

6 February 2020



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.

Alkane Resources Ltd cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this presentation will occur and investors are cautioned not to place any reliance on these forward-looking statements. Alkane Resources Ltd does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this presentation, except where required by applicable law and stock exchange listing requirements.

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 countries' 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.

Corporate profile

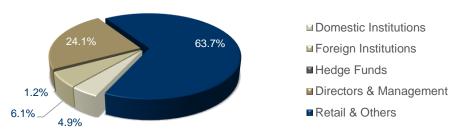
© 2020 Alkane Resources



Capital Structure	
Ordinary shares	580 million
Share Price (4 February 2020)	A\$0.82
Market capitalisation	A\$467M
12 Month low/high	A\$0.18/\$0.86
Cash and gold bullion (Dec-19)	A\$78.4M
Listed investments (market value Dec-19)	A\$13.2M
Debt	Nil
Enterprise value	A\$369M
Average daily turnover	\$1.45M/day

The board	
lan Gandel	Chairman
Nic Earner	Managing Director
lan Chalmers	Technical Director
Anthony Lethlean	Non-Executive Director
Gavin Smith	Non-Executive Director
Dennis Wilkins	Company Secretary

Shareholder ownership (At 31 Dec 2019)



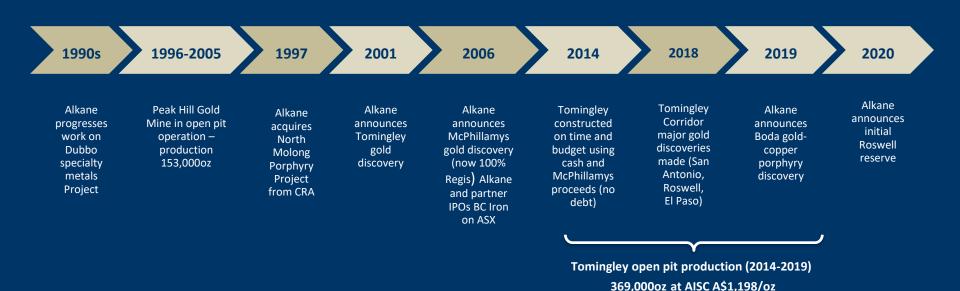
Share price and volume (6 months)



Corporate history – 50 years of Find. Enhance. Deliver.



Timeline of Key Milestones (incorporated 1969)



Tomingley Gold Project



• 1.0 mtpa plant (achieved run rate of 1.4mtpa on oxide ore)

 12 month construction completed in 2014 on time and budget

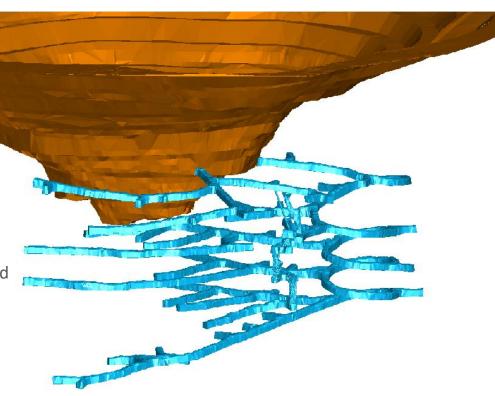
Production guidance for FY20 30,000 – 35,000oz Au

Treated existing low grade stockpiles in 2019

Underground mining of ore has commenced

 Exploration has revitalised the Project – underground and Tomingley Corridor

Potential for strong near term cash flow



Producer in a strong position



Alkane Resources – Quarterly Gold Produced and AISC



369,000 ounces produced average AISC A\$1,198/oz (Feb 2014 to December 2019)

Cash, bullion and investment A\$91.7m

FY19 - produced ~49,000 oz

FY20 - production guidance - 30,000-35,000 oz @ AISC A\$1,250-\$1,400

Exploration +

Development + Production +

Production +

Investment

= Growth

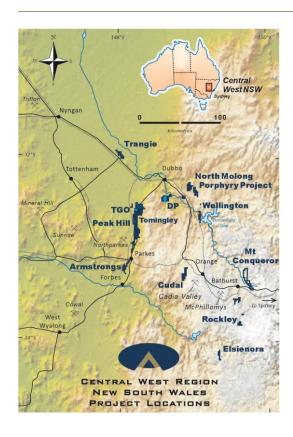






NSW exploration





- Alkane has an extensive tenement package in NSW and continues to seek new tenements
- Our gold exploration focuses on three broad target types
 - Orogenic gold systems such as Tomingley
 - Volcanogenic Massive Sulphide (VMS) gold systems such as McPhillamys and
 - Epithermal porphyry gold-copper systems such as Boda

