Explanatory Notes: BKM 2019 Resource Estimate procedures, observations and outcomes; presented according to the JORC TABLE 1 checklist of the JORC Code (2012).

Compiled by Hackman and Associates Pty. Ltd., June 2019.

Project and Resource Overview

The Beruang Kanan 2019 Resource Estimate deals with the copper mineralisation for the Beruang Kanan prospect located 180 kilometers north of Palangkaraya, the capital city of Central Kalimantan (Figure A). The Beruang Kanan mineralisation is located within tenement held 100% by PT Kalimantan Surya Kancana (KSK) under the Generation 6, KSK Contract of Work. KSK is in turn 75% owned by Indokal Limited (a 100% owned subsidiary of Asiamet Resources Limited and 25% by PT Pancaran Cahaya Kahayan. PT Pancaran Cahaya Kahayan is a 99% owned subsidiary of Indokal Limited with the remaining 1% owned by Mr. Mansur Geiger (held in trust for Asiamet Resources Limited).

On 8 May 2019, the KSK license was upgraded to Production Operation Stage by the Ministry of Energy and Mineral Resources, Indonesia. The impact of this upgrade means the KSK CoW is now in the Construction Period, which is a three year time frame, which is then followed by an Operation Production period for 30 years, with extensions available thereafter. The KSK CoW is in good standing regarding meeting expenditure, social and environmental commitments.



Figure A: Location Plan KSK CoW containing the BKM Project.

KSK, through Asiamet Resources Limited publically reported the Beruang Kanan Main Zone 2017 Copper Resource Estimate on the 28th June 2017. The Beruang Kanan Main Zone (BKM) 2019 Copper Resource Estimate is an update of the BKM 2017 resource estimate and

includes an additional 62 holes drilled into the known mineralisation, confirming the mineralisation distribution and upgrading Resource confidence. The BKM Resource has not materially changed between the 2017 Estimate and 2019 Estimate.

The 2019 Estimate of mineralisation at Beruang Kanan Main Zone is based on the KSK and historic joint venture partners' drill hole logging and sample assay databases as at April 26, 2019 and the geological and structural interpretation undertaken by Mr. Stephen Hughes (KSK Independent Consultant) and Mr. Duncan Hackman of Hackman & Associates Pty Ltd (H&A). The data analysis, triangulation domaining, block modeling and grade interpolation was undertaken by Mr. Hackman. Mr. Hackman verified components of the exploration activities and mineralisation features during a site visits conducted between the 2nd and 3rd September 2014, the 21st and 28th June 2015 and the 22nd and 23rd June 2016.

The 2019 resource model covers the 1300m north-south strike extent and 800m width of the Beruang Kanan Main Zone vein style mineralized system which well defines the extent of the near surface mineralisation at BKM. Three deep holes under the main areas of near surface mineralisation have failed to intersect significant copper mineralisation; however the depth repetition of mineralisation has not been fully tested. There are indications from the structural interpretation that repeat systems at depth and proximal to the Beruang Kanan Main Zone may exist.

Copper mineralisation occurs as covellite, chalcocite, bornite and chalcopyrite replacement of pyrite alteration and less commonly in veins and fracture fill settings. The copper is of both hypogene and supergene origin. Mineralisation is hosted in both blocky fractured volcanics and sediments, and additionally in sheared and tectonically milled breccias related to thrusting mainly in the central and northern sections of the prospect. Phyllic-style alteration is pervasive throughout the prospect.

The Beruang Kanan resource model is underpinned by data from 267 Diamond Drill holes (36,857m). Modeled copper mineralisation has been intercepted in 12,800 mineralised metres from these holes. Topographic control is achieved through the use of a highly detailed LIDAR generated surface to which all drill hole collar coordinates comply. Sample data was composited to three metre lengths and flagged by domains defined by >2000ppm copper assay grades and directed by the H&A and KSK structural interpretation. Three passes of Ordinary Kriging interpolation methodology were employed to estimate grades within domains into a sub-blocked model (parent block size of 25mE x 25mN x 10mRL). High grade copper assays were included in the interpolation with limits to their area of influence applied. The Mineral Resource estimate has been classified based on data density, data quality and reliability, confidence in the geological interpretation, confidence in the copper grade modeling and interpolation and confidence in tonnage factors employed.

Fe, S, copper mineral species, soluble copper estimates and material characteristics models have been generated and included with the 2019 Resource Model.

Resource Estimate

The Beruang Kanan resource is reported between 768400mE and 769200mE, 9931400mN and 9932800mN and above 120mRL (450m vertical extent). Table A details the Beruang Kanan Main Zone Copper Mineral Resource as estimated in the 2019 resource model.

Table A:	Beruang Kanan Main Zone 2019 Copper Resource Estimate (reported on 100%
basis).	

Measured Mineral Resources (JORC, 2012)				
Reporting Cut (Cu %)	Tonnes (M)	Cu Grade (%)	Contained Copper (KT)	Contained Copper (Mlbs)
0.2	20.6	0.7	148.5	327.3
0.5	14.9	0.8	124.9	275.3
0.7	8.6	1.0	87.6	193.0
	Indicated	Mineral Reso	urces (JORC, 2012)	
Reporting Cut (Cu %)	Tonnes (M)	Cu Grade (%)	Contained Copper (KT)	Contained Copper (Mlbs)
0.2	34.1	0.6	212.6	468.8
0.5	21.4	0.8	161.3	355.6
0.7	9.5	1.0	90.6	199.7
Inferred Mineral Resources (JORC, 2012)				
Reporting Cut (Cu %)	Tonnes (M)	Cu Grade (%)	Contained Copper (KT)	Contained Copper (Mlbs)
0.2	15.0	0.6	90.8	200.3
0.5	10.0	0.7	70.3	154.9
0.7	3.8	0.9	33.5	73.8

