

25 January 2023

Quarterly Activities Report to 31 December 2022

Tomingley Gold Operations (Tomingley)

- Gold production of 18,301oz exceeded forecast for the quarter, with site operating cash costs at A\$1,103/oz and AISC of A\$1,323/oz.
- Gold sales for the quarter of 17,855oz for revenue of A\$46.7M at an average price of A\$2,618/oz.
- FY2023 guidance for Tomingley has increased to 62,000oz to 70,000oz production at an AISC of \$A1,550/oz to \$1,800/oz (as per ASX Announcement 5 January 2023).

Tomingley Gold Extension Project (TGEP)

- The Tomingley Gold Extension Project approval from the NSW Department of Planning and Environment, which was expected by the end of December, is now expected in February.

Exploration

- The drill program at Boda continued over the 3km strike length from Boda Three to Kaiser (see ASX Announcements 25 October 2022 and 9 December 2022) with the final holes to be incorporated in the initial mineral resource estimate (MRE) at Kaiser. The MRE is expected in the March quarter 2023.
- At Kaiser, significant results included:

KAI073	320m grading 0.26g/t Au, 0.21% Cu from 505m
incl	12m grading 1.10g/t Au, 0.83% Cu from 509m
KAI086	15m grading 0.32g/t Au, 0.48% Cu from 409m
also	126m grading 0.26g/t Au, 0.21% Cu from 515m
incl	20.3m grading 0.59g/t Au, 0.46% Cu from 521.1m
KAI087	157m grading 0.36g/t Au, 0.17% Cu from 952m
KAI090	122.4m grading 0.42g/t Au, 0.40% Cu from 576.6m
incl	28m grading 0.92g/t Au, 0.84% Cu from 646m

- At Korridor, to the immediate north west of Boda, significant results included:

BOD091	1,041m grading 0.32g/t Au, 0.17% Cu from 698m
incl	326m grading 0.43g/t Au, 0.23% Cu from 1,165m
and	55m grading 0.46g/t Au, 0.25% Cu from 1,516m

CONTACT : NIC EARNER, MANAGING DIRECTOR, ALKANE RESOURCES LTD, TEL +61 8 9227 5677
INVESTORS : NATALIE CHAPMAN, CORPORATE COMMUNICATIONS MANAGER, TEL +61 418 642 556
MEDIA : PAUL RYAN, CITADEL-MAGNUS, TEL +61 409 296 511



- Gold intercepts were also recorded outside the resource at the Macleans prospect located to the north of Roswell and adjacent to the exploration drive (see ASX Announcement 17 November 2022). Significant results included:

MCP095	41 metres grading 1.13g/t Au from 199 metres;
incl	9 metres grading 3.01g/t Au from 217 metres;
also	16 metres grading 0.49g/t Au from 342 metres.
MCP096D	0.9 metres grading 12.6g/t Au from 475.1 metres;
also	17 metres grading 1.10g/t Au from 537 metres;
incl	2 metres grading 5.25g/t Au from 539 metres;
also	27 metres grading 1.08g/t Au from 573 metres;
incl	9 metres grading 2.33g/t Au from 585 metres.

Corporate

- Cash, bullion and listed investments position totalled A\$119.6M.
- Shareholding in ASX listed gold producer Calidus Resources Ltd (ASX:CAI) represents ~9.8% ownership of issued capital in Calidus at end of December quarter.



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. The gold processing plant was commissioned in January 2014 and has been operating at the design capacity of 1Mtpa since late May 2014. Mining is based on four gold deposits (Wyoming One, Wyoming Three, Caloma One and Caloma Two).

Operations Performance

Tomingley delivered another consistent production quarter with both the underground and open cut operations performing well. Wet weather did impact open cut production and other surface activities early in the quarter and production was also temporarily affected by a mechanical failure in the milling circuit in November. These challenges were more than offset by above forecast mined grade resulting in production still exceeding guidance.

A total of 18,301 ounces of gold was poured for the quarter. The site cash costs for the quarter were A\$1,103/oz with an all-in sustaining cost (AISC) of A\$1,323/oz.

The strong performance during the December quarter gives the Company confidence to lift FY2023 guidance for Tomingley to 62,000oz to 70,000oz production at an AISC of \$A1,550/oz to \$1,800/oz (as per ASX Announcement 5 January 2023).

