



22 April 2013

Manager Announcements
Market Announcements Office
ASX Limited
20 Bridge Street
Sydney NSW 2000

Dear Sir,

PRESENTATION – DUBBO ZIRCONIA PROJECT

Attached is a copy of the presentation being given by the Company later today at the Technology Metals Summit 2013 in Toronto, Canada.

A copy of this presentation will also be available on the Company's website www.alkane.com.au.

Yours faithfully,
for **ALKANE RESOURCES LTD**

A handwritten signature in black ink, appearing to read 'D I Chalmers'. The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

D I Chalmers
Managing Director



ProEdgeWire PRESENTS:

TECHNOLOGY METALS SUMMIT 2013

RENEWABLE ENERGY: The Next Industrial Revolution

Sheraton Centre | Toronto, ON | April 21-22, 2013

Dubbo Zirconia Project

NSW Australia

TMS Presentation

Toronto

22 April 2013



AUSTRALIAN
ZIRCONIA LTD



ALKANE
RESOURCES LTD

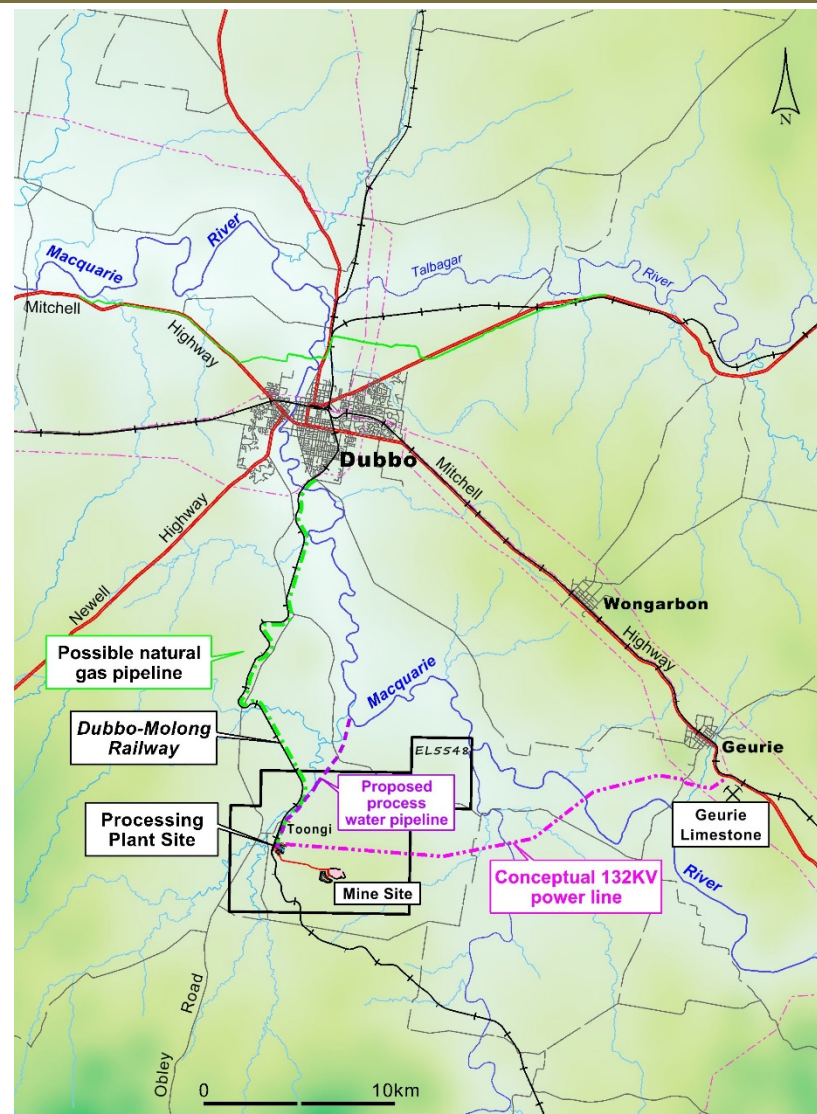
Location and Business Strategy

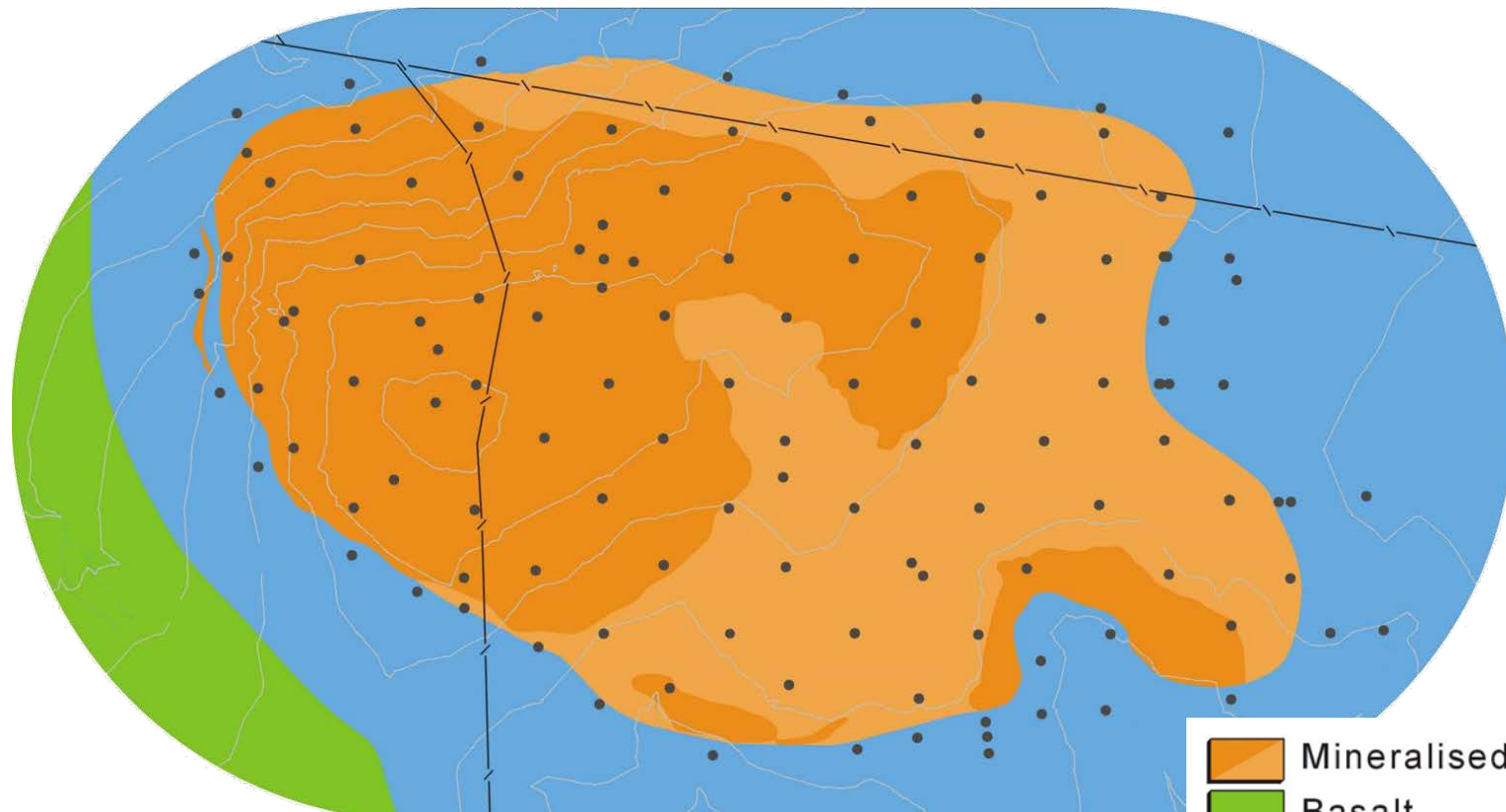
- Alkane is a public company (listed on ASX since 1969)
- 6,100 shareholders (85% Australian)
- Multi commodity exploration and development in the Central West of NSW
- Active in region for more than 20 years with strong community recognition and support
- Developed Peak Hill Gold Mine in 1996, operated to 2005. Site almost fully rehabilitated
- Tomingley Gold Project construction underway, first gold production late 2013
- World class Dubbo Zirconia Project in final stages of feasibility
- On going successful exploration



