

28 March 2023



Drilling Results Confirm Extensive Mineralisation at Boda Two

- Assay results were received from diamond core and RC drilling at Boda Two confirming zones of high grade gold pyrite cemented breccia mineralisation within extensive gold-copper porphyry mineralisation. Significant diamond core intercepts include:

BOD093 438m grading 0.60g/t AuEq (0.38g/t Au, 0.15% Cu) from 842m
 incl 5m grading 2.22g/t AuEq (1.89g/t Au, 0.25% Cu) from 862m
 also 8.1m grading 2.38g/t AuEq (1.11g/t Au, 0.86% Cu) from 1,101.9m
 also 92m grading 0.72g/t AuEq (0.68g/t Au, 0.03% Cu) from 1,149m (*gold-pyrite*)

BOD108 45.7m grading 0.97g/t AuEq (0.73g/t Au, 0.16% Cu) from 599.8m
 incl 3.8m grading 3.74g/t AuEq (3.70g/t Au, 0.03% Cu) from 609m (*gold-pyrite*)
 also 3.4m grading 2.99g/t AuEq (2.04g/t Au, 0.64% Cu) from 633m
 and 226m grading 0.46g/t AuEq (0.25g/t Au, 0.15% Cu) from 881m
 incl 22m grading 0.85g/t AuEq (0.44g/t Au, 0.28% Cu) from 979m

BOD109 62m grading 0.46g/t AuEq (0.25g/t Au, 0.14% Cu) from 520m
 incl 8m grading 1.10g/t AuEq (0.62g/t Au, 0.33% Cu) from 522m
 and 25m grading 2.30g/t AuEq (2.22g/t Au, 0.05% Cu) from 633m (*gold-pyrite*)
 incl 8m grading 5.20g/t AuEq (5.13g/t Au, 0.04% Cu) from 683m (*gold-pyrite*)
 and 40.9m grading 0.53g/t AuEq (0.37g/t Au, 0.10% Cu) from 830m
 incl 1.9m grading 4.34g/t AuEq (4.25g/t Au, 0.06% Cu) from 869m (*gold-pyrite*)

BOD109W 78m grading 0.47g/t AuEq (0.26g/t Au, 0.15% Cu) from 514m
 and 251m grading 0.47g/t AuEq (0.29g/t Au, 0.12% Cu) from 807m
 incl 7m grading 2.95g/t AuEq (2.48g/t Au, 0.32% Cu) from 911m

- Significant shallow RC intercepts include:

BOD098 (PC) 34m grading 0.50g/t AuEq (0.17g/t Au, 0.22% Cu) from 113m
 and 111m grading 1.01g/t AuEq (0.69g/t Au, 0.21% Cu) from 241m
 incl 21m grading 3.01g/t AuEq (2.36g/t Au, 0.44% Cu) from 286m

BOD101 2m grading 1.38g/t AuEq (0.60g/t Au, 0.53% Cu) from 85m
 and 34m grading 0.99g/t AuEq (0.73g/t Au, 0.18% Cu) from 98m
 incl 9m grading 2.62g/t AuEq (2.10g/t Au, 0.35% Cu) from 105m

BOD104 (PC) 102m grading 0.90g/t AuEq (0.38g/t Au, 0.35% Cu) from 322m
 incl 5m grading 2.17g/t AuEq (0.88g/t Au, 0.88% Cu) from 383m

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- East-directed drilling has defined the Boda Two geology as dislocated into four major blocks by a series of imbricated west-dipping reverse faults. The reverse movement on these faults has uplifted the western and deeper sections of the Boda Two porphyry system over the better preserved shallower sections of the system in the east.
- Two high-capacity diamond core drilling rigs are currently in operation in the Boda area. As ground access conditions have improved, an additional two high-capacity RC drill rigs are expected to mobilise over the following month. This will accelerate the updated resource estimations for Boda and Kaiser anticipated to be completed by Q4 2023 and facilitate initial drilling of other regional targets.

Alkane Resources Limited (ASX: ALK) is pleased to announce further results from its drilling program at the Company's Northern Molong Porphyry Project in Central New South Wales. The program extends over three kilometres from Kaiser, through Korridor and Boda, down to Boda Two and Boda Three. The Company believes this system has the potential to be a large, tier one gold-copper project.

Alkane also operates the nearby Tomingley Gold Operations ('Tomingley').

Alkane Managing Director, Nic Earner, said:

"These early results from the most recent phase of drilling at Boda Two confirm that large-scale mineralisation continues to extend to the south of Boda. In addition, it appears that there are higher grade areas within the Boda Two system."

"These results are especially encouraging when viewed in combination with the recent maiden Kaiser resource to the north-west of the existing Boda resource. As we look to update and grow the collective resource base in and around Boda through the rest of 2023, it is exciting to have both a growing resource in Kaiser and Boda Two building extensive mineralisation to the south."

**The equivalent calculation formula is $AuEq(g/t) = Au(g/t) + Cu\%/100 * 31.1035 * \text{copper price}(\$/t) / \text{gold price}(\$/oz)$. The prices used were US\$1,900/oz gold and US\$9,000/t copper, and A\$:US\$0.67. Recoveries are assumed the same 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.*