Measured Plus Indicated Mineral Resources (JORC, 2012)				
Reporting Cut (Cu %)	Tonnes (M)	Cu Grade (%)	Contained Copper (KT)	Contained Copper (Mlbs)
0.2	54.7	0.7	361.1	796.1
0.5	36.3	0.8	286.2	630.9
0.7	18.1	1.0	178.1	392.7
Measured Plus Indicated Plus Inferred Mineral Resources (JORC, 2012)				
ivieasured	Plus Indicate	d Plus Inferred	Mineral Resources	(JORC, 2012)
Reporting Cut (Cu %)	Plus Indicate Tonnes (M)	d Plus Inferred Cu Grade (%)	Contained Copper (KT)	(JORC, 2012) Contained Copper (Mlbs)
Reporting Cut (Cu %)	Tonnes (M) 69.6	d Plus Inferred Cu Grade (%) 0.6	Contained Copper (KT) 451.9	(JORC, 2012) Contained Copper (Mlbs) 996.3
Reporting Cut (Cu %) 0.2 0.5	Tonnes (M) 69.6 46.3	d Plus Inferred Cu Grade (%) 0.6 0.8	Contained Copper (KT) 451.9 356.4	(JORC, 2012) Contained Copper (Mlbs) 996.3 785.8

Notes: The 0.2%Cu grade reporting cut approximates the mineralised domains extents. Mineral Resources for the Beruang Kanan Main Zone mineralisation have been estimated in conformity with generally accepted guidelines outlined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition). In the opinion of Duncan Hackman, the block model Resource Estimate and Resource classification reported herein are a reasonable representation of the copper Mineral Resources found in the

defined volume of the Beruang Kanan Main mineralisation. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted into Ore Reserve. Computational discrepancies in the table and the body of the Report are the result of rounding.

H&A is not aware of any current legal, political, environmental, permitting, taxation, socioeconomic, marketing or other risks that could materially affect the potential development of the Mineral Resources at BKM.

The BKM Copper Resource is currently the subject of an Ore Reserve Estimate and Feasibility Study scheduled for completion end of June 2019.

Comparison with 2017 Resource Estimate

The previous, 2017 resource estimate at BKM was reported at a 0.2% copper reporting cut as:

- Measured Resources: 20.5MT @ 0.7%Cu or 147.7KT of contained copper.
- Indicated Resources: 28.7MT @ 0.6%Cu or 174.9KT of contained copper.
- Inferred Resources: 17.7MT @ 0.6%Cu or 103.9KT of contained copper.

The 2018-19 drilling was designed to improve the confidence in deeper resources in the northern and southern areas of the mineralisation, to obtain metallurgical testwork samples and collect geotechnical data for engineering studies, thus holes were targeted within the defined body of mineralisation and hence there are only incremental updates to the 2017 model and minor-material changes to the resource estimate between 2017 and 2019. The refinement of the estimate has resulted in the increase in Measured Resources by 0.1MT an increase in Indicated Resources by 5.4MT and a reduction in Inferred Resources of 2.7MT.

Contributing Experts

Expert Person / Company	Area of Expertise and Contribution of Expert
Duncan Hackman B.App.Sc MSc.	Exploration and Resource Geologist – 33yrs
MAIG.	experience. Data validation and quality analysis,
	data evaluation, resource domaining, block
Hackman & Associates Pty. Ltd.	modelling, grade interpolation, resource
	classification and reporting.
Stephen Hughes BSc.(Hons). AIG.	Copper Gold Exploration Geologist – 24yrs
APGNS.,	<i>experience</i> . Data validation and quality assurance,
	geological and mineralisation interpretation.
Independent Consultant to PI	
Kalimantan Surya Kancana.	

Compliance with the JORC Code (2012 Edition) assessment criteria

The Beruang Kanan Main Zone Copper Resource Estimate and this statement have been undertaken and compiled in accordance with the guidelines set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition.

Duncan Hackman is a member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken to qualify as a Competent Person as defined in the JORC Code (2012 Edition).

Neither Duncan Hackman nor H&A have any material present or contingent interest in the outcomes of the Beruang Kanan Main Zone Copper Resource Estimate, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence. H&A's fee for completing this Resource Estimate is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of the professional fee is not contingent upon the outcome of the estimate.

The opinions and recommendations provided by Duncan Hackman are in response to requests of technical basis by PT Kalimantan Surya Kancana and based on data and information provided by PT Kalimantan Surya Kancana or their agents. Duncan Hackman and H&A therefore accept no liability for commercial decisions or actions resulting from any opinions or recommendations offered within.

BK Junican Hocking

Duncan Hackman B.App.Sc., MSc., MAIG Consultant Geologist Hackman & Associates Pty. Ltd.

Summary of Key points, BKM 2019 Copper Resource Estimate:

- The resource estimate applies to outcropping vein style copper mineralisation centred on 768800E, 9932400N (WGS84, UTM Zone 49S). The mineralisation has been delineated as thirty-four stacked, intersecting and adjacent domains covering a strike length of 1300m (towards 000^o), across a total width of 800m and a vertical extent of 450m. Mineralisation is centered on three areas whose lateral and vertical extents are well defined. Structural interpretation indicates potential for repeat settings to exist at depth and in laterally detached locations to Beruang Kanan.
- Covellite, chalcocite, bornite and chalocpyrite replacement and lesser vein style copper mineralisation is hosted in sheared and blocky sediments and volcanics of Cretaceous to Tertiary age. The mineralisation is located within and adjacent to an

interpreted thrust fault-coupling or ramping zone and laterally extensive normal faults. Extensive and intense phyllic-style alteration persists throughout the mineralised zone.