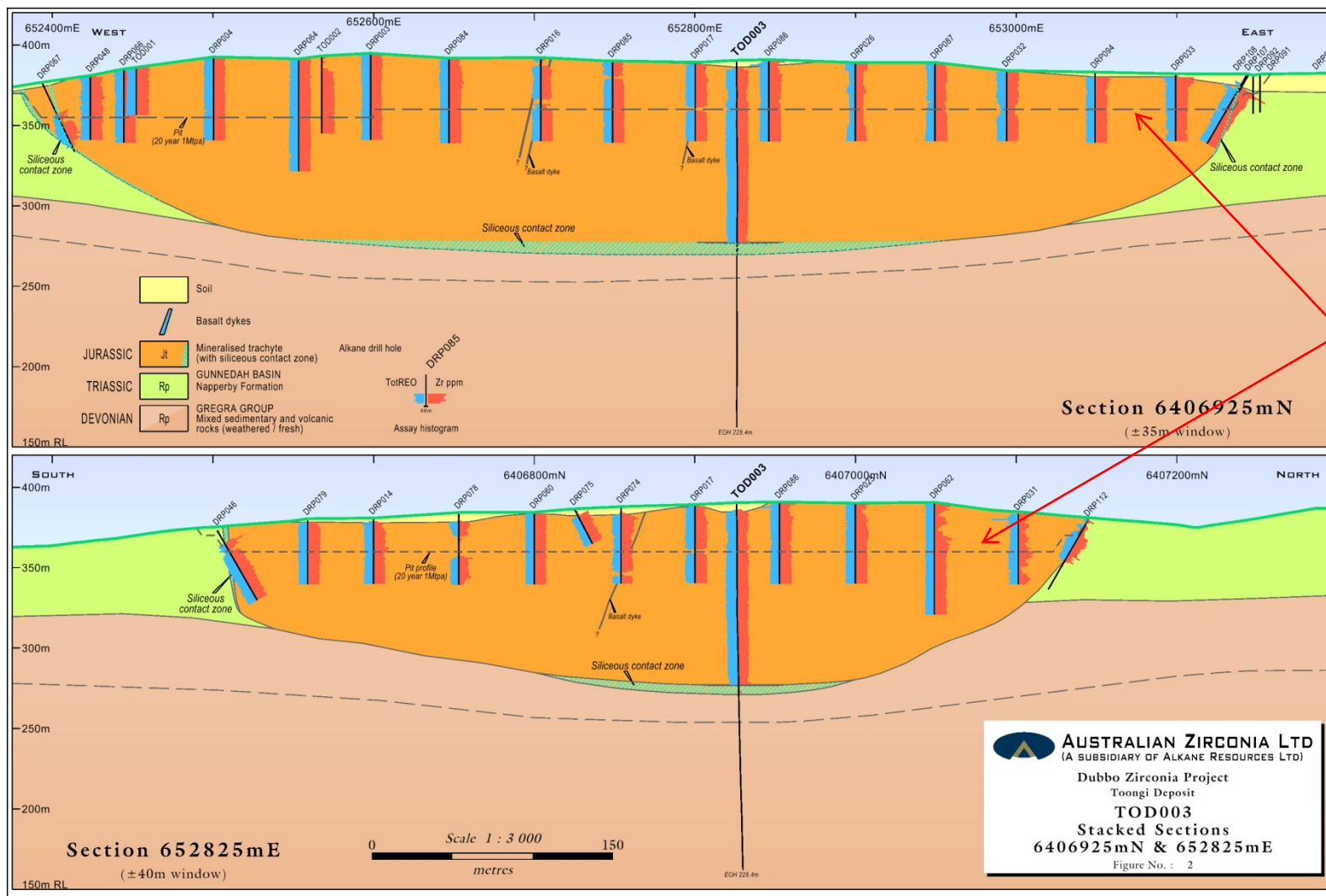
Infrastructure

- Population – 80,000 Dubbo region
- Rail – railway hub
- Road – major highways intersection/hub
- Water – numerous sources 10km
- Electricity – NSW State power grid 25km
- Gas – NSW State gas grid 30km
- Industrial – substantial light industry
- Agriculture – major agricultural hub
- Process chemicals available from multiple sources in eastern Australia
- Limestone for waste neutralisation available at Geurie





**Jurassic aged trachyte intrusive or
lava flow**



**20 year
mine floor**

80 year open pit mine life

Resources & Reserves

