ASX and MEDIA RELEASE

3 October 2023



Extensive High-Grade Results Complete Current Boda Drilling Mineral Resource Estimate Update Underway

Drilling designed to infill the Inferred Boda Mineral Resource Estimation to a nominal 50m grid spacing is completed with final assay results now received. Results from the diamond core drilling include significant intercepts of:

BOD058W1	179m grading 0.63g/t AuEq* (0.37g/t Au, 0.19% Cu) from 447m;
incl	50m grading 1.45g/t AuEq (0.85g/t Au, 0.43% Cu) from 575m;
	475m grading 1.43g/t AuEq (0.65g/t Au, 0.43% Cu) from 762m;
and	
incl	54m grading 5.24g/t AuEq (2.97g/t Au, 1.66% Cu) from 822m;
incl	17m grading 10.8g/t AuEq (6.10g/t Au, 3.43% Cu) from 823m.
BOD060W1	195m grading 0.77g/t AuEq (0.51g/t Au, 0.19% Cu) from 621m;
incl	4m grading 12.9g/t AuEq (12.4g/t Au, 0.34% Cu) from 654m;
and	199.2m grading 0.50g/t AuEq (0.28g/t Au, 0.16% Cu) from 1076.3m to end of hole;
incl	18m grading 1.69g/t AuEq (1.21g/t Au, 0.34% Cu) from 1135m.
BOD136	233m grading 0.51g/t AuEq (0.40g/t Au, 0.08% Cu) from 101m;
and	2m grading 12.9g/t AuEq (10.1g/t Au, 2.03% Cu) from 453m;
and	200m grading 0.72g/t AuEq (0.39g/t Au, 0.24% Cu) from 540m;
incl	63m grading 1.55g/t AuEq (0.87g/t Au, 0.50% Cu) from 613m;
incl	1.7m grading 14.1g/t AuEq (7.32g/t Au, 4.97% Cu) from 644.3m.
000443	244 2 15 0 44 15 10 27 14 0 420/ 6 15 225
BOD142	241.2m grading 0.44g/t AuEq (0.27g/t Au, 0.12% Cu) from 226m;
and	29m grading 1.08g/t AuEq (0.52g/t Au, 0.40% Cu) from 539m;
and	134.4m grading 1.05g/t AuEq (0.67g/t Au, 0.28% Cu) from 601.1m to end of hole;
incl	41.9m grading 2.73g/t AuEq (1.80g/t Au, 0.67% Cu) from 601.1m;
incl	9.9m grading 6.51g/t AuEq (4.43g/t Au, 1.52% Cu) from 619m.
BOD145	318m grading 0.50g/t AuEq (0.33g/t Au, 0.12% Cu) from 158m;
incl	54m grading 1.16g/t AuEq (0.70g/t Au, 0.33% Cu) from 317m.
inci	34111 grading 1:10g/ t Adity (0:70g/ t Adi, 0:33/0 cd/ 110111 31/1111
BOD147	147m grading 1.21g/t AuEq (0.90g/t Au, 0.23% Cu) from 160m;
incl	34m grading 3.20g/t AuEq (2.97g/t Au, 0.17% Cu) from 216m;
incl	2m grading 32.4g/t AuEq (32.1g/t Au, 0.21% Cu) from 216m.

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BOD152 218m grading 0.52g/t AuEq (0.30g/t Au, 0.16% Cu) from 127m; incl 44m grading 1.09g/t AuEq (0.73g/t Au, 0.26% Cu) from 263m.

KSDD028W1 948.8m grading 0.42g/t AuEq (0.26g/t Au, 0.11% Cu) from 302.2m; and 0.4m grading 4.15g/t AuEq (1.30g/t Au, 2.08% Cu) from 1346m.

Assay results received from RC drilling testing the upper levels of the Boda Deposit include significant intercepts of:

BOD151	322m grading 0.56g/t AuEq (0.28g/t Au, 0.16% Cu) from surface;
incl	36m grading 1.17g/t AuEq (0.64g/t Au, 0.39% Cu) from 112m;
also	23m grading 1.19g/t AuEq (0.90g/t Au, 0.21% Cu) from 226m;
and	24m grading 0.57g/t AuEq (0.34g/t Au, 0.17% Cu) from 388m.
BOD156	70m grading 1.03g/t AuEq (0.57g/t Au, 0.34% Cu) from 5m;
incl	13m grading 2.79g/t AuEq (1.40g/t Au, 1.01% Cu) from 29m;
incl	3m grading 5.68g/t AuEq (2.13g/t Au, 2.60% Cu) from 29m;
and	37m grading 0.47g/t AuEq (0.38g/t Au, 0.06% Cu) from 136m.

