



MULTI-COMMODITY MINER EXPLORER
www.alkane.com.au

ASX : ALK
OTCQX : ANLKY

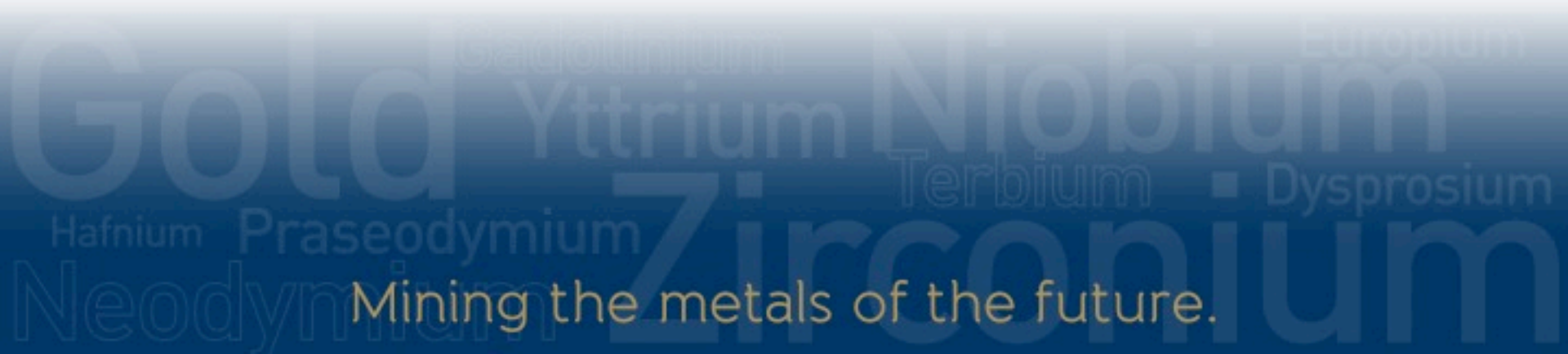
Discovery to Value



AMEC
CONVENTION

23 - 24 June 2015
Crown Perth, Western Australia

www.amecconvention.com.au



Mining the metals of the future.



Disclaimer

This presentation contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

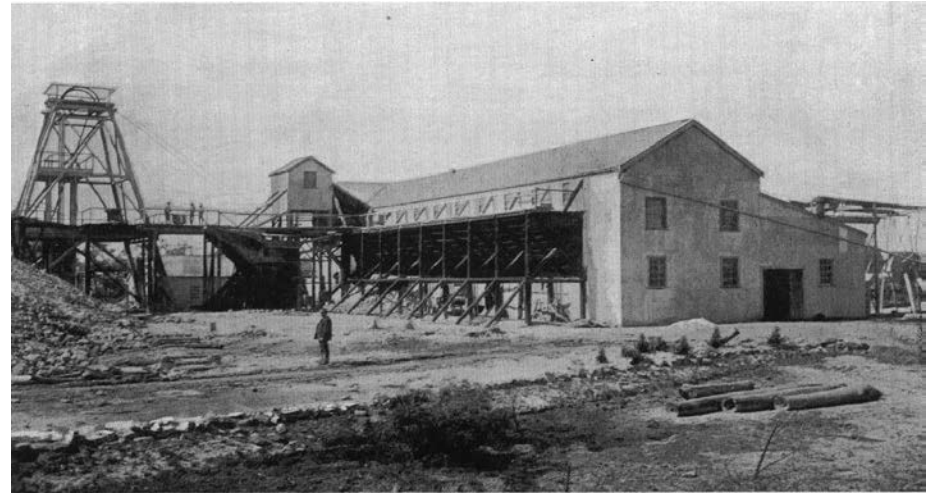
This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geosciences.

Competent Person

Unless otherwise stated, the information in this presentation that relates to mineral exploration, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (director of the Company) who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Chalmers consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

In The Beginning

- Listed on the ASX in 1969 to explore for hydrocarbons in the Sydney Basin and Bass Strait.
- Expands interests to include mineral exploration throughout Australia during 1970's.
- Like most junior resource companies, effort governed by market "interest".
- 1979 Alkane identifies gold potential at Parkes and Peak Hill in NSW Central West.



SURFACE WORKS "MYALL UNITED" GOLD MINE, McPHAIL, N.S.W.



CYANIDE WORKS, "MYALL UNITED" GOLD MINE, McPHAIL, N.S.W.
(time, extended.)

Operations Evolution

- **Drilling at Parkes (London-Victoria) 1987 demonstrates 1.1Mt @ 2.59g/t Au.**
- **Parkes JV to BHP Gold and feasibility study completed 1987. Alkane sells residual 40% to BHP Gold for \$2.1 million rather than fund its share of development.**
- **Alkane amalgamates titles at Peak Hill in 1986 and after two unsuccessful JVs, decides to develop Peak Hill itself in 1995.**
- **PH capex of \$5 million 100% financed by Macquarie Bank and heap leach production commences in 1996 on reserve 1.8Mt @ 2.1g/t Au.**



Financial Evolution

- Peak Hill produces 153,000oz of gold 1996 – 2005 with cash flow of \$18 million.
- Alkane discovers channel iron deposits while exploring for diamonds near Nullagine in WA. Floats BC Iron 2006 to develop these deposits and ultimately sells shares for \$13.6 million.
- Tomingley gold deposits identified in 2001 and development feasibility study completed 2010.
- Alkane defines 2.95Moz McPhillamys gold deposit near Orange NSW in 2010 in partnership with Newmont. Alkane's 49% interest sold to Regis Resources for \$73.5 million in shares in 2012.