- Resources & Reserves – open at depth. Additional resource potential at nearby Railway deposit
- Reserve Life – 36 years; Resources + 70 years
- Major world resource - zirconium, hafnium, niobium, tantalum, yttrium & rare earth elements

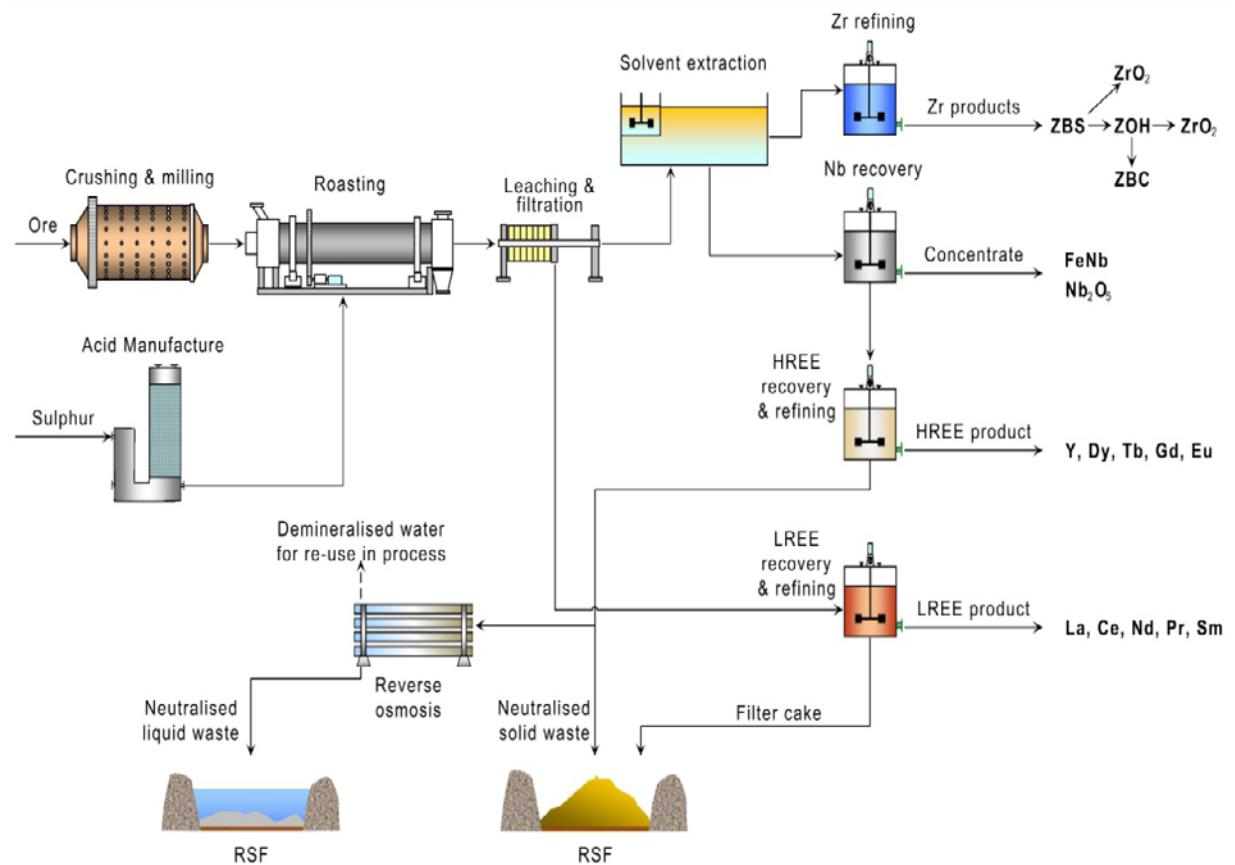
Resources	Depth (m)	Tonnes (Mt)	Grade
Measured	0-55	35.7	1.94% ZrO ₂ , 0.04%HfO ₂ , 0.46% Nb ₂ O ₅ , 0.03% Ta ₂ O ₅ , 0.14% Y ₂ O ₃ , 0.74% REO (0.9% TREO)
Inferred	55-100	37.5	As above
Total	0-100	73.2	As above
Reserves			
Proven	0-26	8.1	1.93% ZrO ₂ , 0.04%HfO ₂ , 0.46% Nb ₂ O ₅ , 0.03% Ta ₂ O ₅ , 0.14% Y ₂ O ₃ , 0.75% REO (0.9% TREO)
Probable	26-45	27.9	As above
Total	0-45	35.9	As above