Gold sold for the quarter was 17,855 ounces at an average sales price of A\$2,618/oz, generating revenue of A\$46.7M. Bullion stocks were 4,732 ounces (fair value of A\$12.7M at quarter end). Site operating cash flow was A\$21.5M for the quarter.

The exploration drive from Wyoming One to Roswell was approximately 2,400m south of Wyoming One, 250 north of the Roswell deposit, at the end of the quarter. Work on the second vent rise to the immediate north of Roswell is now underway.

Tomingley Gold Extension Project

Alkane's intention is to develop the Roswell and San Antonio deposits, which are located 3 – 5km south of Tomingley, as soon as possible.

Project Approval was not received for the Tomingley Gold Extension Project (TGEP) by the end of December. All information requested of the Company has been provided and the Project remains under consideration by the Department of Planning and Environment, with approval now expected in February.

McLeans Prospect

McLeans Prospect is positioned 500 metres northeast of the Roswell Deposit and adjacent to the exploration drive from Wyoming One. The prospect area has been historically tested by nominal 100 metre spaced AC and RAB drilling traverses, and 17 RC drill holes, with shallow mineralisation and alteration evident over a 400-metre strike length masked by approximately 1 to 20 metres of alluvium. A deep RC drill hole (MCP092) intersected the McLeans andesite (correlates with the andesites that host the majority of the gold resources at the Roswell and San Antonio deposits) approximately 100m below surface, intercepting 34m @ 1.80g/t Au from 178m and 19m @ 1.25g/t Au from 242m (ASX Announcement 16 September 2021). The multiple gold zones are associated with either sheeted quartz veins or as pyrite-silica cemented breccias, hosted within and along the contacts of the andesite host.



McLeans Prospect was further drill tested by 8 AC drill holes, 2 RC drill holes and 2 DD drill holes for a total of 2,269 metres, targeting mineralisation along strike and down dip of previous drilling.

Significant gold intercepts reported during the quarter include:

MCP095	41 metres grading 1.13g/t Au from 199 metres;
incl	9 metres grading 3.01g/t Au from 217 metres;
and	16 metres grading 0.49g/t Au from 342 metres.
MCP096D	0.9 metres grading 12.6g/t Au from 475.1 metres;
and	17 metres grading 1.10g/t Au from 537 metres;
incl	2 metres grading 5.25g/t Au from 539 metres;
and	27 metres grading 1.08g/t Au from 573 metres;
incl	9 metres grading 2.33g/t Au from 585 metres.
MCP097D	14 metres grading 0.73g/t Au from 297 metres;
incl	2 metres grading 2.23g/t Au from 297 metres;
and	3.3 metres grading 1.14g/t Au from 395.7 metres.