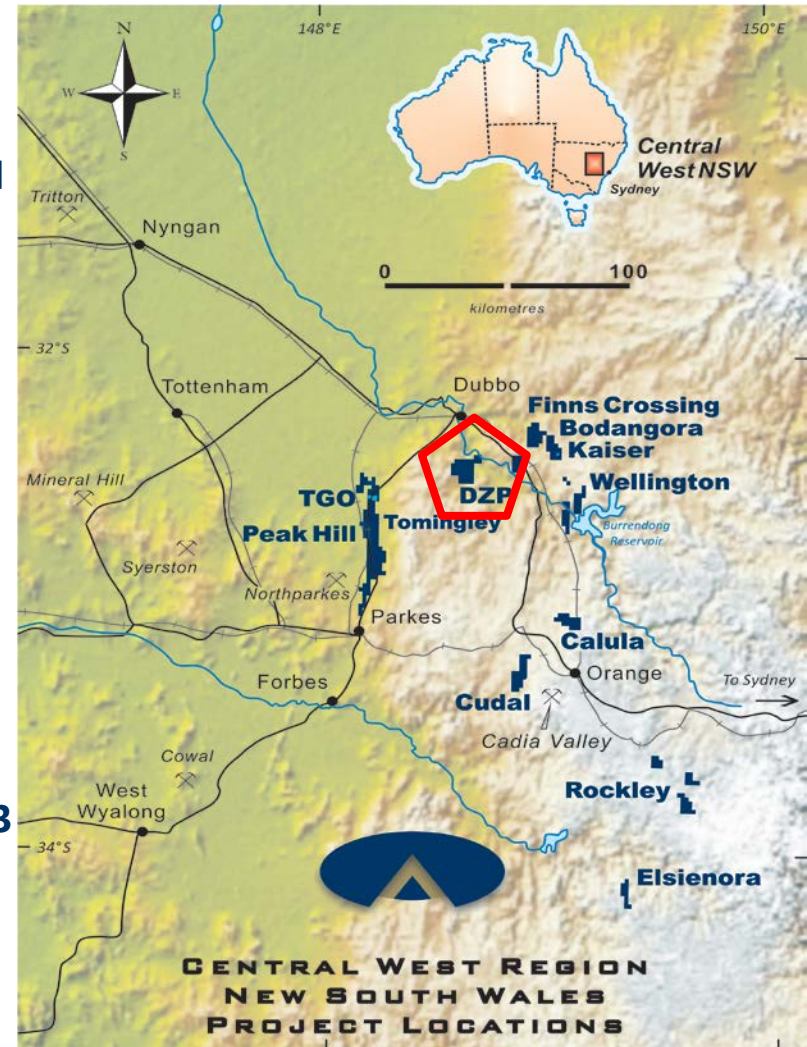
Tomingley Gold Project

- **\$115 million TGP funded from internal financial resources – no debt**
- Resource – 830,000oz of gold (30 June 2014) #
- Mine Method – open cut & underground
- Mine Life – 7.5 years (targeting 10+ years)
- Processing plant throughput – 1.0Mtpa
- 2.00g/t Au and 93% recovery standard CIL
- Gold Production – ~400,000oz over base case life
- Cash operating costs (AISC) estimated and averaged over base case life – ~A\$1,000 - \$1,100/oz
- Gold production commenced February 2014
FY15 at 31 March 2015:
 - Produced 55,484oz
 - AISC A\$1,162/oz
 - Revenue A\$80.50M
 - Cash flow A\$21.5M
 - Hedge 27,500oz @ A\$1,540/oz

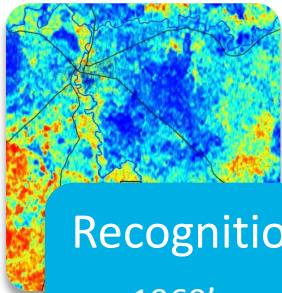


The Future - Dubbo Zirconia Project

- A very large polymetallic resource of the metals zirconium, hafnium, niobium (tantalum), yttrium and rare earths.
- Important and strategic metal mix.
- Reserve supports 35 year mine life at 1 million tonne ore processing per annum with defined resource potentially supporting a significantly longer operation*.
- Demonstrated flow sheet with pilot plant and products for market evaluation at ANSTO.
- Robust technical and financial feasibility completed April 2013. Bankable study nearing completion.
- Environmental Impact Statement lodged in June 2013 – Development approved May 2015.
- Strong market interest in products.

