ASX and MEDIA RELEASE

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ALKANE RESOURCES LTD
ABN 35 000 689 216

High Grade Continuity North West of Boda

- **Gold-copper mineralisation is now outlined over a 3km strike length from Boda Three to Kaiser.**
- **Drilling is testing Boda Two, Boda Three, the area between Boda and Kaiser (Korridor Prospect) and other regional targets within the Northern Molong Porphyry Project (NMPP).**
- **Drilling at Boda is on a nominal 50m x 100m drill hole grid sequence for the purpose of calculating a maiden resource estimation for Boda in Q1 2022.**
- **At Boda significant results included:**

BOD059	**906.7m grading 0.45g/t Au, 0.18% Cu from 309m**
incl	**219m grading 0.28g/t Au from 309m (gold only flanking zone)**
also	**672.7m grading 0.51g/t Au, 0.23% Cu from 543m**
incl	**115m grading 1.98g/t Au, 0.53% Cu from 864m**
incl	**2.8m grading 13.0g/t Au, 1.59% Cu from 901.5m**
also	**33m grading 4.06g/t Au, 1.29% Cu from 946m**
incl	**6m grading 11.2g/t Au, 1.81% Cu from 968m**
KSDD043	**927m grading 0.31g/t Au, 0.16% Cu from 159m**
incl	**157m grading 0.31g/t Au from 159m (gold only flanking zone)**
also	**754m grading 0.31g/t Au, 0.19% Cu from 332m**
incl	**74.7m grading 0.92g/t Au, 0.36% Cu from 680m**
incl	**12m grading 3.01g/t Au, 0.65% Cu from 732m**
also	**38m grading 0.60g/t Au, 0.79% Cu from 875m**
incl	**9m grading 1.04g/t Au, 1.40% Cu from 839m**
also	**6m grading 1.26g/t Au, 0.12% Cu from 1080m**
KSDD044	**302m grading 0.38g/t Au, 0.14% Cu from 212m**
incl	**60m grading 0.84g/t Au, 0.34% Cu from 298m**
and	**141m grading 0.23g/t Au, 0.16% Cu from 723m**

- **At the previously untested northwest trending 800m long Korridor Prospect between the Boda and Kaiser results also identified porphyry type gold-copper mineralisation:**

BOD065	**64m grading 0.43g/t Au, 0.12% Cu from 174m to end of hole**
incl	**8m grading 1.42g/t Au, 0.28% Cu from 205m**
BOD066	**226m grading 0.25g/t Au, 0.10% Cu from 12m to end of hole**
incl	**6m grading 1.06g/t Au, 0.30% Cu from 114m**
also	**6m grading 1.58g/t Au, 0.11% Cu from 189m**

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- **Boda Two and Boda Three prospects are defined by a 1,100m by 500m coincident gold-copper soil and magnetic high footprint with separate conductive IP anomalies. Drilling continues to confirm extensive gold-copper mineralisation, with significant intercepts of:**

KSDD048	**42m grading 0.40g/t Au, 0.21% Cu from 179m**
incl	**6m grading 1.67g/t Au, 0.73% Cu from 196m**
and	**36.4m grading 0.43g/t Au, 0.15% Cu from 280.6m**
incl	**1m grading 3.58g/t Au, 0.22% Cu from 313m**
and	**152.3m grading 0.12g/t Au, 0.11% Cu from 399m**
and	**43.7m grading 0.38g/t Au, 0.21% Cu from 581m**
and	**20.8m grading 0.18g/t Au, 0.14% Cu from 667.2m**
and	**43m grading 0.41g/t Au, 0.21% Cu from 737m**
and	**43.7m grading 0.38g/t Au, 0.21% Cu from 581m**
incl	**11m grading 1.03g/t Au, 0.47% Cu from 743m**
and	**14m grading 0.60g/t Au, 0.21% Cu from 1300m**

- **Further drill hole traverses are planned to test the Boda mineralisation footprint for an additional 100 metres to the northwest where visually encouraging mineralisation was intersected.**
- **The Kaiser Prospect and its Duke Zone is estimated from drilling to be approximately 250m wide and striking over 800m. A 13,000m RC drilling program using a 100m x 100m drill hole grid sequence to 300m vertical depth is planned to commence in January for the purpose of a shallow resource estimation.**
- **The mineralisation at Korridor connects the gold-copper mineralisation mapped at Kaiser to the Boda Prospect, demonstrating the 15km northwest structural corridor as a fertile transverse zone for porphyry mineralisation emplacement. BOD065 and BOD066 both ended in mineralisation and extending these holes with a diamond core tail is in progress.**

Alkane Resources Limited (ASX: ALK) announces intersection of further high-grade mineralisation at the Company's Boda Prospect in Central New South Wales. Boda is a landmark porphyry gold-copper system, within the Northern Molong Porphyry Project, which the Company believes has the potential to be a large, tier one gold-copper project.