- The deposit contains about 100ppm uranium and 350ppm thorium, and would be classified as weakly radioactive. No process concentration and all waste stabilised and stored on site.
- The deposit contains about 25% high value heavy rare earths

Zirconium Heavy REs	eudialyte armstrongite	$\text{ZrSiO}_4 \pm \text{Ca, Y, HREE, H}_2\text{O} + ?\text{U}$	$< 2\mu\text{m} - 50\mu\text{m}$
Niobium/ Tantalum	natroniobite	$\text{NaNbO}_3 + \text{Ta} + ?\text{Th}$ also NbFeSiO_4	$< 30\mu\text{m}$
Rare Earths	calcian basnaesite	$\text{Ca(REE)(CO}_3\text{)F}$	$< 100\mu\text{m}$
	rare ancylite	$\text{Sr(REE)(CO}_3\text{)H}_2\text{O}$	

The deposit does not contain zircon; pyrochlore; columbite; monazite or xenotime

- Demonstration Pilot Plant – established 2008
- ANSTO – Aust. Nuclear Science & Tech. Org.
- Process – unique & advanced
- Optimization – ongoing
- Sulphuric acid leach whole of ore
- Solvent extraction, separation & refining
- Chemical precipitation
- Zirconium products
- Niobium products
- Heavy RE product
- Light RE product



