

25 October 2023

## Quarterly Activities Report to 30 September 2023

### Tomingley Gold Operations (Tomingley)

- Gold production of 15,855oz met forecast for the quarter, with site operating cash costs at A\$1,322/oz and AISC of A\$2,156/oz.
- Gold sales for the quarter of 16,090oz for revenue of A\$46.6m at an average price of A\$2,897/oz.
- FY2024 guidance for Tomingley remains unchanged at 60,000oz to 65,000oz production at an AISC of \$A1,750/oz to \$2,100/oz.

### Tomingley Gold Extension Project (TGEP)

- In July 2023 the Mining Lease that includes the TGEP was approved.
- In early October 2023, post quarter end, the regulator accepted the Construction Environmental Management plan. This enabled physical construction activity, such as earthworks for the paste plant and infrastructure, to commence in the new mining area.
- The second ventilation rise at Roswell has been completed.
- Extensive infill drilling of the Roswell orebody continues.

### Exploration

- Assay results were received from diamond core and RC drilling at Boda and Boda Two-Three intersecting zones of extensive gold-copper porphyry mineralisation during the quarter. Significant intercepts included:

BOD121	1,601.9m grading 0.51g/t AuEq* (0.30g/t Au, 0.15% Cu) from 256m to EOH;
incl	28m grading 1.51g/t AuEq (0.97g/t Au, 0.38% Cu) from 323m;
incl	4m grading 4.10g/t AuEq (2.78g/t Au, 0.93% Cu) from 336m;
also	45m grading 1.32g/t AuEq (1.01g/t Au, 0.22% Cu) from 464m;
incl	5m grading 3.50g/t AuEq (3.08g/t Au, 0.30% Cu) from 464m.
BOD128	113m grading 1.21g/t AuEq (0.57g/t Au, 0.45% Cu) from surface;
incl	24m grading 2.47g/t AuEq (1.17g/t Au, 0.91% Cu) from 70m;
incl	3m grading 6.59g/t AuEq (2.78g/t Au, 2.67% Cu) from 85m.
BOD094	91.8m grading 0.62g/t AuEq (0.35g/t Au, 0.19% Cu) from 1215m;
incl	58m grading 2.30g/t AuEq (1.28g/t Au, 0.74% Cu) from 1223m;
incl	12m grading 4.78g/t AuEq (3.37g/t Au, 0.98% Cu) from 1265m;
also	21m grading 1.02g/t AuEq (0.58g/t Au, 0.31% Cu) from 1285m.

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<b>BOD122</b>	<b>16m grading 1.46g/t AuEq (1.45g/t Au, 0.01% Cu) from 45m;</b>
<b>and</b>	<b>542m grading 0.53g/t AuEq (0.24g/t Au, 0.21% Cu) from 514m;</b>
<b>incl</b>	<b>106m grading 0.94g/t AuEq (0.31g/t Au, 0.46% Cu) from 747m;</b>
<b>also</b>	<b>20m grading 1.09g/t AuEq (0.54g/t Au, 0.40% Cu) from 1026m.</b>

- **Two drill rigs are in operation at the Kaiser deposit comprising of one RC and one diamond core rig. These rigs are doing infill and extensional drilling to allow an update in the mineral resource estimate. The updated mineral resource estimation for Boda will be completed in the current quarter, Q4 2023, and for Kaiser in Q1 2024.**

### **Corporate**

- **Cash, bullion and listed investments position totalled A\$94.4M.**
- **Significant investments made during the quarter in both growth and expansion at Tomingley (A\$16.2m) and exploration (A\$8.1m).**
- **Shareholding in ASX listed gold producer Calidus Resources Ltd (ASX:CAI) represents ~9.0% ownership of issued capital in Calidus at the end of the June quarter. Sale of Genesis Minerals Ltd (ASX: GMD) shareholding during the quarter yielded A\$11.9m in cash.**

Alkane Managing Director, Nic Earner, said: *“We've had a solid start to the year at Tomingley, meeting our production guidance. The Tomingley Extension Project is well underway with the second vent rise completed at Roswell, infill drilling occurring underground and surface works commenced for the Paste Plant.*