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

Alkane Managing Director, Nic Earner, said: *"These drill results show the extension of the high-grade system to the north west of Boda.*

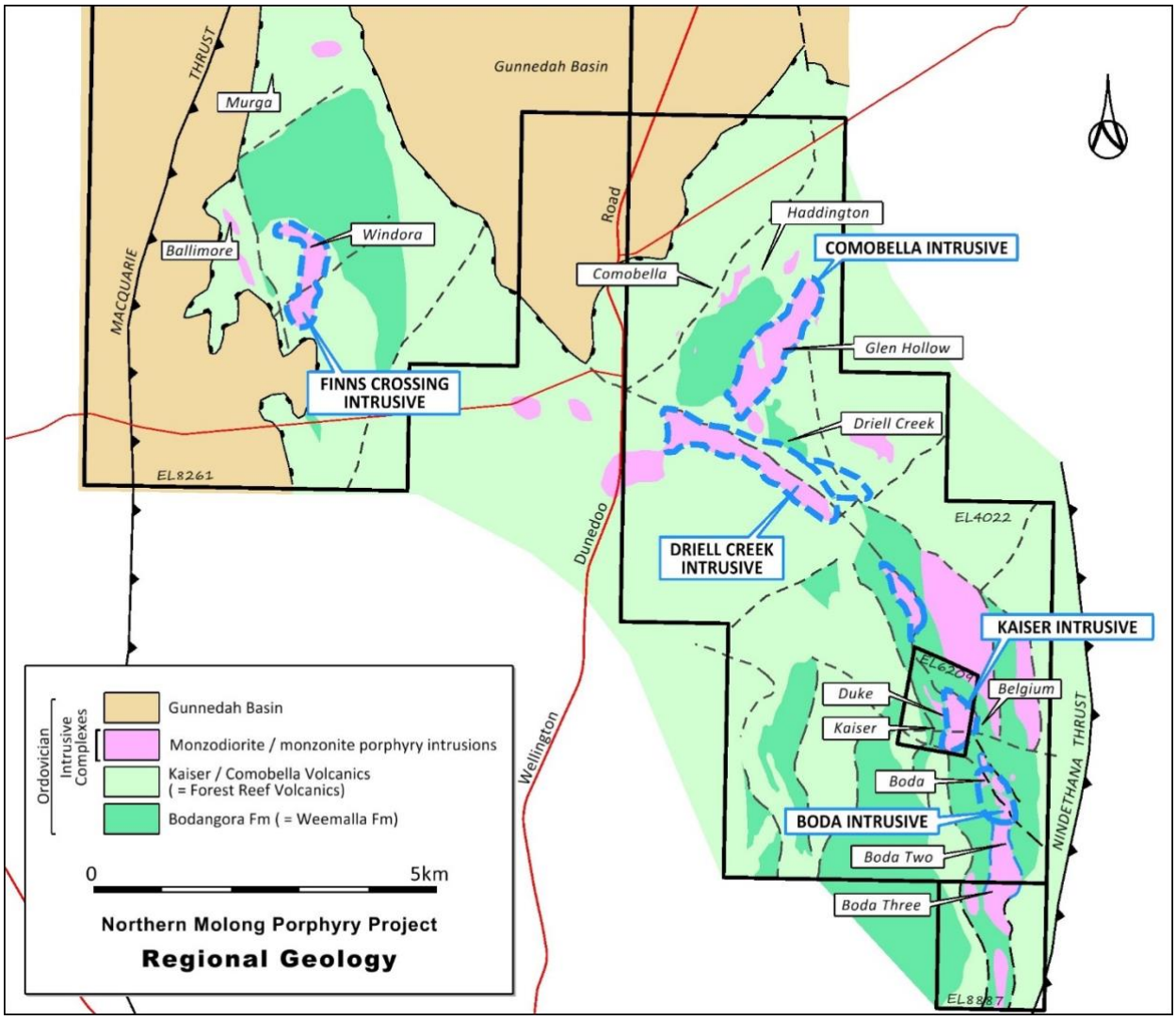
"With the gold-copper mineralisation at Korridor appearing to connect Kaiser to Boda, we're looking at a system over 3km in length.

"We look forward to bringing shareholders more results as well as our initial resource model in the coming quarter."

Northern Molong Porphyry Project (NMPP)

Alkane Resources Ltd 100%

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



Exploration in the NMPP has identified five discrete magnetic/intrusive complexes – Kaiser, Boda, Comobella, Driell Creek and Finns Crossing – within a 15km northwest trending corridor. The corridor is defined by intermediate intrusives, lavas and breccias, extensive alteration and widespread, low-grade, gold-copper mineralisation.

A major RC and diamond core drilling program commenced in July 2020 and was designed to test the dimensions and extensions to the large low-grade mineralised envelope as well as any internal high-grade zones at Boda. In addition, the drilling is testing other known gold-copper mineralisation occurrences and co-incident IP anomalies within the 15km monzonite intrusive corridor that extends from Boda Three to Finns Crossing.

Assays were received from the current drilling program testing Boda, Boda Two/Three, Korridor and other regional targets comprising of 11 RC drill holes and 7 diamond core holes for a total of 10,129 metres.

Note: Due to potential overlap of hole designators a new system has been adopted:

Holes (RC and core) at Boda are defined by BOD

Holes (RC and core) at Kaiser are defined by KAI

Boda Prospect

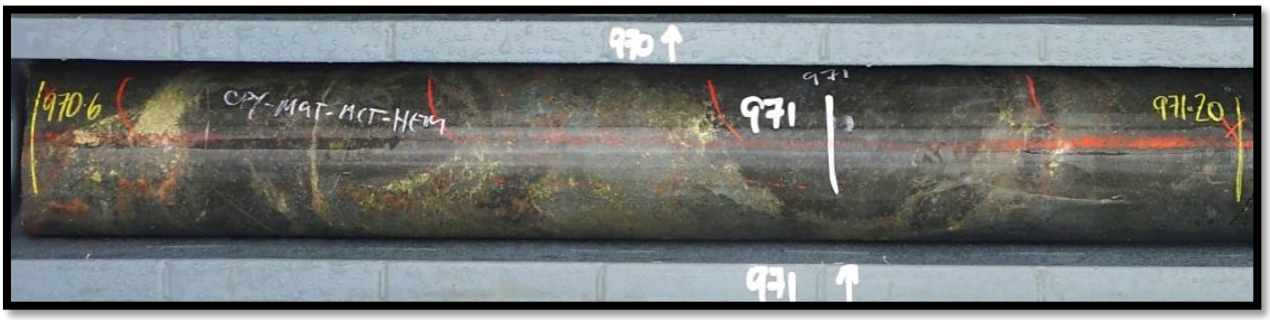
The Boda gold-copper porphyry system is a series of near vertical, northwest striking, intrusive related breccias hosted within a thick sequence of shallowly east dipping andesite lavas. These magmatic breccias tend to hydrothermal in nature with a matrix comprising of calcite-quartz ± actinolite ± magnetite ± chalcopyrite ± pyrite (Boda discovery hole KSDD003 - 502m @ 0.48g/t Au, 0.20% Cu from 211 metres; *ASX Announcement 9 September 2019*) zoning to higher gold-copper grades when associated with a chalcopyrite ± pyrite dominant cement (KSDD007 - 96.8m grading 3.97g/t Au, 1.52% Cu from 768 metres; *ASX Announcement 23 March 2020*).

Drilling has indicated that the northeast shoulder of the Boda gold-copper mineralisation has a shallow blanket of phyllic gold only mineralisation associated strong sericite alteration, abundant pyrite and with occasional colloform quartz-carbonate veining suggestive of shallow level epithermal gold emplacement. The phyllic gold mineralisation often includes very high gold grades, as announced in Table 1 in the 1 metre re-split assays recently received for the pre-collar of BOD055 (1m grading 9.18g/t Au from 258m). Truncating the breccias are late-mineral monzonite vertical intrusives associated with shallowly dipping quartz + chalcopyrite veining and post-mineral vertical dolerite and dacitic dykes.

Drilling continues to focus on testing the northwest trending mineralisation at Boda with 50 metre spaced southwest orientated drilling traverses with nominal 100m spaced drill holes. Assays were received for six drill holes comprising of one RC pre-collar (BOD057), 1m re-splits for the previously announced pre-collar BOD055 (*ASX Announcement 22 October 2021*) and its diamond core tail, and four diamond core drill holes for a total of 5,249 metres. Significant intercepts from the drilling include:

BOD058	20m grading 0.44g/t Au, 0.08% Cu from 310m
incl	1m grading 2.88g/t Au, 0.35% Cu from 325m
and	268m grading 0.32g/t Au, 0.13% Cu from 400m
incl	6m grading 1.45g/t Au, 0.33% Cu from 494m
also	31m grading 0.59g/t Au, 0.28% Cu from 518m
and	54m grading 0.30g/t Au, 0.22% Cu from 935m
incl	5m grading 0.73g/t Au, 0.64% Cu from 973m
BOD059	906.7m grading 0.45g/t Au, 0.18% Cu from 309m
incl	219m grading 0.28g/t Au from 309m (gold only flanking mineralisation)
also	672.7m grading 0.51g/t Au, 0.23% Cu from 543m
incl	115m grading 1.98g/t Au, 0.53% Cu from 864m
incl	2.8m grading 13.0g/t Au, 1.59% Cu from 901.5m
also	33m grading 4.06g/t Au, 1.29% Cu from 946m
incl	6m grading 11.2g/t Au, 1.81% Cu from 968m
KSDD043	927m grading 0.31g/t Au, 0.16% Cu from 159m
incl	157m grading 0.31g/t Au from 159m
also	754m grading 0.31g/t Au, 0.19% Cu from 332m
incl	74.7m grading 0.92g/t Au, 0.36% Cu from 680m
incl	12m grading 3.01g/t Au, 0.65% Cu from 732m
also	38m grading 0.60g/t Au, 0.79% Cu from 875m
incl	9m grading 1.04g/t Au, 1.40% Cu from 839m
also	6m grading 1.26g/t Au, 0.12% Cu from 1080m
KSDD044	39m grading 0.20g/t Au, 0.07% Cu from 84m
and	302m grading 0.38g/t Au, 0.14% Cu from 212m
incl	60m grading 0.84g/t Au, 0.34% Cu from 298m
incl	25m grading 1.31g/t Au, 0.50% Cu from 314m
and	141m grading 0.23g/t Au, 0.16% Cu from 723m

At least four mineralised intrusive breccias are identified central to the Boda system that remains open along strike to the northwest to the Korridor and Kaiser prospects. As demonstrated by BOD059 these breccias can zone to significantly high gold-copper grades when associated with strongly oxidised fluids.



BOD059 – 0.6m grading 24.2g/t Au, 3.69% Cu from 970.6m – Chalcopyrite-actinolite-magnetite-hematite dusted albite hydrothermal breccia

The current program continues to improve confidence for a maiden resource estimation and the drill hole grid sequence is extended by a further two drill traverses to the northwest. The Boda maiden resource estimation is expected in March 2022.