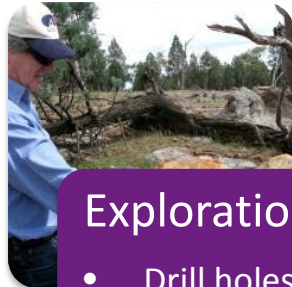


DZP Discovery and Development



Recognition

- 1960's
- Initial drilling 1983 for Cu-Au



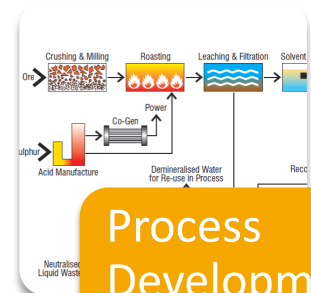
Exploration

- Drill holes 1990
- Preliminary metallurgical work



Resource

- 1999-2002
- Mini pilot plant
- Feasibility study



Process Development

- Metallurgy 2006 - present



Demonstration Pilot Plant

- 2008-2015 cont
- Proven flowsheet
- DFS → BFS



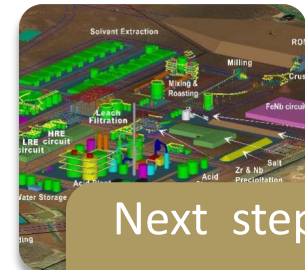
EIS

- Lodged June 2013
- Conditional approval Feb 2015
- Approved 29 May 2015



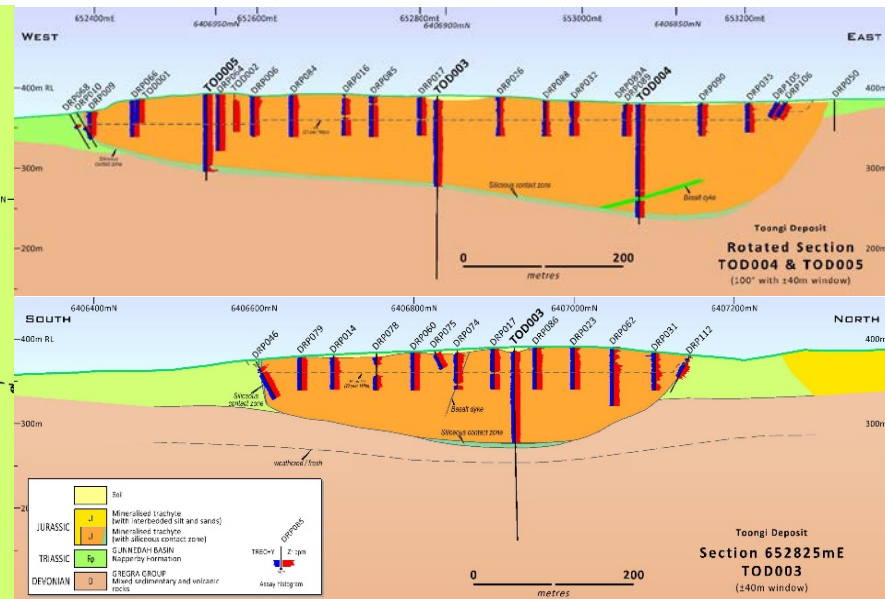
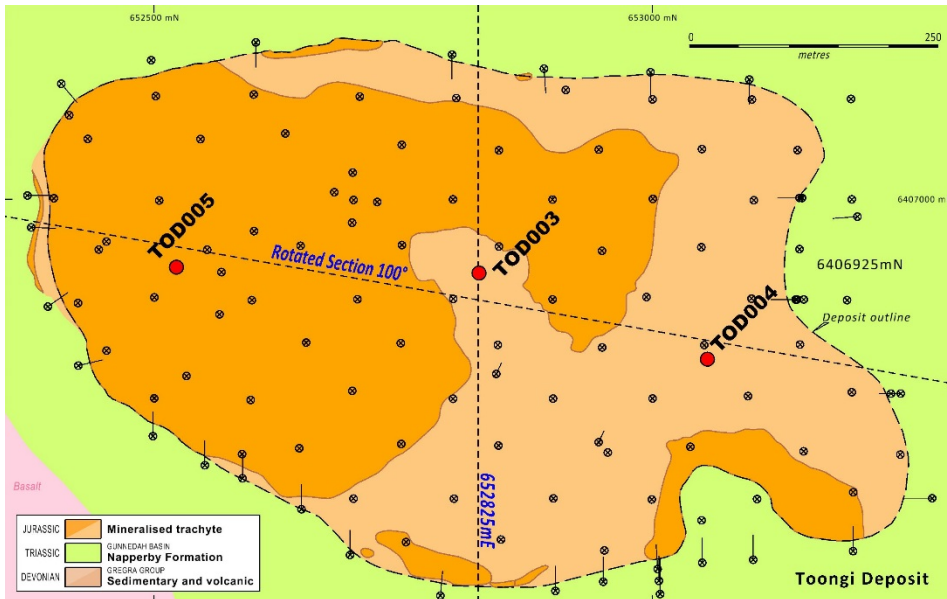
Offtake

- Treibacher AG for Nb
- Multiple options for zirconium
- Rare earths in progress



Next steps...