Off-take

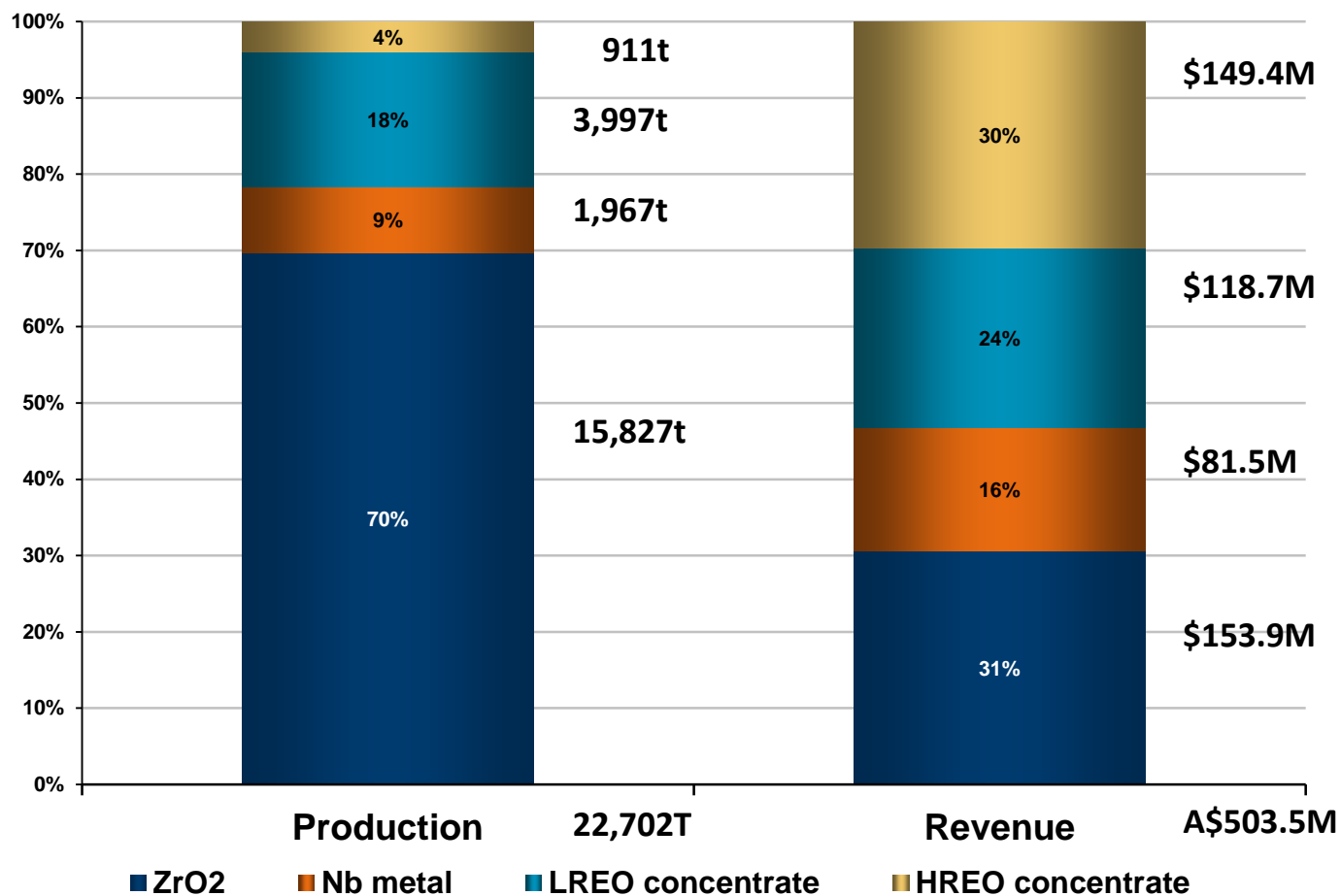
Memorandums of Understandings (MOU's) / Agreements		
MOU	Product	Details
1	Zirconium	Leading Chemical Company to develop applications for zirconia produced by DZP
2	Zirconium	Australian Mintech Chemical Industries to produce zirconium oxychloride
3	Zirconium	European manufacturing / trading company to market DZP products
4	Niobium	European alloy manufacturer JV to produce and market ferro-niobium
5	YREE	Japan Shin-Etsu Toll treatment JV for separation and sale