Korridor Prospect

The Boda and Kaiser prospects are positioned within a northwest trending structural zone similar to the Lachlan Transverse Zone (host to greater than 5km of porphyry related mineralisation at Cadia porphyry gold-copper district). The Boda-Kaiser structural zone was first identified in the detailed magnetics and confirmed by the mineralisation orientations defined at Boda and Kaiser. These two prospects are approximately 800m apart and this area, named the Korridor Prospect, is largely untested by drilling. Two traverses of drill holes approximately 200 metres apart comprising of a total of 10 RC drill holes were planned. Eight RC drill holes for a total of 1,732 metres were completed and assay results received confirm continuous gold-copper porphyry mineralisation between the Boda and Kaiser prospects. The two easternmost collared drill holes returned significant intercepts of:

BOD065	64m grading 0.43g/t Au, 0.12% Cu from 174m to end of hole
incl	8m grading 1.42g/t Au, 0.28% Cu from 205m
BOD066	226m grading 0.25g/t Au, 0.10% Cu from 12m to end of hole
incl	6m grading 1.06g/t Au, 0.30% Cu from 114m
also	6m grading 1.58g/t Au, 0.11% Cu from 189m

Both RC drill holes ended in significant gold-copper mineralisation of similar grades commonly observed at both Boda and Kaiser prospects. The mineralisation is characterised by strong calc-potassic alteration with abundant biotite and sulphides dominated by pyrite with lesser chalcopyrite. These two drill holes are being diamond tailed and assay results are expected in February 2022. The remaining two RC drill holes planned are northwest and along strike of BOD065 and BOD066 and remain scheduled for completion in January 2022.

Electrical geophysics (IP) and magnetotellurics (MT) are planned over the area northwest of Kaiser within a 5km section of the northwest structural corridor that includes the Driell Creek Magnetic Complex for the purpose of delineating further mineralising intrusive centres. The surveying is expected to be completed by the first quarter of 2022.

Boda Two and Boda Three Prospects

Boda Two and Boda Three prospects are defined by coincident high magnetic and gold - copper soil anomalies combined for an estimated 1,100 metre x 500 metre footprint. An electrical geophysics survey (3D-IP) identified a strongly conductive target at the Boda Two prospect and a smaller, separate conductive feature at Boda Three (ASX Announcement 19 May 2020). The Boda Two anomaly was drill tested with KSDD022 intersecting strong pyrite mineralisation with impressive gold grades of 292m @ 0.66g/t Au from 867 metres (*ASX Announcement 11 November 2020*). The drilling to date at Boda Two and Boda Three is conducted on west orientated drilling traverses spaced 100 metres apart with broad drill hole spacing ranging between 150 – 300m. The drilling has identified extensive and continuous zones of low-grade gold-copper porphyry mineralisation with internal high-grade zones associated with weakly developed hydrothermal breccias of magnetite ± pyrite ± chalcopyrite.

Assay results from the Boda Two/Three prospect areas were received for two diamond core drill holes for a total of 2,432 metres. Significant drilling intercepts include:

KSDD048	42m grading 0.40g/t Au, 0.21% Cu from 179m
incl	6m grading 1.67g/t Au, 0.73% Cu from 196m
and	36.4m grading 0.43g/t Au, 0.15% Cu from 280.6m
incl	1m grading 3.58g/t Au, 0.22% Cu from 313m
and	35m grading 0.17g/t Au, 0.11% Cu from 349m
and	152.3m grading 0.12g/t Au, 0.11% Cu from 399m
and	43.7m grading 0.38g/t Au, 0.21% Cu from 581m
and	20.8m grading 0.18g/t Au, 0.14% Cu from 667.2m
and	43m grading 0.41g/t Au, 0.21% Cu from 737m
and	43.7m grading 0.38g/t Au, 0.21% Cu from 581m
incl	11m grading 1.03g/t Au, 0.47% Cu from 743m
and	14m grading 0.60g/t Au, 0.21% Cu from 1300m

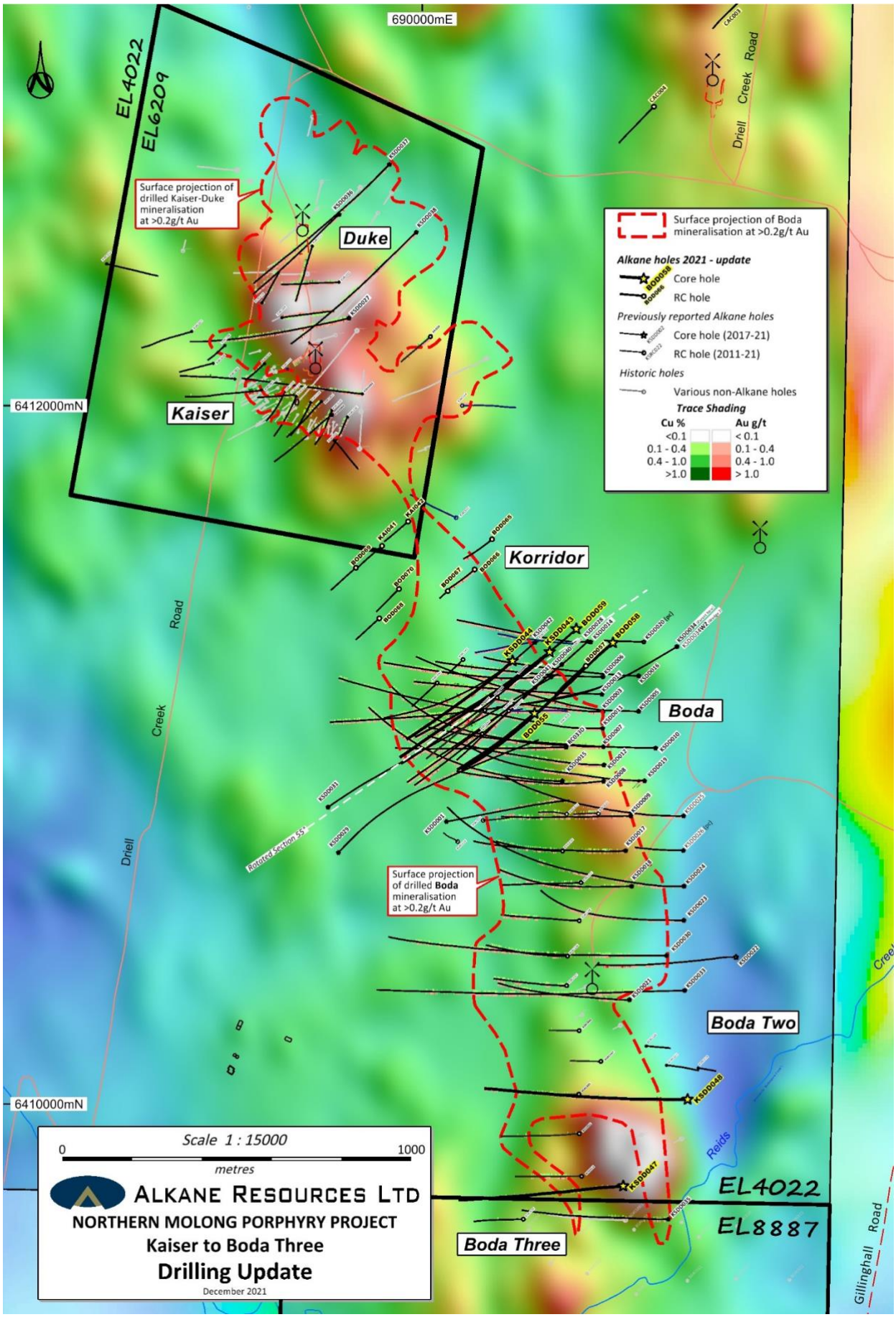
The initial phase of widely spaced drilling is near completion and shows many encouraging similarities to Boda including the existence of low-grade gold-copper mineralised breccias that may zone to high grading zones as defined at Boda. These breccias will be targeted with a second phase of drilling in the second half of 2022.