*“The drilling at Boda and Kaiser continued through the quarter, keeping us on schedule to release the updated Boda resource in the current quarter.”*

*\*The equivalent calculation formula used in ASX Announcement 20 June 2023 is  $AuEq(g/t) = Au(g/t) + Cu\%/100 * 31.1035 * copper\ price(\$ / t) / gold\ price(\$ / oz)$ . The prices used to calculate AuEq are based on 6-month averages of US\$1,930/oz gold and US\$8,500/t copper, and A\$:US\$0.67. Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies. Alkane considers the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.*



## **TOMINGLEY GOLD OPERATIONS**

*Tomingley Gold Operations Pty Ltd 100%*

Tomingley Gold Operations (Tomingley) is a wholly owned subsidiary of Alkane, located near the village of Tomingley, approximately 50km southwest of Dubbo in Central Western New South Wales. Tomingley has been operating since 2014. Mining is occurring underground on three gold deposits (Wyoming One, Caloma One and Caloma Two).

### ***Operations Performance***

Tomingley delivered on its forecast production for the quarter with the underground operations performing well. A new mining truck has been added to the fleet to increase haulage capacity.

A total of 15,855 ounces of gold was poured for the quarter. The site cash costs for the quarter were A\$1,322/oz with an all-in sustaining cost (AISC) of A\$2,156/oz. FY2024 guidance for Tomingley is unchanged at 60,000oz to 65,000oz production at an AISC of \$A1,750/oz to \$2,100/oz.

Gold sold for the quarter was 16,090 ounces at an average sales price of A\$2,897/oz, generating revenue of A\$46.6M. Bullion stocks were 2,651 ounces (fair value of A\$7.6M at quarter end). Site operating cash flow was A\$23.7M for the quarter.

Development to establish drill sites at Roswell continues. Two diamond rigs are conducting infill drilling of Roswell from underground. The second vent rise to the immediate north of Roswell and the associated underground ventilation infrastructure have been completed. The construction of the second cell of Residue Storage Facility 2 (RSF2) continues.

### ***Tomingley Gold Extension Project***

In early October 2023, post quarter end, the regulator accepted the Construction Environmental Management plan. This enabled physical construction activity, such as earthworks for the paste plant and infrastructure, to commence in the new mining area.

Detailed engineering for both the paste plant that will be used at Roswell and for the new flotation and fine grinding circuit continues.

### ***McLeans Prospect***

During the quarter the maiden underground Inferred Mineral Resource estimate was released with 870,000 tonnes at 2.51g/t gold for 70,000 contained ounces (see ASX Announcement 13 September 2023).