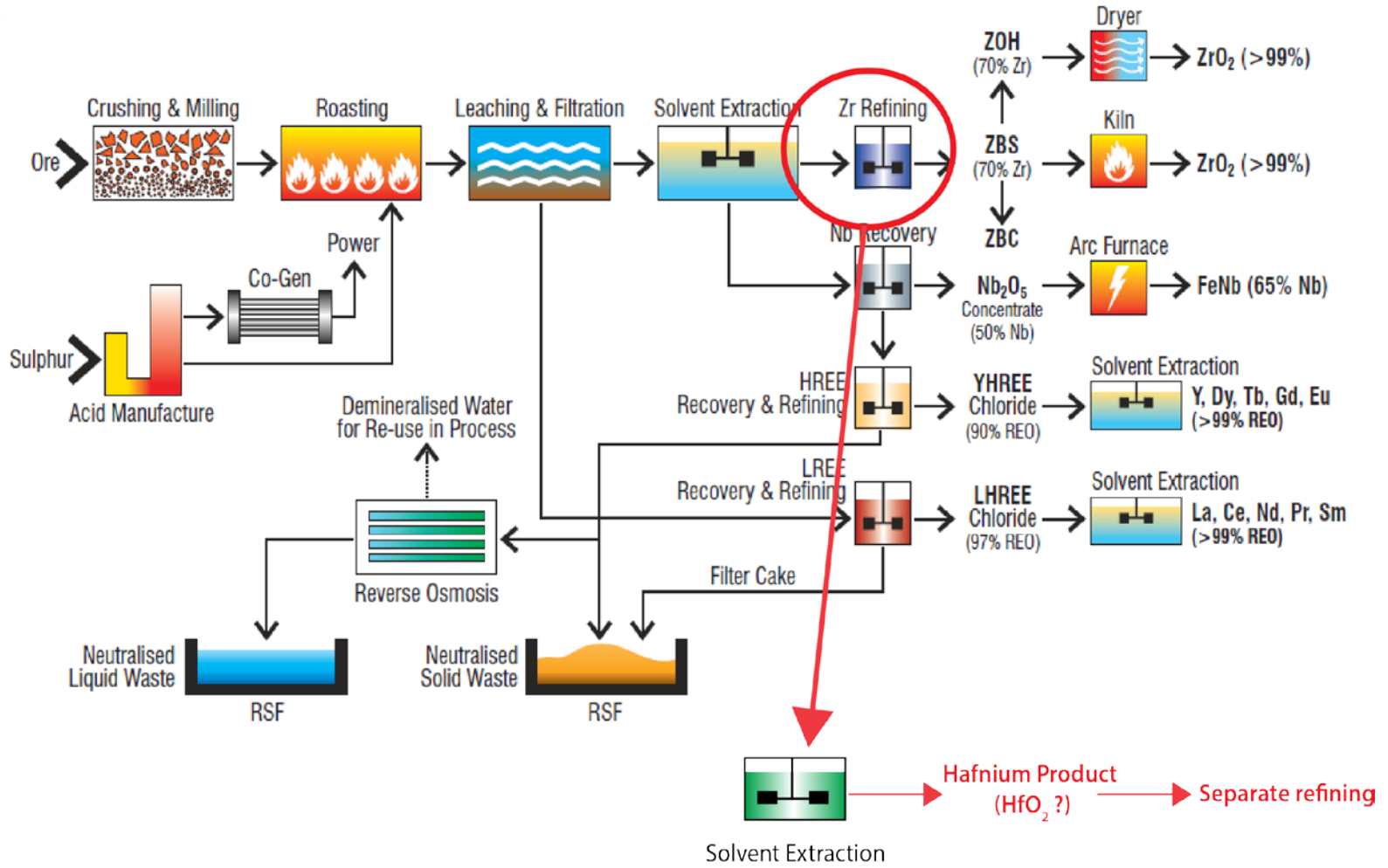
- Financing
- Construction
- Production



- Trachyte lava or sub-volcanic intrusive
- Largely homogeneous ore body
- Ore mineralogy:
 - eudialyte (“like” Zr silicate +Y and HRE)
 - natroniobite (Nb-Ta)
 - bastnaesite (LRE)
- All readily soluble in sulphuric acid forms basis of recovery process

- Resources and reserves detailed in slide 24

Flow Sheet with "new" Hafnium Recovery



DZP Product Output

Product Output	Light rare earth chemical concentrate	99% REO	4,665 tpa (LREO units)
	Heavy rare earth chemical concentrate	95% REO	1,309 tpa (HREO units)
	Zirconium as ZBC (carbonate) & zirconia	99% ZrO ₂	15,827 tpa (ZrO ₂ units)
	Hafnium as HfO ₂ (process being trialed)	Assumed 50% recovery	200 tpa (Hf units)
	Niobium as ferro-niobium	65% Nb	1,967 tpa (Nb units)
	Tantalum (no process to date)	Assumed 50% future output	150 tpa (Ta ₂ O ₅ units)

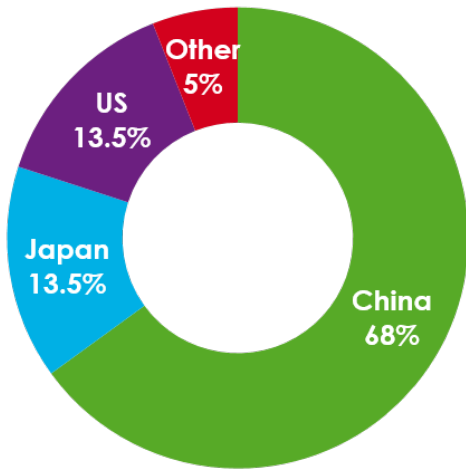
Tonnage based upon recoveries developed from mass balances of the demonstration pilot plant.
Process optimization to improve recoveries is continuing.



ALKANE
RESOURCES LTD

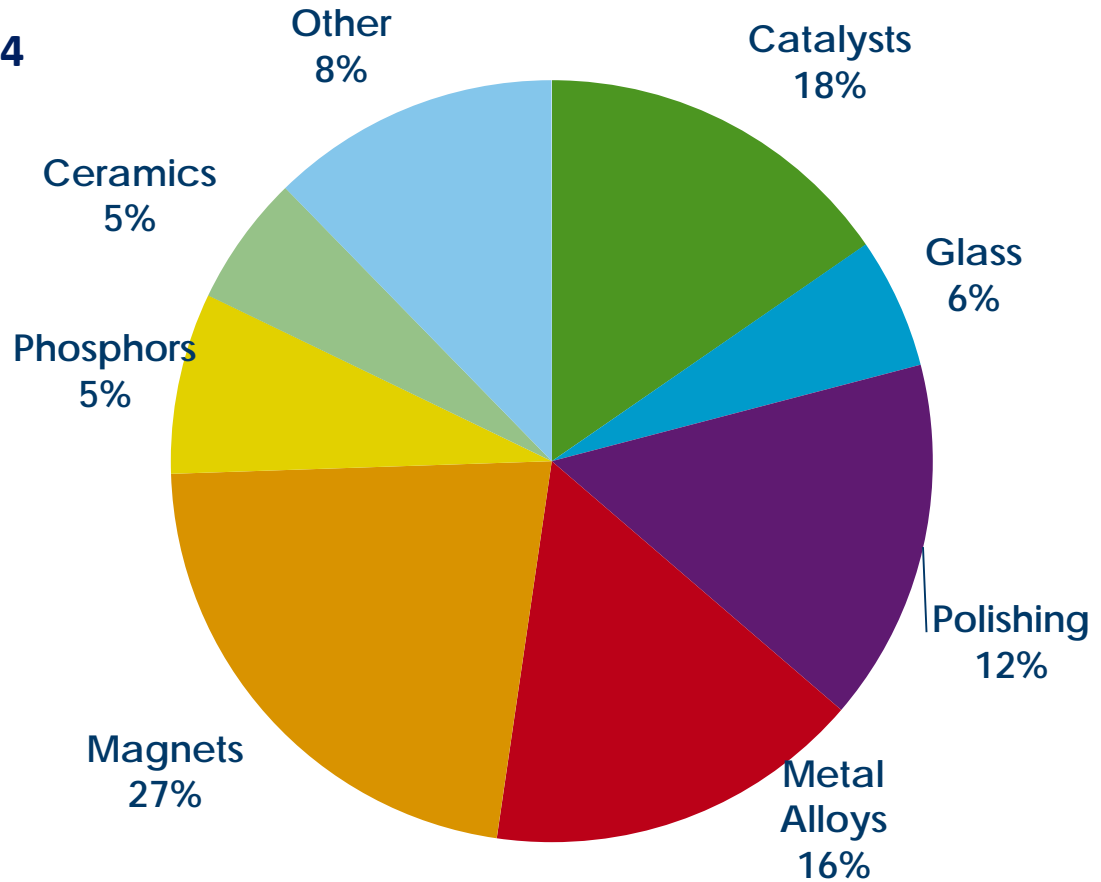
- **US\$3-5B Global market**
- **136,000t Annual consumption 2014**
- **5-10% Annual growth estimates**
- **85-90% REE produced by China**