- 3. 329 diamond drillholes have been drilled within and around the Beruang Kanan mineralisation. 72 of these holes were drilled before May 2013 and formed the basis of the 2014 Resource Estimate. An additional 71 holes were drilled by KSK from May to September 2015, resulting in 143 holes underpinning the 2015 Resource Estimate. A further 122 holes were drilled by KSK from June 2016 to April 2017 and 62 holes from October 2017 to February 2019 and these holes along with the historic holes underpin the 2019 Resource Estimate. The mineralisation is delineated by 267 of the 329 holes, totaling 36,857m of which 12,800m have intercepted the domained mineralisation. Drilling of the deposit was undertaken in seven programmes by three separate companies; PT Kalimantan Surya Kancana (KSK), Oxiana Limited (OX) and PT Eksplorasi Nusa Jaya (ENJ). The latter two mentioned companies undertook their work in Joint Venture with KSK. Hole attitudes are mostly angled between 60^o and 70^o towards 270^o azimuth. Twenty-three holes have been drilled with easterly azimuths, six northerly, ten southerly and thirty-eight vertically. Seven twin holes have been drilled at BKM.
- 4. Pre 2015 holes were sampled at nominal 3m lengths. Drilling of mineralisation undertaken by KSK between 2015 and 2019 is sampled at nominal 1m lengths while non-mineralised core is sampled at nominal 2m lengths in 2015 and 1m lengths in the 2016-19 drilling campaigns. The Pre 2015 assays were determined from 8,029 half-PQ, half-HQ, half-NQ and half-BQ diamond core samples. The 2015 to 2019 assays were determined from 1,781 half-PQ and 20,185 half-HQ samples. 36 elements have been assayed throughout the history of the project, with 29,992 of the 29,995 assayed intervals containing copper assays and 28,943 containing Fe and S assays. 10,672 of the drill sample intervals are modeled within the mineralised domains at BKM. Copper is the only element with potentially economic grades and is accompanied by 0.5ppm to 1.0ppm silver.
- 5. Copper grades of samples from NQ/BQ core average 26% lower than those from PQ/HQ core samples. This difference is due to a base shift or systematic relative bias between the two datasets and may be related to the fundamental sampling error but most likely reflects the variation in copper grade throughout the mineralisation (PQ and HQ drilling samples shallower depths of mineralisation than NQ and BQ drilling). It is unknown if the early laboratory sample reduction methods are appropriate, where pre-2015 samples were reduced to 1kg in size at -4mm crush size. The 2015 to 2019 samples were reduced to 1kg in size at -2mm crush size. Analysis of QC data from the 2015 to 2019 period shows that splitting and reducing at -2mm particle size returns acceptable levels of precision. The comparatively uniform grade profile in the dataset suggests that any introduced sampling variance

at the crushing stage of sub-sampling in the pre-2015 samples will not materially affect confidence in the global resource estimate.

- 6. Samples were digested by mixed 3 acid-digest methods and determined by both ICP-OES and AAS instruments. Assay quality control samples included with the ENJ and KSK drill samples show that confidence can be placed in assays from these subsets of the resource data. Comparison of data population distributions between the ENJ copper assays, the 2015 KSK assays and the historic assays indicate that the earlier assays are also of acceptable reliability for estimating global resources. The assay data is considered of acceptable quality to underpin Measured, Indicated and Inferred Resources (JORC, 2012) at BKM.
- 7. Copper grade is estimated by ordinary kriging interpolation methodology. Interpolation is guided and constrained by solid TIN (triangulated) boundaries. 4,592 three metre composites inform the grade interpolation within domains. Parent cell estimates (25mEx25mNx10mRL) were written to a sub-blocked model. High grade values (>3.0%Cu) were restricted from informing block grades at greater than 50m (E and N) and 25m (RL) distance from sample locations. 87 copper composites were affected by this treatment. Fe, S, copper mineral species, soluble copper estimates and material characteristics models have been generated and included with the 2019 Resource Model.
- 8. Tonnage factors (based on 6,397 dry bulk density measurements) of 1.77g/cc, 2.25g/cc, and 2.61g/cc were stamped on selective domains within the model according to clay content and weathering characteristics. Elsewhere tonnage factors were applied by a linier regression with the Fe assays/estimate (based on 4,166 measurements), which comprise the majority of the mineralisation and all of the Measured Resources at BKM (tonnage factor averages 2.88g/cc for these Resources).
- 9. The estimate is assigned Measured, Indicated and Inferred Mineral Resource classifications under the guidelines outlined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition. Risk associated with drilling density, primary sampling reliability, certainty in geological and grade continuity, confidence in the copper grade modeling and interpolation, and confidence in tonnage factors employed are the key inputs in determining the resource classification.

Further evaluation and exploration

The Beruang Kanan Main Zone Copper Resource is now drilled at nominal 50m centres. Conditional simulation studies indicate that this drill spacing is adequate for generating robust copper grade estimates (with acceptable variance) into a 25m x 25m x 10m block model such as that employed to represent the grade distribution at BKM in the 2019 block model. H&A added an additional requirement for classifying resources, in that only those volumes of the mineralisation with proven grade and geological continuity obtained through west, east, north and south drilled holes have been considered for Measured Resources. Two significant volumes totaling 33% of the resource have proven continuity and have been classified as Measured Resources; however, two additional volumes of the mineralisation, in the north and central areas are yet to be drill tested by holes at these orientations. There is strong indication that the mineralisation in these volumes will be proven to be continuous when these holes are drilled and a further 15% of the Resource could be converted to Measured Resources with appropriately designed holes.

The central and northern areas that are yet to be drilled in multiple orientations also host significant heterogeneous material, an identified risk wrt determining a robust tonnage factor. These areas have been restricted from being classified as Measured Resources on this basis. Further drilling in the central and northern areas must include a robust investigation into the dry bulk density determination for this mineralisation.

Satellite copper mineralisation potential exists along extensions of the major structures transgressing the BKM mineralisation, particularly in the area immediately to the north between BKM and the Beruang Kanan Zinc mineralisation (located 750m north of BKM).

JORC TABLE 1 checklist of the JORC Code (2012 Edition)

This document covering the technical reporting of procedures, observations and outcomes relating to the generation of the Beruang Kanan Main Copper Resource Estimate follows the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). H&A presents these procedures, observations and outcomes as outlined in the JORC TABLE 1 checklist of the JORC Code (2012 Edition).

A list of abbreviations specific to the BKM Project Resource Estimate Explanatory Notes is included following the JORC TABLE 1 checklist report.

Criteria	Explanation
Sampling techniques	 The BKM prospect has been a focus of copper exploration in the KSK CoW for 22 years, being the subject of drilling for KSK and joint venture partners in nine distinct programmes: Prior to 2015:
	 KSK (19 holes in two programmes) and Oxiana Limited (in Joint Venture with KSK, 10 holes in one programme) undertook shallow to moderate depth exploration drilling (~600m) and identified that a near surface body of mineralization could exist at BKM, ENJ (in Joint Venture with KSK) undertook delineation drilling of this mineralization (31 holes) and in a separate programme they drilled three deep holes (>1000m) into BKM. In 2015 KSK drilled 71 holes into and peripheral to the mineralised
	zones to better define and understand the copper mineralisation at BKM.
	 In 2016-18 KSK drilled 143 holes (in two programmes) into the BKM mineralisation to confirm geological and grade continuity and to build a dataset capable of underpinning resources to be considered for Measured and Indicated classification (JORC, 2012). In 2019 KSK drilled 41 holes into the BKM mineralisation to confirm geological and grade continuity in peripheral areas of the mineralisation to expand the dataset capable of underpinning
	resources to be considered for Measured and indicated classification (JORC, 2012). The BKM mineralisation has been drilled at a nominal 50m by 50m grid
	The Billin miller ansation has been armed at a norminal som by som grid.