Drilling is currently focused on the Kaiser Deposit with the first round of results expected to be announced in October. An updated Mineral Resource Estimation for Boda, including Boda 2-3, is now underway and anticipated in Q4 2023.

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 4. 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:

"Boda continues to evolve towards its' potential as a large, tier one gold-copper resource. The current program of infill drilling is now complete, it is particularly pleasing to see not only further mineable grades over extensive intervals, but also new zones of higher-grade mineralisation and expansions of high-grade zones previously identified.

"Our exploration team is continuing infill drilling at Kaiser, as well as working on the updated resource estimate for Boda. This is building to a preliminary economic assessment that is currently underway and will be completed once the Kaiser resource is updated in Q1 2024."

*The equivalent calculation formula is AuEq(g/t) = Au(g/t) + Cu%/100*31.1035*copper price(\$/t)/gold price(\$/oz). The prices used to calculate AuEq are based on 6-month averages of US\$1,930/oz gold and US\$8,500/t copper, and A\$:US\$0.66. 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.

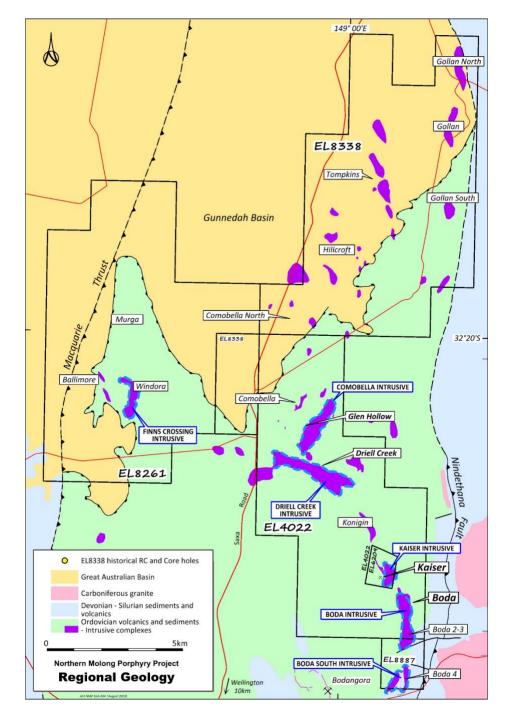


Northern Molong Porphyry Project (NMPP)

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 Deposit

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

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

The initial Mineral Resource Estimation (MRE) 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).

Recent drilling targeting the northwest extension to Boda and south extension to Boda 2-3 outside of the current deposit envelope, as well as infilling the current resource and defining the higher-grade breccia zones within the 500m strike length core zone, is now complete with all assay results received.

Assay results were received from the final four RC drill holes for a total of 1,288m, infilling the shallow component of the MRE at Boda, with significant results of:

BOD151	322m grading 0.56g/t AuEq (0.28g/t Au, 0.16% Cu) from surface;
incl	36m grading 1.17g/t AuEq (0.64g/t Au, 0.39% Cu) from 112m;
also	23m grading 1.19g/t AuEq (0.90g/t Au, 0.21% Cu) from 226m;
and	24m grading 0.57g/t AuEq (0.34g/t Au, 0.17% Cu) from 388m;
incl	5m grading 1.57g/t AuEq (1.04g/t Au, 0.39% Cu) from 406m.
BOD155	360m grading 0.41g/t AuEq (0.23g/t Au, 0.13% Cu) from surface;
incl	20m grading 1.12g/t AuEq (0.73g/t Au, 0.28% Cu) from surface.
BOD156	70m grading 1.03g/t AuEq (0.57g/t Au, 0.34% Cu) from 5m;
incl	13m grading 2.79g/t AuEq (1.40g/t Au, 1.01% Cu) from 29m;
incl	3m grading 5.68g/t AuEq (2.13g/t Au, 2.60% Cu) from 29m;
and	37m grading 0.47g/t AuEq (0.38g/t Au, 0.06% Cu) from 136m;
incl	1m grading 4.20g/t AuEq (4.09g/t Au, 0.08% Cu) from 172m.