REE Demand 2014 by Country



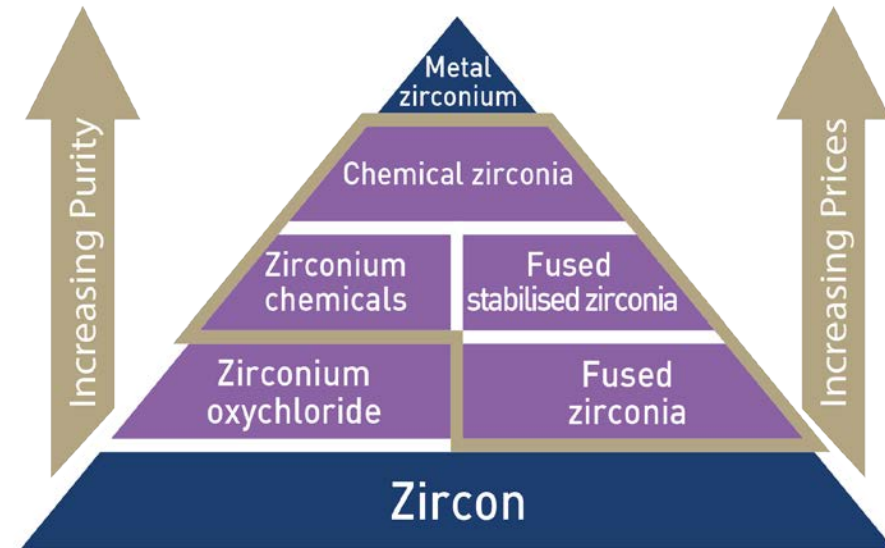
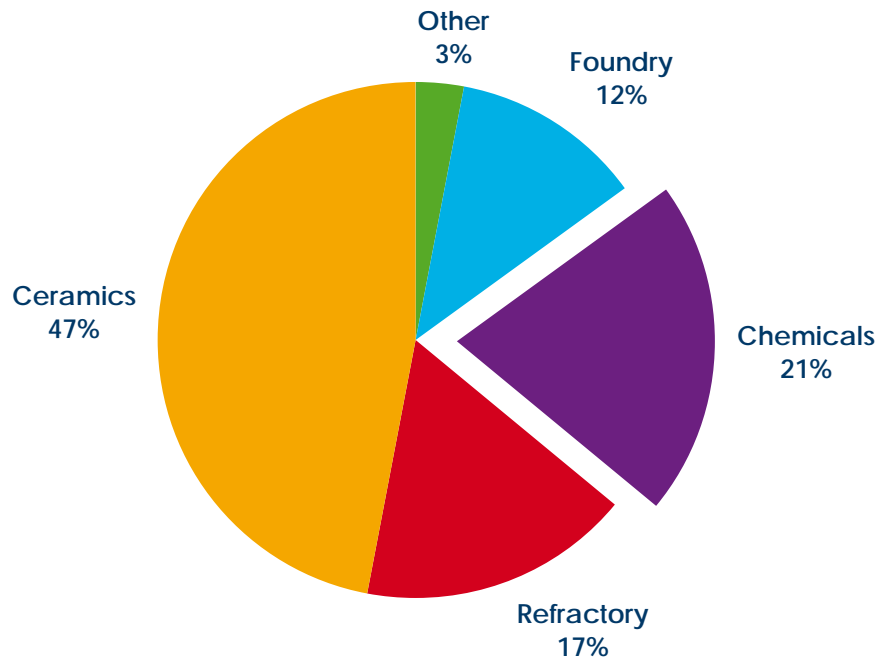
Rare Earth Industry

REE Demand 2016 by Application



Zircon Demand by End Use

(2014 ~ 1 million tonnes)

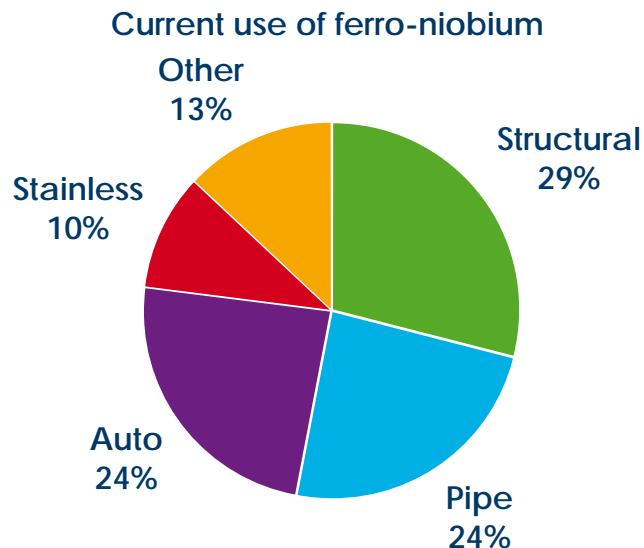


DZP Target Market
 Chemicals

- **Global market US\$2-3B**
- **2014 consumer zircon inventories running down**
- **Market expected to stabilise through 2015 - 2016**
- **CAGR anticipated at 5% - 7% pa**