### ***Exploration***

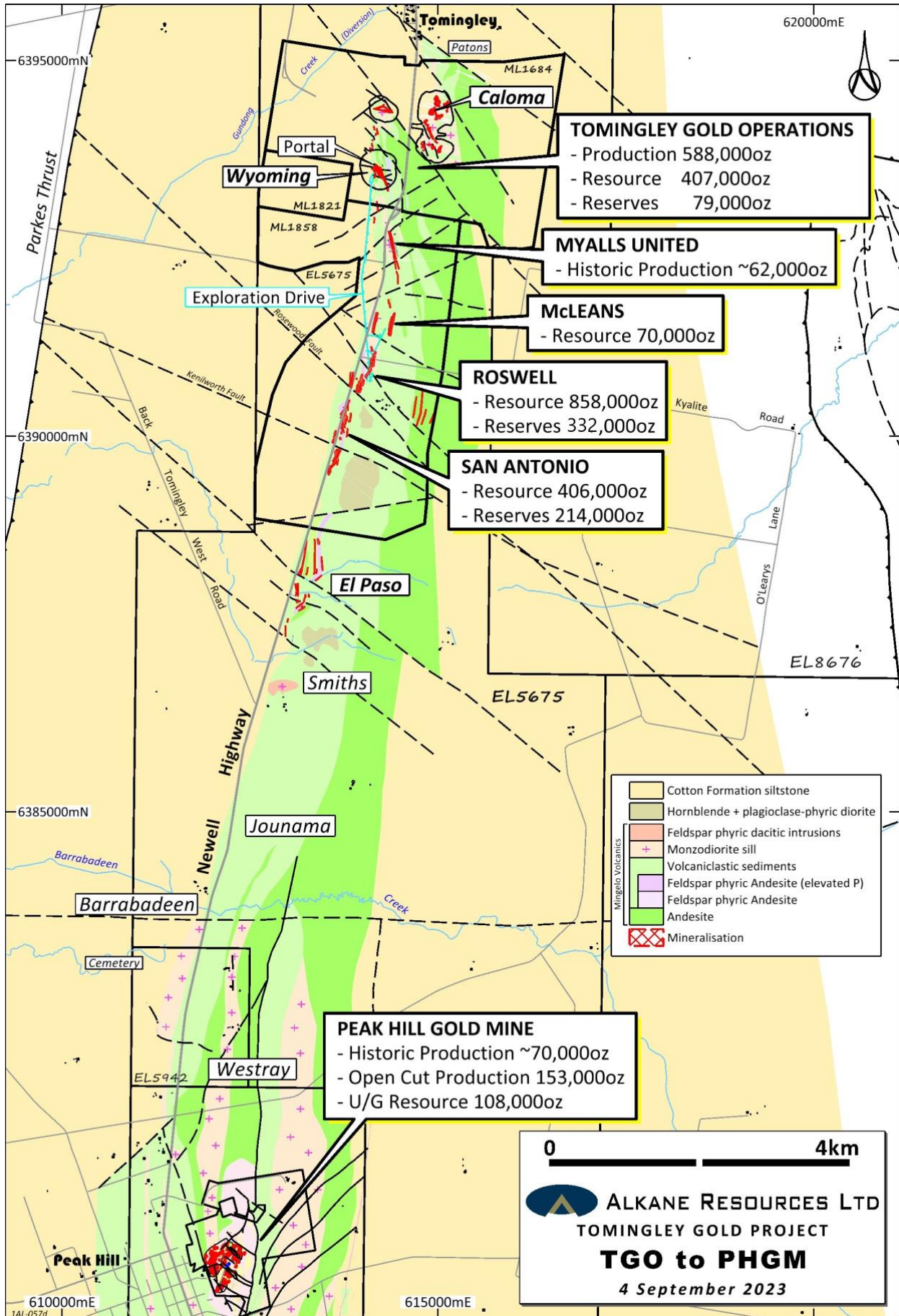
To assist the definition of additional drill targets in the favourable volcanic stratigraphy south of San Antonio to Peak Hill, detailed drone-based magnetic and airborne gravity surveys are planned for this quarter.



## Tomingley FY 2024 Quarterly and Annual Production Figures

Tomingley Production		FY 2023	Sep Quarter 2023	FY 2024
Underground				
Ore mined	Tonnes	822,585	241,591	241,591
Grade	g/t	2.50	2.12	2.12
Ore milled	Tonnes	1,069,331	276,654	276,654
Head grade	g/t	2.42	2.09	2.09
Recovery	%	84.3	82.1	82.1
Gold poured	Ounces	70,253	15,855	15,855
<b>Revenue Summary</b>				
Gold sold	Ounces	70,498	16,090	16,090
Average price realised	A\$/oz	2,703	2,897	2,897
Gold revenue	A\$M	190.5	46.6	46.6
<b>Cost Summary</b>				
Surface works	A\$/oz	134	30	30
Mining	A\$/oz	461	682	682
Processing	A\$/oz	388	435	435
Site Support	A\$/oz	141	175	175
<b>C1 Site Cash Cost</b>	<b>A\$/oz</b>	<b>1,124</b>	<b>1,322</b>	<b>1,322</b>
Royalties	A\$/oz	93	93	93
Sustaining capital	A\$/oz	364	429	429
Gold in circuit movement	A\$/oz	-49	223	223
Rehabilitation	A\$/oz	22	32	32
Corporate	A\$/oz	47	57	57
<b>AISC<sup>1</sup></b>	<b>A\$/oz</b>	<b>1,602</b>	<b>2,156</b>	<b>2,156</b>
Bullion on hand	Ounces	2,890	2,651	2,651
<b>Stockpiles</b>				
Ore for immediate milling	Tonnes	328,594	289,287	289,287
Grade	g/t	1.04	0.94	0.94
Contained gold	Ounces	10,940	8,757	8,757