Assay results were received from a final thirteen diamond core drill holes, designed to infill the Boda MRE for a total of 10,428 metres. The drilling includes ten holes using HQ3 sized gear coring from the base of RC pre-collars and three core drill holes were wedged off existing drill holes using a smaller diameter NQ3 sized barrel. NQ3 core was entirely whole core sampled, HQ3 core was sampled as half core. The more significant results include:

BOD058W1	179m grading 0.63g/t AuEq (0.37g/t Au, 0.19% Cu) from 447m;
incl	50m grading 1.45g/t AuEq (0.85g/t Au, 0.43% Cu) from 575m;
and	475m grading 1.08g/t AuEq (0.65g/t Au, 0.31% Cu) from 762m;
incl	54m grading 5.24g/t AuEq (2.97g/t Au, 1.66% Cu) from 822m;

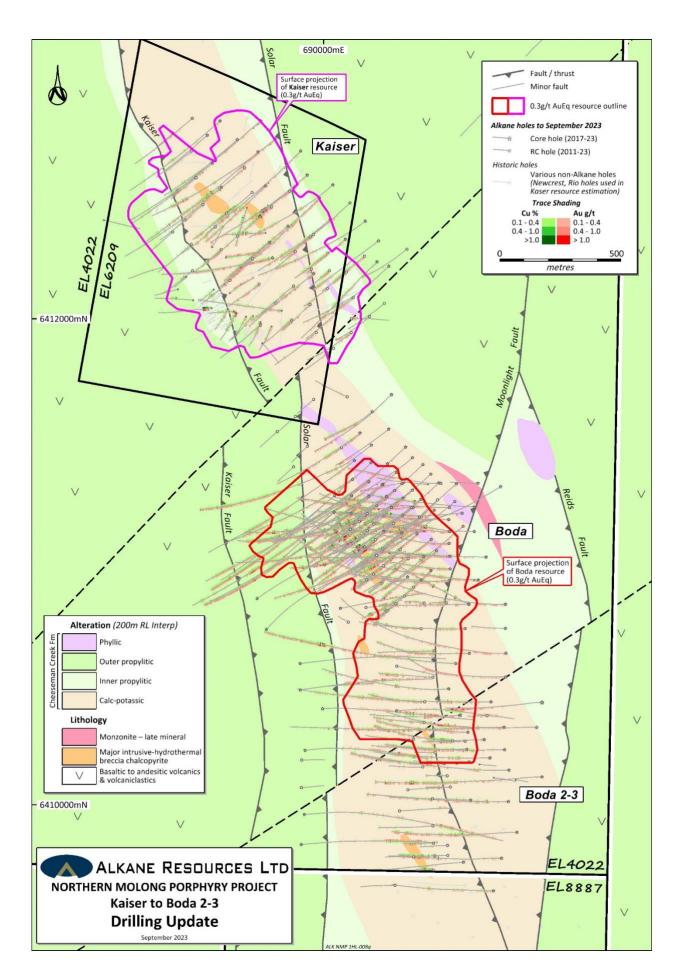


incl	17m grading 10.8g/t AuEq (6.10g/t Au, 3.43% Cu) from 823m.
BOD060W1	195m grading 0.77g/t AuEq (0.51g/t Au, 0.19% Cu) from 621m;
incl	4m grading 12.9g/t AuEq (12.4g/t Au, 0.34% Cu) from 654m;
and	199.2m grading 0.50g/t AuEq (0.28g/t Au, 0.16% Cu) from 1076.3m to end of hole;
incl	18m grading 1.69g/t AuEq (1.21g/t Au, 0.34% Cu) from 1135m.
BOD135	63m grading 0.59g/t AuEq (0.34g/t Au, 0.18% Cu) from 89m;
incl	19m grading 1.35g/t AuEq (0.81g/t Au, 0.39% Cu) from 133m;
and	43m grading 1.07g/t AuEq (0.68g/t Au, 0.28% Cu) from 356m;
incl	14m grading 2.07g/t AuEq (1.28g/t Au, 0.57% Cu) from 363m.
BOD136	233m grading 0.51g/t AuEq (0.40g/t Au, 0.08% Cu) from 101m;
incl	23m grading 1.09g/t AuEq (0.78g/t Au, 0.23% Cu) from 304m;
and	2m grading 12.9g/t AuEq (10.1g/t Au, 2.03% Cu) from 453m;
and	200m grading 0.72g/t AuEq (0.39g/t Au, 0.24% Cu) from 540m;
incl	63m grading 1.55g/t AuEq (0.87g/t Au, 0.50% Cu) from 613m;