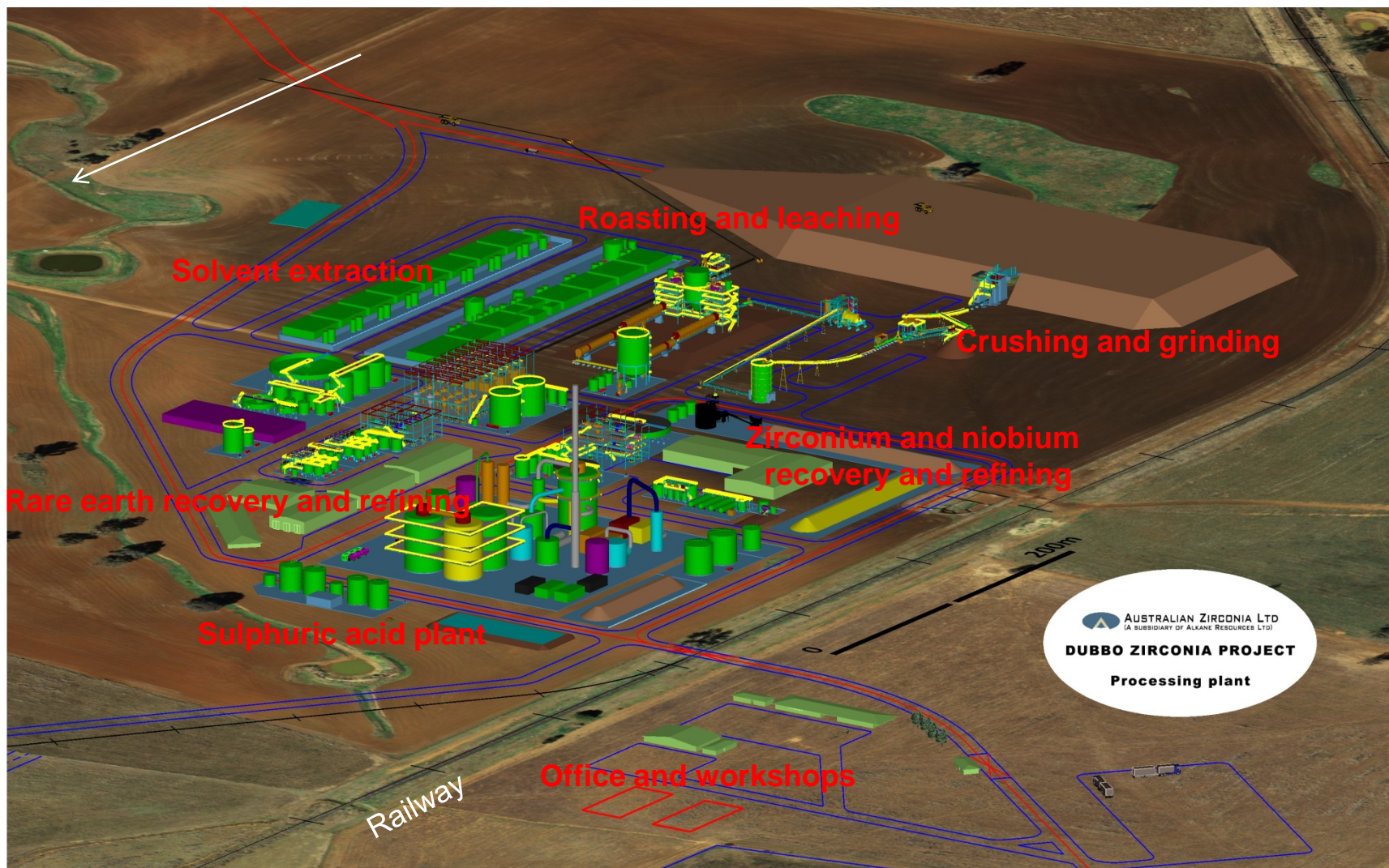
- **Separate project to produce chemical zirconia for ceramics industries ramped up by AZL**
- **Primary filter cake contains ~ 200ppm Ta₂O₅. At 1Mtpa this equates to about 200tpa (>400,000lbs pa).
A program has commenced to review recovery of this valuable Ta₂O₅ product**