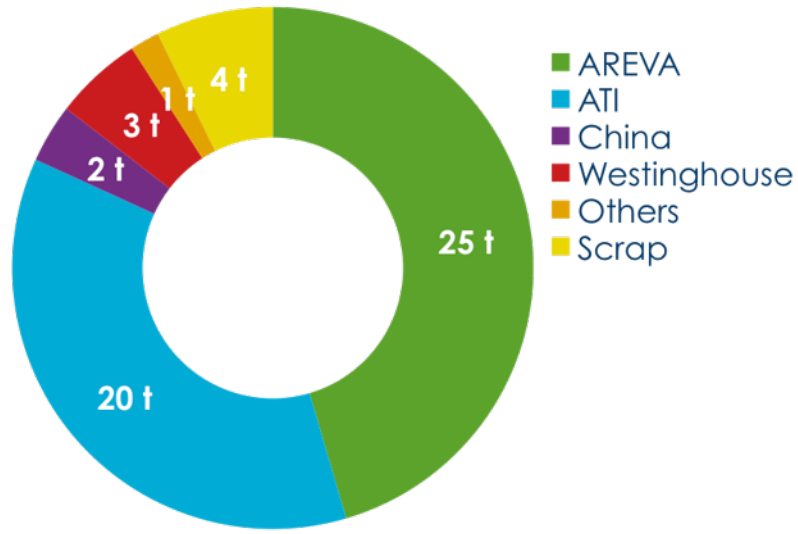
- **China dominates downstream zirconium industry (85-90%)**

- 90% of Nb used in standard grade ferro-niobium for the production of high strength low alloy (HSLA) steels.
- World production estimated at 80,000t Nb in 2012. CBMM in Brazil accounts for 85%.
- Global market US\$3-4B. Price stability since 2008, including GFC.
- CAGR anticipated at 10%. Demand expected to be driven by greater intensity of use in steels by BRIC producers.

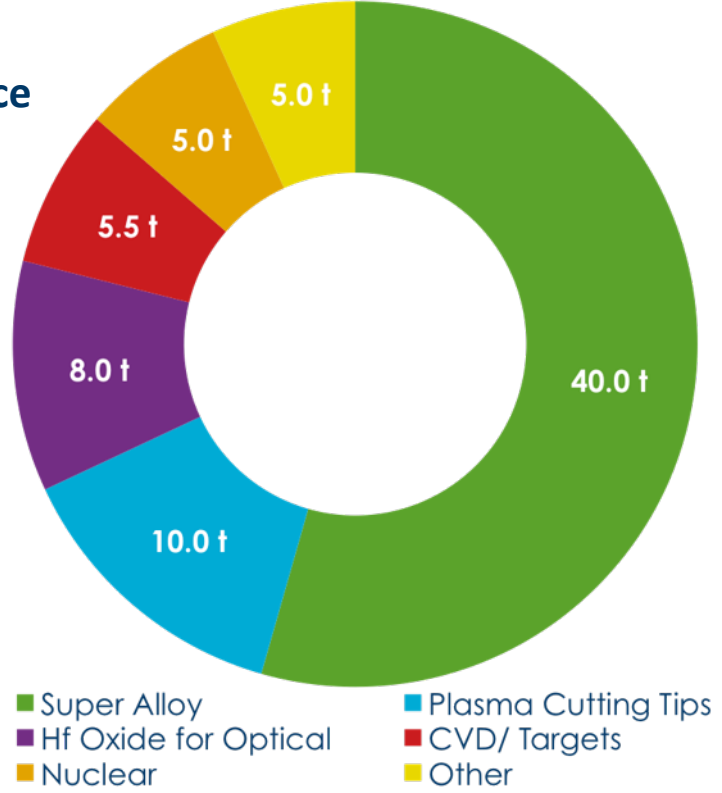


- Super Alloys - 73% of 2015 supply
- By-product from zirconium metal
 - Depends on nuclear industry
- Prices escalating through demand by aerospace industries 2014 into 2015

Hafnium Supply
2015 Estimated 50 - 60 tonnes



Hafnium Demand
2015 Estimated 70 - 80 tonnes



Diversified applications for all products



Renewable energy



Energy efficient lighting



Auto - emissions



Auto – fuel efficiency



Health



Electronics



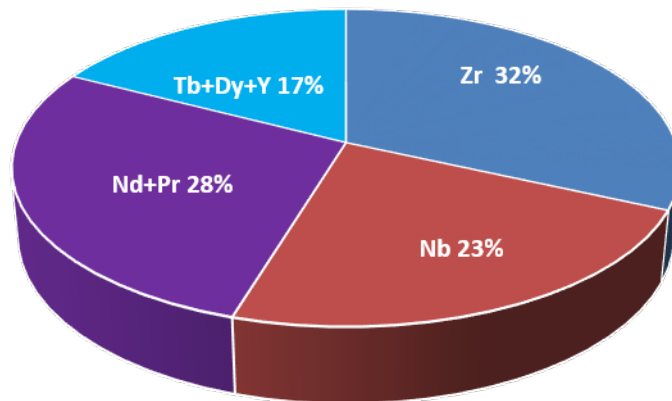
Smart technologies



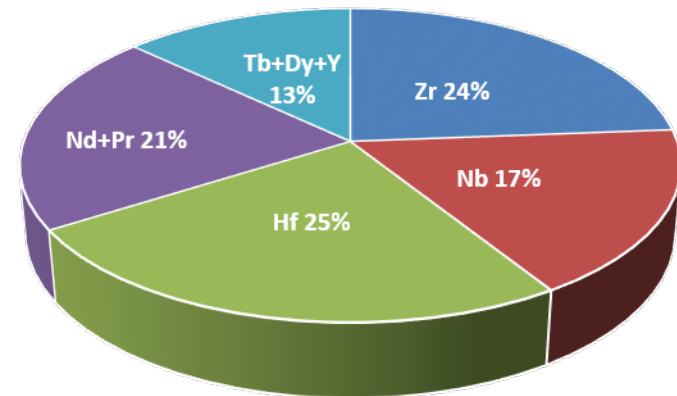
Aerospace

Definitive Feasibility completed April 2013 – BFS with updated capex and opex being compiled. BFS scheduled for completion Q3 2015.