incl	1.7m grading 14.1g/t AuEq (7.32g/t Au, 4.97% Cu) from 644.3m.
BOD142	241.2m grading 0.44g/t AuEq (0.27g/t Au, 0.12% Cu) from 226m;
and	29m grading 1.08g/t AuEq (0.52g/t Au, 0.40% Cu) from 539m;
and	134.4m grading 1.05g/t AuEq (0.67g/t Au, 0.28% Cu) from 601.1m to end of hole;
incl	41.9m grading 2.73g/t AuEq (1.80g/t Au, 0.67% Cu) from 601.1m;
incl	9.9m grading 6.51g/t AuEq (4.43g/t Au, 1.52% Cu) from 619m.
BOD145	318m grading 0.50g/t AuEq (0.33g/t Au, 0.12% Cu) from 158m;
incl	54m grading 1.16g/t AuEq (0.70g/t Au, 0.33% Cu) from 317m;
also	12.8m grading 1.14g/t AuEq (0.80g/t Au, 0.25% Cu) from 396.4m.
BOD147	147m grading 1.21g/t AuEq (0.90g/t Au, 0.23% Cu) from 160m;
incl	34m grading 3.20g/t AuEq (2.97g/t Au, 0.17% Cu) from 216m;
incl	2m grading 32.4g/t AuEq (32.1g/t Au, 0.21% Cu) from 216m.
BOD152	218m grading 0.52g/t AuEq (0.30g/t Au, 0.16% Cu) from 127m;
incl	44m grading 1.09g/t AuEq (0.73g/t Au, 0.26% Cu) from 263m;
incl	3m grading 3.42g/t AuEq (1.75g/t Au, 1.26% Cu) from 263m;
and	6m grading 2.42g/t AuEq (1.86g/t Au, 0.43% Cu) from 292m.
KSDD028W1	948.8m grading 0.42g/t AuEq (0.26g/t Au, 0.11% Cu) from 302.2m;
and	0.4m grading 4.15g/t AuEq (1.30g/t Au, 2.08% Cu) from 1346m.

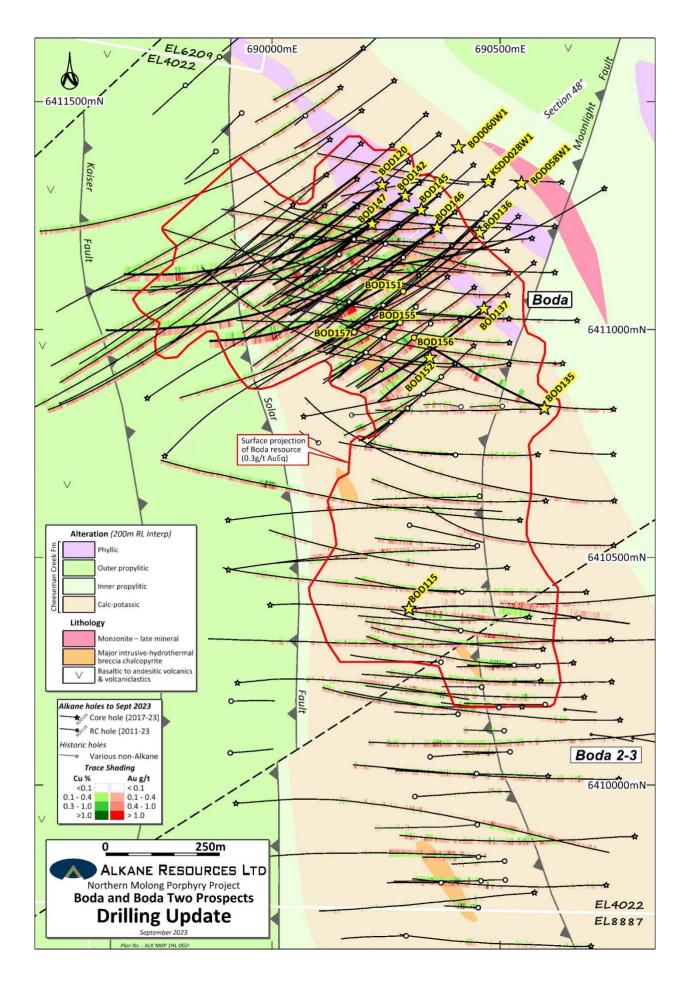
The gold equivalent (AuEq) is calculated using preliminary metallurgical work that determined both Au and Cu could be recovered equally at 85%. The calculation formula is AuEq(g/t) = Au(g/t) + Cu%/100 *31.1035 *CuPrice(\$/t)/AuPrice(\$/oz). The prices used were based on six-month averages of gold at US\$1930/oz and copper at US\$8,500/t, at an exchange rate of A\$:US\$0.66. Alkane considers the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