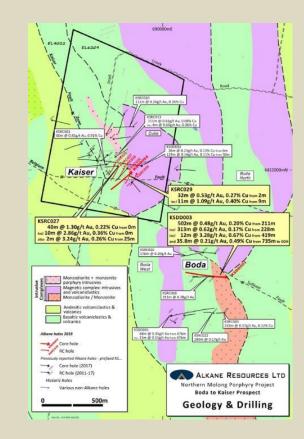
Northern Molong Porphyry Project



"A game changing discovery"

- Significant Gold-Copper Porphyry mineralisation at Boda and Kaiser prospects
- Boda target identified by geophysics followed by RC drilling (KSRC018 311m @0.28g from surface)
- Recent diamond hole demonstrates increasing grade at depth*
- Alkane acquired original tenements from CRA (now RioTinto) in 1997
- Actively working this tenement package and including targets to the north since the early 2000's.
- Numerous other intercepts within 2-3km strike length demonstrating extensive mineralised system
- Prospect potential akin to Cadia Valley (Newcrest)
- Regional targeting underway informed by Boda

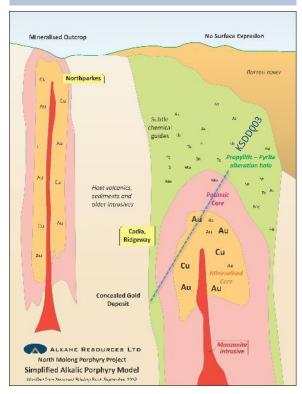
*ASX Release: 9 September 2019



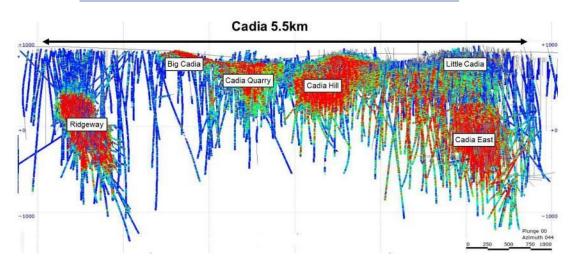
NMPP – the 'model' and Cadia Valley



Macquarie Arc Porphyry Model



Newcrest Mining's Cadia Valley Porphyry System

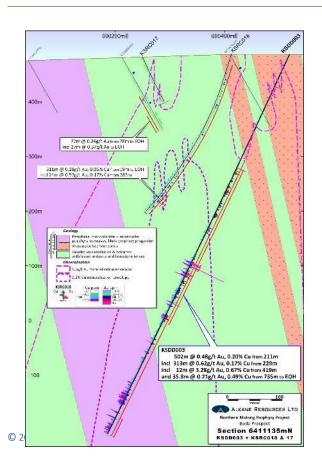


Modified from Newcrest Briefing Book September 2019

Lachlan Orogen in the Central West of NSW hosts a number of world class porphyry - epithermal gold-copper orebodies

NMPP – Boda KSDD003





- Significant Gold Copper Porphyry mineralization at Boda and Kaiser prospects
- Recent Boda diamond hole*:

KSDD003 507m @ 0.48g/t Au, 0.20% Cu from 211m

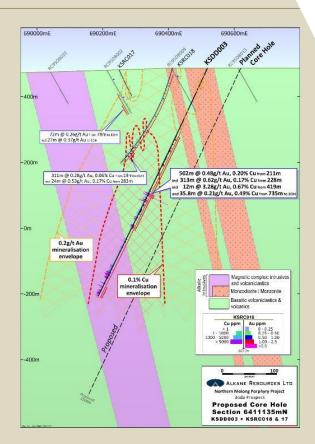
- incl 313m @ 0.62g/t Au, 0.17% Cu from 228m
- incl 100m @ 1.06g/t Au, 0.41% Cu from 408m
- incl 12m @ 3.28g/t Au, 0.67% Cu from 419m
- and 35.8m @ 0.21g/t Au, 0.49% Cu from 735m to EOH
- Numerous other intercepts within 2-3km strike length