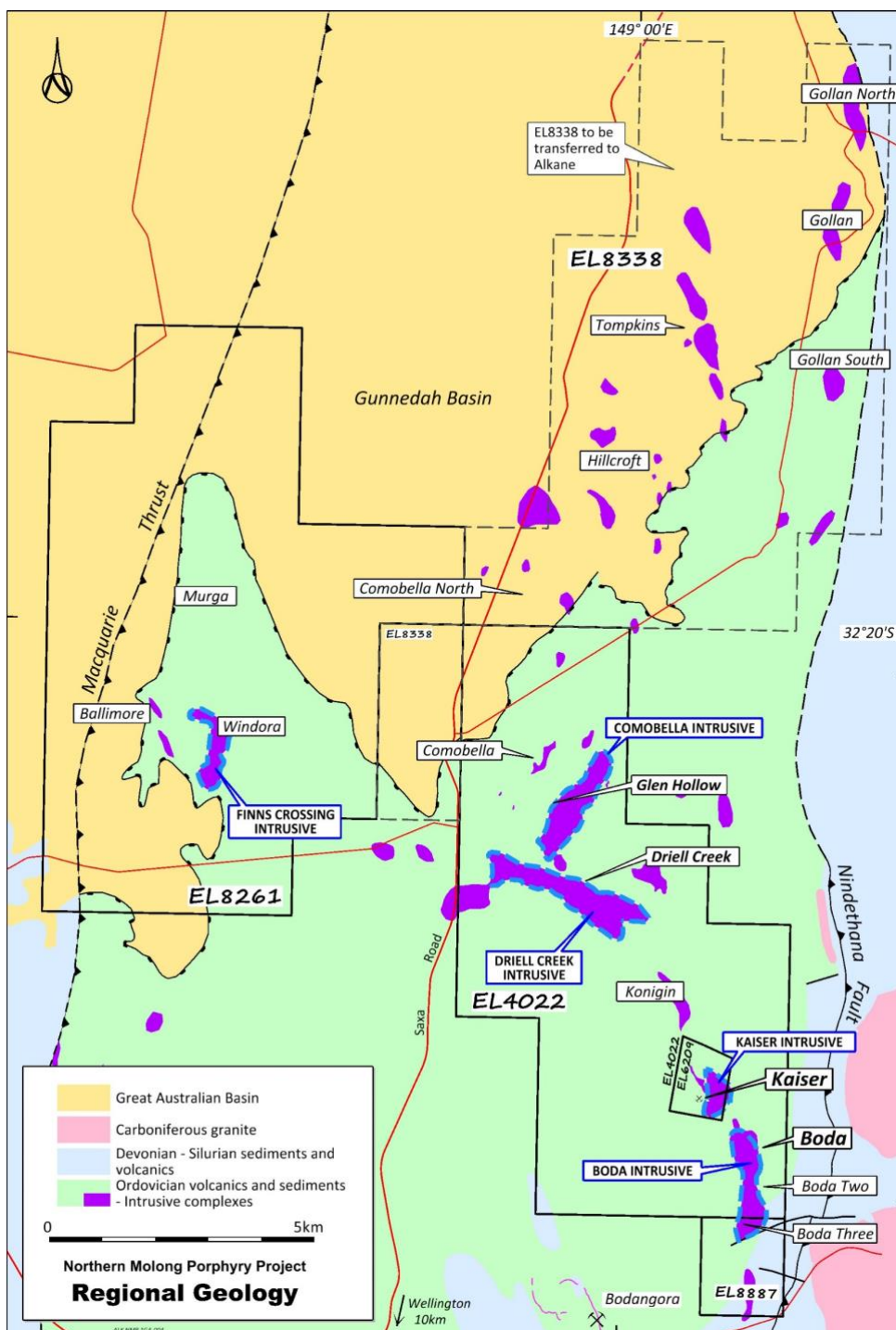


Northern Molong Porphyry Project (NMPP)

Alkane Resources Ltd 100%

The Project is located in central west NSW at the northern end of the Molong Volcanic Belt of the Macquarie Arc and is considered highly prospective for large scale porphyry and epithermal gold-copper deposits.

Exploration in the NMPP has identified five discrete magnetic/intrusive complexes – Kaiser, Boda, Comobella, Driell Creek and Finns Crossing – within a 15km northwest trending corridor. The corridor is defined by intermediate intrusives, lavas and breccias, extensive alteration and widespread, low-grade, gold-copper mineralisation. Two significant gold-copper resources have now been defined within the corridor at Boda and Kaiser (ASX Announcement 27 February 2023). Drilling continues to improve the confidence of the Boda and Kaiser deposits and to test mineralised zones outside their resource envelopes.





Boda Two/Three Prospect

The Boda Two/Three prospect was originally defined by the coincident magnetic high Boda Intrusive Complex (BIC) and a gold-copper soil anomaly with an estimated 1,100m x 500m footprint. The Boda Two prospect was further delineated by an electrical geophysics survey (3D-IP) that identified a strongly conductive target (ASX Announcement 19 May 2020) that was drill tested with KSDD022 intersecting substantial pyrite mineralisation with significant gold grades of 292m @ 0.66g/t Au from 867m (ASX Announcement 9 November 2020). Subsequent exploration has defined this mineralisation as faulted and dislocated from the southern Boda resource envelope by the Reids Fault. The Boda Two/Three prospect is located immediately south and on strike of the Boda resource envelope and further drilling will combine Boda Two/Three mineralisation into the Boda resource estimation.

Boda Two/Three geology comprises a thick sequence of basaltic to andesitic volcanics and volcaniclastics that have been intruded by a series of dykes, stocks and intrusive breccias that range in composition from monzodiorite to monzonite. A significant portion of gold-copper porphyry mineralisation at Boda Two/Three is centred over the magnetic BIC and is associated with zones of potassic to calc-potassic alteration that host chalcopyrite-bornite ± pyrite in veins and as disseminations. Boda Two/Three, like Boda and Kaiser, includes numerous hydrothermal breccias composed of pyrite to chalcopyrite-pyrite cement that are responsible for narrow intervals of high-grade mineralisation.

RC and diamond core drilling at Boda Two/Three is targeting extensions to gold-copper mineralised breccias and to infill the extensive low-grade disseminated gold-copper mineralisation. Drilling is conducted on east-west drilling traverses, spaced 100 metres apart with broad drill hole spacing ranging between 150 – 300m. Assay results recently received from west collared drill holes comprise of five RC drill holes, including two pre-collars (PC), yet to be diamond tailed) and two RC pre-collared diamond core drill holes for a total of 4,049 metres. Significant results include:

BOD095 and	41m grading 0.92g/t AuEq (0.49g/t Au, 0.29% Cu) from 448m 36.4m grading 0.40g/t AuEq (0.26g/t Au, 0.09% Cu) from 829m
BOD097 incl and	93m grading 0.37g/t AuEq (0.23g/t Au, 0.10% Cu) from 249m 3m grading 1.67g/t AuEq (1.25g/t Au, 0.29% Cu) from 327m 10m grading 0.41g/t AuEq (0.22g/t Au, 0.13% Cu) from 781m
BOD098 (PC) and incl	34m grading 0.50g/t AuEq (0.17g/t Au, 0.22% Cu) from 113m 111m grading 1.01g/t AuEq (0.69g/t Au, 0.21% Cu) from 241m 21m grading 3.01g/t AuEq (2.36g/t Au, 0.44% Cu) from 286m
BOD101 and incl	2m grading 1.38g/t AuEq (0.60g/t Au, 0.53% Cu) from 85m 34m grading 0.99g/t AuEq (0.73g/t Au, 0.18% Cu) from 98m 9m grading 2.62g/t AuEq (2.10g/t Au, 0.35% Cu) from 105m
BOD104 (PC) incl	102m grading 0.90g/t AuEq (0.38g/t Au, 0.35% Cu) from 322m 5m grading 2.17g/t AuEq (0.88g/t Au, 0.88% Cu) from 383m

The gold equivalent (AuEq) is calculated using preliminary metallurgical work that determined both Au and Cu could be recovered equally and at 85%. The calculation formula is $AuEq(g/t) = Au(g/t) + Cu\%/100 * 31.1035 * CuPrice(\$/t)/AuPrice(\$/oz)$. The prices used were gold at US\$1900/oz and copper at US\$9,000/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.