<sup>1</sup>AISC = All in Sustaining Cost comprises all site operating costs, royalties, mine exploration, sustaining capex, mine development and an allocation of corporate costs, calculated on the basis of ounces sold. AISC does not include share-based payments or net realisable value provision for ore inventory.





## CORPORATE

### Cash, Bullion and Listed Investments

Description	Sep-23 Quarter	Jun-23 Quarter
	A\$M	A\$M
Cash	77.9	80.3
Bullion	7.6	8.3
Cash and bullion sub-total	85.5	88.6
Listed investments	8.9	18.7
Total cash, bullion and listed investments	94.4	107.3

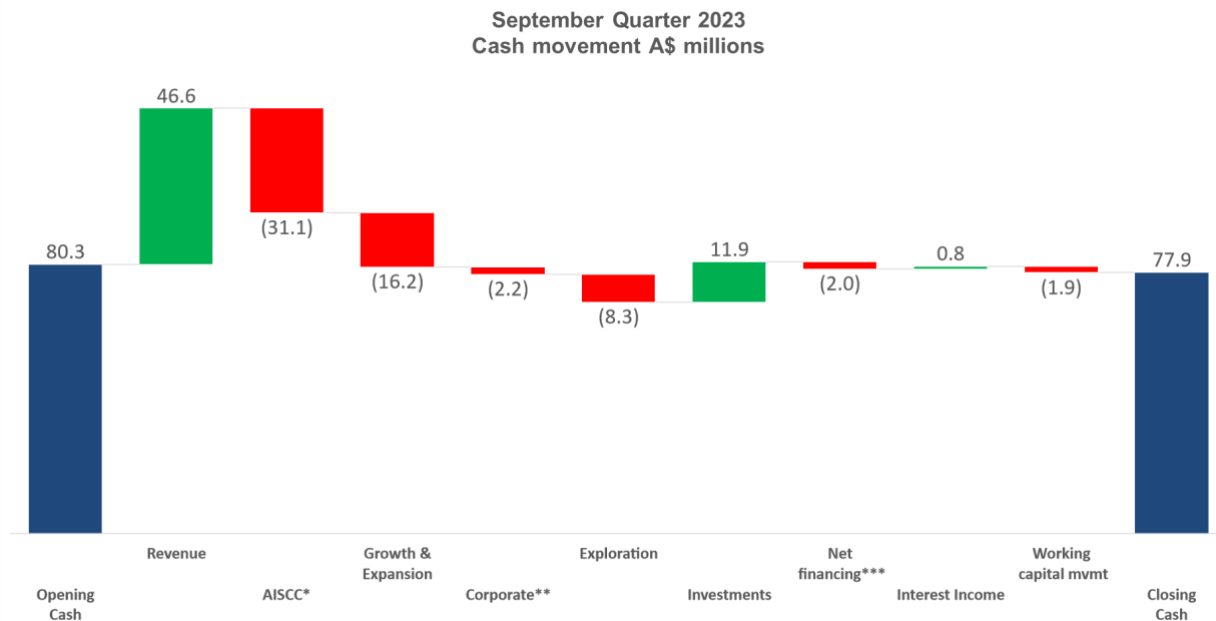
### Banking Facilities

At the end of the quarter, the Company had \$11.7 million of mobile equipment financing.

Alkane has a Project Loan Facility of A\$50m with Macquarie Bank Limited (Macquarie) to develop the Tomingley Gold Extension Project. This facility is currently undrawn as development activities have been funded from cash.

