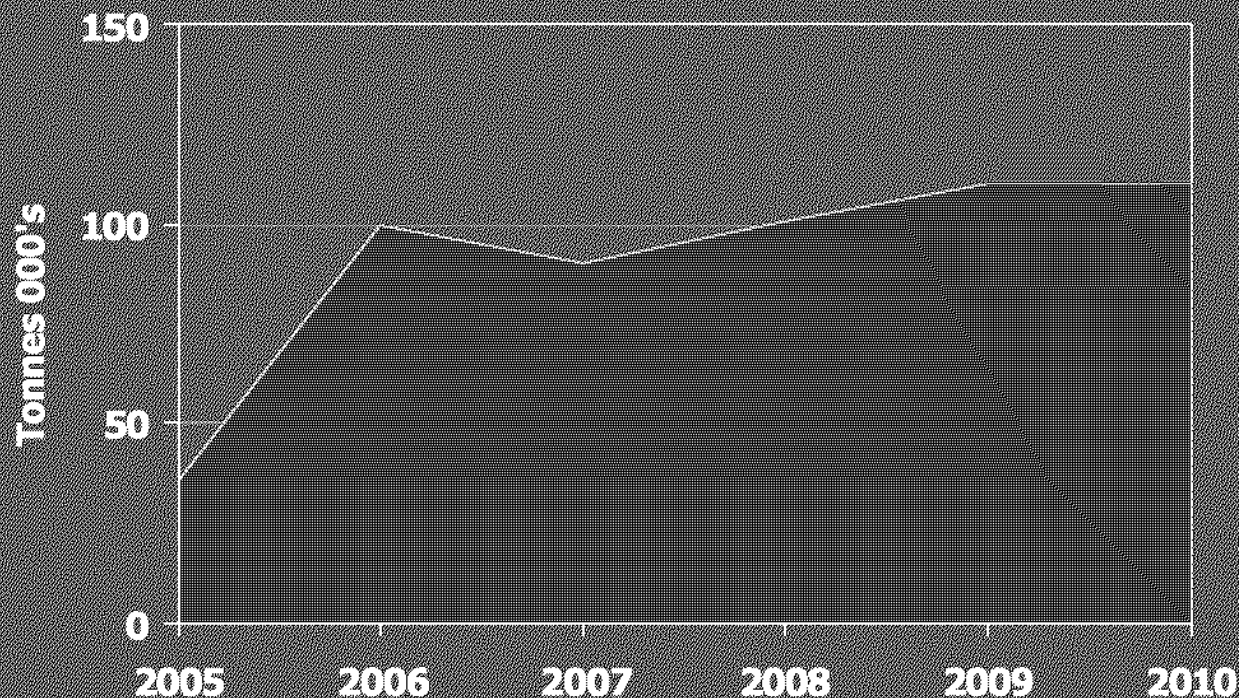
- **Dry mining earthmoving equipment and MUP owned and operated by a contractor. Nominal MUP capacity 580 t/hr of ore**
- **Iluka WCP uses gravity processes to concentrate the HM and Wet magnetic separation to separate non-magnetic R & Z**
- **Douglas ilmenite initially mixed with the sand and clay tailings for return to the mine – can be stock piled for SR when required**
- **WCP designed to treat up to 400 t/hr of spiral feed**

Mineral Separation Plant

- **MSP HMC feed capacity 55 t/hr**
- **Uses wet gravity, dry magnetic and electrostatic processes to separate saleable products**
- **Waste products and tailings returned for disposal in the mine**
- **On site storage of product ready for contract road transport to storage and ship-loading facilities at Portland**

