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ASX and MEDIA RELEASE

9 September 2019

ALKANE RESOURCES LTD
ABN 35 000 689 216

Discovery of Significant Porphyry Gold-Copper Mineralisation at Boda Prospect within Northern Molong Porphyry Project (NSW)

- **Boda Prospect tested with one diamond core drill hole (KSDD003) 200 metres beneath a zone of gold mineralisation previously defined in RC drilling (311m @ 0.28g/t Au from 19m to EOH in KSRC018). KSDD003 assay results indicate an increase in thickness and grade of porphyry gold-copper mineralisation at depth. Drill intercept highlights include:**

KSDD003	**502m @ 0.48g/t gold, 0.20% copper from 211 metres**
incl	**313m @ 0.62g/t gold, 0.17% copper from 228 metres**
incl	**12m @ 3.28g/t gold, 0.67% copper from 419 metres**
and	**35.8m @ 0.21g/t gold, 0.49% copper from 735 metres to EOH**

- **Kaiser Prospect assays confirm strong gold-copper porphyry mineralisation 200 meters southeast of the small near surface Kaiser deposit. Drill intercept highlights include:**

KSRC027	**40m @ 1.30g/t gold, 0.22% copper from 0 metres**
incl	**10m @ 2.86g/t gold, 0.36% copper from 0 metres**
also	**2m @ 3.24g/t gold, 0.26% copper from 25 metres**
KSRC029	**32m @ 0.53g/t gold, 0.27% copper from 2 metres**
incl	**11m @ 1.09g/t gold, 0.40% copper from 9 metres**

- **Boda and Kaiser Prospects are part of the Northern Molong Porphyry Project (NMPP) which incorporates exploration licences covering an area of 110km^2 of the northern Molong Volcanic Belt (MVB), in the Central West of New South Wales. The northern MVB, within the eastern Lachlan Orogen is considered highly prospective for large porphyry gold-copper mineralisation, as demonstrated by the world class Cadia Valley porphyry district, located to the south.**

Alkane Resources' (ASX:ALK) Managing Director, Nic Earner, said: "These drill results suggest a significant and exciting discovery in a region that has a history of delivering large, low-grade and long-life gold-copper mines. The project area has already delivered some strong indications of a big porphyry system near surface at Kaiser and, along with the results from this diamond drill hole at Boda, we can see clear evidence of Cadia-style mineralisation and grade over hundreds of metres. Alkane is immediately prioritizing follow up drilling, seeking to determine the scale of this highly encouraging discovery".

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Northern Molong Porphyry Project (NMPP)

Alkane Resources Ltd 100%

The Northern Molong Porphyry Project (NMPP) incorporates three exploration licences; Bodangora (EL 4022), Kaiser (EL 6209) and Finns Crossing (EL 8361), covering an area of 110km^2 of the northern Molong Volcanic Belt (MVB), in the Central West of New South Wales.

The NMPP is located close to the major regional centres of Dubbo and Orange, which together with Parkes service several major mines in the district including Alkane's own Tomingley Gold Operations. In addition, the NMPP is close to road, rail, power, gas and water infrastructure.

The northern MVB, within the eastern Lachlan Orogen is considered highly prospective for large porphyry gold-copper mineralisation, as demonstrated by the presence of the world class Cadia Valley porphyry district located 110km to the south (~49Moz Au; Newcrest website).

