ASX and MEDIA RELEASE

25 August 2023



Further High Grade Gold and Copper Identified at Boda

Results have been received for three diamond drill holes at Boda 2-3 including BOD094 that had identified a 'causative' intrusion associated with chalcopyrite cemented breccia mineralisation*. Significant intercepts include:

BOD094	591.8m 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.
BOD105	147m grading 0.43g/t AuEq (0.20g/t Au, 0.16% Cu) from 294m;
and	28m grading 0.51g/t AuEq (0.31g/t Au, 0.14% Cu) from 611m;
and	162m grading 0.30g/t AuEq (0.14g/t Au, 0.10% Cu) from 718m;
and	122.4m grading 0.38g/t AuEq (0.15g/t Au, 0.17% Cu) from 921.6m.

Drilling designed to infill the Inferred Boda Mineral Resource Estimation to a nominal 50m grid spacing is now completed with final assay results pending. Recent results received from RC drilling testing the upper levels of the Boda Deposit include significant RC drilling intercepts of:

128m grading 0.59g/t AuEq (0.37g/t Au, 0.16% Cu) from 155m;
5m grading 2.43g/t AuEq (2.36g/t Au, 0.05% Cu) from 191m;
4m grading 2.10g/t AuEq (2.06g/t Au, 0.04% Cu) from 300m;
6m grading 1.02g/t AuEq (0.39g/t Au, 0.46% Cu) from 317m;
20m grading 0.47g/t AuEq (0.31g/t Au, 0.11% Cu) from 392m.
31m grading 0.48g/t AuEq (0.31g/t Au, 0.12% Cu) from 1m;
266m grading 0.70g/t AuEq (0.48g/t Au, 0.16% Cu) from 79m;
42m grading 2.23g/t AuEq (1.78g/t Au, 0.33% Cu) from 186m;
3m grading 12.0g/t AuEq (11.1g/t Au, 0.67% Cu) from 210m.
153m grading 0.50g/t AuEq (0.22g/t Au, 0.20% Cu) from 2m;
16m grading 1.11g/t AuEq (0.39g/t Au, 0.52% Cu) from 65m;
2m grading 2.65g/t AuEq (0.84g/t Au, 1.33% Cu) from 122m.

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 \triangleright Recent assay results received by deeper diamond core drilling within the Boda Mineral Resource include significant drilling intercepts of:

BOD059W1	958m grading 0.55g/t AuEq (0.31g/t Au, 0.17% Cu) from 345m;
incl	127m grading 1.44g/t AuEq (0.68g/t Au, 0.56% Cu) from 648m.
BOD122	16m grading 1.46g/t AuEq (1.45g/t Au, 0.01% Cu) from 45m;
and	542m grading 0.53g/t AuEq (0.24g/t Au, 0.21% Cu) from 514m;
incl	106m grading 0.94g/t AuEq (0.31g/t Au, 0.46% Cu) from 747m;

RC drill hole BOD084 was extended with a diamond core tail from 334m to 1,830m to further define significant mineralisation down plunge to the northwest of the Boda

BOD084 110m grading 0.36g/t AuEq (0.20g/t Au, 0.11% Cu) from 367m; and 876.7m grading 0.42g/t AuEq (0.21g/t Au, 0.15% Cu) from 954m to end of hole.

20m grading 1.09g/t AuEq (0.54g/t Au, 0.40% Cu) from 1026m.

Drilling in the current program at Boda and Boda 2-3 is complete and final assay results are anticipated in September. Diamond and RC drilling is now solely focused on the Kaiser Deposit. An updated Mineral Resource Estimation for Boda, including Boda 2-3, is anticipated in Q4 2023 and for Kaiser in Q1 2024.

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 five kilometres from Kaiser to Boda, through Boda 2-3 and south to Boda 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').

Mineral Resource Estimation. Significant intercepts include:

Alkane Managing Director, Nic Earner, said:

also

"Our drilling at Boda has focussed on increasing drill density to lift resource grade, expanding the mineralised volume, and identifying further high-grade zones. These latest results meet all those objectives for us. The high-grade intercepts deep and to the west of Boda 2-3 are very interesting and add further to our knowledge of the expanding system.

"We remain on track to release an updated Mineral Resource Estimation for Boda in Q4 2023 and for Kaiser in Q1 2024."

^{*}ASX Announcement 20 June 2023.

^{**}The equivalent calculation formula is AuEq(g/t) = Au(g/t) + Cu%/100*31.1035*copper price(\$/t)/goldprice(\$/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.