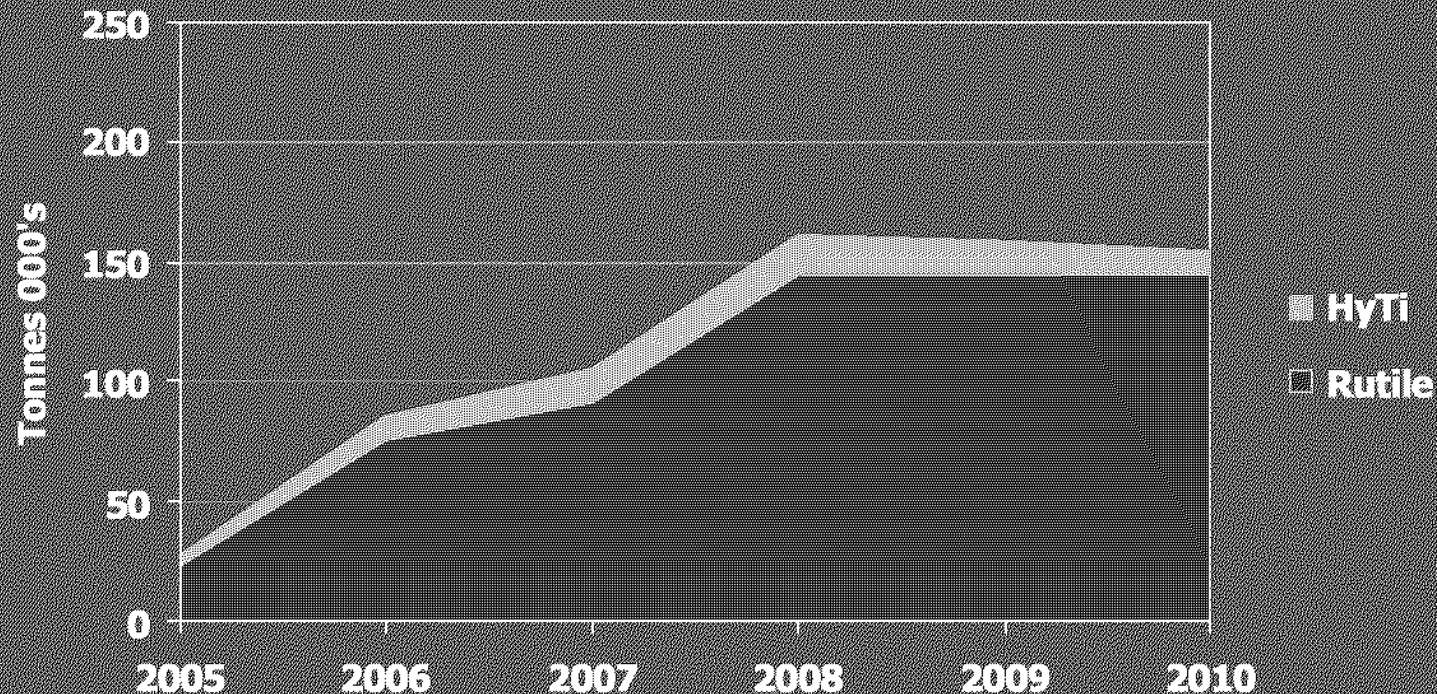


Douglas/KWR Zircon Production



- **Douglas (2005/06 cumulative) 135,000 tonnes**
- **Douglas and KWR combined (2007 - 2015) average 102,000 tonnes per year**

Douglas/KWR Rutile and HyTi Production



- Douglas (2005/06 cumulative) rutile - 98,000 and HyTi - 11,000 tonnes
- Douglas/KWR combined (2007 - 2015) average rutile 135,000 and HyTi 11,000 tonnes per year