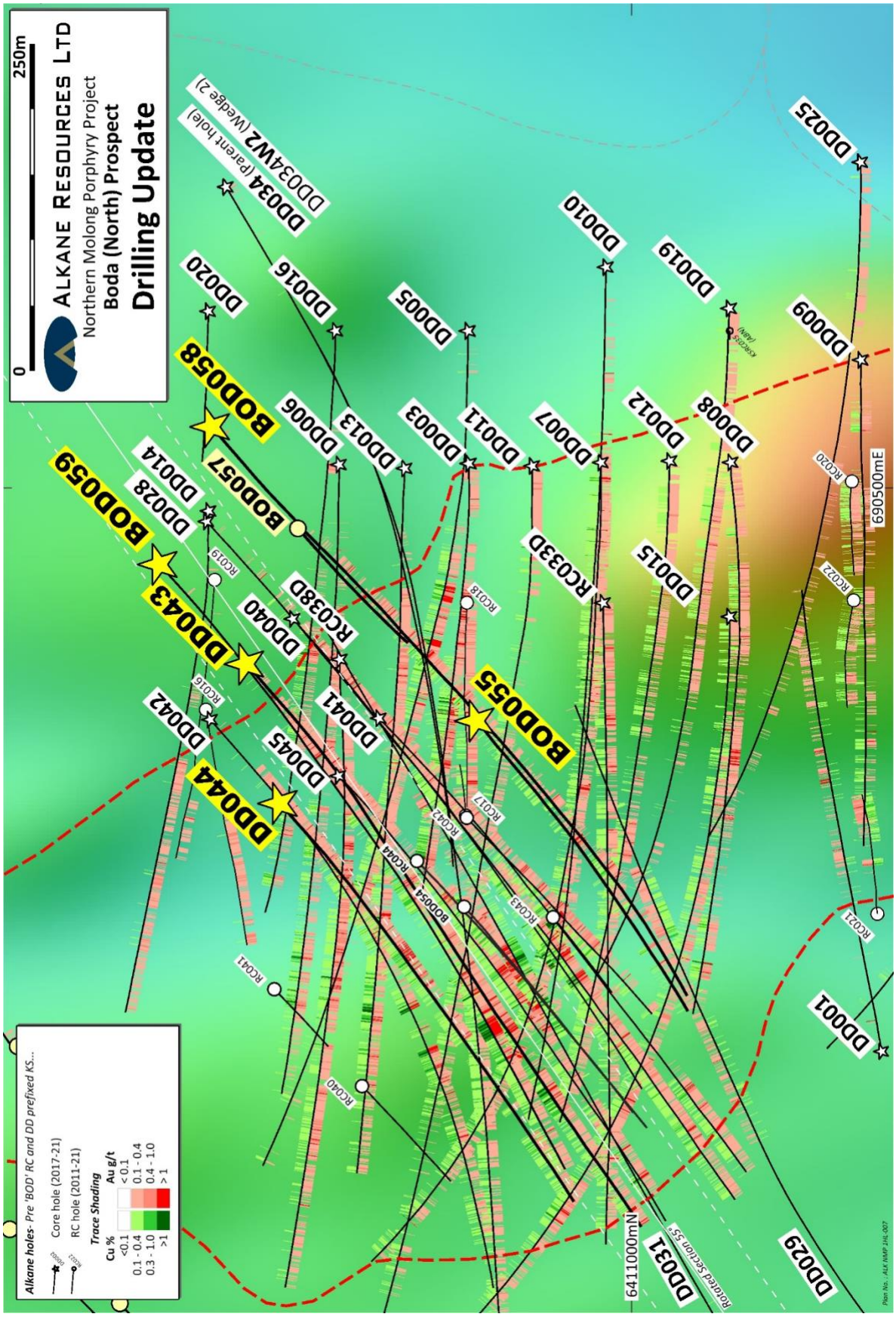
Other Regional Targets

Five strong conductive IP anomalies were generated by the 2020 IP geophysical survey (*ASX Announcement 6 May 2020*). The Duke Zone (Kaiser), Boda Two and Boda Three anomalies were drill tested, and all intersected significant gold-copper mineralisation. Two other conductive anomalies approximately 2km north of Kaiser were tested in total by four RC drill holes (CAC001 and CAC002 were previously announced - *ASX Announcement 22 October 2021*). All four drill holes intersected distal propylitic alteration hosted in andesitic lavas with little mineralisation.