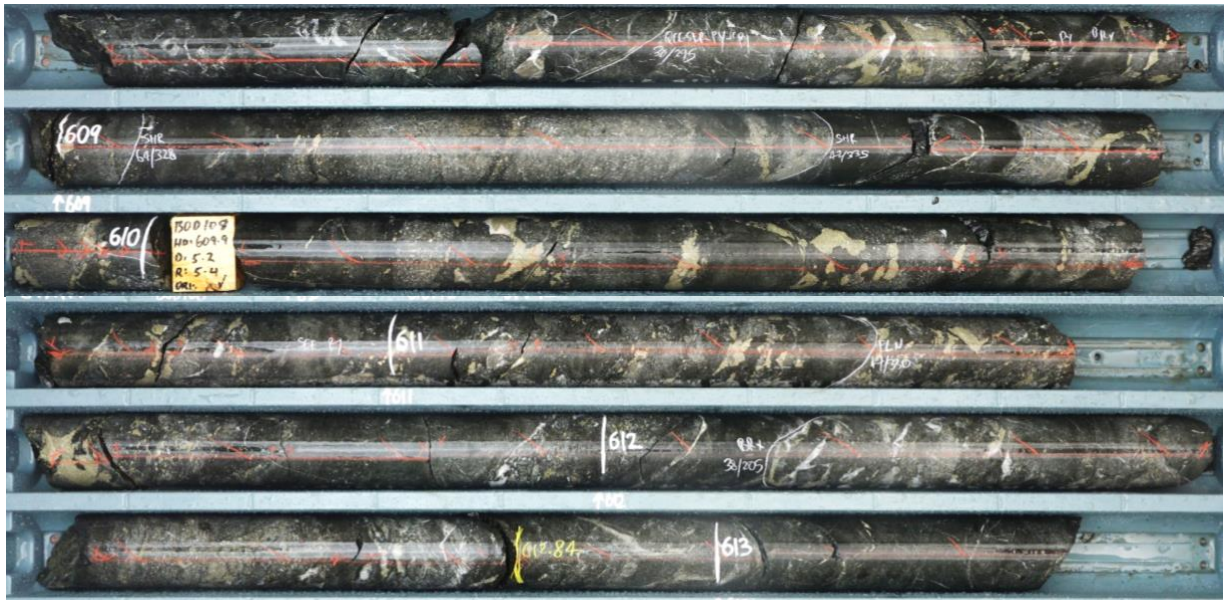


Drilling was also directed east to better target at depth the gold-rich pyrite mineralisation intersected east of Reids Fault, with a secondary purpose of identifying repetition in alteration and mineralisation assemblages caused by moderate-steep west to west-southwest dipping shear zones. Assay results were received for four east collared drill holes comprising of one RC drill hole and three diamond core drill holes for a total of 5,654m. BOD109 experienced a drill string failure and terminated early in mineralisation at 870.9m. This hole was completed as BOD109W using a wedge off the parent hole from 274m downhole and was completed to a depth of 1,392.8m. Significant results from these east collared drill holes include:

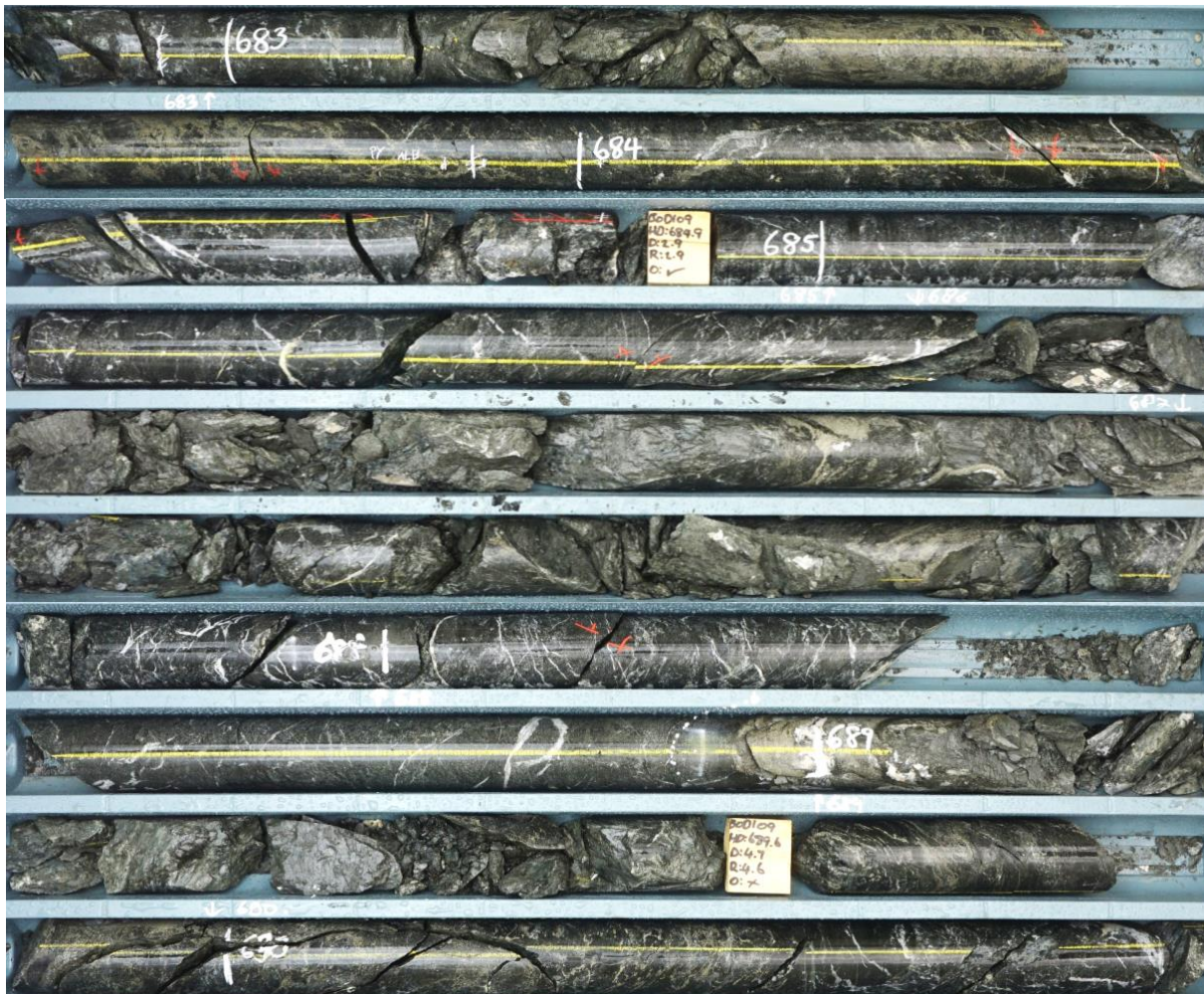
BOD093	438m grading 0.60g/t AuEq (0.38g/t Au, 0.15% Cu) from 842m
incl	5m grading 2.22g/t AuEq (1.89g/t Au, 0.25% Cu) from 862m
also	8.1m grading 2.38g/t AuEq (1.11g/t Au, 0.86% Cu) from 1,101.9m
also	92m grading 0.72g/t AuEq (0.68g/t Au, 0.03% Cu) from 1,149m (<i>gold-pyrite</i>)
BOD108	45.7m grading 0.97g/t AuEq (0.73g/t Au, 0.16% Cu) from 599.8m
incl	3.8m grading 3.74g/t AuEq (3.70g/t Au, 0.03% Cu) from 609m (<i>gold-pyrite</i>)
also	3.4m grading 2.99g/t AuEq (2.04g/t Au, 0.64% Cu) from 633m
and	226m grading 0.46g/t AuEq (0.25g/t Au, 0.15% Cu) from 881m
incl	22m grading 0.85g/t AuEq (0.44g/t Au, 0.28% Cu) from 979m
BOD109	62m grading 0.46g/t AuEq (0.25g/t Au, 0.14% Cu) from 520m
incl	8m grading 1.10g/t AuEq (0.62g/t Au, 0.33% Cu) from 522m
and	25m grading 2.30g/t AuEq (2.22g/t Au, 0.05% Cu) from 633m (<i>gold-pyrite</i>)
incl	8m grading 5.20g/t AuEq (5.13g/t Au, 0.04% Cu) from 683m (<i>gold-pyrite</i>)
and	40.9m grading 0.53g/t AuEq (0.37g/t Au, 0.10% Cu) from 830m
incl	1.9m grading 4.34g/t AuEq (4.25g/t Au, 0.06% Cu) from 869m (<i>gold-pyrite</i>)
BOD109W	78m grading 0.47g/t AuEq (0.26g/t Au, 0.15% Cu) from 514m
and	251m grading 0.47g/t AuEq (0.29g/t Au, 0.12% Cu) from 807m
incl	7m grading 2.95g/t AuEq (2.48g/t Au, 0.32% Cu) from 911m
and	32m grading 0.45g/t AuEq (0.36g/t Au, 0.06% Cu) from 683m