Douglas In-situ HM Reserves

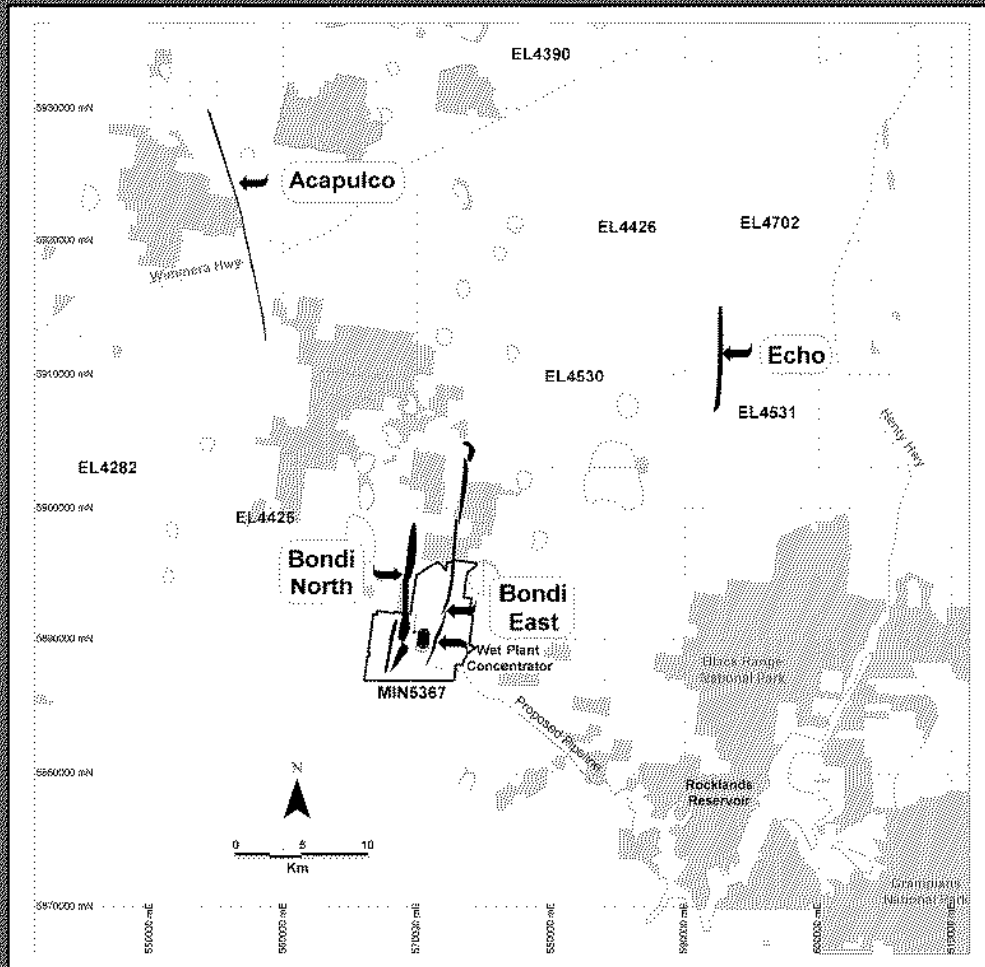
- **DFS in-situ HM Douglas reserves revised**
 - **current reserves 30% lower than published reserves**
- **Revision due to a combination of**
 - **updated DFS cost information, mine planning studies**
 - **reclassification of some rutile to leucoxene reserves**

Comparison of Basin Minerals NL and Iluka DFS Reserves

	Ore Reserve Category	Ore (MT)	In-Situ HM (MT)	HM Grade (%)	Ilmenite (%)	Zircon (%)	Rutile (%)
BASIN NL	P+P	47.4	4.65	9.8	37	10	10**
ILUKA	P+P	23.4	3.25	13.9	44	12	8

**** includes leucoxene**

Douglas Region Reserves Potential

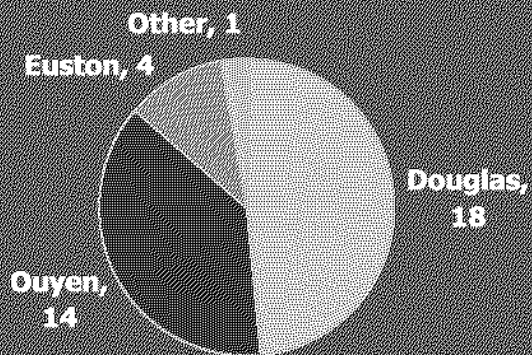


- **Reserves based on**
 - **Bondi main deposit**
 - **Bondi East and West deposits**
- **Future reserves opportunities near the Douglas mine**
 - **Acapulco**
 - **Echo**
 - **Bondi North**

Murray Basin Resource Potential

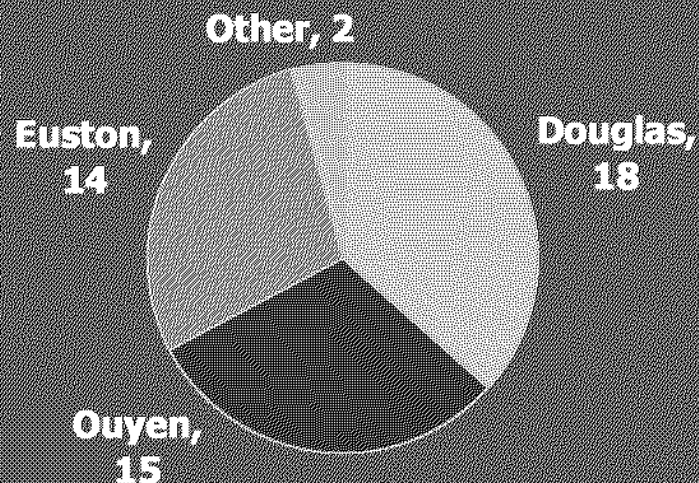
- Region remains highly prospective
- Resource base continuing to expand – up 12 mt in past year