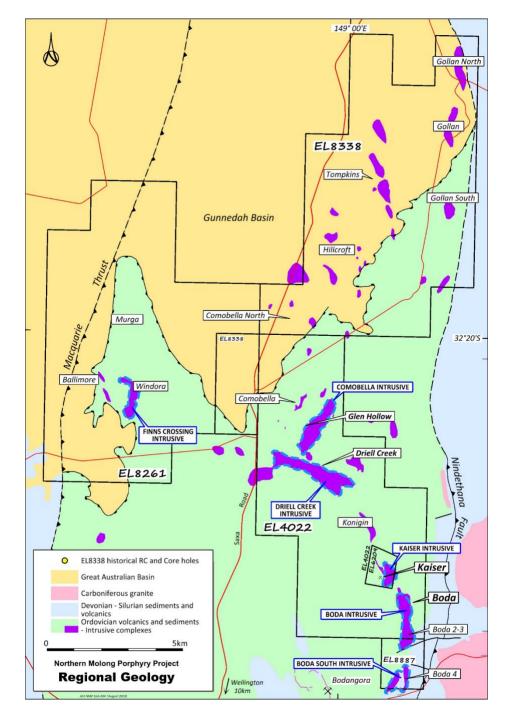


Northern Molong Porphyry Project (NMPP)

Alkane Resources Ltd 100%

The Project is located in the Central West of 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 six discrete magnetic/intrusive complexes — Kaiser, Boda, Boda South, 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 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 2-3 Prospect

The Boda 2-3 prospect mineralisation is centred around a magnetic high within the Boda Intrusive Complex and immediately south of the Boda Mineral Resource Estimation (5.2Moz gold, 0.9Mt copper – ASX Announcement 30 May 2022). Recent drilling has focused on defining a structural model for the dislocated geology at the prospect as well as targeting high grade mineralisation beneath previously identified pyrite cemented breccias.

Boda 2-3 comprises a west tilted sequence of basaltic to andesitic volcaniclastics and volcanics that have been intruded by a series of steep west dipping dykes, stocks and intrusive breccias ranging in composition from diorite to monzodiorite. The sequence is dislocated by a series of imbricated thrust faults resulting in deep distal propylitic altered volcanics with minor gold-copper mineralisation in the west being thrust over a central zone of broadly calc-potassic altered volcanics with extensive gold-copper mineralisation. These sections are further thrusted over the preserved upper level of the Boda 2-3 porphyry system in the east.

Assay results have now been received from diamond core drill hole BOD094 that was previously announced to have visually identified a 'causative' monzodiorite intrusion associated with chalcopyrite cemented hydrothermal brecciation (ASX Announcement 20 June 2023). Significant results include:

BOD094	591.8m 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.

The 'causative' monzodioritic intrusion is estimated as 5m true thickness with chalcopyrite mineralisation forming within miarolitic cavities, interstitial disseminations and as sulphide veins. The contacts of the intrusion transition into magmatic-hydrothermal brecciation with the highest grades occurring along the eastern contact of the intrusion of 2m grading 3.08% Cu, 2.94g/t Au from 1,249m. The 5.6m of intersected causative porphyry was copper-rich grading 1.62% Cu, 0.82g/t Au (3.04g/t AuEq) from 1249.9m, in difference to the surrounding gold-rich chalcopyrite cemented hydrothermal breccias.



BOD094 – Feldspar-hornblende porphyritic monzodiorite with miarolitic cavities (fossilised bubbles) of calcite-actinolite-chalcopyrite at 1251.7m. Causative porphyry intersection graded 5.5m at 1.62% Cu, 0.82g/t Au from 1249.9m.





BOD094 – 1.1m intercept of 'causative' monzodiorite margin with chalcopyrite forming within miarolitic cavities and veins, grading 4.72% Cu and 3.32g/t Au from 1249.9m.

Surrounding this intrusion are high grade chalcopyrite sulphide cemented hydrothermal breccias of up to 30m thickness hosted in the volcanic country rock that can be vertically extensive for over several hundred metres. This breccia zone including the causative monzodiorite porphyry has significant coppergold mineralisation of 58m at 2.30g/t AuEq (1.28g/t Au, 0.74% Cu) from 1223m, including 12m at 4.78g/t AuEq (3.37g/t Au, 0.98% Cu) from 1265m.

This mineralisation is open down dip (truncated by faulting) and along strike and sits outside of the current Boda mineral resource estimation. Further drilling is being planned to further test this western zone which appears to be separate to the main Boda system.