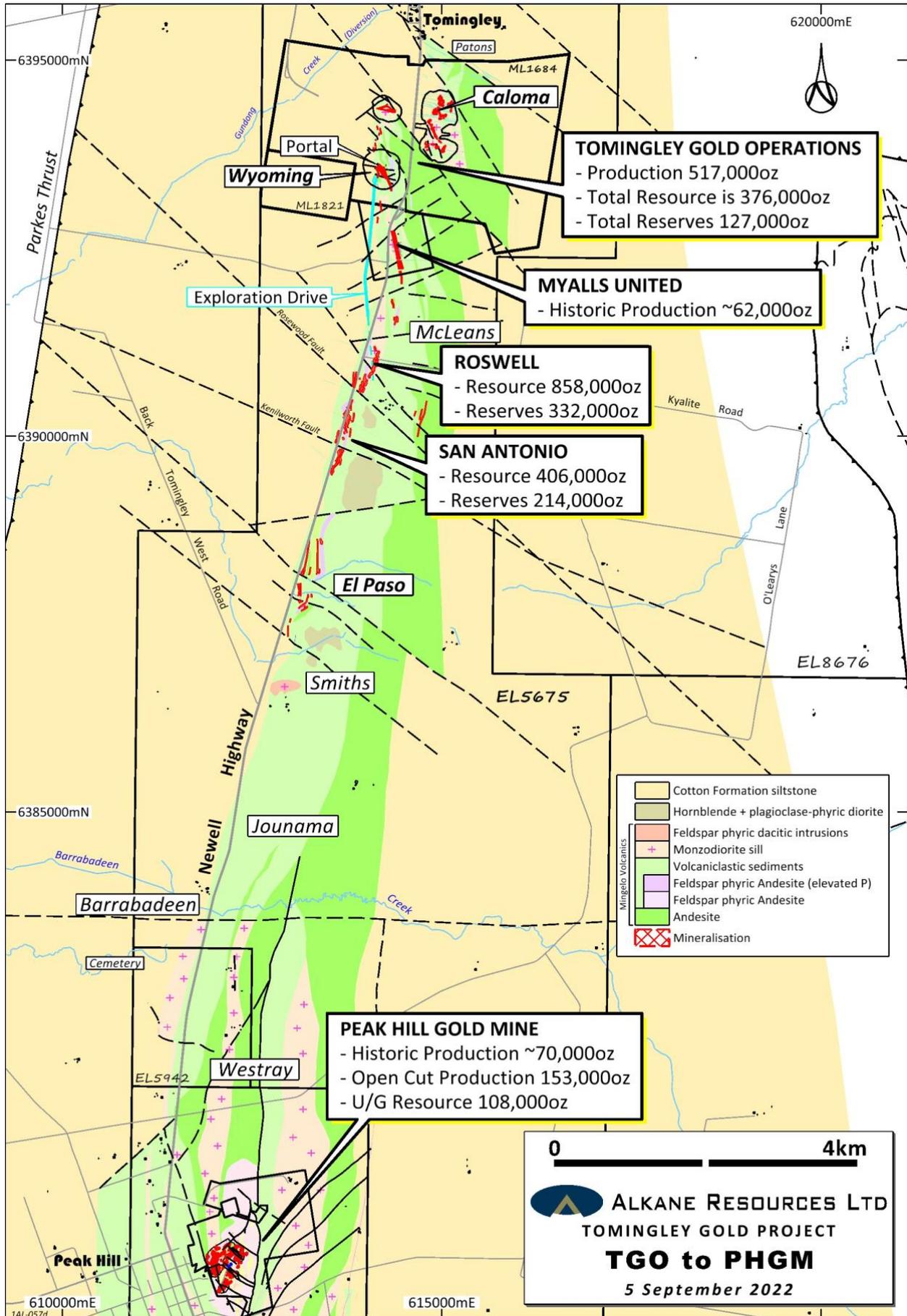
RC drill hole MCP094 is interpreted to have drilled over the top of the andesite and intersected weak gold-arsenic anomalism in overlying volcanoclastic sediments. The recent drilling has confirmed significant gold mineralisation over 200 metres of strike, 500 metres down dip and remains open along strike and down dip. Drilling is planned to commence from the surface and underground from the exploration drive in the current quarter for the purpose of extending the known strike of the mineralised andesite and to estimate a maiden underground Inferred Mineral Resource.



Tomingley FY 2023 Quarterly and Annual Production Figures

Tomingley Production		FY 2022	Sep Quarter 2022	Dec Quarter 2022	FY 2023
Open cut					
Waste mined	BCM	848,911	138,574	52,330	190,904
Ore mined	Tonnes	540,939	121,862	28,954	150,815
Strip Ratio	Ratio	4.3	3.2	5.1	3.6
Grade	g/t	1.30	1.71	2.23	1.81
Underground					
Ore mined	Tonnes	799,584	228,119	242,267	470,386
Grade	g/t	2.76	2.83	2.33	2.57
Ore milled	Tonnes	1,029,207	270,618	239,078	509,696
Head grade	g/t	2.44	2.75	2.56	2.66
Recovery	%	83.7	87.0	84.6	85.9
Gold poured	Ounces	66,802	19,489	18,301	37,790
Revenue Summary					
Gold sold	Ounces	66,883	18,344	17,855	36,199
Average price realised	A\$/oz	2,467	2,547	2,618	2,582
Gold revenue	A\$M	165.0	46.7	46.7	93.5
Cost Summary					
Surface works	A\$/oz	211	169	155	162
Mining	A\$/oz	460	449	390	420
Processing	A\$/oz	346	356	383	370
Site Support	A\$/oz	136	121	174	147
C1 Site Cash Cost	A\$/oz	1,153	1,095	1,103	1,099
Royalties	A\$/oz	81	89	111	100
Sustaining capital	A\$/oz	247	195	375	284
Gold in circuit movement	A\$/oz	-85	-265	-331	-298
Rehabilitation	A\$/oz	21	24	23	23
Corporate	A\$/oz	43	52	44	48
AISC¹	A\$/oz	1,460	1,191	1,323	1,256
Bullion on hand	Ounces	3,149	4,290	4,732	4,732
Stockpiles					
Ore for immediate milling	Tonnes	383,563	462,925	495,068	495,068
Grade	g/t	1.31	1.33	1.28	1.28
Contained gold	Ounces	16,167	19,746	20,381	20,381