In-situ HM Resource by district
2002



Total in-situ HM 37 mt

In-situ HM Resource by district
2003



Total in-situ HM 49 mt

Key Douglas Project Risks and Mitigation

- **Mine water**
 - increased dam capacity, offsite water sources
 - technology in place to increase re-use of water
- **Clay and tails management**
 - large scale trials on Murray Basin material
 - ongoing testing in USA (clay levels > 30%)
- **Project Execution Delays**
 - early commencement of advance works
- **Induration**
 - dry mining operation
 - worst zone successfully tested in Douglas test pit

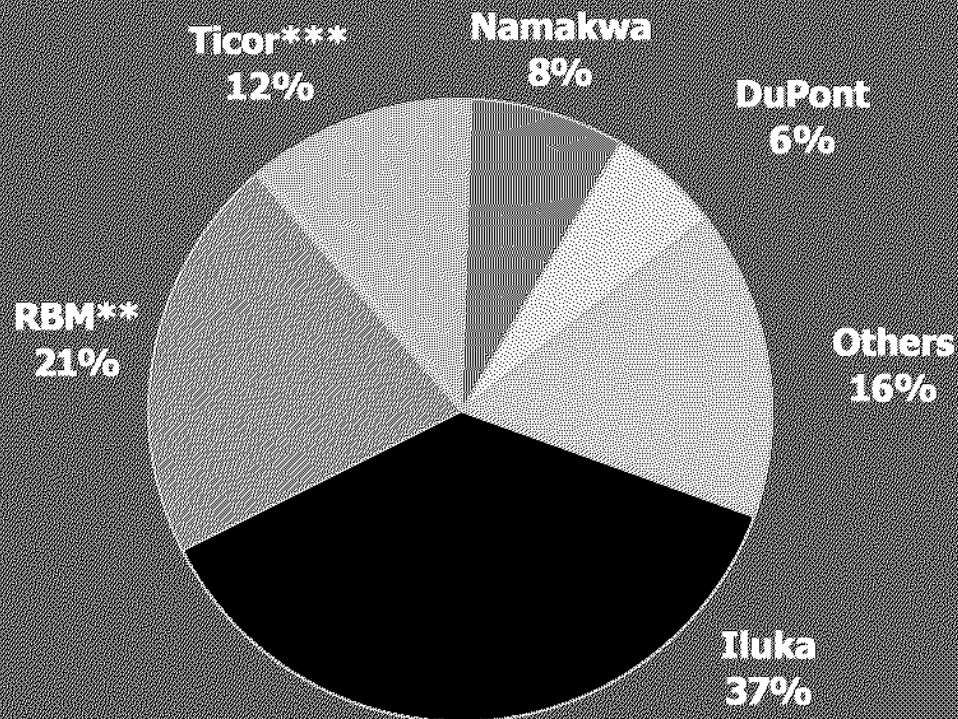
Douglas Project Opportunities

- **Exploration Potential**
 - **brown field and green field opportunities**
- **Ilmenite**
 - **identify further saleable product or progress opportunities to upgrade product**
- **Productivity and Recovery**
 - **opportunities to increase current inputs**
 - **potential to exceed name plate capacities**
- **Toll Processing**
 - **first starter option to process product from other mines**
- **Tin / Gypsum**
 - **project will produce approximately 1,000 tonnes of tin concentrate per year**
 - **potential for gypsum sales in the medium-term**

Marketing Strategy

- **Marketing strategy is based around**
 - **Product differentiation with a focus on**
 - **profitable growth in high TiO_2 feed stocks and chloride ilmenite for chloride pigment production**
 - **sulphate ilmenite as an important product**
 - **maintain or grow zircon production with focus on high quality/high margin sectors**
 - **Customer service differentiation**
 - **the supplier of choice**
 - **reliable, low risk and good relationships**
 - **easy to deal with**