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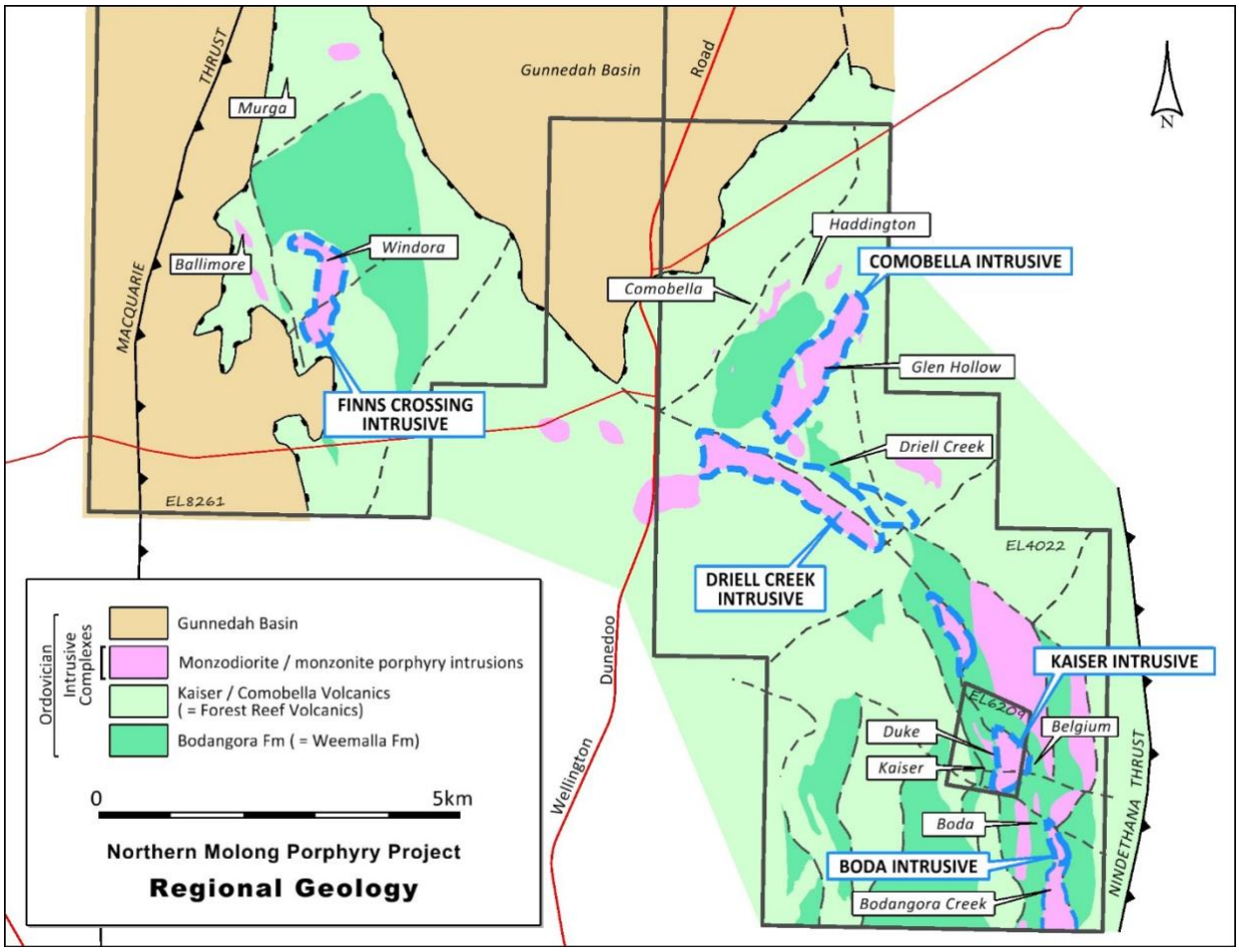
Alkane's exploration activity has established a geological framework for the region which highlights strong similarities with the Cadia district. Although structurally more complex than the Cadia Valley area, Alkane has been able to reconstruct the geology in the area and has shown that a stratigraphic sequence very similar to that at Cadia exists within the project area, and that mineralisation is hosted by very similar rock types at very similar stratigraphic positions.

Exploration in the NMPP has demonstrated the margins of major intrusive complexes provide a primary control for porphyry and epithermal mineralisation, with significant intersections being reported along the western margin of the Kaiser Magnetic Complex and from the Boda Target at the western margin of the Boda Magnetic Complex.