¹AISC = 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	Dec-22 Quarter A\$M	Sep-22 Quarter A\$M
Cash	86.1	78.2
Bullion	12.7	11.0
Cash and bullion sub-total	98.8	89.2
Listed investments	20.8	35.4
Total cash, bullion and listed investments	119.6	124.6

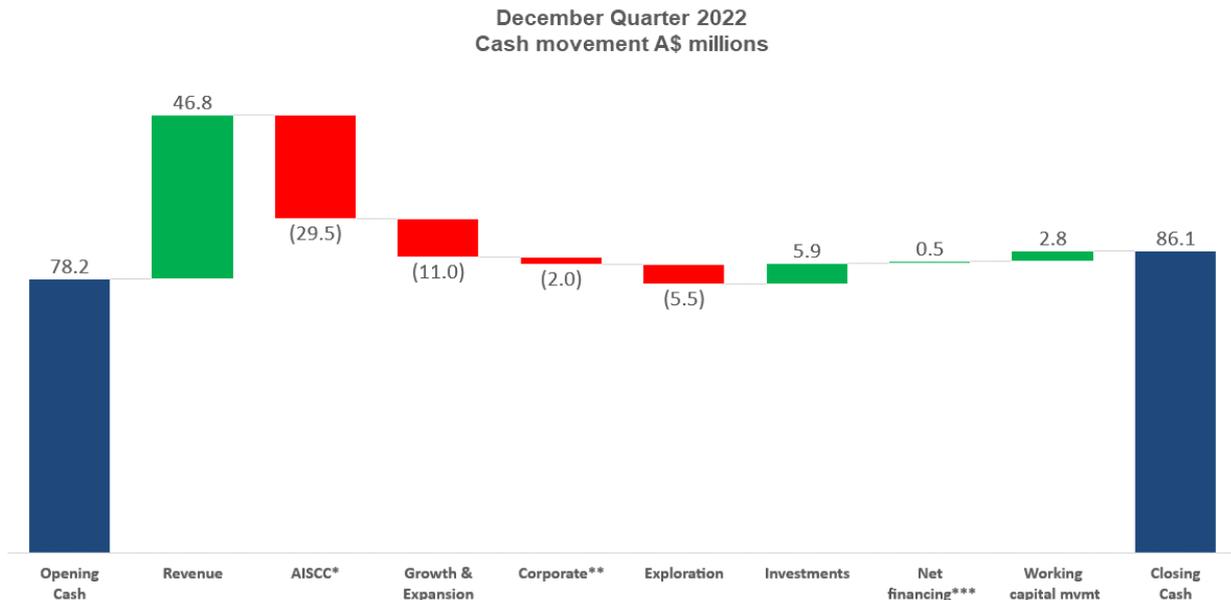
Note that the bullion on hand is higher than the amount reported on 5 January 2023 due to a gold pour at the end of the month that had not been correctly included in the total.

Banking Facilities

At the end of the quarter the Company had \$14.3 million of mobile equipment financing.

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):



*AISC – 17,855ozs sold x \$1,323/oz. The Gold in circuit movement from the AISC table on page 5 is a non-cash movement so is excluded from the cashflow waterfall above.

** Corporate costs of \$779k are included in the AISC.

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

During the quarter Tomingley Gold Operations sold 17,855 ounces at an average price of A\$2,618/oz. This included the delivery of 5,500 ounces into forward sales contracts at an average of \$2,591/oz. Further details of the current forward sales can be found below. All in sustaining cash outflows for the quarter were \$29.5 million (note this excludes the Gold in circuit and other adjustments from the table on page 5 as these are non-cash). Sustaining capital of \$375/oz (\$6.7m) for the quarter includes the purchase of a new jumbo, integrated tool carrier and construction works to expand capacity of existing Residue Storage Facility One.



Major items included in growth and expansion cash outflows of \$11.0 million is expenditure associated with the San Antonio-Roswell underground exploration drive and the construction of Residue Storage Facility Two, to the immediate south of the existing Residue Storage Facility. This expenditure will increase on Project Approval.