Sampling Techniques and Data

Criteria	Explanation
	The dominant drilling attitude is -60 degrees towards 270 degrees as dictated by logistics in drilling on a predominantly steeply easterly sloping mountain side. Check holes at alternate orientations and twin holes complete the resource dataset. All holes were drilled utilizing diamond drill rigs.
Drilling techniques	Pre-2015 holes typically started at PQ or HQ core sizes, reducing to NQ and BQ when required due to drilling conditions and rig capabilities. The 2015, 2016-18 and 2019 holes were drilled with HQ triple tube running gear and 1.5m core barrels. 83% of the mineralization has been sampled with HQ core and 8% with PQ core. NQ and BQ holes contribute to <9% of the modelled mineralisation and this data subset shows a negative bias in copper grade that is considered deposit zonation related rather than primary sampling error related.
	84% of mineralised drill core is sampled at 1m lengths, 5% at 2m lengths (2015 holes) and 5% at 3m lengths (pre-2015 holes). Sampling intervals were determined by supervising geologists and core shed technicians split core longitudinally by diamond saw to generate ½ core samples for analytical assay. Friable core was first wrapped in plastic and tape before cutting.
Drill sample recovery	 Drill core recovery was recorded for all holes on a drilling run basis where: Percent length core recovered = measured core in drill run / length hole drilled * 100 In addition to length core recovery, the KSK 2015-19 drill core recovery was also determined on a total/complete core recovery basis. This measurement describes internal loss caused by scrubbing and washing of core during the drilling process. A four category ranking is logged on a drill run basis ranging from no loss through to extreme loss where washing and material loss is noticed immediately. Minor and moderate categories are applied to core where pitting or plucking is observed at varying degrees. Triple tube HQ drilling utilising a 1.5m barrel is known to assist in minimising core loss and this configuration has assisted drillers in obtaining >90% length recovery in over 94% of the mineralised intervals at BKM. However this acceptable level of core recovery is not ubiquitous at BKM as three zones of heterogeneous and clayey material have been identified and these zones have returned variable recoveries. Although there is no certain

Criteria	Explanation
	relationship between recovery and copper grade in these zones they have been treated independently in the 2019 resource estimation and classification processes.
Logging	All core has been logged prior to sampling for geotech, vein and fracture characteristics, lithology, alteration, mineralisation and structure (alpha measurements only as there is no oriented core at BKM). Additional logging of core photos was undertaken to obtain data relating to the specific metallurgical characteristics "material type" and "degradation index" and in determining the homogeneity of material for zoning and applying tonnage factors to the resource.
Sub-sampling techniques and sample preparation	Industry accepted practices were employed in sub-sampling and sample preparation for assaying at BKM. Typically for each of the eight programmes core was checked on arrival at the core shed (depths, core block and tray annotation); photographed; logged for recovery, geotech, vein and fracture characteristics, lithology, alteration, mineralisation and structure; SG samples measured and returned to tray; split/cut longitudinally and sampled; re-photographed; then stored. Analytical samples were prepared and assayed by accredited laboratories. Samples were crushed and split with a nominal 1kg split sample pulverised to P95 passing 200microns from which an analytical charge was taken for assay. Crusher reject material and pulps for all assay intervals are stored by KSK. Assessment of pre-2015 core handling, sampling and sample preparation procedures:
	 KSK drilling: Core handling, logging and storage are adequate. Sampling processes are adequate. Sample numbering protocols are adequate. Sample security is lax and sample compromise could accidentally occur during transport/transfer or could be intentionally introduced without evidence. In particular compromise could occur as: Samples are held in plastic bags sealed with masking tape. Sample lists are generated more than once during the transfer process of transporting them from site

Criteria	Explanation
	to the laboratory.
	 Samples traveled accompanied by KSK from site to
	the Palangkaraya office then unaccompanied by
	courier from Palangkaraya to PT Indoassay
	Laboratories in Balikpapan. PT Indoassay
	Laboratories confirmed the arrival and condition of
	samples and no adverse issues have been recorded.
	 Sample preparation undertaken by PT Indoassay
	Laboratories is not detailed.
	Oxiana drilling: There is no record of how Oxiana Limited core was
	handled during their involvement at BKM. Verbal communication
	with KSK personnel involved with this programme confirms that
	core and sampling followed the general description outlined at the
	start of these criteria (above).
	ENJ drilling:
	 Transporting of core from site to Tengkiling prior to logging
	and sampling is not ideal as core can be readily destroyed
	and mixed-up during the journey over rough roads.
	 Core handling, logging and storage are adequate.
	 Sampling processes are adequate.
	 Sample numbering protocols are adequate.
	 Sample security is lax and sample compromise could
	accidentally occur during transport/transfer or could be
	intentionally introduced without evidence. In particular
	compromise could occur as:
	 Sample lists generated more than once during the
	transfer process of transporting them to the
	laboratory for processing.
	 It is not stated if dispatch and receipt paperwork was
	generated for transferring samples from the KSK area
	to the GeoAssay area of the Tengkiling core yard.
	 Pulp samples traveled accompanied by courier from
	Tengkiling to GeoAssay Laboratories in Jakarta.
	 Sample security could be intentionally compromised by easy
	access to the sample preparation laboratory which was
	setup by PT GeoAssay Laboratories within the KSK
	compound at the tengkiling core shed.
	 Sample preparation appears adequate except that:
	 Samples were crushed to -4mm prior to 1kg being