### Cashflows

The waterfall chart below summarises the quarterly movement in cash held (excludes bullion and investments held at the beginning and end of the period):



\*AISCC – 16,090ozs sold x \$2,156/oz. The Gold in circuit movement from the AISC table on page 4 is a non-cash movement so is excluded from the cashflow waterfall above.

\*\* Corporate costs of \$917k are included in the AISCC.

\*\*\* Net financing outflows detailed in the commentary below.

During the quarter Tomingley Gold Operations sold 16,090 ounces at an average price of A\$2,897/oz. This included the delivery of 6,500 ounces into forward sales contracts at an average of \$2,778/oz. Further details of the current forward sales can be found below.

All in sustaining cash outflows for the quarter were \$31.1 million (note this excludes the Gold in circuit from the table on page 4 as these are non-cash). Sustaining capital was \$429/oz or \$6.9m for the quarter.





Major items of expenditure in this category included the purchase of an underground haul truck, ongoing works associated with the second residue storage facility construction and underground mine development. Costs for RSF 2 are split between sustaining and growth as a portion can be attributed to the TGEP.

Major items included in growth and expansion cash outflows of \$16.2 million is expenditure for process and paste plant capital for the TGEP, Roswell ventilation rise, Roswell pre-commercial mine development and the construction of RSF2 to the immediate south of the existing RSF.

The focus of exploration expenditure was the Northern Molong Porphyry Project, in particular drilling at the Boda, Boda 2 and Kaiser prospects.

Investment inflows include \$11.9m from the sale of shares in Genesis Minerals Ltd (ASX:GMD).

Net financing outflows represent mobile equipment fleet lease repayments and insurance premium funding repayments.

At the end of the quarter, Alkane holds ~7M shares in Sky Metals (ASX:SKY). Alkane maintains an ownership position of ~9.0% of Calidus Resources Ltd. Alkane continues to watch its position in Calidus closely and notes the recent announcements regarding Q1FY24 production, potential satellite deposits and the interest in the Pirra Lithium subsidiary as positive.

### ***Gold Forward Sale Contracts***

The Company holds the following forward sale contracts.

<b>Quarter</b>	<b>Average Forward Price A\$/oz</b>	<b>Delivery Ounces</b>
<b>December 2023</b>	2,778	6,000
<b>March 2024</b>	2,744	5,900
<b>June 2024</b>	2,762	7,300
<b>September 2024</b>	2,778	8,600
<b>December 2024</b>	2,791	9,400
<b>March 2025</b>	2,804	9,800
<b>June 2025</b>	2,818	8,700
<b>September 2025</b>	2,832	8,600
<b>December 2025</b>	2,843	8,200
<b>March 2026</b>	2,855	8,700
<b>June 2026</b>	2,870	8,500
<b>September 2026</b>	2,884	7,800
<b>December 2026</b>	2,896	8,500
<b>Total</b>	<b>2,822</b>	<b>106,000</b>



## NORTHERN MOLONG PORPHYRY PROJECT (NMPP) (gold-copper)

Alkane Resources Ltd 100%

During the quarter drill results from Boda and Boda Two-Three were received (see ASX Announcements 4 August 2023 and 25 August 2023). Results, not reported below, were also received after the end of the quarter (see ASX Announcement 3 October 2023).

### **Boda Deposit**

The Boda deposit is located within a northwest trending structural corridor and is centred on the northwest margin of a significant magnetic high within the Boda Intrusive Complex (BIC). The mineralisation is hosted within a package of submarine basaltic to andesitic lavas with subordinate latite flows. The volcanic sequence is intruded by monzodiorite-monzonite units and related magmatic-hydrothermal breccias. The deposit is crosscut by numerous post-mineralisation dykes and sills of varying composition.

Magmatic-hydrothermal breccias appear to be the focus for the calc-potassic alteration and gold-copper mineralisation at Boda. The mineralisation is related to a series of northwest-trending monzodiorite intrusions that manifest as a series of vertically extensive intrusive breccias forming a central stock to Boda. These intrusive breccias transition vertically to hydrothermal breccias which the highest gold-copper grades are related.