The focus of exploration expenditure was the Boda project, and the San Antonio/Roswell/El Paso deposits.

The investment income of \$5.9 million was Alkane’s sale of shares in Genesis Minerals Ltd (ASX:GMD).

Net financing outflows represent mobile equipment fleet lease repayments.

At the end of the quarter Alkane holds ~7M shares in GMD and ~7M shares in SKY. Alkane maintains an ownership position of ~9.8% of Calidus Resources Ltd’s (ASX:CAI) issued capital.

Gold Forward Sale Contracts

The Company holds the following forward sale contracts.

Quarter	Average Forward Price A\$/oz	Delivery Ounces
March 2023	2,778	5,500
June 2023	2,778	6,500
September 2023	2,778	6,500
December 2023	2,778	6,000
Total	2,778	24,500

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

Alkane Resources Ltd 100%

Results received during the quarter (see ASX Announcements 25 October 2022 and 9 December 2022) include the final holes drilled at Kaiser to complete the initial mineral resource.

Kaiser Prospect

The Kaiser prospect, centred about 1km northwest of Boda, comprises a thick sequence of basaltic to andesitic volcanics and volcanoclastics that have been intruded by a series of dykes and stocks that range in composition from diorite and monzodiorite to monzonite. Porphyry copper-gold mineralisation at the Kaiser prospect is associated with two northwest trending zones of potassic to calc-potassic alteration, the Kaiser and Duke Zones, that host zones of chalcopryrite-bornite ± pyrite in veins and as disseminations. Minor hydrothermal breccias are responsible for some narrow intervals of high-grade mineralisation, and other high-grade intervals occur as disseminations, forming blebs of bornite - chalcopryrite ± chalcocite replacement mineralisation. In difference to Boda, the Kaiser alteration appears more siliceous and commonly with a higher component of copper mineralisation, possibly indicating it was formed at a deeper level to the porphyry system at Boda.

A drilling program composed of RC with diamond tails, commenced in February 2022, was designed on a 100m x 100m grid to a 300m vertical depth for the purpose of estimating a shallow resource. Significant intercepts from the drilling during the quarter include:

KAI073	193m grading 0.25g/t Au from 0m (Au only zone)
incl	3m grading 3.55g/t Au from 189m (Au only zone)
and	320m grading 0.26g/t Au, 0.21% Cu from 505m
incl	12m grading 1.10g/t Au, 0.83% Cu from 509m
and	12.7m grading 0.48g/t Au, 0.53% Cu from 546.8m



KAI086 and incl	15m grading 0.32g/t Au, 0.48% Cu from 409m 126m grading 0.26g/t Au, 0.21% Cu from 515m 20.3m grading 0.59g/t Au, 0.46% Cu from 521.1m
KAI087 incl also	157m grading 0.36g/t Au, 0.17% Cu from 952m 22m grading 0.55g/t Au, 0.30% Cu from 953m 8m grading 0.80g/t Au, 0.46% Cu from 994m
KAI090 Incl	122.4m grading 0.42g/t Au, 0.40% Cu from 576.6m 28m grading 0.92g/t Au, 0.84% Cu from 646m