Criteria	Explanation
	 split for pulverizing Pulverised material was mat rolled prior to being quartered to generate four pulps.
	Evaluation of the pre-2015 copper assay subset against the remaining data shows no reason of concern regarding the validity and suitability of this early data in estimating resources at BKM.
	2015 to 2019 core handling, sampling and sample preparation procedures. This subset now constitutes 82% of the BKM resource dataset:
	The onsite processing workflow is as follows:
	 The onsite processing workflow is as follows: Core is packed (screw-down cradles to eliminate spillage) and carried by hand (2015) and by hand and vehicle (2016-19) from drill sites to the core processing facility at camp (located to the east of the BKM mineralisation). Core blocks and tray details are checked and hole depth details recorded on core. Core trays are weighed and photographed wet. Geotechnical and geological logging undertaken. Geologist selects segments of core for SG determination, which is undertaken by core yard technicians. Sample intervals are determined by geologists and core is split longitudinally by core saw. Clayey and incompetent core is wrapped in glad-wrap and packing tape prior to cutting. CRM Standards, coarse blanks (granite), pulp blanks and coarse crush duplicates are inserted into the sample sequence (coarse crush duplicates are generated at ITS during sample preparation; empty, numbered bags are included within the sampling sequence in preparation for their creation).
	 Core and QC samples are bagged and tagged for transport to ITS Jakarta.
	 Dispatch paperwork is prepared for ITS which includes the list of coarse crush duplicates to be prepared and of those samples where SG segments require drying separately and recombined with the remaining material before crushing).
	 Sampled, half core in trays is photographed both wet and dry. Core block details are inscribed onto aluminum tags which are then attached back onto core blocks. Tray details are engraved onto trays before being packed and transported by light vehicle to the

Criteria	Explanation
	 Tengkiling core shed for rack storing under cover. Samples are transported in poly weave bags to the Tengkiling core yard where these bags are then paletted and transported to PT Intertek Utama Laboratories in Jakarta. KSK employs the use of numbered, tamper-proof zip ties to seal sample bags being transported off-site. The flow sheet presented in the following Figure depicts the sample preparation procedure conducted at PT Intertek Utama Laboratories in Jakarta (ITS).
	KSK - 1/2 Diamond Drill Core and Rockchips Sample Preparation Flow Sheet - JULY 2015
	Standard Procedure Weigh Core on receipt at Lab (follow SG protocols for samples containing SG potions) * Clean brushes/handling equip and run barren wash between samples (crusher and pulveriser). Oven Dry 105°C till dry through (minimum 24 hrs). Weigh Core post /drying. * Clean brushes/handling equip and run barren wash between samples (crusher and pulveriser). Oven Dry 105°C till dry through (minimum 24 hrs). Weigh Core post /drying. * Crushing and Grinding checks to be conducted 1 in 10 samples and on duplicates Duplicate sample Preparation. Approx every 25th
	Fine Crush -2mm (Boyd Crusher, 95% passing -2mm) sample (bags marked with Red flagging and recorded on Sample DPO Advice) Marked Bags - Duplicates Rotary Split 50:50
	Sample < 1.5kg Replace in original bag (lower sample number) Rotary Split to obtain ~1.5kg for Pulverising - store reject Replace in original bag (lower sample number) Pulverize (95% gosting -75 micron) Total Pulverize (90% passing -75 micron)
	Split off pulp for analysis and store reject Split off pulp for analysis (second Sample No)
	NB: * Volume of 1/2 NQ Drill Core = 800cc. Weights may vary from 1.0kg to 2.5kg * Volume of 1/2 HQ Drill Core = 1500cc. Weights may vary from 2.0kg to 5.0kg
	H&A undertook three site visits and confirmed that protocols were being executed as designed and that activities and diligence was unchanged over time. H&A also visited and reviewed sample preparation at PT Intertek Utama Laboratories in Jakarta on three occasions and found that work was being undertaken diligently and with appropriate monitoring and supervision.

Criteria	Explanation
	Quality Control Assay samples were submitted with routine samples for the OX-KSK and ENJ-KSK and the 2015 to 2019 drilling programmes. There were no quality control samples inserted into the early KSK drill samples to assess the reliability of these copper assays. Sample comminution tests are reported as being undertaken for the ENJ and KSK 2015-19 drill programmes. Only the KSK 2015-2019 data is available for evaluation and all test show compliance at both crush and pulverise size. Although not confirmed, the compliance shown in the 2015-19 sizing QC data and the acceptable repeatability of assays in both coarse crush and pulp duplicates, adds confidence in the belief that samples in earlier drilling programmes were reliably prepared.
	Copper assays from seven twin-hole pairs and a half core sampling comparison programme show that inappropriately small primary sample sizes (and numbers/counts) will introduce a precision error but not an accuracy (bias) error. Mineralisation thickness is considered in classifying the BKM Resource Estimate.
Quality of assay data and laboratory tests	All laboratories undertaking the sample preparation and assays were accredited over the duration of the BKM sample analyses. PT Intertek Utama Laboratories in Jakarta (ITS) analysed 91% of the resource assay dataset and is KAN accredited.
	Quality Control Assay samples were submitted with routine samples for the OX-KSK and ENJ-KSK drilling programmes. There were no quality control samples inserted into the early KSK drill samples to check the reliability of copper results.
	Quality control programme findings:
	ENJ-KSK compiled a detailed assay quality control report. H&A has confirmed that the assay results for the QC samples are as reported from the laboratories and agrees with the ENJ-KSK findings, these being:
	 There is no detectable cross contamination issues to be considered The CRM assays show that the laboratories (GeoAssay, Intertek Services and Sucofindo) return reliable copper assays for all batches Check assays to reference laboratories show good correlation with the primary laboratory copper assays. H&A also notes that ENJ-KSK:

Criteria	Explanation
	 Submitted both barren quartz and unconsolidated sand as their blank material at the rate of one per batch. The use of sand is not ideal as exposure to crusher contamination cannot be detected. The inclusion rate of blanks is low. Sourced four standards from those used by PT Freeport Indonesia and produced one matrix matched standard from the BKM prospect. Globally the matrix matched standard BKSH-01 performs poorly wrt the other standards, H&A suspects that this is more likely due to features of the standard rather than issues with the laboratories and therefor has no reason to question the reliability of the routine assay at this stage of the project. Copper assays of the standards from ITS and SFK increase from ~+/-1% difference from their certified values pre May 2013 to +3-5% difference from these values post May 2013. The GA results are acceptable for all periods bar August 2012 where they are 4% greater than the certified values. ENJ-KSK offer no reason for the deviation in assay accuracy. The inter-laboratory check sample results analysis presented by ENJ-KSK show that assays generally differ by less than 4% (mean paired difference). The ENJ-KSK report does not show direct comparisons between the primary laboratory (GeoAssay) and the check laboratory sample results. H&A undertook this analysis which confirms the ENJ-KSK findings, being that the umpire laboratories' conpare areas.
	In addition, H&A reviewed all laboratory inserted standards, duplicate assays and repeat assays inserted by GeoAssay, Intertek Services and Sucofindo. No material issues were uncovered that would impact on assay confidence for generating and classifying the BKM 2019 Resource Estimate.
	OX-KSK inserted blanks and standards into the routine sample stream for assay. There is no reference in the dataset supplied to H&A as to which assay results belong to the quality control samples, therefor H&A is not able to cross-check the graphs presented by OX-KSK on the assay quality control.
	H&A notes from the OX-KSK graphs:
	 The QC programme undertaken is limited and not ideal for assessing the reliability of assaying of samples to be utilized in generating

Criteria	Explanation
	resource estimates.
	• There is no concern regarding the degree of cross-sample
	contamination.
	 CRM standards show that laboratory performance for early batches (K30001 to K30009) is of concern, as: All copper results for standard OREAS52pb (3338ppm Cu)
	 are within the "warning" classification (>2StdDev from expected value as specified by the CRM documentation). Copper results for the inserted standard OREAS50pb (7440ppm Cu) are more in alignment with their expected value, however the precision in batches K30001 to K30009 is poor compared with batches K30010 and above.
	The reliability of copper results for batches K30001 to K30009 is yet to be confirmed. The reliability of copper assays from a single hole KBK-0021 is impacted by the diminished confidence in these assays. Clustering of holes in proximity of KBK-0021 has restricted the impact of this hole on the resource estimate and no Measured Resources have been classified proximal to KBK-0021.
	H&A is of the opinion that the copper assays for the ENJ-KSK drill programme are suitable for underpinning resource estimates being considered for Classification under the guidelines set out in the JORC Code (2012 Edition). H&A has compared the copper assay populations from ENJ-KSK with the combined KSK and OX-KSK programmes; and the assays from pre-2015 with the 2015 KSK drilling and considers that, for the purpose of generating the BKM 2019 Resource Estimate, all populations are statistically the same. H&A is of the opinion that, although the reliability of the pre ENJ-KSK drill assay data (early KSK and OX-KSK) cannot be assessed directly, the similarity of the statistical- distributions adds confidence in this data and H&A proposes that the probability this data containing material issues affecting accuracy or confidence in the BKM 2019 Resource Estimate is low.
	KSK 2015 to 2019 drilling programme:
	All samples were assayed for copper by ITS method IC30 with fifteen samples returning assays of >11%Cu being re-assayed by ITS method GA30. Details of the analytical methods are as follows:

Criteria	Explanation
	 Sample assay charge: IC30 = 0.50g; GA30 = 0.25g Digest method: digested to incipient dryness with Nitric, Hydrochloric and Perchloric acids. The salts are re-dissolved in Hydrochloric Acid and made to final volume in a volumetric flask using distilled water. Analytical method: ICP-OES Lower limit of detection, Cu: IC30 = 2ppm; GA30 = 0.01% Upper limit of detection, Cu: IC30 = 10%; GA30 = unlimited. Reanalysis by GA30 is primarily due to the upper limit for IC30 however may also be conducted to confirm higher IC30 grade results for QC purposes.
	KSK employed coarse and pulp blanks (1-4% commonly 2% of batch), standards (4-7% commonly 6% of batch) and coarse crush and split duplicates (4-5% of batch) with the routine samples to assess copper assay reliability. Coarse blanks and coarse crush and split duplicates were preferentially inserted where mineralisation was observed. KSK pulp blanks were inserted following standards. KSK utilised commercial standards in 2015, matrix matched standards from 2016 to 2018 and a mix of matrix matched and commercial standards in 2019.
	ITS included blanks (2-3% of batch), standards (6-10%), second charges (same batch, 5-7%) and repeat assays (subsequent assay batch, 4-6%) in the analytical stream. Sizing test results (4% of batch) show that all batches met comminution requirements for both the crushing and pulverizing stages of sample preparation.
	Both the KSK and ITS QC data and results from an umpire laboratory assay programme undertaken in 2015 make up the copper assay quality control dataset for BKM. Findings regarding copper assay reliability are:
	 There are no contamination or carry-over issues detected in the coarse blanks or pulp blanks (both KSK and ITS). No material issues were detected in the KSK or ITS standards. There is a +5% relative difference systematically reported for the BKM MED standard (measured vs expected) which is attributed to the determination of the certified value, where Ore Research & Exploration (certifier) eliminated the results of two laboratories that returned high grades from their analyses of the standard. With the results from these laboratories included in the certification data the expected grade lifts and

Criteria	Explanation
	the compliance of this standard improves and is more in line with the BKM LOW and BKM HIGH standards' performances.
	Two batches assayed in 2019 returned spuriously low assays for the matrix matched standards inserted. Investigations indicted that the standards' integrity was compromised and re-assaying with additional standards proved this to be the case. The re- assayed values were included in the resource dataset.
	 The KSK Coarse crush and split duplicate copper assays show acceptable repeatability (%AMPD = 0.5% and %AMPD = 2.4% for mineralised samples >2000ppm Cu) as do the ITS second charge assay duplicates (%AMPD = -0.2% and %AMPD = 1.8% for mineralised samples >2000ppm Cu) and the ITS repeat assay duplicates (%AMPD = 0.1% and %AMPD = 1.5% for mineralised samples >2000ppm Cu).
	ITS and H&A investigated the issue of 25 duplicate coarse crush and split pairs returning >5%AMPD in the 2015 drilling dataset. No definitive explanation was uncovered. H&A suspects that the discrepancy is due to a hygiene issue as the issue is not present in contiguous check samples or in the 2016-19 QC dataset. The 2015 copper assay data compares well with the pre and post 2015 datasets, indicating that any issue relating to the poor copper grade repeatability in coarse crush and split duplicate assays will not materially impact on the confidence of the 2019 Resource Estimate.
	 Coarse reject and pulps from 45 mostly mineralised samples (>2000ppm Cu) were selected from the 2015 ITS assay batches and dispatched to PT GeoAssay Laboratory, Jakarta (GA) where copper <1.0% was assayed by method GAI03 (0.5g charge, 3 acid digest, ICP-OES determination) and copper >1.0% assayed by method GOA03 (1.0g charge, 3 acid digest, AAS determination).
	The assaying of coarse reject material shows a %AMPD of -2.0% and %AMPD of 5.2% when compared with the original ITS assay and the check assaying of the pulp material shows a %AMPD of -3.0% and %AMPD of 5.9% when compared with the original ITS assay. Although the inter laboratory assay checks do not show excellent repeatability with the ITS assays, they support the robustness of the original ITS assays and

