

Corporate Presentation Development Commenced First Cash Flows Early 2014

April 2013





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





Equity and Ownership

Equity

- Shares 372,539,000
- Options 4,000,000
- Market Capitalisation A\$200M
- Cash A\$65M (31 March 2013)
- Investments ~A\$75M (RRL)
- Debt nil
- Share turnover ~0.5M / day current
- 12 Month Low/High A\$0.45/\$1.40
- Top 20 58%
- Codes ALK (ASX)
 - ANLKY (OTCQX)

Ownership



Major Shareholder: Abbotsleigh (Gandel Metals) – 25%





Board

- John Stuart Ferguson Dunlop (Chairman). BE(Min), MEngSc(Min). Mining engineer with 40 years surface and underground mining experience in Australia and overseas. Former director of the Australian Institute of Mining and Metallurgy. Chairman of Alliance Resources and Non-Exdirector of Copper Strike Limited
- David <u>Ian</u> Chalmers (Managing Director). MSc. Geologist with over 40 years experience in the mining and exploration industry in all facets of exploration through feasibility and development to the production phase in Australia and overseas. 30 years involvement in rare metal and rare earth exploration and development.
- Ian Jeffrey Gandel (Director). LLB, BEC. Extensive experience in retail property and resource companies. Former Director of Gandel Retail Trust. Investor in the mining industry through Gandel Metals. Executive Director of Alliance Resources, and Chairman of Gippsland Ltd and Octagonal Resources Ltd.
- Anthony Dean Lethlean (Director) BAppSc. Geologist with 10 years mining experience. Former resources analyst with various resource bankers and stockbrokers. Currently a director of Helmsec Global Capital Limited. Non-executive director of Alliance Resources Ltd.

Senior Management

- Karen Brown (Joint Company Secretary) BEc
- Lindsay Colless (Joint Company Secretary) CA
- Michael Ball (Chief Financial Officer) CA BCom
- Terry Ransted (Chief Geologist). BSc.
- Michael Sutherland (General Manager NSW). BSc
- Tony Wright (Commercial Manager).
- Henry Kaye (TGP Project Manager) Mechanical Engineer
- Sean Buxton (TGP Operations Manager) Mining Engineer

Senior Consultants

- Fiona Morgan (TGP EPCM Mintrex) Mechanical Engineer
- Greg Foster (TGP EPCM Mintrex) Mechanical Engineer
- Steve Gilman (DZP Consulting Director TZMI) Metallurgist
- Gavin Diener (DZP Consulting Director TZMI) Chemical Engineer
- Alister MacDonald (DZP Marketing TCMS) Ceramic Engineer



DZP Location and Infrastructure

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





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% Zr0 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% Zr0 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



DZP Process Flow Sheet

Demonstration Pilot Plant – established 2008 Zr refining ANSTO – Aust. Nuclear Science & Tech. Org. Solvent extraction ZrO₂ Process – unique & advanced Zr products щ \rightarrow ZBS \rightarrow ZOH \rightarrow ZrO₂ **Optimization** – ongoing Nb recovery Crushing & milling ZBC Roasting Leaching & Sulphuric acid leach whole of ore filtration Ore Solvent extraction, separation Concentrate FeNb ╗╗╔╝ & refining Nb₂O₅ **Chemical precipitation** Acid Manufacture HREE **Zirconium products** recoverv & refining Sulphur **Niobium products** HREE product Y, Dy, Tb, Gd, Eu **Heavy RE product Light RE product** Demineralised water LREE for re-use in process recovery & refining LREE product La, Ce, Nd, Pr, Sm Reverse Neutralised Neutralised osmosis Filter cake solid waste liquid waste RSF RSF



Demonstration Pilot Plant



DPP Filtration, PLS, SX, Zr and Nb recovery



Y and HREE refiningand recovery



Zirconium refiningand precipitation



Reverse osmosis and water recycle

Operating at ANSTO since 2008



Environmental Impact

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 Marketing

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 Plant Layout





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.



DZP Development pathway

	2009	2010	2011	2012	2013	2014	2015	2016
Resource definition 2001 - 2002	\checkmark							
Flow sheet development 2002	\checkmark							
Laboratory Zr – Nb 1999 –2002	\checkmark							
Pilot plant Zr – Nb 2002	\checkmark						Continued p	roduct
Mine Plan & Scheduling 2002	\checkmark					//	developr	nent
Plant Design & Engineering 2002	\checkmark							
Laboratory Y & REE 2009 -								
Demonstration Pilot Plant 2008 -	\checkmark							
Zr – Nb Product Distribution		\checkmark \checkmark	1	\checkmark	4			
Y - REE Product Distribution			\checkmark	\checkmark	K			
Secure Offtake Agreements								
Definitive Feasibility Study	2002		✓		✓ <		continued of optimisation	apex/opex
Environmental Impact (EIS)	2000							
Detailed Design	1							
Financing								
Development Consent						?		
Construction					?			
Production							?	