Five discrete magnetic/intrusive complexes have been identified to date – Kaiser, Boda, Comobella, Driell Creek and Finns Crossing – within a 15km northwest trending corridor. Recent drilling targeted areas adjacent to four of these complexes – Kaiser, Boda, Comobella and Finns Crossing (Murga Prospect) – with significant mineralisation intersected at the Boda, Kaiser and Glen Hollow prospects.



The Kaiser-Boda target zone has been mapped over a north-south strike length of 5km and 1km wide corridor defined by monzonite intrusives, extensive alteration and widespread low grade gold-copper mineralisation.

The exploration results detailed below have been prepared and reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

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Boda Prospect

A single diamond drill hole (KSDD003, 770.8m) was drilled to test the depth extent of gold mineralisation identified in RC drilling (311m @ 0.28g/t Au from 19m to EOH in KSRC018; ASX Announcement 6 May 2016) at the northern end of the Boda Intrusive Complex (BIC). Drill hole KSDD003 intersected a thick zone of gold-rich pyritic stringers from the top of hole vectoring down hole to a gold-rich chalcopyrite dominant core with chalcopyrite forming as disseminated blebs and in quartz veins. Two monzonite porphyries were intersected in the first 200m downhole intruding into more primitive volcaniclastics and lavas that host the majority of the potassic alteration.

The zonation of a pyrite shell towards a chalcopyrite dominant core is characteristic of the upper parts of an alkalic porphyry mineralisation system. Lithogeochemistry conducted on the drill samples in the area is also supportive, displaying a zonation pattern of outer propylitic and sodic alteration from the top of hole vectoring to a copper rich outer calc-potassic core (biotite + chlorite + chalcopyrite ± kspar ± magnetite ± bornite mineral assemblage). The style of alteration and mineralisation has several apparent similarities with the upper sections of the Cadia East Deposit (2,900Mt @ 0.36g/t gold, 0.26% Cu, Newcrest global resource Annual Report 2018). KSDD003 returned significant gold-copper porphyry mineralisation intercepts of:

KSDD003	502m @ 0.48g/t gold, 0.20% copper from 211m
incl	313m @ 0.62g/t gold, 0.17% copper from 228m
incl	108m @ 1.06g/t gold, 0.41% copper from 408m
incl	12m @ 3.28g/t gold, 0.67% copper from 419m
and	35.8m @ 0.21g/t gold, 0.49% copper from 735ms to EOH

The calc-potassic alteration is associated with magnetite, and a weak magnetic anomaly is observed in the ground magnetics over a strike length of 300m trending north-northwest from the strongly magnetic BIC. An Induced Polarisation (IP) survey previously completed over the BIC exhibits a strong high chargeable anomaly along the northern edge of the survey area coincident with the magnetic anomaly at the Boda Prospect. Extending the IP survey area north over this section of the Boda Prospect towards the Kaiser Prospect is a high priority. The Boda mineralisation is open at depth and along strike and a possible inner calc-potassic bornite rich core is untested.

Kaiser Prospect

Five RC drill holes and a single diamond drill hole for a total of 1,557 metres, were drilled to test an apparent east-west trending cross structure transecting the north-south trending Kaiser mineralisation at its southern extent. The holes are located approximately 1.5km northwest of the collar of KSDD003 and the drilling returned intercepts of significant porphyry style mineralisation, including:

KSRC027	40m @ 1.30g/t gold, 0.22% copper from 0m
incl	10m @ 2.86g/t gold, 0.36% copper from 0m
also	2m @ 3.24g/t gold, 0.26% copper from 25m
and	14m @ 0.29g/t gold, 0.41% copper from 136m
incl	2m @ 0.79g/t gold, 0.98% copper from 140m
KSRC029	32m @ 0.53g/t gold, 0.27% copper from 2m
incl	11m @ 1.09g/t gold, 0.40% copper from 9m

The mineralisation is characterised by thin zones of fine disseminated chalcopyrite and bornite associated with minor silicification. Thin zones of potassic alteration intermixed with broader zones of sodic alteration were associated with the mineralisation. An overprinting phyllic zone assumed to be the cross-cutting Kaiser Fault is present towards the end of hole. The alteration and mineralisation is hosted in mafic to intermediate volcanics and volcaniclastics.