Criteria	Explanation
	further increase view that the ITS assays are robust and reliable for use in estimating copper mineralisation at BK. Comparison of Copper Assays from pre-2015, 2015 and 2016-19
	Programmes:
	The copper assays from each of the three drilling campaign periods show comparable population distributions and can be combined for estimating the 2019 resources. A base shift observed between the pre2016 and the2016-19 drill programme copper grades is explained by the spatial distribution of the holes within each drill period, with a significantly higher portion holes drilled into the better mineralised areas of the deposit pre2016 and a higher portion of the 2016-19 holes in the areas peripheral to the high grade areas (than in the pre2016 hole dataset). Additional confidence that there is no issue with combining the datasets is obtained from the reconciliation between the 2015, 2017 and 2019 resource estimates.
Verification of sampling and assaying	There has been no independent sampling undertaken on the BKM mineralisation.
	confidence in the validity of the BKM resource dataset. These studies were:
	 KSK in 2015 and ENJ-KSK in 2012-13 undertook reference laboratory programmes with acceptable results. Seven twin holes drilled at BKM allow assessment of the primary sampling error at BKM and a comparison between the KSK 2015 and 2017 drilling. A good comparison in grade tenor, mineralised intercept lengths and number of identified domains was achieved in this drilling dataset. Seventeen holes have been drilled with an easterly attitude, seven with a southerly attitude and sixteen sub-vertically. These holes form crossed pairs with westerly drilled holes to generate a dataset to assess the primary sampling error associated with drilling direction. When copper assay population distributions are assessed there is no material difference between a dataset generated by either drill hole direction for westerly holes and easterly holes and for the lower 60% of the population datasets for holes drilled southerly and westerly. It is indicated that

Criteria	Explanation
	 similar resource estimates for copper mineralisation at BKM would be generated from datasets obtained from predominantly westerly or predominantly easterly drilled holes. A comparison of drilling datasets from the pre-2015 ENJ, pre-2015 KSK, 2015 KSK and 2016-19 KSK periods confirm that each of these subsets have sampled the same copper mineralisation, with the only significantly different dataset being the 2016-19 dataset which, as designed, contains a higher proportion of holes drilling peripheral and lower grade mineralisation as opposed to the earlier drilling which targeted the thicker and higher tenor mineralisation in the core of BKM. All samples from the 2015 to 2018 drilling programmes containing greater than 1000ppm copper were submitted for sequential copper assays at Bureau Veritas Minerals Metallurgical Laboratory, Perth WA. Issues relating to sample loss were encountered however results confirm that copper mineralisation of the tenor established from the ITS assays exist at BKM. A comprehensive optical mineralogy programme has identified a zoned distribution of chalcocite, covellite, bornite and chalcopyrite minerals at BKM and the global copper grade distribution reflects the relative portions of each of these minerals at various locations at BKM.
Location of data All resource work is H&A has verified this locations and confirm inscriptions physical issues at BKM and th topographic surface Collars locations are locations are well es survey readings. The GPS and compass an confirming against o BKM LIDAR data. Co missing downhole su surveyed holes wher minimal due to the c	All resource work is undertaken and recorded in WGS84, UTM Zone 49S. H&A has verified this at site by GPS surveying four pre-2015 drill collar locations and confirmed that the surveys match the recorded data and the inscriptions physically stamped on the drill collars. There are no translation issues at BKM and the grid references for drill holes and the LIDAR topographic surface are congruent. Collars locations are well established by survey pickup and drill trace locations are well established through appropriately spaced downhole
	survey readings. There are 30 pre 2015 hole collars not surveyed and their GPS and compass and tape generated locations have been validated by confirming against original location files and by comparing RLs with the BKM LIDAR data. Confidence in the trace path of the 30 pre-2015 holes missing downhole surveys is garnered from observations in the traces from surveyed holes where deviations are small and effects of location errors minimal due to the orthogonal relationship between trace and

Criteria	Explanation
	mineralisation domain contact attitudes.
Data spacing and	The 2019 BKM resource model covers the 1300m north-south strike, 800m
distribution	width and up to 300m vertical extent of the BKM mineralized system which
	well defines the extent of this near surface mineralisation. The model is
	underpinned by data from 267 mostly westerly oriented diamond drill
	holes (36,857m) drilled on a nominal 50m X 50m grid. This drill spacing was
	selected from outputs of a conditional simulation study undertaken in 2016
	designed to identify the optimal drill spacing enabling resources to be
	consider for all resource classifications under the JORC Code (2012 Edition).
	62 holes have been drilled at alternate orientations and these holes
	confirm geological and grade continuity in volumes of the resource
	considered for Measured Classification (JORC, 2012).
	84% of mineralised drill core is sampled at 1m lengths, 5% at 2m lengths
	(2015 holes) and 5% at 3m lengths (pre-2015 holes).