The initial Mineral Resource Estimation (MRE) at 0.3g/t AuEq for Boda was confined to a surface area of 1,000m strike length and 500m width, using assay results from 83 drill holes for a combined 71,431 metres of drilling. The Inferred Mineral Resource was estimated at 624Mt grading at 0.26g/t gold, 0.14% copper for 5.21Moz gold and 0.90Mt copper (see ASX Announcement 30 May 2022).

Results of recent drilling targeting the northwest extension to Boda and south extension to Boda 2-3 outside of the current deposit envelope, as well as infilling the current resource and defining the higher-grade breccia zones within the 500m strike length core zone, were announced during the quarter. Significant results included:

BOD121	1,601.9m grading 0.51g/t AuEq (0.30g/t Au, 0.15% Cu) from 256m to EOH;
incl	28m grading 1.51g/t AuEq (0.97g/t Au, 0.38% Cu) from 323m;
incl	4m grading 4.10g/t AuEq (2.78g/t Au, 0.93% Cu) from 336m;
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also	20m grading 1.09g/t AuEq (0.54g/t Au, 0.40% Cu) from 1026m.

The gold equivalent (AuEq) is calculated using preliminary metallurgical work that determined both Au and Cu could be recovered equally at 85%. The calculation formula is  $AuEq(g/t) = Au(g/t) + Cu\%/100 * 31.1035 * CuPrice(\$/t)/AuPrice(\$/oz)$ . The prices used were based on six month averages of gold at





US\$1930/oz and copper at US\$8,500/t, at an exchange rate of A\$:US\$0.67. Alkane considers the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

### ***Current Drilling***

Two drill rigs are operating at the Kaiser deposit comprising of one RC and one diamond core rig. These rigs are doing infill and extensional drilling to allow an update in the mineral resource estimate. The updated mineral resource estimation for Boda will be completed in the current quarter, Q4 2023, and for Kaiser in Q1 2024.

### ***Metallurgical Testwork***

A second phase of metallurgical test work on Boda and Kaiser core is nearing completion. Results will be used for the calculation of the updated mineral resources.