3D modelling and further drilling is required to test this significant mineralisation positioned 200m southeast of the small porphyry style gold-copper deposit (no JORC classification) at Kaiser.

Glen Hollow Prospect

Two RC drill holes for a total of 438 metres were drilled to test geochemical anomalies outboard from the Comobella Intrusive Complex (CIC) located about 7km to the northwest of Kaiser. Hole COMRC045 tested down dip from mineralisation intersected by COMRC009 (45m @ 0.87g/t Au, 0.24% Cu from 50m; ASX Announcement 19 April 2011). The drilling demonstrated the continuation of the significant porphyry mineralisation dipping to the northeast, including:

COMRC045	42m @ 0.27g/t gold, 0.19% copper from 63m

A detailed review of all the NMPP data is scheduled to determine geology and alteration features identified elsewhere are being integrated to develop vectors to copper-gold mineralisation, with many targets remaining to be tested in the various intrusive complexes.

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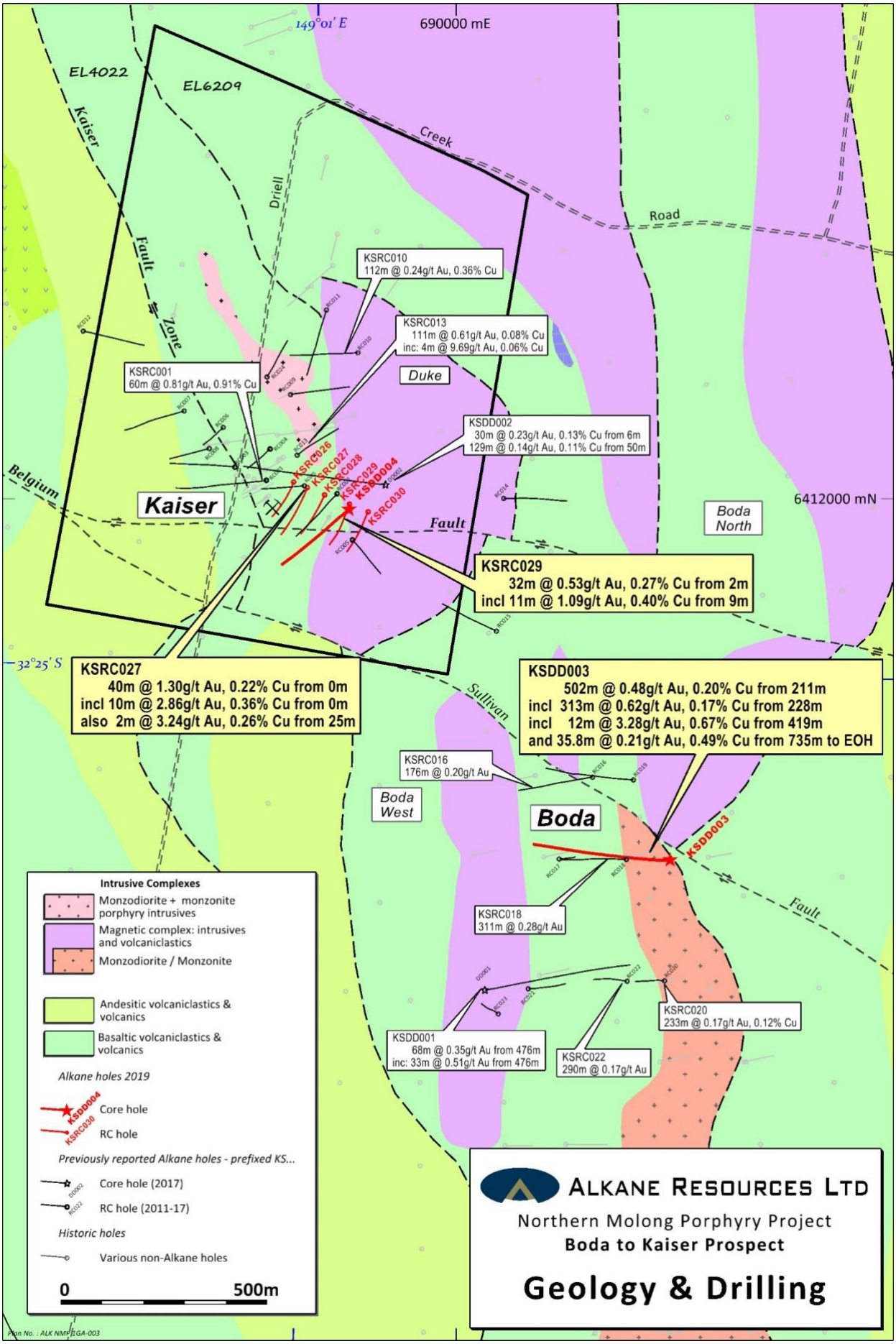