DFS Base Case ~A\$1B capex and 20 year NPV A\$1.2B*



Zr-Nb-Pr-Nd-Tb-Dy-Y



Zr-Hf-Nb-Pr-Nd-Tb-Dy-Y

Anticipated revenue at current Chinese spot prices ~A\$400 – 450 million, and A\$500 – 550 million with hafnium production. Opex ranges from from ~A\$200 – 250 million, including hafnium production.

Rare earth revenues largely derived from Pr, Nd, Tb, Dy and Y (for production of RE magnets and special ceramics)

Investment at Project Level

- Strategic Investment(s)
- Advisors: SMBC & Credit Suisse
- Strategic interest(s) in long term supply of critical metals
- Intro of cornerstone investor(s)

Government Assistance Programs

- ECA Style Funding
- Lead coordinator: Sumitomo Mitsui Banking Corp
- Attractive Project
 - Long life, low cost
 - Long term off-take-agreements with international companies

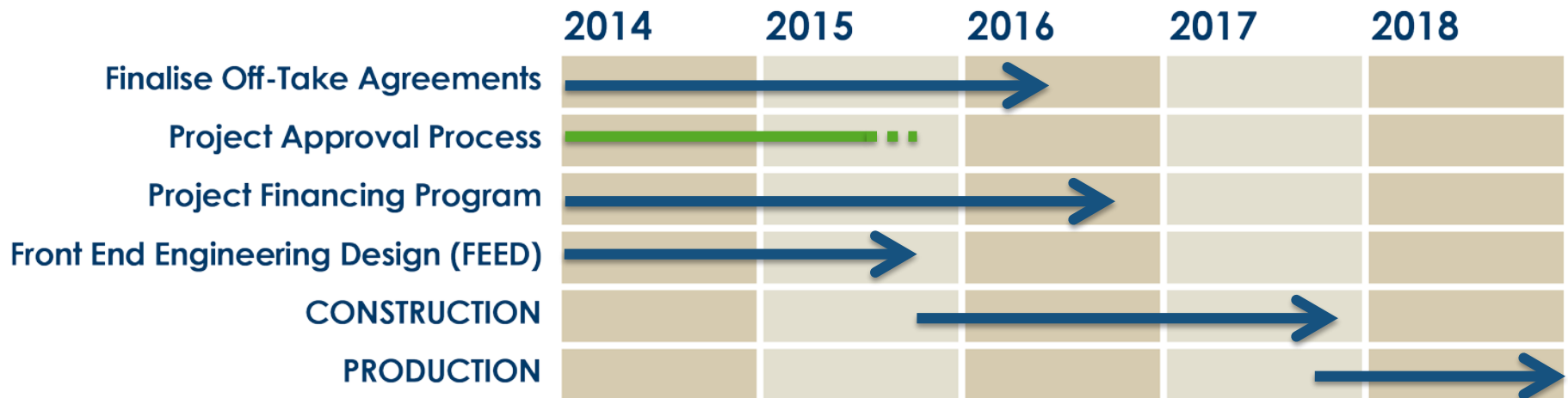
Commercial Bank Debt

- Advisors: SMBC & Credit Suisse
- Attractive Project
 - Strong operating cash flows
 - Diversified revenue stream
 - New markets

Equity Capital Markets (ALK)

- Advisors: Credit Suisse & Petra Capital

- **Total project capex ~A\$1B (including A\$166M contingency)**
- **Based on April 2013 DFS to +/-17%**
- **Current FEED program to achieve BFS standard @ +/-10%**
- **Capex, opex and revenue being reviewed**

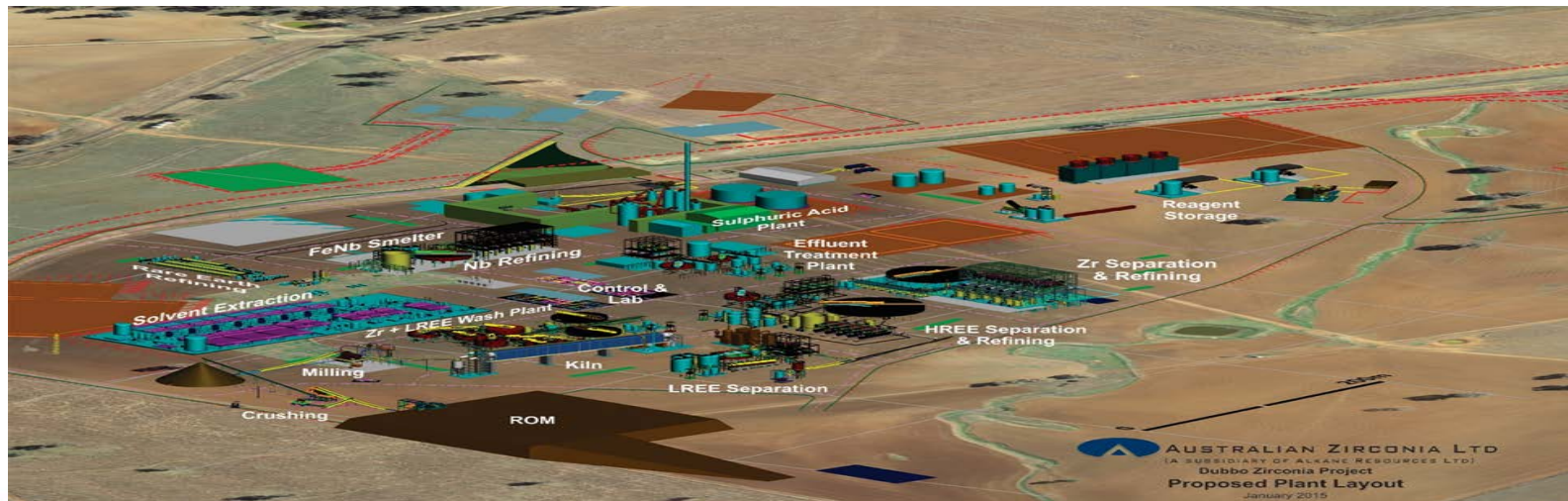


State approval received 29 May 2015
ML and EPL anticipated by end of September

Estimates of times are indicative only and are subject to change.
 Alkane reserves the right to vary the timetable without notice.