## **SOUTHERN JUNEE PORPHYRY PROJECT (SJPP) (gold-copper)**

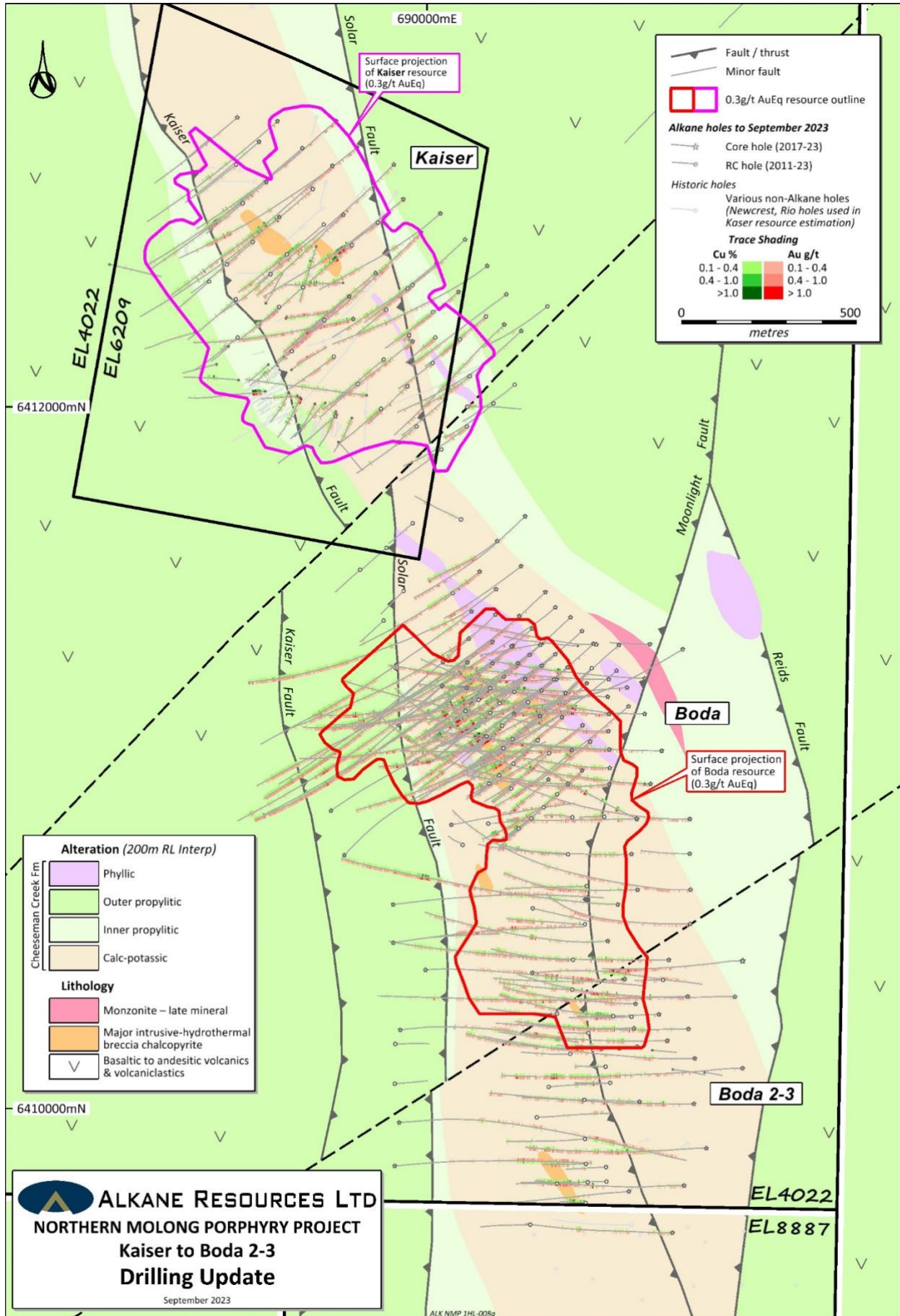
*Alkane Resources Ltd 100%*

Alkane is planning an airborne gravity survey over the SJPP in 2024, with data review ongoing.