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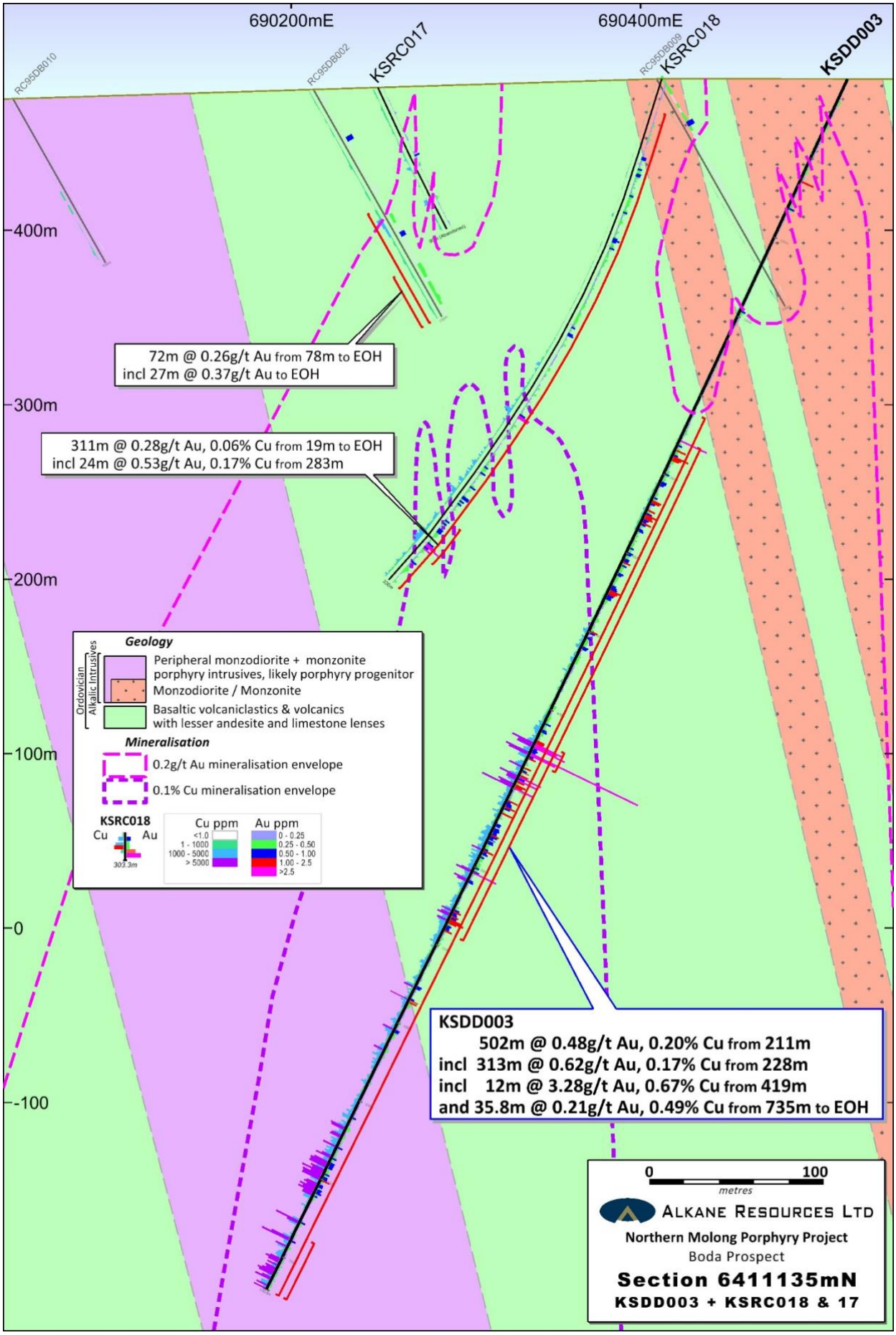