2003 Global Market Share – Zircon



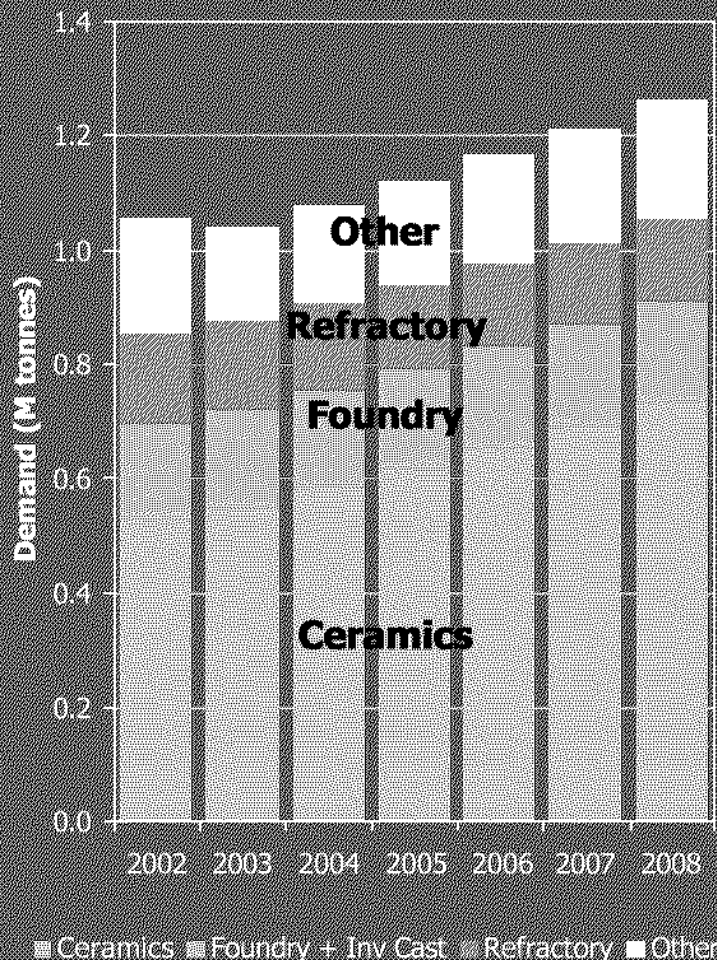
* Iluka's market share includes 100% CRL