All assay results have now been received for the drilling at Boda and Boda 2-3. An updated Mineral Resource Estimate for the Boda deposit, including Boda 2-3, is now underway and anticipated in Q4 2023. Drilling is focused on infilling the Kaiser resource area, with an initial release of results anticipated next month and an updated Mineral Resource Estimate anticipated in Q1 2024.

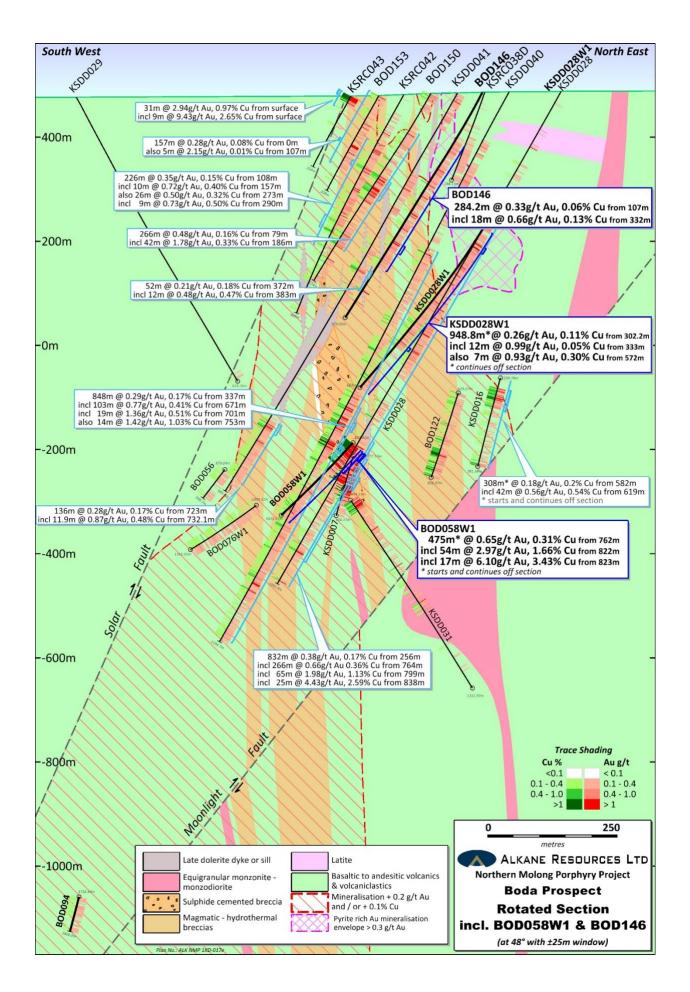














	Tab	ole 1 – Bod	a Signi	ifican	t Drilling	Results –	Septembe	r 2023 (>0	.3g/t AuE	(*p		
Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azi (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	AuEq* (g/t)	Au (g/t)	Cu (%)
BOD058W1	690547	6411321	490	-61	229	1248.5	315	326	11	0.55	0.46	0.07
and							355	356	1	1.31	1.17	0.10
and							447	626	179	0.63	0.37	0.19
incl							575	625	50	1.45	0.85	0.43
incl							585.5	593.5	8	3.66	2.31	0.99
and							657	665	8	0.33	0.18	0.11
and							699	709	10	0.35	0.21	0.10
and							762	1237	475	1.08	0.65	0.31
incl							822	876	54	5.24	2.97	1.66
incl							823	840	17	10.8	6.10	3.43
also							1068	1082	14	2.46	1.84	0.45
BOD060W1	690409	6411400	486	-62	228	1275.5**	368	379	11	0.33	0.27	0.04
and							422	524	102	0.31	0.30	0.01
incl							441	451	10	0.80	0.78	0.01
and							559	565	6	0.52	0.42	0.07
and							621	816	195	0.77	0.51	0.19
incl							654	658	4	12.9	12.4	0.34
also							685	693.5	8.5	1.50	1.26	0.17
also							733	736	3	1.93	0.61	0.96
and							835.9	845	9.1	0.49	0.25	0.18
and							888	922	34	0.51	0.24	0.20
and							975	977	2	1.22	0.84	0.28
and							989.3	1007	17.7	0.48	0.32	0.11
and							1031	1037	6	0.41	0.23	0.13
and							1056.7	1062.9	6.2	0.49	0.25	0.18
and							1076.3	1275.5	199.2**	0.50	0.28	0.16
incl							1135	1153	18	1.69	1.21	0.34
BOD115	690300	6410387	491	-57	84	945.75	366	532.9	166.9	0.45	0.24	0.15
incl							458.7	476	17.3	0.98	0.66	0.23
and							554	556	2	0.73	0.66	0.06
and							692	693	1	1.15	1.11	0.03
and							736	758	22	0.34	0.30	0.03
BOD120	690241	6411317	481	-59	229	510.8	13	20	7	0.33	0.31	0.02
and							73	91	18	0.35	0.31	0.03
incl							84	88	4	0.71	0.63	0.06
and							186	197	11	0.35	0.21	0.10
and							232	267.2	35.2	0.50	0.24	0.19
and							293	306.8	13.8	0.40	0.17	0.16
and							319	320	1	1.70	0.02	1.73
BOD135	690597	6410827	486	-64	293	729.8	89	152	63	0.59	0.34	0.18