Planned Exploration Programs

The Kaiser Prospect and its Duke Zone is estimated from drilling to be approximately 250m wide and striking over 800m. 13,000 metres of RC drilling using a nominal 100m x 100m drill hole grid sequence to a 300m vertical depth is planned for drilling in January 2022 to estimate a shallow resource at Kaiser. Other exploration is focused on delineating additional intrusive and mineralising centres within the 15km long northwest corridor from Boda Three to Finns Crossing. Regional work includes IP, MT and district scale soil sampling surveys are being initiated for early 2022. The results from the trial downhole EM at Boda, although weak in response, were encouraging and further trialling is planned for the first quarter of 2022.





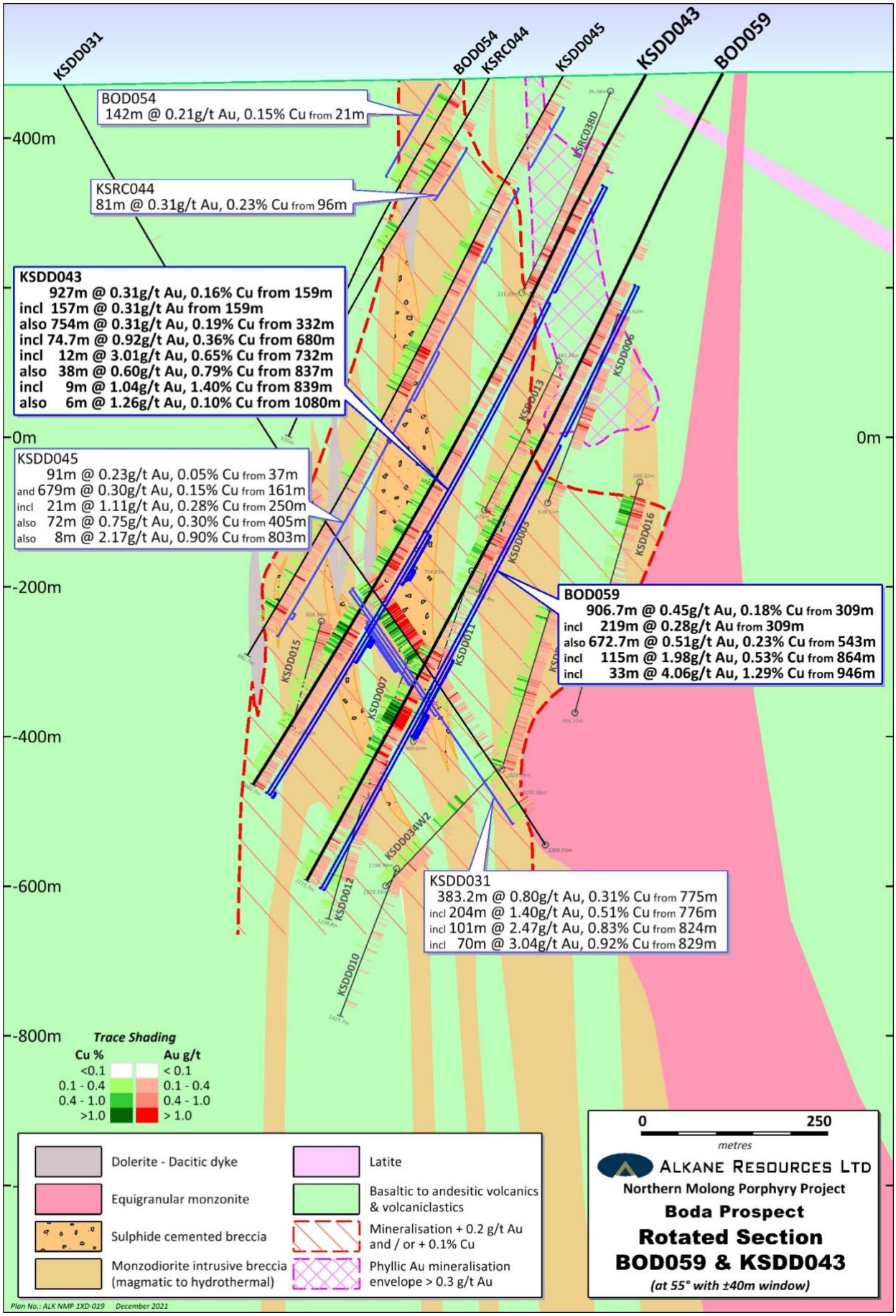


Table 1 – Boda Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
BOD055	690322	6411121	486	-61	228	660.8	10	11	1	0.69	0.14
and							22	24	2	0.20	0.15
and							26	29	3	0.20	-
and							36	38	2	0.16	0.11
and							45	68	23	0.11	0.10
and							103	105	2	0.21	0.20
and							109	161	52	0.15	0.12
and							201	209	8	0.14	0.13
and							214	219	5	0.26	0.22
and							230	275	45	0.80	-
incl							258	259	1	9.18	-
and							331	345	14	0.26	0.08
and							364.5	415	50.5	0.17	0.11
and							421	423	2	0.22	0.14
and							506	515	9	0.52	0.41
and							549	558.6	9.6	0.38	0.15
incl							549	552	3	0.79	0.34
and							639	655	16	0.17	0.10
BOD057	690469	6411119	488	-62	229	250*	132	133	1	1.16	0.06
and							191	201	10	0.27	-
and							223	231	8	0.54	-
and							244	250*	6	0.60	0.07
BOD058	690547	6411321	490	-61	229	1170.7	21	24	3	0.48	-
and							191	201	10	0.27	-
and							310	330	20	0.44	0.08
incl							325	326	1	2.88	0.35
and							377	379	2	0.40	0.18
and							400	668	268	0.32	0.13
incl							494	500	6	1.45	0.33
also							518	549	31	0.59	0.28
also							608	620	12	0.58	0.26
and							713	720	7	0.14	0.13
and							831	849	18	0.29	0.16
and							895	897	2	0.33	0.21
and							935	989	54	0.30	0.22
incl							968	973	5	0.73	0.64
and							1025	1035	10	0.06	0.12
and							1048.7	1053.3	4.6	0.56	0.05
and							1058	1062	4	0.29	-
and							1109	1113	4	0.23	-
BOD059	690442	6411361	487	-62	228	1215.7	266	268	2	0.25	0.09
and							309	1215.7	906.7	0.45	0.18
incl							309	528	219	0.28	-
also							543	1215.7	672.7	0.51	0.23
incl							864	979	115	1.98	0.53
incl							901.5	904.3	2.8	13.0	1.59
also							946	979	33	4.06	1.29
incl							968	974	6	11.2	1.81

Table 1 – Boda Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
KSDD043	690365	6411295	485	-61	225	1086.7	159	1086	927	0.31	0.16
incl							159	316	157	0.31	-
also							332	1086	754	0.31	0.19
incl							680	754.7	74.7	0.92	0.36
incl							732	744	12	3.01	0.65
also							837	875	38	0.60	0.79
incl							839	848	9	1.04	1.40
also							1080	1086	6	1.26	0.10
KSDD044	690259	6411269	482	-62	227	864.6	21	23	2	0.22	0.12
and							53	65	12	0.30	-
and							79	81	2	0.24	0.10