In addition to drill hole BOD094, assay results were also received from another two diamond core drill holes and one RC pre-collar for a total of 4,628 metres at Boda 2-3. Significant results include:

BOD105	147m grading 0.43g/t AuEq (0.20g/t Au, 0.16% Cu) from 294m;
incl	18m grading 0.84g/t AuEq (0.33g/t Au, 0.37% Cu) from 306m;
and	28m grading 0.51g/t AuEq (0.31g/t Au, 0.14% Cu) from 611m;
and	22m grading 0.45g/t AuEq (0.24g/t Au, 0.15% Cu) from 663m;
and	162m grading 0.30g/t AuEq (0.14g/t Au, 0.10% Cu) from 718m;
and	122.4m grading 0.38g/t AuEq (0.15g/t Au, 0.17% Cu) from 921.6m.
BOD106	71m grading 0.42g/t AuEq (0.22g/t Au, 0.14% Cu) from 259m;
incl	9m grading 0.88g/t AuEq (0.50g/t Au, 0.28% Cu) from 311m;
and	90.6m grading 0.32g/t AuEq (0.13g/t Au, 0.14% Cu) from 752m;
and	45m grading 0.35g/t AuEq (0.10g/t Au, 0.18% Cu) from 916m;
and	7m grading 0.50g/t AuEq (0.21g/t Au, 0.21% Cu) from 1034m;
and	60m grading 0.31g/t AuEq (0.16g/t Au, 0.11% Cu) from 1089m.

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.

Assay results are outstanding for one drill hole at the Boda 2-3 prospect. The Boda 2-3 drilling results are to be included in the updated Boda MRE anticipated for the Q4 2023.



Boda Deposit

The Boda deposit is located within a NW 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 monzogabbroic, and 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 NW-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) 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 (ASX Announcement 30 May 2022).

Drilling targeting the northwest extension to Boda outside of the current deposit envelope, as well as infilling the current resource and defining the higher-grade breccia zones, is now completed with final assay results pending. The drilling will improve the confidence in the estimation and increase the Mineral Resource Estimation (MRE) at Boda.

Assay results were received from six RC drill holes for a total of 1,728m infilling the shallow component of the MRE at Boda, with significant results of:

BOD149	128m grading 0.59g/t AuEq (0.37g/t Au, 0.16% Cu) from 155m;
incl	5m grading 2.43g/t AuEq (2.36g/t Au, 0.05% Cu) from 191m;
also	30m grading 1.03g/t AuEq (0.60g/t Au, 0.31% Cu) from 252m;
and	4m grading 2.10g/t AuEq (2.06g/t Au, 0.04% Cu) from 300m;
and	6m grading 1.02g/t AuEq (0.39g/t Au, 0.46% Cu) from 317m;
and	10m grading 0.50g/t AuEq (0.21g/t Au, 0.21% Cu) from 368m;
and	20m grading 0.47g/t AuEq (0.31g/t Au, 0.11% Cu) from 392m.
BOD150	31m grading 0.48g/t AuEq (0.31g/t Au, 0.12% Cu) from 1m;
and	266m grading 0.70g/t AuEq (0.48g/t Au, 0.16% Cu) from 79m;
incl	42m grading 2.23g/t AuEq (1.78g/t Au, 0.33% Cu) from 186m;
incl	3m grading 12.0g/t AuEq (11.1g/t Au, 0.67% Cu) from 210m.
BOD153	157m grading 0.39g/t AuEq (0.28g/t Au, 0.08% Cu) from surface;
incl	3m grading 1.00g/t AuEq (0.50g/t Au, 0.36% Cu) from 1m;
also	5m grading 2.17g/t AuEq (2.15g/t Au, 0.01% Cu) from 107m.
BOD154	153m grading 0.50g/t AuEq (0.22g/t Au, 0.20% Cu) from 2m;
incl	16m grading 1.11g/t AuEq (0.39g/t Au, 0.52% Cu) from 65m;
also	2m grading 2.65g/t AuEq (0.84g/t Au, 1.33% Cu) from 122m.

Diamond core drilling to infill the Boda MRE comprised of three drill holes for a total of 3,830 metres. One drill hole was cored from surface using HQ3 sized gear and two drill holes were wedged off existing drill holes using the smaller diameter NQ3 sized barrel.



Significant results include:

BOD059W1	958m grading 0.55g/t AuEq (0.31g/t Au, 0.17% Cu) from 345m;
incl	127m grading 1.44g/t AuEq (0.68g/t Au, 0.56% Cu) from 648m.
BOD076W1	91m grading 0.61g/t AuEq (0.41g/t Au, 0.14% Cu) from 340m;
and	5m grading 1.09g/t AuEq (0.53g/t Au, 0.40% Cu) from 472m;
and	189m grading 0.36g/t AuEq (0.22g/t Au, 0.10% Cu) from 662m;
and	333m grading 0.34g/t AuEq (0.18g/t Au, 0.12% Cu) from 902m.
BOD122	16m grading 1.46g/t AuEq (1.45g/t Au, 0.01% Cu) from 45m;
and	51m grading 0.42g/t AuEq (0.28g/t Au, 0.10% Cu) from 394m;
incl	2m grading 2.14g/t AuEq (1.83g/t Au, 0.23% Cu) from 399m;
also	6m grading 1.10g/t AuEq (0.74g/t Au, 0.26% Cu) from 427m;
and	542m grading 0.53g/t AuEq (0.24g/t Au, 0.21% Cu) from 514m;
incl	106m grading 0.94g/t AuEq (0.31g/t Au, 0.46% Cu) from 747m;
also	20m grading 1.09g/t AuEq (0.54g/t Au, 0.40% Cu) from 1026m.