^{*}ASX release 9 September 2019

Current Boda drilling

ALKANE RESOURCES LTD

- Series of 5 step out holes at ~100m spacing strike and also targeting underneath the discovery hole KSDD003 (which finished in mineralisation) currently underway
- Updated IP survey underway over ~5km prospective corridor
- Results will be released on a hole-by-hole basis
- Currently awaiting assays from first hole to receive and release within 2 weeks
- Expect to release further holes every 3-4 weeks thereafter.

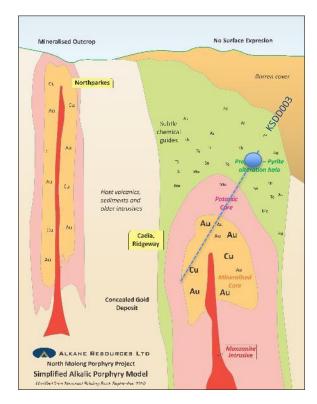


NMPP - Boda core





Outer propylitic alteration – disseminated pyrite zone Hosts +0.1 - 0.5g/t gold



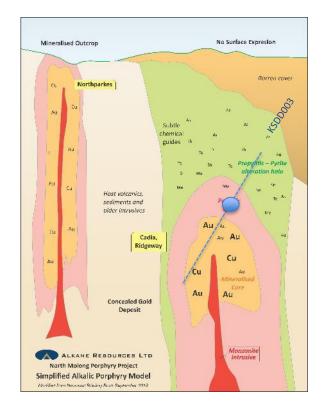
NMPP - Boda core





Inner potassic alteration (biotite/kspar) – stringer chalcopyrite – (pyrite) zone

Gold 0.3 - +1.0g/t Copper 0.1 - 0.5%

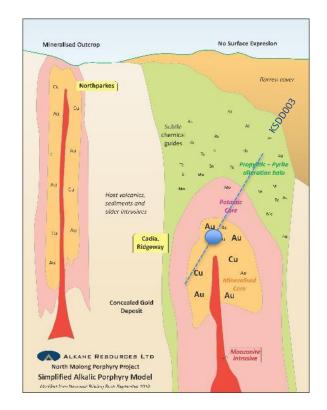


NMPP - Boda core





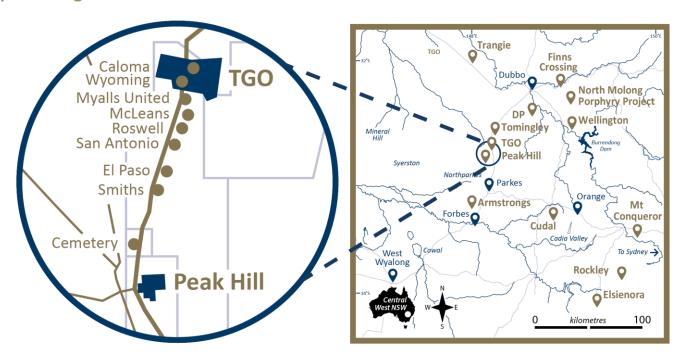
Veined and strong inner potassic alteration (biotite/kspar) – disseminated and blebby bornite - chalcopyrite zone Gold +0.5g/t Copper +0.2%



Tomingley Corridor: Central West NSW



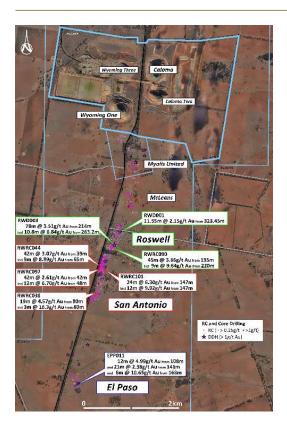
~10km mineralisation adjacent to established processing infrastructure