NMPP Diamond Core and RC Significant Drilling Results – 9 September 2019 (>0.1g/t Au and or 0.05% Cu)												
Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azimuth (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	Au (g/t)	Cu (%)	Prospect
KSDD003	690519	6411124		-65	270	770.8	13	89	76	0.21	-	
and							145	161	16	0.22	-	
and							169	194	25	0.15	-	
and							211	718	502	0.48	0.20	
incl							228	541	313	0.62	0.17	
incl							228	241	13	1.01	-	
also							320	329	9	0.95	-	
and							408	516	108	1.06	0.41	**BODA**
also							419	431	12	3.28	0.67	
also							457	466	9	0.91	0.21	
also							502.3	504	1.7	2.51	0.76	
also							527	536	9	1.13	0.47	
also							585	589	2	1.02	0.53	
also							689	711	22	0.56	0.78	
and							726	730	4	0.34	0.74	
and							735	770.8	35.8	0.21	0.49	
KSDD004	689740	6411974		-55	230	356.7	1.3	10	8.7	0.13	0.12	
and							15	17	2	0.10	0.15	
and							23	41	18	0.13	0.14	
and							55	64	9	0.10	0.16	
and							69	77	8	0.09	0.14	
and							83	84	1	0.13	0.39	
and							87	88	1	0.29	0.08	
and							112	114	2	0.10	0.22	
and							145	146	1	0.20	0.31	
and							192.6	193.1	0.5	0.07	0.60	
and							231	234	3	0.10	0.26	
KSRC026	689605	6412040	499	-60	202	240	0	24	24	0.28	0.16	
incl							0	9	9	0.61	0.2	
and							50	84	34	0.24	0.18	
incl							63	64	1	0.36	1.79	**KAISER**
also							72	73	1	2.65	0.11	
and							95	107	12	0.13	0.29	
and							112	116	4	0.60	0.24	
KSRC027	689639	6412027	502	-56	202	240	0	40	40	1.30	0.22	
incl							0	10	10	2.86	0.36	
also							25	27	2	3.24	0.26	
and							59	91	32	0.16	0.17	
and							102	108	6	0.39	0.26	
and							117	127	10	0.20	0.40	
incl							123	124	1	0.76	1.82	
and							136	150	14	0.29	0.41	
incl							140	142	2	0.79	0.98	
and							212	213	1	0.22	0.47	
KSRC028	689681	6412009	504	-60	202	240	3	10	7	0.34	0.11	