and							84	123	39	0.20	0.07
and							146	150	4	0.24	0.05
and							212	514	302	0.38	0.14
incl							298	358	60	0.84	0.34
incl							314	339	25	1.31	0.50
and							658	670	12	0.16	0.13
and							723	864	141	0.23	0.16
incl							735	756	21	0.44	0.35

* pre-collar RC hole ended in mineralisation.

Gold and copper intercepts are calculated using a lower cut of 0.1g/t Au and 0.05% Cu respectively. Internal dilution (< cut off) is less than 15% of reported intercepts. True widths are estimated as approximately 50% of intersected width.

Table 2 – Boda Two/Three Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
KSDD047	690576	6409765	472	-65	264	1113.9	197	199	2	0.21	0.22
and							295	298	3	0.51	0.05
and							325	334	9	0.34	0.15
incl							332	334	2	0.96	0.28
and							336	337	1	0.24	0.20
and							365	369	4	0.40	0.20
and							424	441	17	0.09	0.13
and							445	475	30	0.10	0.13
and							503	506	3	0.08	0.11
and							698	700	2	0.09	0.12
and							765	767	2	0.12	0.16
and							820	825	5	0.10	0.15
and							841	848	7	0.08	0.12
and							913	915	2	0.43	0.15
and							1030	1042	12	0.16	0.18
incl							1040	1041	1	0.63	0.69
and							1050	1051	1	0.30	0.15
and							1097	1099	2	0.14	0.12
KSDD048	690760	6410013	466	-66	268	1317.9	94	97	3	0.30	0.15
and							131	135	4	0.36	0.24
and							179	221	42	0.40	0.21
incl							196	202	6	1.67	0.73
and							234	243	9	0.15	0.10

Table 2 – Boda Two/Three Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
and							257	259	2	0.26	0.19
and							280.6	317	36.4	0.43	0.15
incl							313	314	1	3.58	0.22
and							330	333	3	0.20	0.11
and							349	384	35	0.17	0.11
incl							372	377	5	0.49	0.23
and							399	551.3	152.3	0.12	0.11
and							581	624.7	43.7	0.38	0.21
and							667.2	688	20.8	0.18	0.14
and							737	780	43	0.41	0.21
incl							743	754	11	1.03	0.47
and							804	807	3	0.10	0.22
and							832	842	10	0.06	0.12
and							848.3	883	34.7	0.08	0.10
and							1258	1266	8	0.25	0.13
and							1300	1314	14	0.60	0.21
incl							1305	1308	3	1.50	0.56

Gold and copper intercepts are calculated using a lower cut of 0.1g/t Au and 0.05% Cu respectively. Internal dilution (< cut off) is less than 20% of reported intercepts. True widths are estimated as approximately 50% of intersected width.

Table 3 – Korridor Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
BOD065	690200	6411618	478	-65	228	238*	174	238*	64	0.43	0.12
incl							205	213	8	1.42	0.28
BOD066	690150	6411531	477	-65	230	238*	12	238*	226	0.25	0.10
incl							114	120	6	1.06	0.30
also							189	195	6	1.58	0.11
BOD067	690073	6411469	476	-65	228	76	57	63	6	0.05	0.13
BOD068	689877	6411391	477	-65	228	238	210	213	3	0.34	0.05
BOD069	689810	6411536	482	-65	228	238	*No significant results*				
BOD070	689934	6411475	478	-64	226	238	*No significant results*				
KAI041	689885	6411598	482	-64	229	238	124	126	2	0.10	0.10
KAI042	689959	6411668	482	-65	228	228	*No significant results*				

* pre-collar RC hole ended in mineralisation.