incl	_						133	152	19	1.35	0.81	0.39
and							225	262	37	0.46	0.09	0.28
incl							250	254	4	0.98	0.11	0.64
and							295	298	3	0.42	0.11	0.17
and							356	399	43	1.07	0.68	0.28
incl							363	377	14	2.07	1.28	0.57
and							419	426	7	0.38	0.29	0.06
and			-				530	561	31	0.38	0.29	0.00



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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							573	593	20	0.36	0.22	0.10
and							623	671	48	0.42	0.30	0.09
incl							653	657	4	1.19	1.09	0.07
and							712	719	7	0.34	0.15	0.11
BOD136	690455	6411212	488	-60	229	744.8	40	83	43	0.32	0.27	0.03
and							101	334	233	0.51	0.40	0.08
incl							157	164	7	1.18	0.97	0.15
also							289	291	2	3.71	3.25	0.34
also							304	327	23	1.09	0.78	0.23
and							389	423	34	0.30	0.20	0.07
and							453	455	2	12.9	10.1	2.03
and							476	493	17	0.38	0.15	0.16
and							540	740	200	0.72	0.39	0.24
incl							613	676	63	1.55	0.87	0.50
incl							644.3	646	1.7	14.1	7.32	4.97
BOD137	690465	6411046	485	-63	229	697.5	12	89	77	0.30	0.22	0.06
incl							33	37	4	0.68	0.56	0.09
and							130	161	31	0.37	0.24	0.09
and							184	289	105	0.33	0.15	0.13
incl							208	212	4	0.90	0.36	0.39
and							345	371	26	0.33	0.15	0.13
and							398	428	30	0.30	0.19	0.08
and							459	470	11	0.31	0.22	0.06
and							504	592	88	0.64	0.44	0.14
incl							550	560	10	1.27	1.04	0.17
and							639	648	9	0.31	0.18	0.10
and							671	686	15	0.33	0.18	0.11
BOD142	690292	6411293	483	-63	228	735.5**	114	124	10	0.30	0.24	0.04
and						100.0	149	168	19	0.31	0.28	0.02
and							183	189	6	0.30	0.27	0.02
and							226	467.2	241.2	0.44	0.27	0.12
incl							277	287	10	0.88	0.34	0.40
also							341	348	7	0.92	0.74	0.13
also							407	420	13	1.03	0.66	0.27
and							488	492	4	0.48	0.24	0.18
and							539	568	29	1.08	0.52	0.40
incl							559	565	6	1.81	0.85	0.70
and							601.1	735.5	134.4**	1.05	0.67	0.28
incl							601.1	643	41.9	2.73	1.80	0.67
incl							619	628.9	9.9	6.51	4.43	1.52
BOD145	690327	6411262	484	-62	229	642.7**	103	108	5.5	0.33	0.25	0.05
and			 				118	128	10	0.36	0.34	0.01
and							158	476	318	0.50	0.33	0.12
incl							158	159.9	1.9	2.40	0.33	2.66
also							317	371	54	1.16	0.70	0.33
incl							346	364	18	2.00	1.28	0.52
			-				396.4	409.2	12.8	1.14	0.80	0.32
also and							623	642.7	19.7**	0.45	0.80	0.23