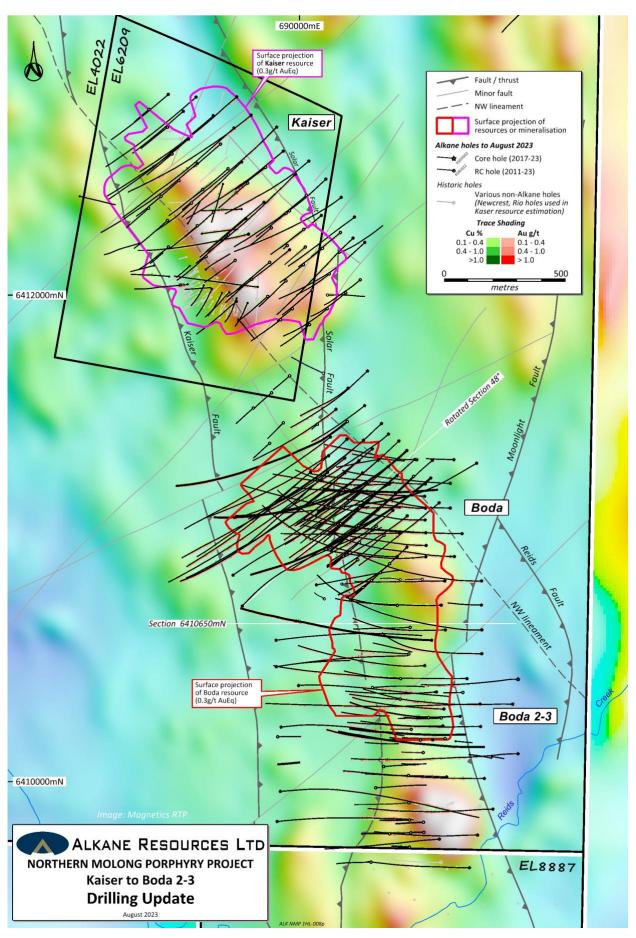
The previously announced RC drill hole BOD084 (ASX Announcement 18 July 2022) at the formerly named Korridor prospect was recently diamond tailed to test approximately 200m down dip and northwest of significant mineralisation intersected by BOD089 of 427m grading 0.26g/t Au and 0.15% Cu from 684m (ASX Announcement 7 September 2022). The Korridor prospect (now Boda NW) sits outside the initial Boda Mineral Resource Estimation (MRE). The diamond core tail of the 334m deep RC precollar, has extended this drill hole by 1,496 metres. Extensive gold-copper mineralisation was intercepted and is open at depth with significant results of:

BOD084	110m grading 0.36g/t AuEq (0.20g/t Au, 0.11% Cu) from 367m;
and	22m grading 0.48g/t AuEq (0.27g/t Au, 0.15% Cu) from 746m;
and	876.7m grading 0.42g/t AuEq (0.21g/t Au, 0.15% Cu) from 954m to end of hole.

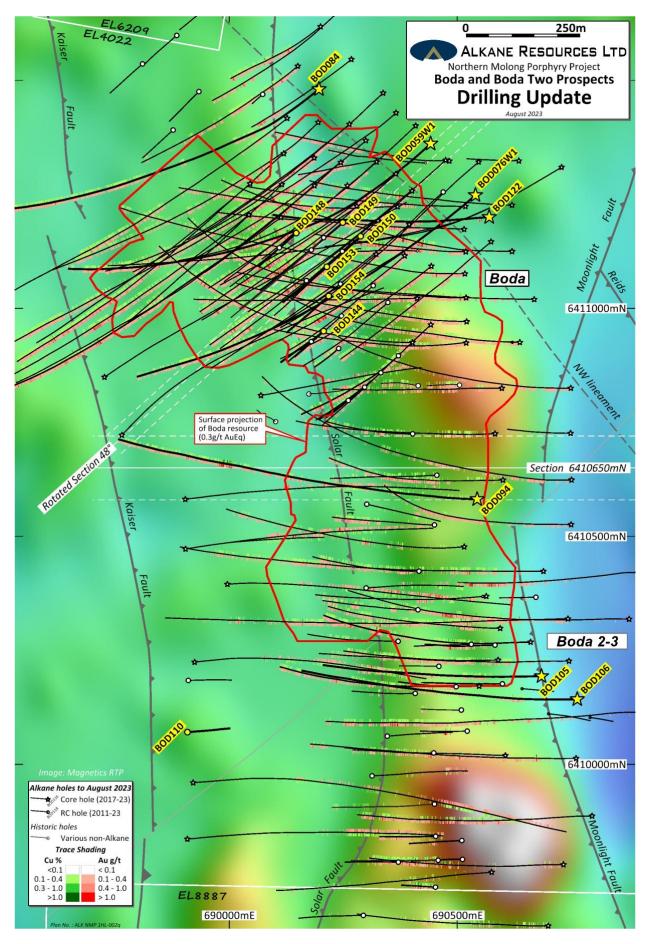
The gold equivalent (AuEq) is calculated using preliminary metallurgical work that determined both Au and Cu could be recovered equally at 85%. The calculation formula is AuEq(g/t) = Au(g/t) + Cu%/100 *31.1035 *CuPrice(\$/t)/AuPrice(\$/oz). The prices used were based on six month averages of gold at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