TGP Summary

Current Project Activities

- Project approval by NSW Department of Planning and Infrastructure late July 2012. Mining Lease approved February 2013
- Resource 12.6 Mt @ 2.0g/t (812,000oz)
- CAPEX A\$107M
- Throughput 1.0Mtpa
- Head Grade 2.00g/t
- Recoveries 93%
- Gold Production average 50 60,000ozpa
- Operating Costs ~\$980/oz
- EBITDA \$217M (base case at \$1,600/oz)
- Life 7.5years (targeting +10 years)
- Mine method open cut & underground
- Caloma Two resource estimate
- Commissioning anticipated late 2013





TGP Geology





Geological Summary – Wyoming / Caloma

Additional Resource Potential Caloma underground Caloma Two open pit and underground Myalls underground Wyoming Two underground McLeans

Typical Orogenic style gold deposits





Dubbo Zirconia Project (DZP):

Global Strategic Significance – a long term, significant project in the zirconium and heavy rare earth industries, which can generate substantial cash flows at around ~A\$250Mpa

Production costs – spread across the four metal outputs which will assist to insulate the DZP from price instability in certain sectors. Four outputs:

(i) zirconium

- (ii) niobium (tantalum)
- (iii) light rare earths
- (iv) heavy rare earths (plus yttrium)
- Tomingley Gold provides cash flow insurance against any DZP delays and possible slow down in world growth. It also has mine life upside and provides operating expertise. Cash flow about ~A\$25Mpa
- Exploration a tight geographical focus in NSW with exploration success, provides further development potential.
- Currently cash and RRL shares total ~\$140 million.
- CONCLUSION Alkane is a long term investment opportunity with a clear development strategy of multiple operations with substantial emerging cash flow, and capacity to pay dividends.



Disclaimer

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 of 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	Tonnage	ZrO ₂	HfO ₂	Nb ₂ O ₅	Ta ₂ O ₅	Y ₂ O ₃	REO	U ₃ O ₈
Deposit	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
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 MAus/MM (Principal, Multi Metal Consultants Pty Ltd) 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	Tonnage	ZrO ₂	HfO ₂	Nb ₂ O ₅	Ta₂O₅	Y ₂ O ₃	REO
Deposit	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)
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 $ZrO_2+Nb_2O_5+Y_2O_3+REO$ 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.

Wellington – Galwadgere – Mineral Resources

DEPOSIT 0.5% Cu cut off	Tonnage	MEASURED Tonnage Grade Gra		Tonnage	INDICATED Grade	Grade
	(t)	(% Cu)	(g/t)	(t)	(% Cu)	(g/t)
Galwadgere	-	-		2,090,000	0.99	0.3

These Mineral Resources are based upon information compiled by Mr Terry Ransted MAusIMM (Principal, Multi Metal Consultants Pty Ltd) 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 2005 Annual Report



Tomingley (TGP) – Mineral Resources

DEPOSIT	MEASU	JRED	INDIC	ATED	INFER	RED		TOTAL	
Top Cut	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Gold
2.5x2.5x5.0m model	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(koz)
Wyoming One	2,316,550	2.2	890,340	2.2	3,117,350	1.7	6,324,240	1.9	392.4
Wyoming Three	642,470	2.0	63,225	2.0	102,820	1.3	808,510	1.9	49.9
Caloma	2,690,530	2.3	567,860	2.1	2,194,490	1.9	5,452,870	2.1	369.4
Total	5,649,550	2.2	1,521,420	2.1	5,414,660	1.8	12,585,630	2.0	811.7

These Mineral Resources are based upon information compiled by Mr Richard Lewis MAusIMM (Lewis Mineral Resource Consultng Pty Ltd) 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. Richard Lewis 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 are given in the ASX Reports dated 25 March 2009, 2 October 2010 and 29 March 2012.

Tomingley (TGP) – Ore Reserves

DEPOSIT	PROVED		PROB	ABLE			
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Ounces
	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	
Wyoming One	1,700,000	1.6	200,000	1.3	1,900,000	1.6	94,500
Wyoming Three	500,000	1.6	0	0.0	500,000	1.6	28,100
Caloma	1,100,000	2.3	100,000	1.7	1,200,000	2.2	86,500
Total	3,300,000	1.8	300,000	1.5	3,600,000	1.8	209,100

These Ore Reserves are based upon information compiled under the guidance of Mr Dean Basile MAusIMM (Mining One Pty Ltd) 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 and Resources are estimated at an effective A\$1,540 per ounce gold price. Dean Basile consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Peak Hill – Mineral Resources

DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		
0.5g/t gold	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	k Ounces
cut off	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	
Proprietary			9,440,000	1.35	1,830,000	0.98	11,270,000	1.29	467.4
3.0g/t gold	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	k Ounces
cut off	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	(t)	(g/t)	
Proprietary P					810,000	4.40	810,000	4.40	114.6

These Mineral Resources are based upon information compiled by Mr Terry Ransted MAusIMM (Principal, Multi Metal Consultants Pty Ltd) 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.