Gold and copper intercepts are calculated using a lower cut of 0.1g/t Au and 0.05% Cu respectively. Internal dilution (< cut off) is less than 5% of reported intercepts. True widths are estimated as approximately 50% of intersected width.

Table 4 – Regional Drilling Significant Results – December 2021 (>0.2g/t Au and/or >0.1% Cu)											
Hole ID	**Easting (MGA)**	**Northing (MGA)**	**RL**	**Dip**	**Azimuth (Grid)**	**Total Depth**	**Interval From (m)**	**Interval To (m)**	**Intercept (m)**	**Au (g/t)**	**Cu (%)**
CAC003	690924	6413174	493	-65	225	358	336	342	6	-	0.22
CAC004	690664	6412857	504	-66	225	358	*No significant results*				

Gold and copper intercepts are calculated using a lower cut of 0.1g/t Au and 0.05% Cu respectively.
Internal dilution (< cut off) is less than 1% of reported intercepts. True widths are estimated as approximately 50% of intersected width.

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 NSW) 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 informa tion or data that materially affects the information included in the original announcements and that the form and context in which the Competent Person's findings are presented have not been materially altered.

Disclaimer

This report contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

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

ABOUT ALKANE - www.alkane.com.au - ASX: ALK

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

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

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

Alkane's exploration success includes the landmark porphyry gold-copper mineralisation discovery at Boda in 2019. With a major drill program ongoing at Boda, Alkane is confident of further consolidating Central West New South Wales' reputation as a significant gold production region.

Alkane's gold interests extend throughout Australia, with strategic investments in other gold exploration and aspiring mining companies, including ~12.7% of Genesis Minerals (ASX: GMD) and ~9.7% 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 – December 2021

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 3m) 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 (~20-30kg) 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 strong mineralisation is observed by the site geologist this is sampled as a final 1m interval instead. The 1m intervals forming composite samples assaying ≥0.10 g/t Au or ≥0.10 % Cu are re-split using a cone splitter on the rig into a separate calico at the time of drilling and re-submitted to the laboratory for re-assay.* • *Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish* • *A multi-element suite was determined using a multi-acid digest with a ICP Atomic Emission Spectrometry or ICP Mass Spectrometry analytical finish.*
Drilling techniques	• *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. The wedge holes were 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 samples.*	• *Sample quality is qualitatively logged* • *Core drilling completed using HQ triple tube where possible to maximise core recovery.* • *A high capacity RC rig was used to enable dry samples collected. Drill cyclone is cleaned between rod changes and after each hole to minimise cross-hole contamination.*
	• *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*
	• *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 strong 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.* • *Other geochemical elements, samples are digested by near-total mixed acid digest with each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. RC samples that are re-split are digested by aqua regia with a ICP Atomic Emission Spectrometry for Cu only*
	• *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 at this early stage of exploration*
	• *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 drill spacing is on nominal 100m x 50m grid. For all other prospects too early an exploration stage, and the data spacing is variable with focus on identifying new zones of mineralisation.*
	• *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 strong 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 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*
	• *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
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 four licences (EL4022, EL6209, EL8261 and EL8887) in the Northern Molong Porphyry Project are owned 100% by Alkane.*
	• *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 2023. EL8887 expires on 6 February 2026. EL8261 expires on 30 April 2023.*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *Significant historical drilling activity has been conducted within the bounds of EL4022.* *BODA PROSPECT: CRA Exploration/Rio Tinto completed a small IP survey and several reconnaissance RC holes in the Boda Prospect area in 1995. The results identified sporadic, shallow low-grade intervals of gold mineralisation hosted within a sequence of monzonites, diorites and intermediate volcanics. Sampling was performed by collecting spear composites from 3m drill runs, assayed by aqua regia digest and fire assay-AAS and ICP finishes.* *Amax Mining Inc/Woodsreef Mines grid sampled the residual soil profile and analysed for Cu, Pb and Zn. A coherent +250 ppm Cu soil anomaly was outlined with a strike length of over 1000m and a maximum of 1.25% Cu, in the -80-mesh sieve fraction. Grid based rock chip sampling produced up to 5.4% Cu and 42ppm Au.* *KAISER PROSPECT: Under-reporting of historical exploration drill results from the Kaiser Prospect is suggested by preliminary metallurgical test work by previous explorers and is supported by a drill hole (KSRC001) completed by Alkane. This can be partly explained by the partial digests and analogue equipment commonly used in the 1970s.* *EL6209 (Kaiser) historical records show 14 AC (170m), 78 RC (7591m) and 45 DD holes (7833m) = 15,594m.*
Geology	• *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	• *See body of announcement*

Criteria	JORC Code explanation	Commentary
	• *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 0.1g/t Au and/or 0.05% Cu 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 <20% 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*
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *It is apparent on the sections and the report descriptions that the overall geometry of the porphyry mineralisation at Boda prospect is subvertical.* *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.*
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.*	• *Recently completed downhole EM was a trial and results were not considered meaningful enough to assist interpretation. Further trialling of downhole EM is planned and any material response will be reported.*
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• *It is recommended that further drilling is undertaken at Boda and Kaiser prospects to define their resource potential. Other drilling targeting Boda Two and Three and the Korridor prospects will be undertaken within the Project. Regional exploration comprising of IP, MT and soil geochemistry surveys are also planned.*

Criteria	JORC Code explanation	Commentary
	• *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.*