The drilling at Boda for this program is now complete with final assay results expected in September. An updated Boda MRE is anticipated in Q4 2023.

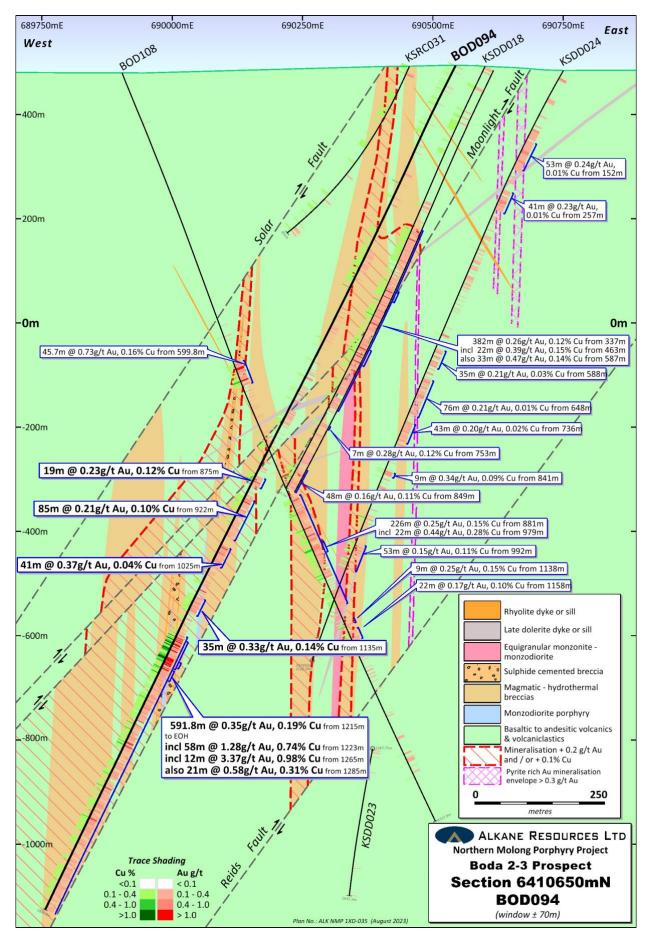














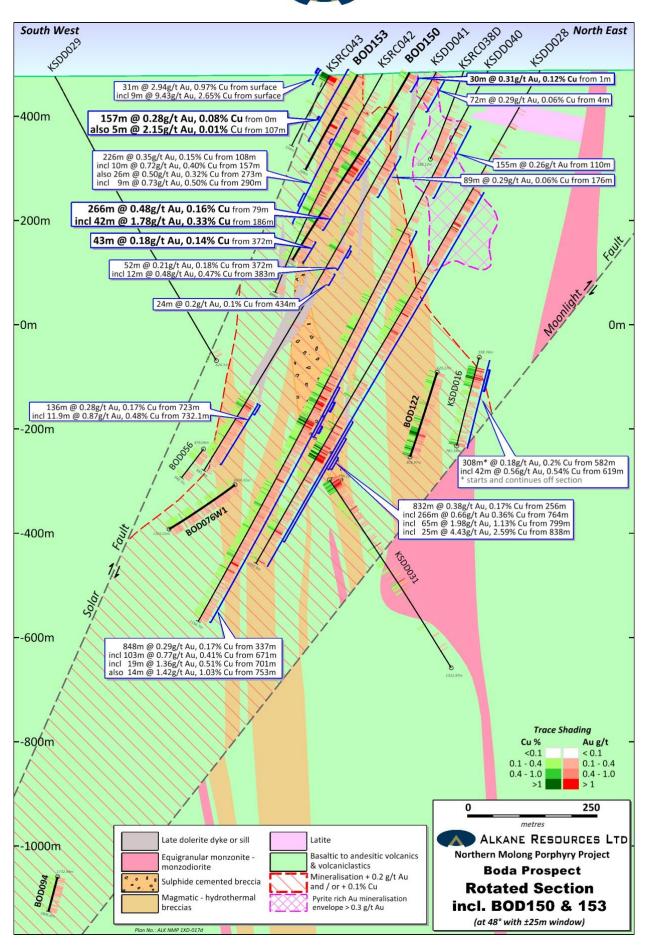




Table 1 – Boda Significant Drilling Results – August 2023 (>0.3g/t AuEq*)												
Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azi (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	AuEq* (g/t)	Au (g/t)	Cu (%)
BOD059W1	690442	6411361	487	-62	228	1338.6	345	1303	958	0.55	0.31	0.17
incl							390	414	24	1.11	1.02	0.06
also							648	775	127	1.44	0.68	0.56
incl							667	695	28	2.22	1.05	0.86
BOD076W1	690540	6411248	489	-60	230	1302.5	340	431	91	0.61	0.41	0.14
and							472	477	5	1.09	0.53	0.40
and							509	515	6	0.61	0.29	0.23
and							582	588	6	0.35	0.21	0.10
and							605	609	4	0.36	0.18	0.13
and							625	631	6	0.51	0.26	0.18
and							662	851	189	0.36	0.22	0.10
and							902	1235	333	0.34	0.18	0.12
and							1251	1259	8	0.46	0.22	0.17
BOD084	690197	6411480	479	-60	231	1830.7**	367	477	110	0.36	0.20	0.11
incl	_						368	385	17	0.63	0.38	0.18
and							746	768	22	0.48	0.27	0.15
and							865	867	2	0.50	0.13	0.27
and							922	925	3	0.40	0.23	0.12
and							954	1830.7**	876.7	0.42	0.21	0.15
incl							1494	1542	48	0.70	0.37	0.24
also							1607	1626	19	0.81	0.42	0.28
also							1787	1793	6	1.50	1.05	0.33
also							1819	1826	7	1.14	0.64	0.37
BOD122	690570	6411200	490	-68	265	1188.8	45	61	16	1.46	1.45	0.01
incl	030370	0411200	430	- 00	203	1100.0	45	47	2	6.49	6.48	0.01
and							394	445	51	0.42	0.48	0.10
							399	401	2	2.14	1.83	0.23
incl							427	433	6	1.10	0.74	0.26
also							485	488	3	0.44	0.74	0.12
and										0.44	0.27	0.12