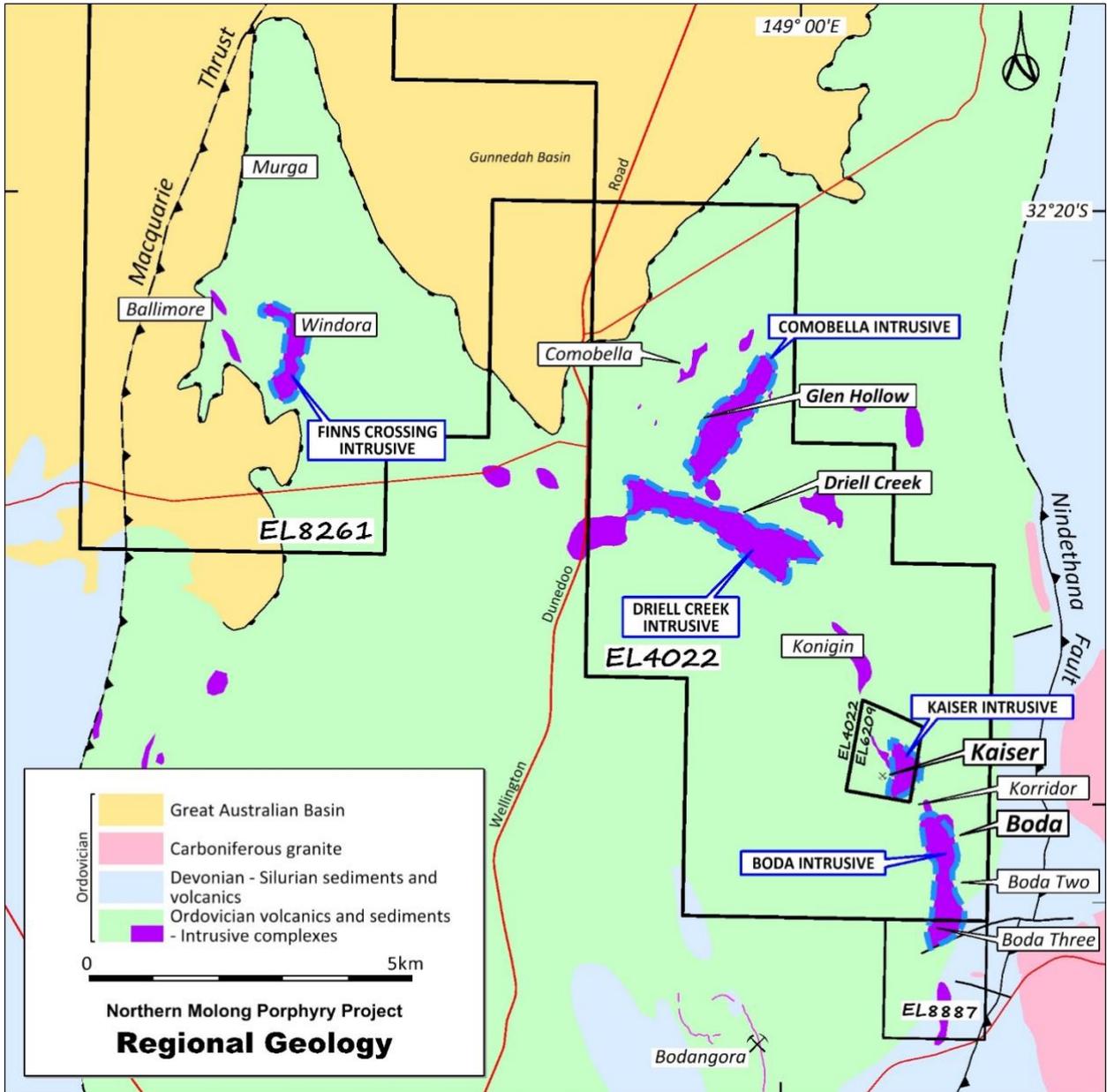
The final drill holes that will be included in the resource estimation are completed and the initial resource is expected in the current quarter.

Korridor Prospect/Boda NW Extension

The Korridor prospect is located within a northwest trending structural transverse zone, positioned along strike between the Boda deposit and the Kaiser prospect. Porphyry gold-copper mineralisation was intersected from near surface in RC holes BOD066 - 226m grading 0.25g/t Au, 0.10% Cu from 12m to end of hole, and deeper in BOD065 - 64m grading 0.43g/t Au, 0.12% Cu from 174m to end of hole (ASX Announcement 17 December 2021). Assay results were received for a deep diamond core drill hole BOD091 within Korridor and immediately northwest of the margin of the Boda Inferred Resource Estimation. Significant results from the 1,749m deep drill hole include:

BOD091	1,041m grading 0.32g/t Au, 0.17% Cu from 698m
incl	326m grading 0.43g/t Au, 0.23% Cu from 1,165m
and	55m grading 0.46g/t Au, 0.25% Cu from 1,516m

The BOD091 mineralised intercept ended in a post-mineralisation dolerite sill at least 10m thick. Had the drill hole continued through the dolerite, the Au-Cu mineralised intercept is interpreted to have continued for another approximately 250m.





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. The previous market announcements are available to view on the Company's website or on the ASX website (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 - ASX: ALK

Alkane Resources is poised to become Australia's next multi-mine gold producer.

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 a major drill program ongoing at Boda, Alkane is confident of further consolidating Central West New South Wales' reputation as a significant gold production region.

Alkane's gold interests extend throughout Australia, with strategic investments in other gold exploration and aspiring mining companies, including ~9.8% of Calidus Resources (ASX: CAI) issued capital.