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NMPP Diamond Core and RC Significant Drilling Results – 9 September 2019 (>0.1g/t Au and or 0.05% 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 (%)	Prospect
and							19	24	5	0.29	0.14	
and							51	70	19	0.16	0.15	
incl							59	61	2	0.79	0.15	
and							144	165	21	0.16	0.19	
incl							150	154	4	0.48	0.30	
KSRC029	689741	6411987	503	-60	202	240	2	34	32	0.53	0.27	
incl							9	20	11	1.09	0.40	
and							38	39	1	0.29	0.29	
and							48	53	5	0.10	0.18	
and							57	62	5	0.21	0.57	
incl							60	62	2	0.42	1.22	
and							67	113	46	0.15	0.20	
KSRC030	689786	6411968	499	-60	202	240	11	45	34	0.17	0.16	
and							54	61	7	0.15	0.12	
and							69	73	4	0.13	0.12	
and							96	99	3	0.12	0.15	
and							102	123	21	0.25	0.21	
COMRC044	687041	6417713	408	-60	270	282	42	51	9	0.01	0.12	**GLEN HOLLOW**
and							198	216	18	0.02	0.12	
and							225	240	15	0.04	0.26	
and							264	267	3	0.05	0.17	
COMRC045	687507	6417491	421	-60	235	156	63	105	42	0.27	0.19	
and							120	123	3	0.18	0.17	
FCRC005	680533	6421582	350	-80	270	258	No significant assays					**MURGA**

Significant intervals, defined by >0.1g/t Au and/or 0.05% Cu, with up to 2.8% internal dilution

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Competent Person

Unless otherwise advised above, the information in this report that relates to exploration results is based on, and fairly reflects, information compiled by Mr David Meates MAIG, (Alkane Senior Exploration Geologist) 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 has provided his prior written consent 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.

The information in this report taken from the Company's ASX announcement dated 19 April 2011 was prepared and first disclosed under the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. It has not been updated since to comply with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves on the basis that the information has not materially changed since it was last reported.

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.

ABOUT ALKANE - www.alkane.com.au - ASX: ALK and OTCQX: ANLKY

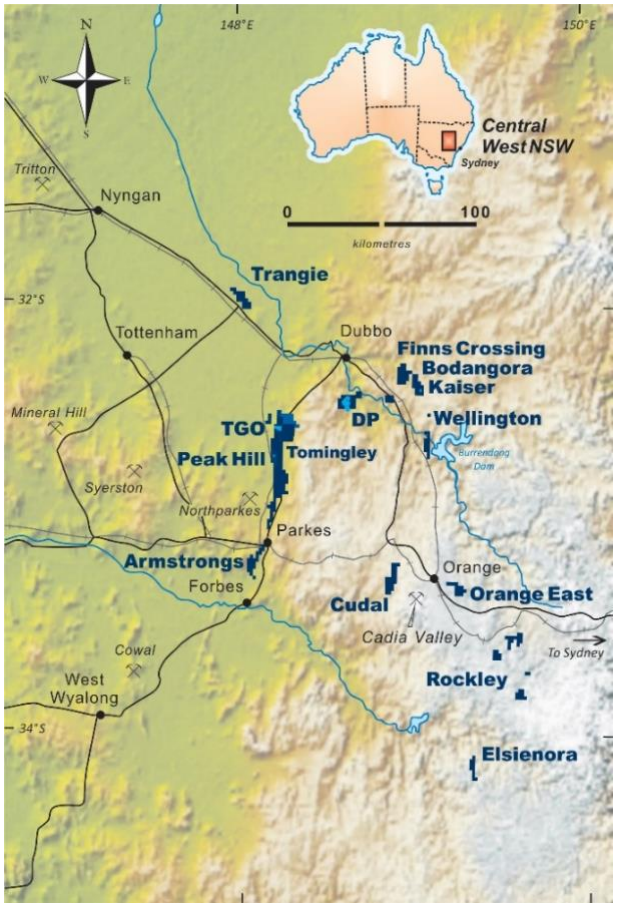
Alkane is a gold production company with a multi-commodity exploration and development portfolio. Alkane's projects are predominantly in the Central West region of NSW, but extend throughout Australia.