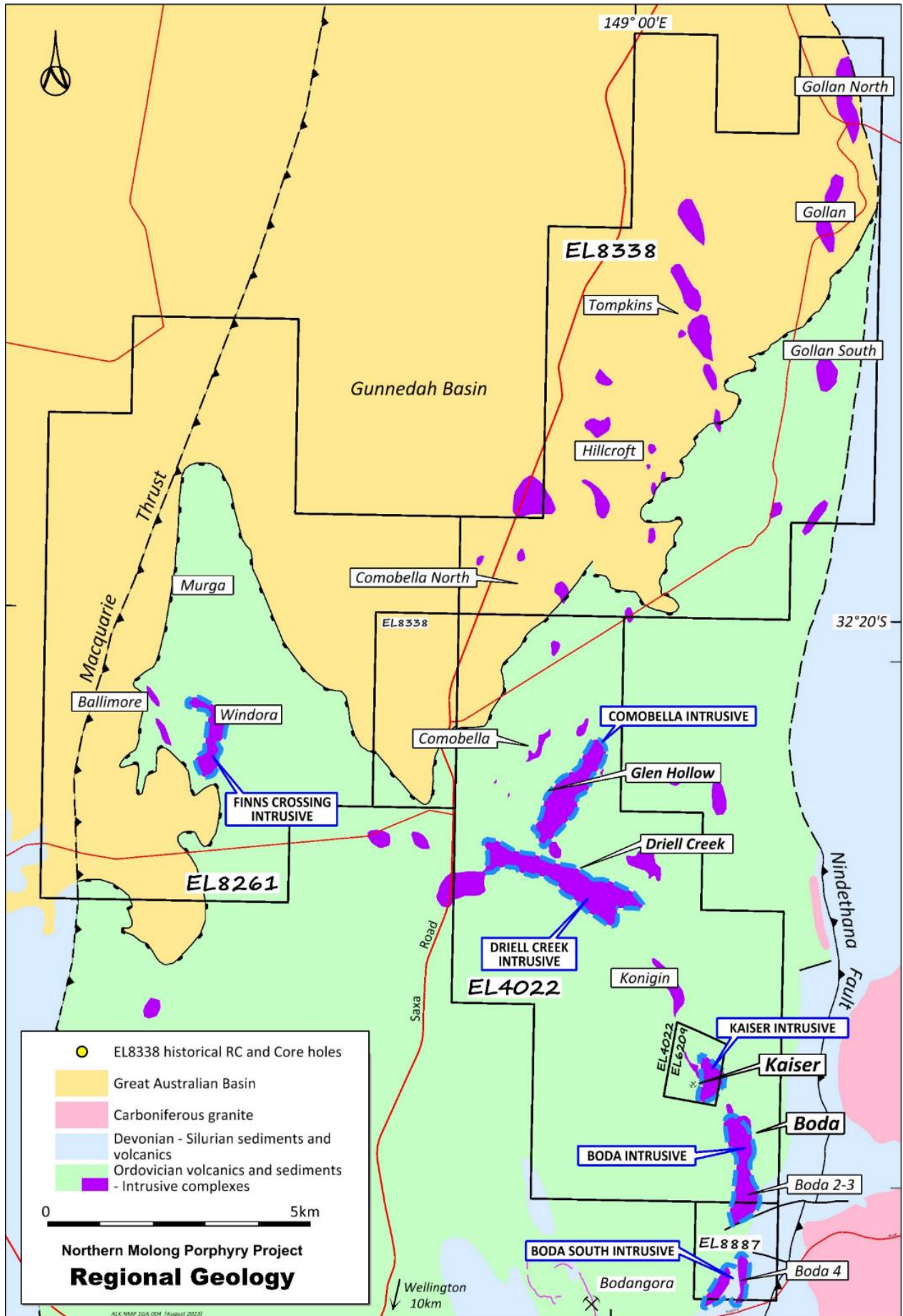
## **ROCKLEY (gold-base metals)**

*Alkane Resources Ltd 100%*

A fixed loop ground EM survey within the Apsley target area, south of Bathurst, is scheduled for this quarter to assess potential for skarn type gold and base metal mineralisation.



**ALKANE RESOURCES LTD**  
**NORTHERN MOLONG PORPHYRY PROJECT**  
**Kaiser to Boda 2-3**  
**Drilling Update**  
 September 2023







### Competent Person

Unless otherwise advised above or in the Announcements referenced, the information in this report that relates to 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 a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Chalmers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

### Previously Reported Information

The information in this report that references previously reported exploration results and mineral resources is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears (specifically the information in this report that relates to Mineral Resources at Boda and Kaiser is extracted from the reports dated 30 May 2022 and 27 February 2023). The previous market announcements are available to view on the Company's website or on the ASX website ([www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of mineral resources or ore reserves, that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### Disclaimer

This report 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 report 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 Geoscientists.

**This document has been authorised for release to the market by Nic Earner, Managing Director.**

### ABOUT ALKANE - [www.alkane.com.au](http://www.alkane.com.au) - ASX: ALK

Alkane Resources intends to grow to become one of Australia's multi-mine gold and copper producers.

The Company's current gold production is from the Tomingley Gold Operations in Central West New South Wales, where it has been operating since 2014 and is currently expediting a development pathway to extend the mine's life beyond 2030.

Alkane has an enviable exploration track record and controls several highly prospective gold and copper tenements. Its most advanced exploration projects are in the tenement area between Tomingley and Peak Hill, which have the potential to provide additional ore for Tomingley's operations.

Alkane's exploration success includes the landmark porphyry gold-copper mineralisation discovery at Boda in 2019. With drilling ongoing adjacent to the initial resource identified at Boda, Alkane is confident of further consolidating Central West New South Wales' reputation as a significant gold and copper production region.

Alkane's gold interests extend throughout Australia, with strategic investments in other gold exploration and aspiring mining companies, including ~9.0% of Calidus Resources (ASX: CAI).