DUBBO ZIRCONIA PROJECT Financial Summary for 20 year life in A\$	
Project Capacity	1,000,000 tonnes pa
Capex – Plant	\$396.8M
Sulphuric Acid Plant	\$116.6M
Infrastructure + Owners	\$253.4M
SUB TOTAL	\$766.8M
EPCM	\$63.5M
Contingency (20%)	\$166.1M
TOTAL	\$996.4M
Annual Revenue	\$503.5M
Annual Operating Costs	\$213.5M
Annual EBITDA	\$290.0M
IRR*	19.3%
NPV*	\$1,235M

* 20 year life, pre-tax, 8% discount rate

DZP Product Output





Credit Suisse (Australia) Limited (“CS”), Sumitomo Mitsui Banking Corporation (“SMBC”) and Petra Capital Pty Limited (“Petra”) to provide investment banking services, including the arrangement of project financing to fund the development of the Dubbo Zirconia Project as follows:

Credit Suisse and SMBC appointed financial advisors to provide general financial and strategic advisory services

- *for the potential sale of a strategic minority interest in the DZP*
- *for the arrangement of a commercial debt facility*

SMBC as the sole lead coordinator of Export Credit Agency and other available government assistance programs; and

Credit Suisse and Petra as joint lead managers and joint book runners in connection with a potential equity raising, which Credit Suisse is engaged to underwrite, subject to customary terms, conditions and due diligence. The equity component should be the last step in the process.

Securing the finance package is expected to take up to 12 months to coincide with final project approvals allowing the development program for the DZP to commence in Q1 2014.

Environmental Impact Statement – key areas of focus

- Existing land use (agriculture)
 - Socio-economic
 - Air quality
 - Noise and vibration
 - Surface and ground water
 - Soil stability
 - Flora and fauna
 - Biodiversity
 - Visibility
 - Rail freight movements
 - Road traffic
 - Aboriginal and European heritage
 - Natural radioactivity
-
- EIS scheduled to be lodged with NSW Dept of Planning and Infrastructure April 2013



DZP Development pathway

	2009	2010	2011	2012	2013	2014	2015	2016
Resource definition 2001 - 2002	✓							
Flow sheet development 2002	✓							
Laboratory Zr – Nb 1999 –2002	✓							
Pilot plant Zr – Nb 2002	✓							
Mine Plan & Scheduling 2002	✓							
Plant Design & Engineering 2002	✓							
Laboratory Y & REE 2009 -				✓				
Demonstration Pilot Plant 2008 -	✓							
Zr – Nb Product Distribution		✓	✓	✓	✓			
Y - REE Product Distribution			✓		✓			
Secure Offtake Agreements								
Definitive Feasibility Study	2002			✓	✓			
Environmental Impact (EIS)	2000							
Detailed Design								
Financing								
Development Consent						?		
Construction						?		
Production								?

Continued product development

Continued capex/opex optimisation



DPP Filtration, PLS, SX, Zr and Nb recovery



Y and HREE refining and recovery



Zirconium refining and precipitation



Reverse osmosis and water recycle

Dubbo Zirconia Project

***A strategic and alternate supply for the zirconium,
niobium and rare earths industries***

***The DZP is a world class project capable of supplying “new age metals”
in to rapidly developing international markets for many years.***

The DZP is a participant in the “Next Industrial Revolution”

www.alkane.com.au

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

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) 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 2004 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.



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 (%)	U ₃ O ₈ (%)
Measured	35.70	1.96	0.04	0.46	0.03	0.14	0.75	0.014
Inferred	37.50	1.96	0.04	0.46	0.03	0.14	0.75	0.014
Total	73.20	1.96	0.04	0.46	0.03	0.14	0.75	0.014

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 2004 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 2004 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.