and							514	1056	542	0.55		0.46
incl							747	853	106		0.31	1.00
incl							747	766	19	1.80	0.43	
also	690207	6/10050	480	-61	224	21/	1026	1046	20	1.09	0.54	0.40
BOD144	090207	6410950	480	-01	231	214	4	85	81	0.31	0.10	
incl	600147	6411165	479	-62	220	214	31	34	3	0.86	0.28	0.42
BOD148	690147				228	454**	5	13	8	0.45	0.21	0.17
BOD149	690249	6411188	480	-61	228	454***	1	3	2	0.48	0.45	0.02
and							95	99	4	0.31	0.19	0.09
and							155	283	128	0.59	0.37	0.16
incl							191	196	5	2.43	2.36	0.05
also							252	282	30	1.03	0.60	0.31
and							300	304	4	2.10	2.06	0.04
and							317	323	6	1.02	0.39	0.46
and							368	378	10	0.50	0.21	0.21
and							392	412	20	0.47	0.31	0.11
incl							406	411	5	0.93	0.79	0.10
and							422	425	3	0.51	0.14	0.26
BOD150	690288	6411158	484	-61	228	424	1	31	30	0.48	0.31	0.12



	Table 1 – Boda Significant Drilling Results – August 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							79	345	266	0.70	0.48	0.16		
incl							186	228	42	2.23	1.78	0.33		
incl							210	213	3	12.0	11.1	0.67		
and							372	415	43	0.37	0.18	0.14		
incl							372	375	3	0.99	0.53	0.34		
also							382	384	2	1.03	0.45	0.43		
BOD153	690214	6411091	480	-62	226	208	0	157	157	0.39	0.28	0.08		
incl							1	4	3	1.00	0.50	0.36		
also							107	112	5	2.17	2.15	0.01		
BOD154	690218	6411027	480	-56	227	214	2	155	153	0.50	0.22	0.20		
incl							65	81	16	1.11	0.39	0.52		
also					·		122	124	2	2.65	0.84	1.33		

Gold and copper intercepts are calculated using a lower cut of 0.2g/t AuEq. Internal dilution (< cut off) is less than 25% of reported intercepts. Only significant intercepts of >0.3g/t AuEq are reported. True widths are estimated as approximately 50% of intersected width.