The east directed drilling has confirmed three significant thrust faults (named Solar, Moonlight and Reids) with a moderate-steep west to west-southwest dip showing significant reverse movement and dislocating the geology into four blocks. The western block is comprised of distal propylitic altered volcanics with only minor mineralisation. East of the Solar Fault and further disjointed by the Moonlight Fault, are the central blocks which are broadly calc-potassic altered with extensive low-grade gold-copper mineralisation. Higher grades within this mineralisation occur as narrow sulphide cemented breccias. The Reids Fault thrusts a central block over the eastern block which is comprised of patchy shallow level chlorite-sericite phyllic alteration with an underlying zone of potassic alteration with gold enriched pyrite mineralisation.

Two drill holes (BOD108 and BOD109) intersected high-grade gold pyrite cemented breccias within the west-central block. These pyrite-cemented breccias appear focused within northwest trending shear zones that also appear to host earlier forming intrusive/magmatic breccias. Drill targeting down dip of these high grading gold pyrite-cemented breccias is planned to test whether they zone into high grade copper-gold chalcopyrite or bornite cemented breccias as observed at Boda.



BOD108 – 3.8m intercept of pyrite-cemented and magmatic breccia grading 3.70g/t Au from 609m

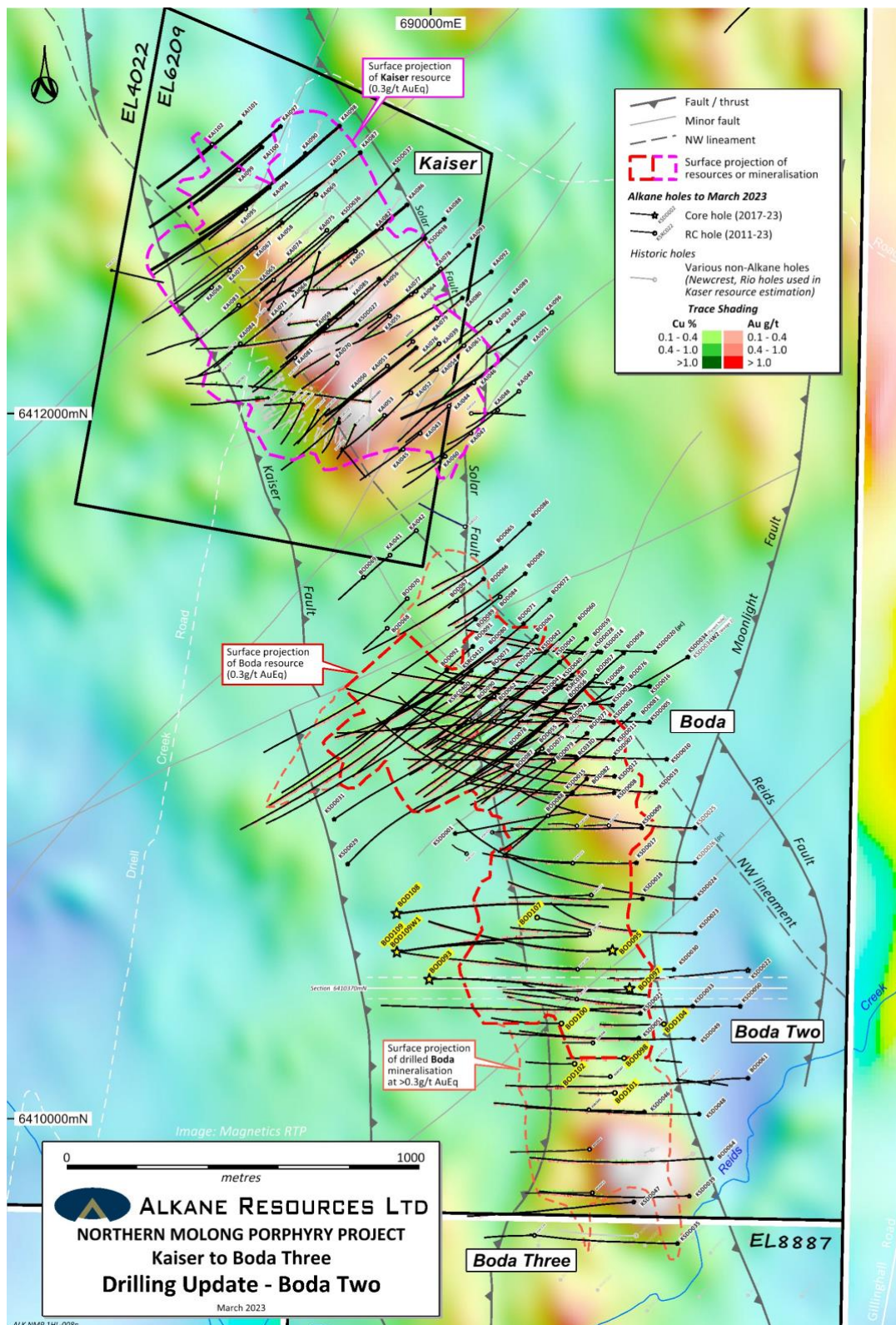


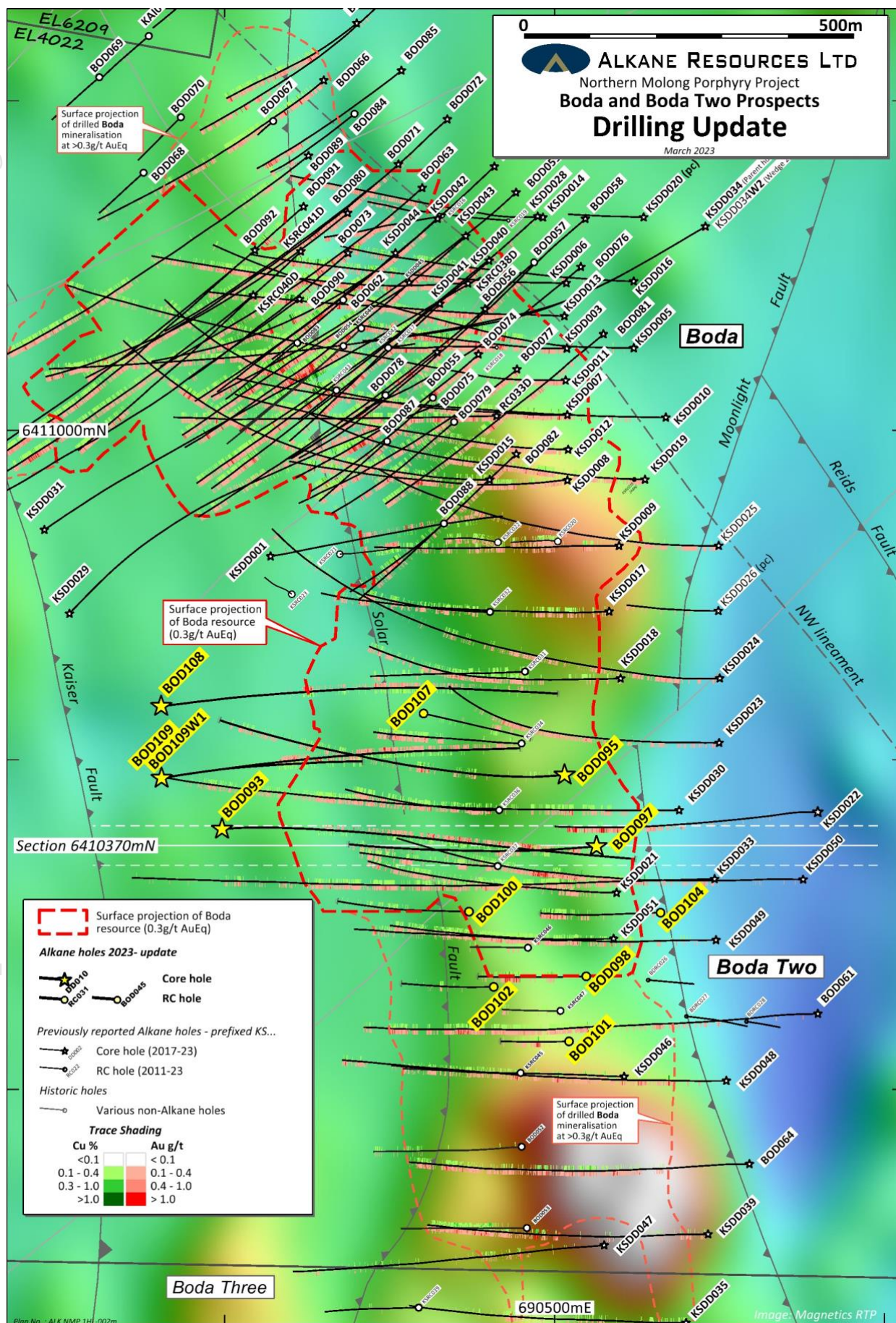
BOD109 – 8m intercept of pyrite-cemented breccia within NW shear zone grading 5.20g/t Au from 683m

Two high-capacity diamond core drill rigs are currently in operation at Boda and at Boda Two/Three. The planned drilling is testing extensions to mineralisation outside of the calculated Boda Mineral Resource and is focusing on extensions to the northwest of the Boda resource envelope terminating at the Solar Fault and south of the Boda resource envelope at Boda Two/Three.



In addition, two high-capacity RC drill rigs are planned to start next month to infill areas around high grade mineralisation at Boda and Kaiser to improve the confidence of the initial Boda and Kaiser Resource Mineral estimations to raise to Indicated category. Boda and Kaiser updated resource estimations are expected later in 2023. The additional drill capacity will also facilitate initial testing of other regional targets.





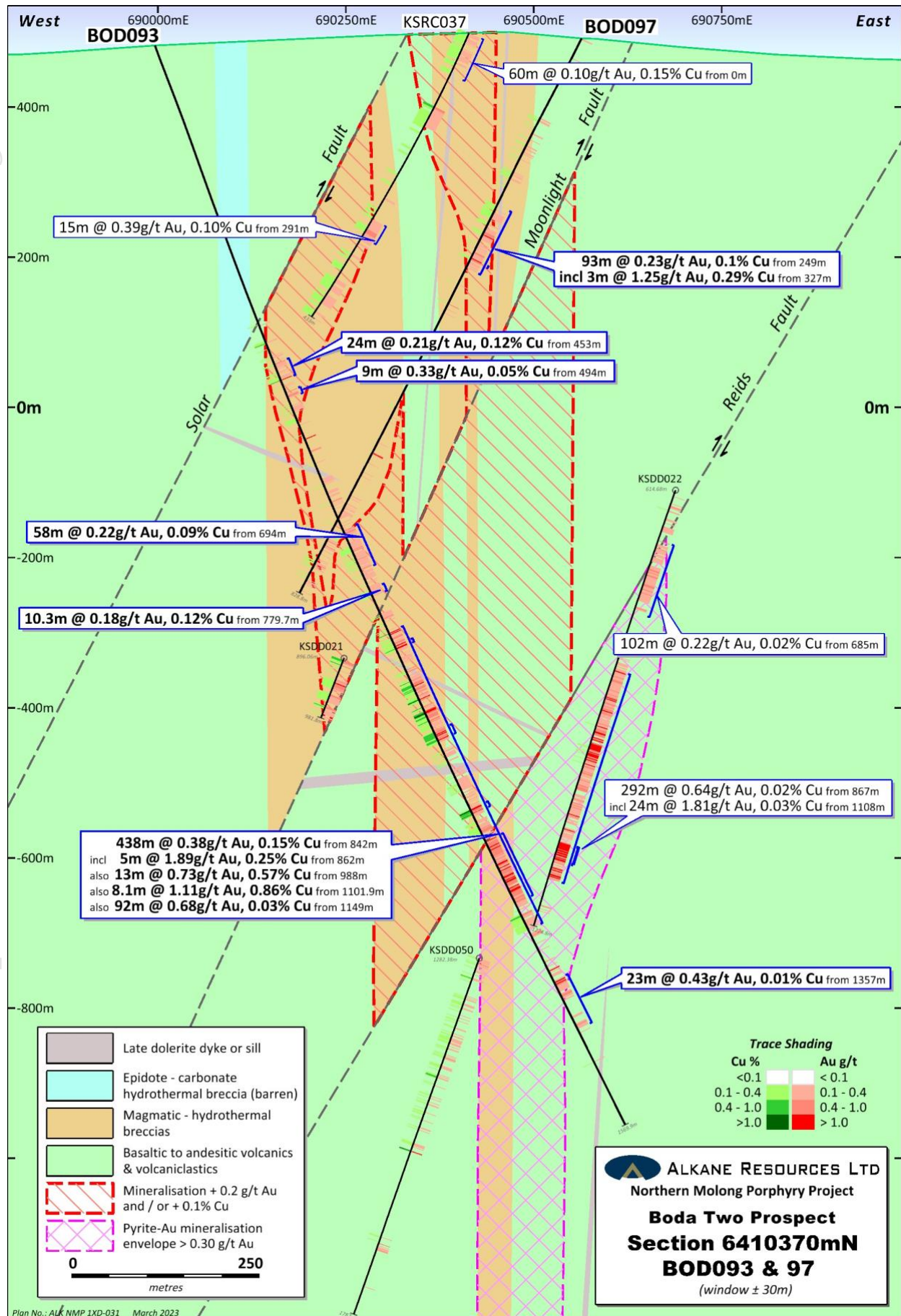




Table 1 – Boda Two/Three Significant Drilling Results – March 2023 (>0.3g/t AuEq*)

Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azi (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	AuEq* (g/t)	Au (g/t)	Cu (%)
BOD093	689996	6410395	482	-70	86	1569.9	420	425	5	0.52	0.09	0.29
and							453	477	24	0.39	0.21	0.12
incl							476	477	1	2.69	1.25	0.98
and							494	503	9	0.41	0.33	0.05
and							651	655	4	0.49	0.32	0.11
and							694	752	58	0.36	0.22	0.09
and							779.7	790	10.3	0.37	0.18	0.12
and							842	1280	438	0.60	0.38	0.15
incl							862	867	5	2.22	1.89	0.25
also							988	1001	13	1.57	0.73	0.57
also							1101.9	1110	8.1	2.38	1.11	0.86
also							1149	1241	92	0.72	0.68	0.03
and							1357	1380	23	0.45	0.43	0.01
BOD095	690515	6410477	493	-65	265	1140.7	295	302.5	7.5	0.37	0.15	0.14
and							448	489	41	0.92	0.49	0.29
and							678	682	4	0.54	0.43	0.08
and							719	743	24	0.35	0.15	0.13
and							771	779	8	0.35	0.21	0.09
and							829	865.4	36.4	0.40	0.26	0.09
and							1021	1032	11	0.44	0.26	0.12
and							1043	1070	27	0.35	0.21	0.11
and							1094	1100	6	0.37	0.18	0.13
BOD097	690564	6410369	491	-64	266	828.8	160	162	2	0.43	0.21	0.15
and							207	211	4	0.32	0.14	0.12
and							249	342	93	0.37	0.23	0.10
incl							327	330	3	1.67	1.25	0.29
and							617	620	3	0.94	0.87	0.05
and							756	760	4	0.45	0.36	0.06
and							781	791	10	0.41	0.22	0.13
BOD098	690548	6410172	490	-65	267	424**	5	7	2	0.36	0.10	0.18
and							113	147	34	0.50	0.17	0.22
and							184	189	5	0.32	0.10	0.15
and							203	208	5	0.32	0.11	0.14
and							241	352	111	1.01	0.69	0.21
incl							286	307	21	3.01	2.36	0.44
BOD100	690370	6410270	493	-62	269	400	156	157	1	0.42	0.27	0.10
and							243	244	1	0.33	0.05	0.19
and							273	274	1	0.33	0.05	0.19
and							310	311	1	0.31	0.04	0.18
and							375	376	1	0.31	0.15	0.11
BOD101	690522	6410073	482	-65	268	238	6	11	5	0.31	0.07	0.17
and							85	87	2	1.38	0.60	0.53
and							98	132	34	0.99	0.73	0.18
incl							105	114	9	2.62	2.10	0.35
and							148	166	18	0.30	0.15	0.10
and							186	188	2	0.48	0.20	0.19
and							225	229	4	0.31	0.13	0.12
BOD102	690408	6410156	487	-65	269	331	135	140	5	0.32	0.11	0.14



Table 1 – Boda Two/Three Significant Drilling Results – March 2023 (>0.3g/t AuEq*)

Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azi (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	AuEq* (g/t)	Au (g/t)	Cu (%)
incl							136	137	1	0.92	0.37	0.37
and							176	188	12	0.45	0.14	0.21
incl							181	183	2	0.83	0.28	0.38
and							214	215	1	0.40	0.27	0.09
BOD104	690661	6410268	486	-62	268	424**	237	243	6	0.30	0.16	0.10
and							274	276	2	0.35	0.13	0.15
and							300	307	7	0.34	0.14	0.14
and							322	424**	102	0.90	0.38	0.35
incl							383	388	5	2.17	0.88	0.88
BOD107	690301	6410570	488	-56	103	262	168	188	20	0.39	0.21	0.12
and							214	215	1	0.49	0.29	0.14
BOD108	689904	6410581	480	-69	83	1557.9	542	544.8	2.8	0.43	0.19	0.16
and							599.8	645.5	45.7	0.97	0.73	0.16
incl							609	612.8	3.8	3.74	3.70	0.03
also							633	636.4	3.4	2.99	2.04	0.64
and							656	658	2	0.43	0.24	0.13
and							730.9	732.9	2	0.47	0.21	0.18
and							761	770	9	0.43	0.22	0.15
and							821	823	2	0.38	0.27	0.08
and							833	837	4	1.14	1.08	0.04
and							845	847	2	0.42	0.27	0.17
and							852	854	2	0.61	0.37	0.17
and							881	1107	226	0.46	0.25	0.15
incl							979	1001	22	0.85	0.44	0.28
and							1118	1120.9	2.9	0.35	0.17	0.12
and							1138	1147	9	0.47	0.25	0.15
and							1158	1180	22	0.32	0.17	0.10
and							1192	1195	3	0.47	0.32	0.10
and							1212	1214	2	0.41	0.31	0.07
and							1415	1418	3	0.43	0.29	0.09
BOD109	689904	6410472	478	-69	81	870.9***	520	582	62	0.46	0.25	0.14
incl							522	530	8	1.10	0.62	0.33
and							622	624	2	0.52	0.22	0.20
and							632	637	5	0.49	0.33	0.11
and							678	703	25	2.30	2.22	0.05
incl							683	691	8	5.20	5.13	0.04
and							727	754	27	0.40	0.28	0.08
incl							729	733	4	1.29	1.19	0.07
and							774	779	5	0.34	0.18	0.11
and							790	797	7	0.34	0.17	0.11
and							830	870.9***	40.9	0.53	0.37	0.10
incl							869	870.9***	1.9	4.34	4.25	0.06
BOD109W	689904	6410472	478	-69	81	1392.8	514	592	78	0.47	0.26	0.15
and							730	732	2	0.93	0.64	0.19
and							807	1058	251	0.47	0.29	0.12
incl							911	918	7	2.95	2.48	0.32
and							1068	1070	2	0.43	0.24	0.13
and							1074	1085	11	0.41	0.20	0.14



Table 1 – Boda Two/Three Significant Drilling Results – March 2023 (>0.3g/t AuEq*)

Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azi (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	AuEq* (g/t)	Au (g/t)	Cu (%)
and							1152	1184	32	0.45	0.36	0.06
and							1199	1219	20	0.31	0.22	0.06
and							1268	1275	7	0.45	0.40	0.03
and							1300	1302	2	0.63	0.56	0.05

Gold and copper intercepts are calculated using a lower cut of 0.2g/t AuEq. Internal dilution (< cut off) is less than 22% of reported intercepts. Only significant intercepts of >0.3g/t AuEq are reported. True widths are estimated as approximately 50% of intersected width.