Alkane's gold production is from the Tomingley Gold Operations (TGO) which has been operating since early 2014. Alkane has investments in other gold exploration and development companies.

Alkane's most advanced gold exploration projects are in the 100% Alkane owned tenement area between TGO and Peak Hill and have the potential for sourcing additional ore for TGO.

Alkane has other 100% owned exploration tenements in Central Western NSW prospective for gold and copper.

Alkane's largest non-gold project is the Dubbo Project (DP), a large in-ground resource of zirconium, hafnium, niobium, yttrium and rare earth elements. As it is an advanced polymetallic project outside China, it is a potential strategic and independent supply of critical minerals for a range of sustainable technologies and future industries. It has a potential mine life of 75+ years. The DP is development ready, subject to financing, with the mineral deposit and surrounding land acquired and all major State and Federal approvals in place.



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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

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 • RC drilling was undertaken by Mitchell Services 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 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.*	• 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. The 1m intervals forming composite samples assaying ≥0.10 g/t Au or with ≥0.1% Cu are resplit 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. • 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 was sampled • Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish • A multi-element suite was determined using a four acid digest with a ICP-MS 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).*	• Triple tube diamond drilling with PQ3/HQ3 wireline bit producing 83mm diameter (PQ3) and 61.1mm diameter (PQ3) sized oriented core • Reverse circulation (RC) drilling using 110mm rods 144mm face sampling hammer.

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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 used in the oxide and saprolite zones
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Sample quality is qualitatively logged • A high capacity RC rig was used to enable dry samples collected. Drill cyclone and sample buckets are cleaned between rod changes and after each hole to minimise cross-hole contamination. • Core drilling completed using HQ triple tube to maximise core recovery
	• *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.*	• Core was laid out in core trays and 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 core geologically logged onto physical log sheets, followed by importing into Alkane's central database • All core was 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.*	• Initially each one metre interval is spear sampled with 3m composite samples collected in a calico sample 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 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.

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Criteria	JORC Code explanation	Commentary
	• *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 samples are collected for both composite intervals and re-split intervals. Duplicates generally show excellent repeatability.
	• *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
	• *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 and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Drill data is compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary
	• *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 field data entry spreadsheets for transfer and storage in an industry standard access database with verification protocols in place

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Criteria	JORC Code explanation	Commentary
		• 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 this early exploration stage, data spacing is variable with the 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*	• Early stage, reconnaissance drilling, no resource estimations being undertaken
	• *Whether sample compositing has been applied*	• 3m sample composites for RC drilling were collected as described above
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.*	• Drillholes KSDD001 and KSDD003 suggests a broadly steeply east dipping 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 at this early stage of drilling are possibly ~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 plyweave 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).

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Criteria	JORC Code explanation	Commentary
		• 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

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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.*	• Drilling completed on exploration licence numbers 4022, 6209 and 8261 which 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 2020, EL6209 on 11 March 2023 and 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 EL6209 and EL4022. • Within EL6209 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. • BODA PROSPECT: CRA Exploration/Rio Tinto completed 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.
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* ○ *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.*	• See body of announcement
	• *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.

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Criteria	JORC Code explanation	Commentary
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). • 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.*	• No metal equivalents are reported
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 is steeply east dipping, at Kaiser it is less well known and will require additional oriented core drilling to fully determine • In the case of Boda, 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.*	• Other than drilling noted above and minor geophysical data which has been used to assist interpretations, no other material exploration data is available 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).*	• It is recommended that further drilling and an extension to the IP survey area at Boda prospect be undertaken within the licences to further define the targets
	• *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.