Tomingley Corridor: Exploration





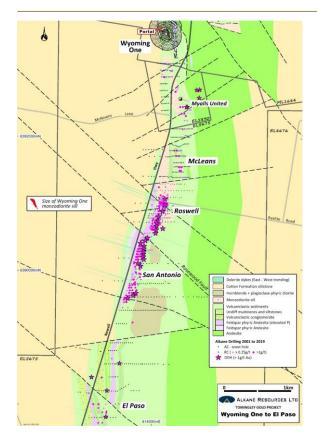
- Three major target areas within 8km of mill; Roswell, San Antonio and El Paso
- Infill drilling at 40m spacing of Roswell, San Antonio largely progressed
- Exploration Target (San Antonio, El Paso) of ~12.5 17.6 million tonnes (open pit and underground) at a grade ranging between 1.7-2.2 g/t Au*
- Maiden Resource (Roswell) 7.02Mt @1.97g/t Au (455,000 oz)#
 - Cf 2009 Tomingley Mineral Resource 11.2Mt @ 1.8g/t Au
- Extent of mineralisation in San Antonio, Roswell alone covers significantly larger area than original Tomingley discoveries

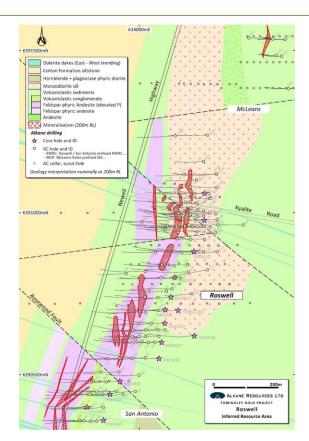
^{*}ASX: release 9 July 2019 #ASX Release: 28 January 2020