	Tak	ole 1 – Bod	a Signi	ifican	t Drilling	Results –	Septembe	r 2023 (> 0	.3g/t AuE	(*p		
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							625	628	3	1.53	1.39	0.10
BOD146	690362	6411224	486	-63	230	705.5	107	391.2	284.2	0.42	0.33	0.06
incl							332	350	18	0.85	0.66	0.13
and							446.2	448	1.8	2.36	1.25	0.81
and							469.6	471.6	2	1.26	0.66	0.44
and							512.6	527.1	14.5	0.62	0.35	0.20
BOD147	690219	6411231	481	-64	228	444.8	26	30	4	0.31	0.24	0.06
and							160	307	147	1.21	0.90	0.23
incl							216	250	34	3.20	2.97	0.17
incl							216	218	2	32.4	32.1	0.21
and							336	341.6	5.6	0.30	0.15	0.12
and							383	386	3	0.51	0.25	0.19
and							421	427	6	0.36	0.23	0.10
BOD151	690288	6411084	482	-60	229	454	0	322	322	0.56	0.28	0.16
incl							112	148	36	1.17	0.64	0.39
also							177	191	14	1.03	0.63	0.29
also							226	249	23	1.19	0.90	0.21
and							388	412	24	0.57	0.34	0.17
incl							406	411	5	1.57	1.04	0.39
and							432	441	9	0.33	0.12	0.15
and							447	451	4	0.41	0.11	0.22
BOD152	690346	6410938	482	-65	228	345.4	29	57	28	0.37	0.17	0.14
and	030310	0110330	102	03		3 13. 1	66.9	96	29.1	0.32	0.14	0.12
and							127	345	218	0.52	0.30	0.16
incl							263	307	44	1.09	0.73	0.26
incl							263	266	3	3.47	1.75	1.26
also							292	298	6	2.42	1.86	0.41
BOD155	690281	6411015	481	-62	227	400	0	360	360	0.41	0.23	0.13
incl	030201	0411013	701	02	221	400	0	20	20	1.12	0.23	0.28
also							122	133	11	0.94	0.73	0.12
									9	0.92	0.77	0.12
also BOD156	690312	6410982	481	-56	228	310	192 5	201 75	70	1.03	0.56	0.20
	090312	0410382	401	-50	220	310		42		2.79	1.40	1.01
incl							29		13	5.68	2.13	2.60
incl							29	32	3	0.57	0.31	0.19
and							106	111	5	0.57		0.19
and							119	124	5	0.83	0.72	0.08
and							136	173	37	4.20	0.38	0.08
incl			-				172	173	1	0.30	4.09 0.14	0.08
and	690180	6410994	478	-56	227	124	233	280	47			0.12
BOD157	690180	6411325	478	-61	227	1392.5	2 202.2	6	049.9	0.71	0.37	0.25
KSDD028W1	050474	0411323	400	-01	220	1337.3	302.2	1251	948.8	0.42	0.26	0.11
incl			-				333	345	12	1.05	0.99	
also							572	579	7	1.35	0.93	0.30
also							826	828.1	2.1	3.39	2.87	0.38
also							1172	1173	1	8.40	8.15	0.18
and							1290	1297	7	0.37	0.16	0.16
and			-				1316.4	1316.8	0.4	4.15	1.3	2.08
and							1346	1348	2	0.71	0.16	0.41



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.

* 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\$0.66. 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 – September 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. NQ3 sized core was whole sampled. 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	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.
recovery		Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core or RC pre-collars 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. NQ sized core is whole sampled.				
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

laboratory.

received in time for announcement.

splitter on the RC rig as a 1 metre interval into a calico bag and forwarded to the

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

• 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 structure	•	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.
	•	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.	•	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 done by other	Acknowledgment and appraisal of exploration by other parties.	Significant historical drilling activity has been conducted within the bounds of the NMPP, including EL4022 (Bodangora).
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
	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\$0.66
		Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies at Boda, Boda 2-3 and Kaiser.
Relationship between mineralisation widths and intercept lengths	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
	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.
	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.