^{**} Drill hole ended in mineralisation

Table 2 – Boda 2-3 Drilling Significant Results – August 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)		Au (g/t)	Cu (%)
BOD094	690544	6410581	494	-64	271	1806.8**	0	4	4	0.32	0.15	0.13
and							228	231	3	0.51	0.44	0.05
and							249.8	251	1.2	1.37	0.19	0.87
and							278	283	5	0.42	0.24	0.13
and							293	295	2	0.72	0.66	0.05
and							394	461	67	0.30	0.11	0.13
and							472	473	1	0.89	0.1	0.58
and							514	515	1	0.94	0.80	0.10
and							530	532	2	0.84	0.61	0.17
and							582	585	3	0.40	0.23	0.13
and							663	666	3	0.64	0.41	0.17
and							692	701	9	0.35	0.21	0.10
and							712	716	4	0.44	0.27	0.13
and							738	770	32	0.31	0.17	0.10
and							843	846	3	0.46	0.26	0.14
and							875	894	19	0.40	0.23	0.12
and							922	1007	85	0.35	0.21	0.10
and							1025	1066	41	0.43	0.37	0.04
and							1135	1170	35	0.52	0.33	0.14
and							1215	1806.8	591.8	0.62	0.35	0.19
incl							1223	1281	58	2.30	1.28	0.74
incl							1265	1277	12	4.78	3.37	0.98
also							1285	1306	21	1.02	0.58	0.31
BOD105	690685	6410193	483	-62	269	1227.7	256	260	4	0.34	0.10	0.17
and							294	441	147	0.43	0.20	0.16
incl							306	324	18	0.84	0.33	0.37
and							611	639	28	0.51	0.31	0.14
and							663	685	22	0.45	0.24	0.15

^{*} 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.



	Table 2 – Boda 2-3 Drilling Significant Results – August 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							718	880	162	0.30	0.14	0.11	
and							921.6	1044	122.4	0.38	0.15	0.17	
and							1132	1136	4	0.45	0.15	0.22	
BOD106	690763	6410143	475	-62	269	1379.4	259	330	71	0.42	0.22	0.14	
incl							311	320	9	0.88	0.50	0.28	
and							589	602	13	0.30	0.18	0.08	
and							715.6	733	17.4	0.38	0.18	0.14	
and							752	842.6	90.6	0.32	0.13	0.14	
and							891	899	8	0.34	0.09	0.19	
and							916	961	45	0.35	0.10	0.18	
incl							931	934	3	0.79	0.15	0.47	
and							977	986	9	0.30	0.14	0.11	
and							995	1003	8	0.32	0.07	0.18	
and	_	_			_		1034	1041	7	0.50	0.21	0.21	
and							1089	1149	60	0.31	0.16	0.11	
incl	_	_			_		1145	1148	3	0.77	0.47	0.22	
BOD110	689908	6410071	464	-67	87	214	R	C pre-collar	– no signifi	cant res	ults		

Gold and copper intercepts are calculated using a lower cut of 0.2g/t AuEq. Internal dilution (< cut off) is less than 25% of reported intercepts. True widths are estimated as approximately 50% of intersected width.

^{*} 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.

^{**} Drill hole ended in mineralisation



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





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 – August 2023

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	 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
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling and QAQC procedures are carried out using Alkane protocols as per industry best practice
	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.	 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, the representative sample taken from the rig's cone splitter and collected into a calico bag, 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 the 1m calico collected 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	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).	 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	Method of recording and assessing core and chip sample recoveries and results assessed.	DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥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.
	Measures taken to maximise sample recovery and ensure representative nature of the	Sample quality is qualitatively logged.
	samples.	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.
	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.	There is no known relationship between sample recovery and grade.
Logging	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.	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)
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography	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
	The total length and percentage of the relevant intersections logged	All drill holes were logged in full
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core sawn with half core samples submitted for analysis for all HQ3 and PQ3 core. NQ3 size core was sampled as whole core and submitted for analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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



Criteria	JORC Code explanation	Commentary
		 laboratory for re-assay. 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.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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% <75um (ALS code PUL-32). Crushers and pulverisers are washed with QAQC tests undertaken (ALS codes CRU-QC, PUL-QC).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples	Internal QAQC system in place to determine accuracy and precision of assays
	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	 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.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample are of appropriate size.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	 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. For other geochemical elements, most samples are digested by near-total mixed acid digest for each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. For selected drill holes that there are nearby (less than 100m spaced drilling) previous near-total mixed acid digest assay results or that are re-split RC samples, these samples are digested by aqua regia with a ICP Atomic Emission Spectrometry for Ag, As, Cu, Mo and S only.
	 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. 	No geophysical tools were used to determine any element concentrations
	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.	Full QAQC system in place including certified standards and blanks of appropriate matrix and concentration levels
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	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	The use of twinned holes.	No twinned holes have been drilled.