** RBM - 50% Rio Tinto and 50% BHPB

*** Tigor - Tiwest and Tigor SA

Zircon Supply and Demand Outlook

Global Demand

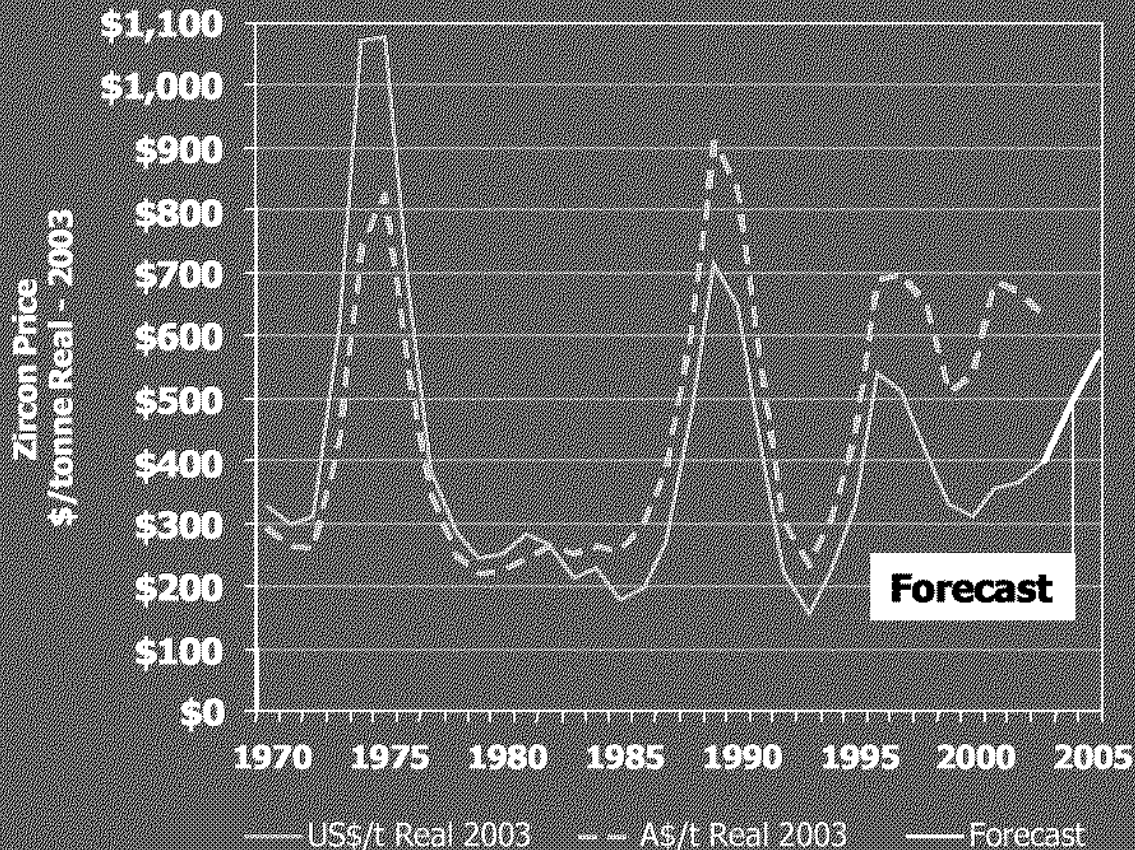


Zircon outlook

- Large potential supply deficit developing
- Decreasing production from existing suppliers
- Strong global demand growth in ceramic and zirconium chemicals
- Moderate growth in TV glass and foundry
- Emerging opportunity gap

Zircon Pricing Outlook

Zircon Price ex Australia



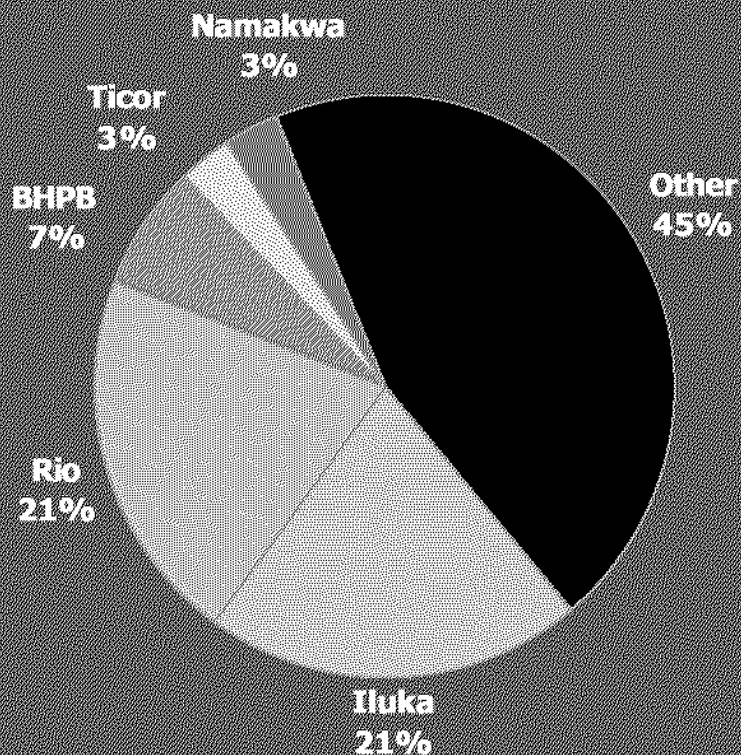
- Continuing tight market dynamics forecast
- Modest demand growth > supply
- Chinese market is major growth area
- Iluka increasing prices in a responsible manner

Murray Basin Zircon Strategic Fit

- **Murray Basin zircon is of premium quality**
 - **suitable for most market sectors**
- **35% of the zircon production is currently contracted**
 - **balance will be sold to existing customers**
- **No other major zircon rich deposits in development pipeline**
- **Murray Basin production will enable Iluka to**
 - **maintain and/or grow market share whilst targeting high-margin premium sectors**
 - **target the opportunity gap in future as suppliers struggle to meet predicted demand**

2003 Global Market Share – Titanium Feedstock

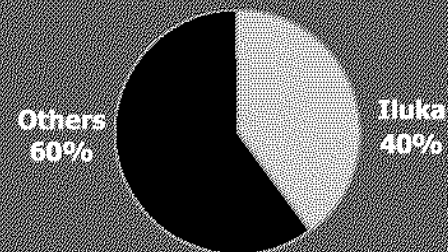
Total TiO_2 Feedstock



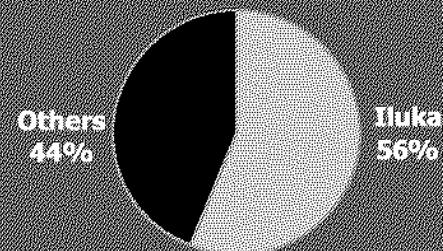
Iluka's market share includes 100% CRL
Rio Tinto includes their 50% ownership in RBM
Ticor includes Tiwest and Ticor SA