* The prices used to calculate AuEq and CuEq were US\$1,900/oz gold and US\$9,000/t copper, and A\$:US\$0.67. Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies.

** RC pre-collar intercept results, diamond tail assays pending

*** Diamond drilling rods parted, wedged off and drilled as BOD109W



Competent Person

Unless otherwise advised above or in the Announcements referenced, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr David Meates, MAIG, (Exploration Manager) 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 Meates consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Previous Information

The information in this report that relates to exploration results is extracted from the Company's ASX announcements noted in the text of the announcement and are available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and that the form and context in which the Competent Person's findings are presented have not been materially altered.

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

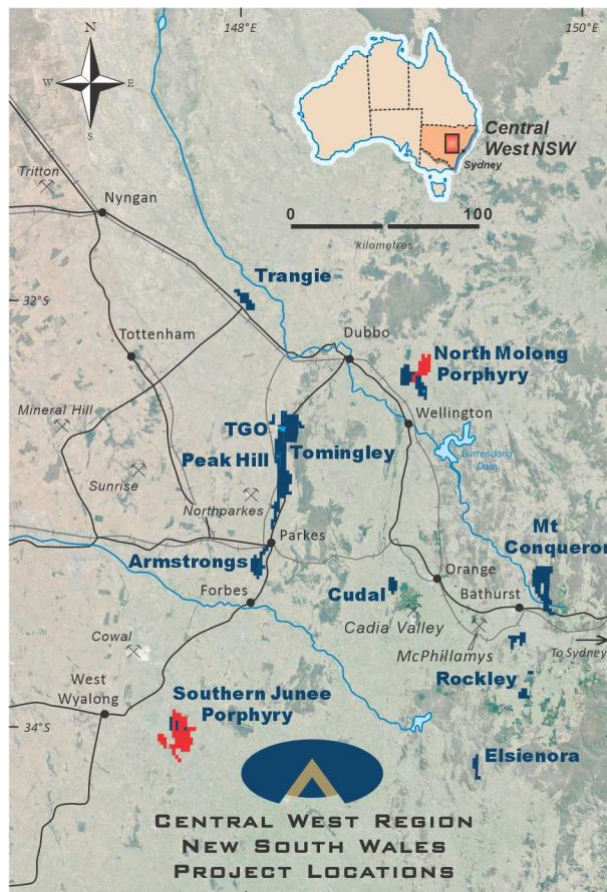
Alkane Resources is poised to become Australia's next multi-mine gold producer.

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 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 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: CAL).





The following tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

JORC Code, 2012 Edition – Table 1 NORTHERN MOLONG PORPHYRY PROJECT – March 2023

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	<ul style="list-style-type: none"> Diamond core drilling was undertaken by Ophir Drilling Pty Ltd DD sample intervals were defined by geologist during logging to honour geological boundaries, cut in half by diamond saw, with half core sent to ALS Laboratories RC drilling was undertaken by Strike Drilling Pty Ltd RC samples are collected at one metre intervals via a cyclone on the rig. The cyclone is cleaned regularly to minimise any contamination
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> Sampling and QAQC procedures are carried out using Alkane protocols as per industry best practice
	<ul style="list-style-type: none"> Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 6m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards. Half core is sampled with a Corewise automatic core saw. RC Drilling – the total sample (~35kg) is delivered via cyclone into a large plastic bag which is retained for future use if required. A sub-sample of approximately 1kg is spear sampled from each plastic bag and composited to make a 3 metres sample interval. If mineralisation is observed by the site geologist this is sampled as a final 1m interval instead. The 1m intervals forming composite samples assaying ≥ 0.10 g/t Au or ≥ 0.10 % Cu are re-split using a cone splitter on the rig into a separate calico at the time of drilling and re-submitted to the laboratory for re-assay. Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish A multi-element suite was determined using a multi-acid digest with a ICP Atomic Emission Spectrometry or ICP Mass Spectrometry analytical finish.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Reverse circulation (RC) drilling using 110mm rods 144mm face sampling hammer Triple tube diamond drilling with PQ3/HQ3 wireline bit producing 83mm diameter (PQ3) and 61.1mm diameter (HQ3) sized orientated core. Wedge holes are completed using NQ3 wireline bit producing 45mm diameter sized orientated core.



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> DD - core loss was identified by drillers and calculated by geologists when logging. Generally $\geq 99\%$ was recovered with any loss usually in portions of the oxide zone. Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core or RC precollars used in the oxide zones. RC sample quality is assessed by the sampler by visual approximation of sample recovery and if the sample is dry, damp or wet.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> Sample quality is qualitatively logged Core drilling completed using HQ triple tube where possible to maximise core recovery. A high capacity RC rig was used to enable dry samples collected. Drill cyclone is cleaned between rod changes and after each hole to minimise cross-hole contamination.
	<ul style="list-style-type: none"> Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> There is no known relationship between sample recovery and grade
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	<ul style="list-style-type: none"> Each one metre interval is geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage)
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography 	<ul style="list-style-type: none"> Mostly logging was qualitative with visual estimates of the various characteristics. In addition, magnetic susceptibility data (quantitative) was collected as an aid for logging All drill holes were geologically logged into Geobank Mobile, followed by validation before importing into Alkane's central Geobank database All drill holes were logged by qualified and experienced geologists
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged 	<ul style="list-style-type: none"> All drill holes were logged in full
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. 	<ul style="list-style-type: none"> Core sawn with half core samples submitted for analysis
	<ul style="list-style-type: none"> If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 	<ul style="list-style-type: none"> Each one metre interval is spear sampled with 3m composite samples collected in a calico sample bag and forwarded to the laboratory. Where mineralisation is observed by the site geologist, instead of compositing, this is individually sampled from the cone splitter on the RC rig as a 1 metre interval into a calico bag and forwarded to the laboratory. The 1m intervals forming composite samples assaying ≥ 0.10 g/t Au or ≥ 0.10 % Cu are resplit using a cone splitter on the rig during the time of drilling and re-submitted to the



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		<p>laboratory for re-assay.</p> <ul style="list-style-type: none"> Laboratory Preparation – the entire sample (~3kg) is dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples are discarded. A pulp sample (±100g) is stored for future reference.
	<ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> Samples were delivered by Alkane personnel to ALS Minerals Laboratory, Orange NSW. Crushed with 70% <2mm (ALS code CRU-31), split by riffle splitter (ALS code SPL-21), and pulverised 1000grm to 85% <75µm (ALS code PUL-32). Crushers and pulverisers are washed with QAQC tests undertaken (ALS codes CRU-QC, PUL-QC).
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples 	<ul style="list-style-type: none"> Internal QAQC system in place to determine accuracy and precision of assays
	<ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling 	<ul style="list-style-type: none"> Non-biased core cutting using an orientation line marked on the core Duplicate RC samples are collected for both composite intervals and re-split intervals.
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Sample are of appropriate size
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> All samples were analysed by ALS Minerals Gold is determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill is dissolved in aqua regia with gold determined by flame AAS. Other geochemical elements, samples are digested by near-total mixed acid digest with each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. RC samples that are re-split are digested by aqua regia with a ICP Atomic Emission Spectrometry for Cu only
	<ul style="list-style-type: none"> For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	<ul style="list-style-type: none"> No geophysical tools were used to determine any element concentrations
	<ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Full QAQC system in place including certified standards and blanks of appropriate matrix and concentration levels
Verification of sampling	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. 	<ul style="list-style-type: none"> Drill data is compiled, collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary



Criteria	JORC Code explanation	Commentary
and assaying	<ul style="list-style-type: none"> The use of twinned holes. 	<ul style="list-style-type: none"> No twinned holes have been drilled at this stage of exploration
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> All drill hole logging and sampling data is entered directly into Geobank Mobile in the field for validation, transfer, and storage into Geobank database with verification protocols in place All primary assay data is received from the laboratory as electronic data files which are imported into sampling database with verification procedures in place. QAQC analysis is undertaken for each laboratory report
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> No adjustments made
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	<ul style="list-style-type: none"> Drillholes are laid out using hand-held GPS (accuracy $\pm 2\text{m}$) then DGPS surveyed accurately ($\pm 0.1\text{m}$) by licenced surveyors on completion
	<ul style="list-style-type: none"> Specification of the grid system used. 	<ul style="list-style-type: none"> GDA94, MGA (Zone 55)
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drillhole collars DGPS surveyed accurately ($\pm 0.1\text{m}$) by licenced surveyors on completion
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results.. 	<ul style="list-style-type: none"> At Boda Two/Three, the data spacing is variable with focus on identifying new zones of mineralisation and optimal drilling direction, although the drilling is approaching a nominal 100m x 100m grid.
	<ul style="list-style-type: none"> Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied 	<ul style="list-style-type: none"> No Mineral Resource estimation procedure and classifications apply to the exploration data being reported.
	<ul style="list-style-type: none"> Whether sample compositing has been applied 	<ul style="list-style-type: none"> RC – each one metre interval is spear sampled with 3m composite samples collected in a calico sample bag and forwarded to the laboratory. Where mineralisation is observed by the site geologist, instead of compositing, this is individually sampled from the cone splitter on the RC rig as a 1 metre interval into a calico bag and forwarded to the laboratory. The 1m intervals forming composite samples assaying $\geq 0.10\text{ g/t Au}$ or $\geq 0.10\% \text{ Cu}$ are re-split using a cone splitter on the rig during the time of drilling and re-submitted to the laboratory for re-assay. Composite samples may be reported if re-split assays were not received in time for announcement. DD – Sample intervals are based on alteration and lithology but in general are 1m. No



Criteria	JORC Code explanation	Commentary
		<i>interval was less than 0.3m or greater than 1.3m.</i>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> 	<ul style="list-style-type: none"> <i>Drilling suggests a broadly sub vertical geometry at the different prospects in the NMPP. A significant NW trending lineament exists from Boda to Korridor to Kaiser to Konigin. Boda Two and Boda Three strike north-south. All drilling is planned normal to the strike of the respective prospect/deposit.</i>
	<ul style="list-style-type: none"> <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material</i> 	<ul style="list-style-type: none"> <i>Estimated true intervals are ~50% of downhole lengths</i>
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> <i>All samples are bagged into tied calico bags, before being grouped into polyweave bags and transported ~1hr to ALS Minerals Laboratory in Orange by Alkane personnel. All sample submissions are documented via ALS tracking system with results reported via email</i> <i>Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years).</i> <i>The Company has in place protocols to ensure data security.</i>
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> <i>No audits or reviews have been conducted at this stage</i>



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> All four licences (EL4022, EL6209, EL8261 and EL8887) in the Northern Molong Porphyry Project are owned 100% by Alkane. Ajax Joinery retain a 2% net smelter return on any products produced from within EL6209. All exploration licences are in good standing. EL4022 expires on 13 August 2026. EL6209 expires on 11 March 2023 but is under renewal. EL8887 expires on 6 February 2026. EL8261 expires on 30 April 2023.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Significant historical drilling activity has been conducted within the bounds of EL4022. BODA PROSPECT: CRA Exploration/Rio Tinto completed a small IP survey and several reconnaissance RC holes in the Boda Prospect area in 1995. The results identified sporadic, shallow low-grade intervals of gold mineralisation hosted within a sequence of monzonites, diorites and intermediate volcanics. Sampling was performed by collecting spear composites from 3m drill runs, assayed by aqua regia digest and fire assay-AAS and ICP finishes. Amax Mining Inc/Woodsreef Mines grid sampled the residual soil profile and analysed for Cu, Pb and Zn. A coherent +250 ppm Cu soil anomaly was outlined with a strike length of over 1000m and a maximum of 1.25% Cu, in the -80-mesh sieve fraction. Grid based rock chip sampling produced up to 5.4% Cu and 42ppm Au. KAISER PROSPECT: Under-reporting of historical exploration drill results from the Kaiser Prospect is suggested by preliminary metallurgical test work by previous explorers and is supported by a drill hole (KSRC001) completed by Alkane. This can be partly explained by the partial digests and analogue equipment commonly used in the 1970s. EL6209 (Kaiser) historical records show 14 AC (170m), 78 RC (7591m) and 45 DD holes (7833m) = 15,594m.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The area is located at the northern extent of the Molong Volcanic Belt, a geological region considered highly prospective for and host to several economically important examples of porphyry Au-Cu mineralisation e.g. Cadia Valley alkalic porphyry cluster.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	<ul style="list-style-type: none"> See body of announcement



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> All drill holes have been reported in this announcement.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 	<ul style="list-style-type: none"> Exploration results reported for uncut gold grades, grades calculated by length weighted average
	<ul style="list-style-type: none"> Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. 	<ul style="list-style-type: none"> Reported intercepts are calculated using a broad lower cut of 0.2g/t AuEq, although grades lower than this may be present internally (internal dilution). Internal dilution can be significant because of the type of bulk mining techniques used to extract this style of mineralisation but are limited to <22% for the purpose of calculation. No top cut has been used. Short intervals of high grades that have a material impact on overall intersection are reported as separate (included) intervals
	<ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Gold equivalent values were calculated and used in modelling the mineralisation shells. Metal prices used for the gold equivalent were US\$1900/oz for gold and US\$9000/t for copper, and A\$:US\$0.67 Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies at Boda and Kaiser.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> It is apparent on the sections and the report descriptions that the overall geometry of the porphyry mineralisation at Kaiser, Boda and Korridor prospects are subvertical. True intervals are likely to be ~50% of downhole lengths
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Plans showing geology with drill collars are included in the body of the announcement.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> Comprehensive reporting has been undertaken with all holes listed in the included table.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> No other exploration data is considered meaningful for reporting.



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<i>Further work</i>	<ul style="list-style-type: none"><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<ul style="list-style-type: none"><i>Further work is planned drill targeting Boda Two and Three and NW extensions to Boda within the Project. Infill drilling is also planned at Boda to improve confidence in the resource estimation from Inferred to Indicated. Regional exploration planned are soil geochemistry surveys with follow up drilling.</i>
	<ul style="list-style-type: none"><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive</i>	<ul style="list-style-type: none"><i>See figures included in the announcement.</i>