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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.
	Discuss any adjustment to assay data.	No adjustments made
Location of data points	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.	Drillholes are laid out using hand-held GPS (accuracy ±2m) then DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion
	Specification of the grid system used.	• GDA94, MGA (Zone 55)
	Quality and adequacy of topographic control.	Drillhole collars DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion
Data spacing and distribution	Data spacing for reporting of Exploration Results	At Boda drilling is on a nominal 50m x 50m grid. At Boda 2-3, the data spacing is variable with focus on identifying new and higher grading zones of mineralisation and identifying an optimal drilling direction. The drilling at Boda 2-3 is approaching a nominal 100m x 100m grid.
	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	No Mineral Resource Estimation procedure and classifications apply to the exploration data being reported.
	Whether sample compositing has been applied	 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 ≥0.10 g/t Au or ≥0.10 % 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

				interval was less than 0.3m or greater than 1.3m.
Orientation of data in relation to geological	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	•	Drilling suggests a broadly sub vertical geometry to mineralisation within flat to moderately dipping stratigraphy at the different prospects in the NMPP. A significant NW trending lineament exists from Boda to Kaiser to Konigin. Boda 2-3 statigraphy strikes north and dips shallowly to moderately to the west. Mineralisation at Boda 2-3 is subvertical and strikes north to northwest. All drilling is planned normal to the strike of the respective prospect/deposit.
structure	•	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	•	Estimated true intervals are ~50% of downhole lengths
Sample security	•	The measures taken to ensure sample security.	٠	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.
			Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years).	
				The Company has in place protocols to ensure data security.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audits or reviews have been conducted at this stage.



Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
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Mineral tenement and land tenure status	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.	All five licences (EL4022, EL6209, EL8261, EL8338 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.
	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.	All exploration licences are in good standing. EL4022 expires on 13 August 2026. EL6209 expires on 11 March 2029. EL8338 expires on 27 January 2024. EL8887 expires on 6 February 2026. EL8261 expires on 30 April 2029.
Exploration	Acknowledgment and appraisal of exploration by other parties.	Significant historical drilling activity has been conducted within the bounds of the NMPP, including EL4022 (Bodangora).
done by other parties		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.
		EL6209 (Kaiser) historical records show 14 AC (170m), 78 RC (7591m) and 45 DD holes (7833m) = 15,594m.
		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.
		EL8887 (Boda South) historical exploration includes the extension of the Amax Mining Inc/Woodsreef Mines grid soil sampling to approximately 300m into EL8887 including the southern section of the +1,000m striking +250 ppm Cu soil anomaly at Boda 2-3. Historical records show 9 RAB holes 16 RAB (124m), 51 shallow RC (859m) and 1 DD holes (503m) = 1,486m
Geology	Deposit type, geological setting and style of mineralisation.	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	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: easting and northing of the drill hole collar	See body of announcement



Criteria	JORC Code explanation	Commentary
	 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. 	
	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.	All drill holes have been reported in this announcement.
Data aggregation methods	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.	Exploration results reported for uncut gold grades, grades calculated by length weighted average
methous	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.	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 <25% 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
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Gold equivalent values were calculated and used in modelling the mineralisation shells. Metal prices used for the gold equivalent are based on a historical 6-month average and were US\$1930/oz for gold and US\$8500/t for copper, and A\$:US\$0.67
		Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies at Boda, Boda 2-3 and Kaiser.
Relationship	These relationships are particularly important in the reporting of Exploration Results.	It is apparent on the sections and the report descriptions that the overall geometry of
between mineralisation	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported	the porphyry mineralisation at Kaiser, Boda and Boda 2-3 are subvertical to steep west dipping. Skarn mineralisation has been intersected at Boda 2-3 and is stratigraphically controlled, dipping moderately west.
widths and intercept lengths	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').	True intervals are likely to be ~50% of downhole lengths.
Diagrams	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.	Plans showing geology with drill collars are included in the body of the announcement.
Balanced reporting	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.	Comprehensive reporting has been undertaken with all holes listed in the included table.



Criteria	JORC Code explanation	Commentary
Other substantive exploration data	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.	No other exploration data is considered meaningful for reporting.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Further work is planned drill targeting Boda 2-3, Boda 4 and NW extensions to Boda within the Project. Infill drilling is also ongoing at Kaiser to improve confidence in the resource estimation from Inferred to Indicated. Regional exploration planned are soil geochemistry surveys, airborne gravity and further drilling.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	See figures included in the announcement.