Chloride TiO_2 Feedstock

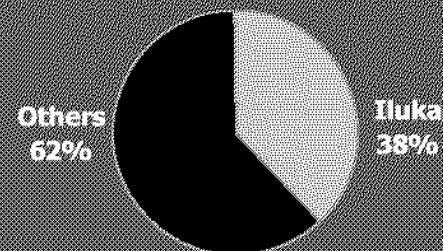
Chloride Ilmenite



Synthetic Rutile

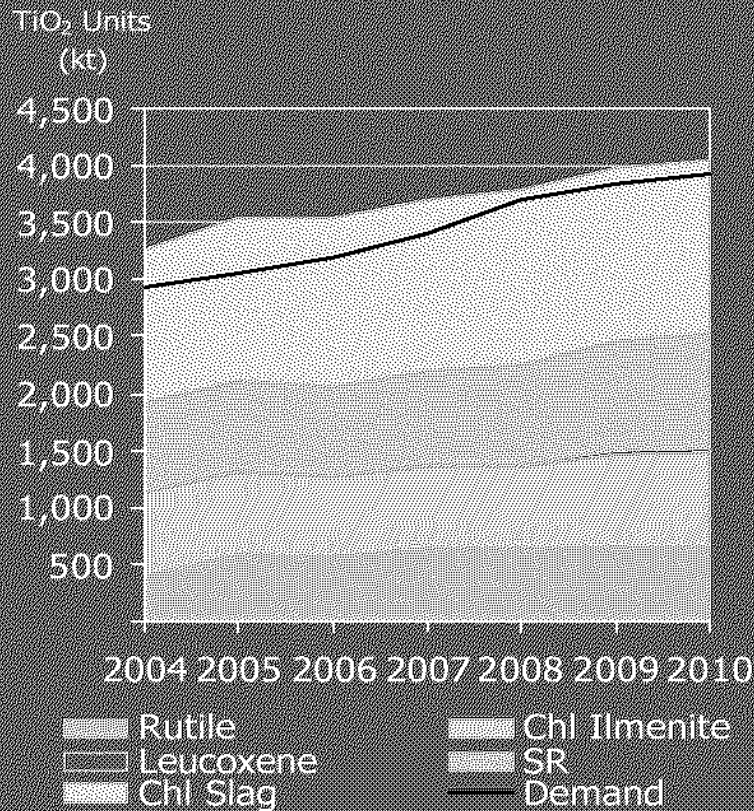


Rutile



TiO₂ Feedstock Supply/Demand

Chloride TiO₂ Supply Demand



Chloride Feedstock

- **Market forecast to remain in oversupply due to slag production**
- **Demand increasing in line with GDP growth (pigment demand)**
- **Welding market growth ~ 2% pa**
- **Titanium metal growth ~ 5% pa in short term**