Producing the Metals of the Future

- Internationally strategic DZP with supply of several critical metals from non-Chinese sources
- Diversified DZP output gives robust revenues, even at current Chinese domestic RE prices
- Full spectrum of rare earth magnet materials – neodymium, praseodymium, dysprosium and terbium produced
- Potential to be the world's largest hafnium producer and supply long term stable production and pricing into the expanding aerospace industry



- **Alkane has demonstrated over a 45 year period that junior resource companies can survive and thrive using a diversified approach to discovery and taking a value return to suit the circumstances at any particular time.**
- **While the Company is yet to deliver dividends, it has self funded a measure of its development and is on track to provide a substantial return through the DZP.**
- **The importance of community engagement early in the discovery process cannot be underestimated.**
- **Technical knowledge and innovation to maintain the discovery and development pipeline are paramount.**
- **The future of mining in Australia will need firstly strong community support to counter the increasing burden of bureaucracy and the ideological confrontation of minority interest groups, and secondly a belief by financial institutions that the industry can generate sustainable returns.**

Alkane Strategy



Focused on NSW Central West



Multi-commodity company



Strategic relationships



Community & environmentally responsible

TOMINGLEY GOLD PROJECT MINERAL RESOURCES (as at 30 June 2014)									
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold (Koz)
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	
Open Pittable Resources (cut off 0.50g/t Au)									
Wyoming One	2,171	1.7	442	1.5	735	1.1	3,348	1.6	166.8
Wyoming Three	473	1.8	25	1.5	98	1.1	597	1.6	31.5
Caloma	2,556	2.0	649	1.7	2,464	1.4	5,669	1.7	316.9
Caloma Two	-	-	1,085	2.4	704	1.3	1,789	2.0	112.4
Sub Total	5,200	1.9	2,201	2.0	4,001	1.3	11,402	1.7	627.5
Underground Resources (cut off 1.75g/t Au)									
Wyoming One	229	4.1	296	3.7	869	2.9	1,394	3.3	147.3
Wyoming Three	29	2.6	15	2.4	8	2.5	52	2.5	4.2
Caloma	3	2.1	13	2.3	224	2.5	240	2.4	18.9
Caloma Two	-	-	215	2.7	165	2.5	380	2.6	32.0
Sub Total	261	3.9	539	3.2	1,266	2.8	2,066	3.0	202.4
TOTAL	5,461	2.0	2,740	2.3	5,267	1.7	13,468	1.9	829.8

TOMINGLEY GOLD PROJECT ORE RESERVES (as at 30 June 2014)							
DEPOSIT	PROVED		PROBABLE		TOTAL		Total Gold (Koz)
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	
Wyoming One	1,662	1.7	202	1.4	1,864	1.6	98.4
Wyoming Three	379	1.7	10	1.8	389	1.7	21.4
Caloma	1,744	2.2	184	1.7	1,928	2.2	136.0
Caloma Two	-	-	239	3.6	239	3.6	27.4
TOTAL	3,785	1.9	635	2.3	4,420	2.0	283.2
Stockpiles	186	1.9			186	1.9	11.5
TOTAL					4,606	2.0	294.7

Note: ASX announcement 5 September 2014 - the Company confirms that all material assumptions and technical parameters underpinning the estimated Mineral Resources and Ore Reserves, and production targets and the forecast financial information as disclosed continue to apply and have not materially changed. 31 March Quarterly 2015 results reported 23 April 2015.

Dubbo Zirconia Project – Mineral Resources

Toongi Deposit	Tonnage (Mt)	ZrO ₂ (%)	HfO ₂ (%)	Nb ₂ O ₅ (%)	Ta ₂ O ₅ (%)	Y ₂ O ₃ (%)	REO (%)
Measured	35.70	1.96	0.04	0.46	0.03	0.14	0.75
Inferred	37.50	1.96	0.04	0.46	0.03	0.14	0.75
Total	73.20	1.96	0.04	0.46	0.03	0.14	0.75

These Mineral Resources are based upon information compiled by Mr Terry Ransted MAusIMM (Alkane Chief Geologist) who is a competent person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Terry Ransted consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The full details of methodology were given in the 2004 Annual Report.

Dubbo Zirconia Project – Ore Reserves

Toongi Deposit	Tonnage (Mt)	ZrO ₂ (%)	HfO ₂ (%)	Nb ₂ O ₅ (%)	Ta ₂ O ₅ (%)	Y ₂ O ₃ (%)	REO (%)
Proved	8.07	1.91	0.04	0.46	0.03	0.14	0.75
Probable	27.86	1.93	0.04	0.46	0.03	0.14	0.74
Total	35.93	1.93	0.04	0.46	0.03	0.14	0.74

These Ore Reserves are based upon information compiled by Mr Terry Ransted MAusIMM (Alkane Chief Geologist) who is a competent person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The reserves were calculated at a 1.5% combined ZrO₂+Nb₂O₅+Y₂O₃+REO cut off using costs and revenues defined in the notes in ASX Announcement of 16 November 2011. Terry Ransted consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Note: ASX announcements 16 November 2011, 11 April 2013 and 30 October 2013 - the Company confirms that all material assumptions and technical parameters underpinning the estimated Mineral Resources and Ore Reserves, and production targets and the forecast financial information as disclosed continue to apply and have not materially changed.