^{*}The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

Tomingley Corridor: Plans



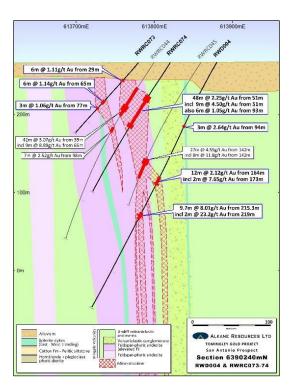




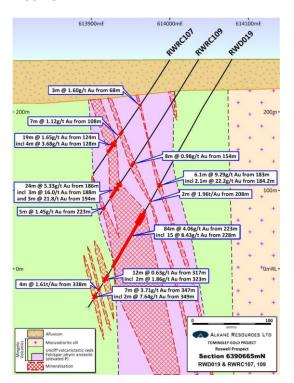
Tomingley Corridor: Cross sections



San Antonio

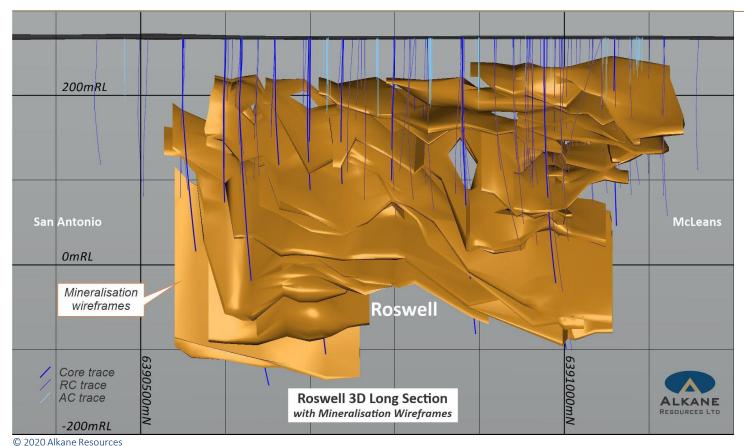


Roswell



Roswell 3D long section





21

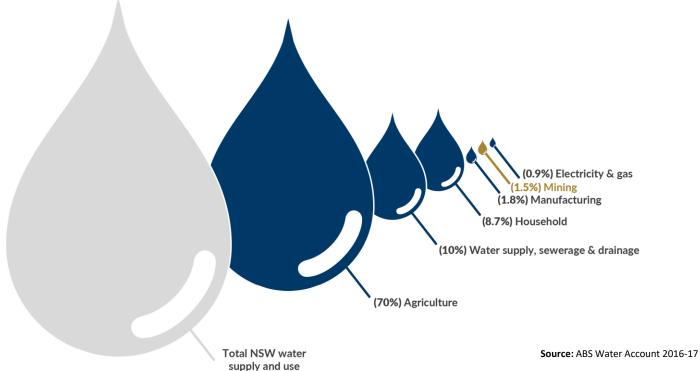




Mining in NSW



The mining industry is a relatively small user of water, using just 1.5% of total water consumed in NSW in 2016-17, compared with 70% used by agriculture and 8.7% by households.



Australian Strategic Materials



Dubbo Project

- Critical minerals resource
 - Rare earths, zirconium, hafnium and niobium
 - Used in clean energy, electric vehicles and most modern technology
- Defined resource supports 70+ year open pit operation
- 400km northwest of Sydney
- Extensive piloting at ANSTO since 2008
- Full FEED with Hatch and further updates
- All major State and Federal approvals in place
- Land and resource wholly owned

Korean Metals Plant

- RMR tech pilot plant under construction
- Seeking to confirm low cost, low emission process
- 2020 feasibility on integrated separation & metallisation plant







Dubbo project financials



Dubbo Project Engineering and Financials Update (4 June 2018)

20 year Base case (1 Mtpa)

- 1.0Mtpa (base case)
- CAPEX A\$1.3B
- Revenue A\$663M
- Operating Costs A\$341M
- EBITDA A\$320M
- IRR 17.5%
- NPV A\$1.24B

Modular (4 June 2018)

Stage 1

- 0.5Mtpa
- CAPEX A\$808M
- Revenue A\$397M
- Operating Costs A\$202M

Stage 2

- 0.5Mtpa
- CAPEX A\$692M
- Revenue AŚ663M
- Operating Costs A\$341M

Modular Advantage

- Large elements of construction occur offsite
- Significantly reduces initial start-up capex
- Reduces construction period
- Allows Alkane to develop and grow with its customers and the target markets for its products

Note: As per ASX announcement of 4 June 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement

Key work plan & milestones – Next 6 months



- Results of step-out drilling at Boda (Q1/Q2 2020)
- Inferred Resource for San Antonio in Tomingley Corridor (March 2020)
- Acquisition of key land for Tomingley Corridor (some under option)
- Approvals and Commencement of Tomingley Corridor Exploration Drive
- Update on ASM Demerger decision (Q1 2020)

Alkane highlights



Grow shareholder value by increasing production at Tomingley, pursuing organic growth through exploration and development, and strategic acquisition.

Unlock the value of Australian Strategic Materials (ASM), including a potential demerger and listing in H1 2020.

Corporate strength

- \$91.7M in cash, bullion and listed investments as at 31 December 2019 (nil debt)
- Extensive senior management expertise in the full miningcycle (exploration, approvals, construction, operation, rehab)
- Well-credentialled and experienced Board

Existing production

- Tomingley mill partially utilised for the existing underground; upgraded FY20 guidance of 30,000oz-35,000oz
- Production growth through Tomingley Corridor (San Antonio, Roswell)
- Expediting development pathway; underground initially with open pit longer term
- Potential for strong near term cash flow

Landmark discovery at Boda

- Extensive porphyry
 mineralisation encountered with
 similar characteristics to
 Newcrest's Cadia Project (110km
 south)
- Strong indications of large system at Kaiser-Boda
- RC drilling shows extensive low grade from surface, with increase in grade from ~200m
- 502m at 0.48g/t Au and 0.2% Cu; higher than Cadia East reserve grade
- Drill program will test scale and depth extension; 5 step-out diamond holes & IP

Growth options

- Extensive tenement holding in NSW with strong exploration potential
- 15% of Genesis Minerals (ASX: GMD)
- 13% of Calidus Resources (ASX: CAI)
- 100% of Australian Strategic Materials, including Dubbo Project, with imminent demerger under consideration

Find.

Enhance.

Deliver.

...it's what we do!

www.alkane.com.au



@alkaneresources



in alkane-resources-ltd