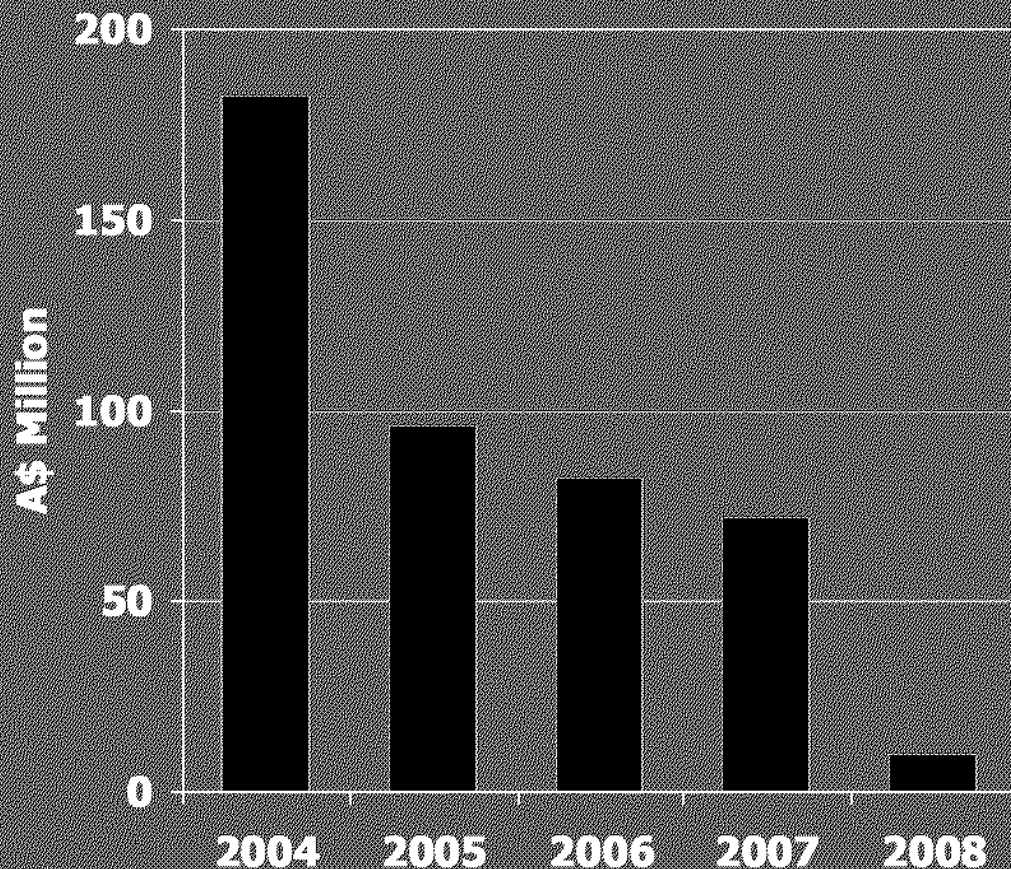
Murray Basin Rutile/HyTi Strategic Fit

- **MSP technology produces**
 - **a premium quality rutile for sale into the pigment market**
 - **HyTi 91 for sale into the welding and pigment markets**
- **Approval gives 'first confirmed project' market advantage**
 - **major competitors are not planning any major rutile expansions in the medium term**
 - **no new rutile projects from new entrants approved – some currently being promoted**
 - **negotiating sales agreements – will be finalised well before Q4, 2005**

Douglas Project Assumptions

- **Rutile and zircon are fully sold**
- **No economic contribution from Ilmenite**
- **Price forecasts are consistent with TZMI**
- **Exchange rate assumptions consistent with external long-term forecasts**
- **Conservative approach on resources modelled**
- **Land access will be as expected**
- **Current environmental and operating license conditions prevail**

Douglas/KWR Capital Expenditure Profile



- Major expenditure for Douglas in 2004-05
- Major expenditure for KWR 2006-07
- Post-KWR commissioning 10 year average cash flows pre- tax ~ \$100 M pa

Funding Position

- **Murray Basin capital requirements are well within Iluka's capacity**
- **Iluka has strong cash flows and is modestly geared**
- **Murray Basin will be financed by a combination of cash flows and available debt facilities**
- **Existing debt maturity profile is long-dated (>5yrs)**
- **Capacity for future expansion projects and opportunities as and when required**

Douglas/KWR Project Revenues, Costs and Earnings

- **Expected sales revenues**
 - **more than A\$100 million in 2006 expanding to around A\$200 million per year by 2009**
- **Operating costs**
 - **between A\$70 to A\$80 million per year from 2006**
- **EBIT**
 - **approaches A\$100 million within 5 years**
 - **MSP utilisation is key EBIT determinant**
 - **processing HMC stockpile enhances throughput in 2006**
 - **MSP mostly runs on Douglas HMC in 2007**
 - **commissioning of KWR concentrator provides additional feedstock for MSP from late 2007 onwards**
 - **opportunities exist to accelerate availability of additional HMC in 2007**

Contribution to the Victorian Economy

- **Major new capital investment commitment**
- **Upgraded regional infrastructure in south-west Victoria**
- **Direct employment (Douglas mine and MSP)**
 - **250 new construction jobs, 150 new operations jobs**
- **Annual operating expenditure of A\$70-A\$80 million per year**
- **Export sales of more than A\$1.5 billion over 20 years**
- **Payroll and land tax payments of more than A\$800,000 per year from 2007**
- **Royalties of more than A\$100 million from Douglas and KWR**

Concluding Comments

- **Commitment to Douglas builds on other achievements to date**
- **Iluka now in a unique position with**
 - **new fit-for-purpose facilities and dedicated infrastructure**
 - **extensive resources in a highly prospective region and up to three high-value rutile and zircon projects**
 - **established global sales capacity/market share and a new globally significant production stream**
- **Murray Basin production provides a significant value capture opportunity for Iluka from late 2005**
- **Potential also exists for further value creation**