Criteria	Explanation
Orientation of data in relation to geological structure	 The predominant westerly oriented drilling at BKM is designed to orthogonally intercept the mostly 30 degree, structurally controlled easterly dipping planar mineralised domains at BKM. 62 alternatively oriented holes create datasets to test the data gap (potential structures and mineralisation oriented at acute angles to the drill direction) and internal grade orientation(s) within the mineralised zones. Confidence in modelled geological continuity is obtained from: Infill drilling intercepting mineralised domains where planned (TIN model updates mostly involved snapping existing surfaces to new holes). The four sets of alternately oriented holes intercepted the same number of mineralised domains and same thickness of domains as the westerly oriented holes crossing their paths. Mineralised domain orientation and grade distribution is as expected from a low angle thrust fault structural setting. Confidence in modelled grade continuity is obtained from: The relationship between copper grade and host copper mineral species distribution. The correlation of copper grade tenor with mineralisation related alteration zonation. The correlation of copper grades in the seven twin hole pair dataset, the seventeen easterly vs westerly cross-hole paired dataset. The similarity of data subsets generated by selecting each of the drilling programmes.
Sample security	Sample security, sample provenance and chain of custody documentation has improved over time where, in 2015-19, significant metadata is recorded for each hole, including photographs depicting activities undertaken at key stages of the processing chain (in particular sampling and sample dispatching). Tamper proof and numbered zip-ties were employed in the 2015-19 drill programmes. The high degree of similarity between the 2015 and pre-2015 copper datasets adds confidence that the earlier, less secure samples have not been compromised.
Audits or reviews	H&A audited and improved the KSK core yard and ITS sample preparation protocols in June 2015. The following changes were introduced and

Criteria	Explanation
	monitored throughout the 2015-19 drilling campaigns:
Criteria	 Explanation monitored throughout the 2015-19 drilling campaigns: Reviewing analytical method; resulting in increasing the elements reported by ITS, Reviewing standard type, grade ranges, insertion positions and rates; resulting in preferentially positioning coarse blanks and duplicates in mineralised intervals, and introduction of BKM matrix matched standards, Assessing sample dispatch sizes wrt the standard inclusion rates and ITS laboratory batch/work flow sheet; resulting in an increase in batch sizes, Reviewing standards, duplicates and blanks performance for assays already received (batches BKM00[3-12, 15-24]; resulting in feedback to laboratory regarding copper assay drift and correction issues and the continuation of -2mm crush and split of primary sample to produce a ~1kg subsample for pulverizing, Review of SG determination; resulting in new protocols to correctly accommodate porous material and workstation setup improvement, Review of core handling and logging procedures; resulting in improved survey intervals and QA measures for monitoring survey tool reliability, Review of sampling procedures; resulting in improved survey intervals and procedures; resulting in improved survey intervals and procedures; resulting in improved survey intervals and procedures; resulting in improved kygiene protocols, A visit to the ITS Jakarta laboratory to review sample preparation workstations and procedures; resulting in the following key recommendations and requests:
	 selected from any portion of in the satchel), o Both the -2mm and -75micron comminution test results to be reported with assay results.

Criteria	Explanation
	H&A and KSK monitored adherence to protocols through on receipt and periodic evaluation of routine and QC data and through assessment during periodic site visits by senior personnel. KSK personnel have followed the protocols diligently and consistently throughout all drilling programmes.

Reporting of Exploration Results

Criteria	Explanation
Mineral tenement and land tenure status	PT Kalimantan Surya Kencana (KSK, incorporated in Indonesia) is the 100% owner of the 6 th generation Contract of Work (KSK CoW) within which BKM is located. KSK in turn is owned 75% by Indokal Limited (incorporated in Hong Kong) and 25% by PT Pancaran Cahaya Kahayan (incorporated in Indonesia). Indokal Limited owns 99% of PT Pancaran Cahaya Kahayan with the remaining 1% owned by Mr Mansur Geiger (held in trust for Asiamet Resources Limited). The parent company to the corporate structure is a Bermuda company, Asiamet Resources Limited (AMR), formally Kalimantan Gold Corporation Limited, which is a publicly listed company on the AIM (London) stock exchange. AMR owns 100% of the shares in Indokal Limited.
	On 8 May 2019, the KSK license was upgraded to Production Operation Stage by the Ministry of Energy and Mineral Resources, Indonesia. The impact of this upgrade means the KSK CoW is now in the Construction Period, which is a three year time frame, which is then followed by an Operation Production period for 30 years, with extensions thereafter. On 26 March 2018, the Company announced amendments to the KSK CoW of which the key features noted in public releases by KSK are:
	 Tenure secured for 30 years and can be extended up to 50 years. KSK now has 39,000 hectares under the KSK CoW. The fiscal framework includes: Setting of the tax rate either at the prevailing rate (currently 25%) or no greater than 30%. Copper royalty rate of 4%, gold 3.75% and silver 3.25% KSK will receive a tax holiday and/or tax reduction for imported capital goods. No divestment required until after the 10th year of production The amended CoW requires the Company to work towards and

Criteria	Explanation
	 assist the GOI in supporting the policy of establishing metals processing facilities in Indonesia. Asiamet plans to produce LME Grade (99.99%) copper cathode at BKM and as such will satisfy the criteria. The amended CoW currently contemplates the priority use of local labour, products and registered mining service companies. Indonesian nationals currently comprise 98% of the KSK workforce. KSK has strong community engagement and informs H&A that it will continue to support the development of local communities in the areas in which it operates.
Exploration done	Other than drilling undertaken by joint venture parties (already discussed in
by other parties	appropriate sections of this document) there has been no work undertaken at BKM by other or historic companies.
Geology	The KSK CoW is situated within a mid-Tertiary age magmatic arc that hosts a number of epithermal gold deposits (e.g., Kelian, Indon, Muro) and significant prospects such as Muyup, Masupa Ria, Gunung Mas and Mirah. Copper-gold mineralization in the KSK CoW is associated with a number of intrusions that have been emplaced at shallow crustal levels at the junction between Mesozoic metamorphic rocks to the south and accreted Lower Tertiary sediments to the north. Older intrusions, and associated volcanic and volcaniclastic rocks, of probably Cretaceous age also outcrop along this contact.
	Structures in the region are dominated by a northeast striking set of faults that are interpreted to be features of the Kalimantan Suture and are probably arc parallel, or accretionary, faults. Subsidiary northwest trending arc normal, or transfer faults cross-cut the northeast structures.
	Large circular features, that are evident on satellite, landsat, radar, and aerial photo images commonly coincide with the mid-Tertiary intrusions and associated magnetic high anomalies. These circular structures are interpreted to be volcanic collapse features and they host many of the porphyry copper-gold prospects within the KSK CoW. To date, more than 38 porphyry and porphyry-related copper and/or gold prospects have been defined in the KSK CoW, and only a few of these, namely the Baroi, Mansur and Beruang prospects have undergone any detailed exploration. There have been two geological mapping programmes over the Beruang



Criteria	Explanation
	Setting and Lithologies:
	The geology of the Beruang Kanan District consists of a volcano- sedimentary succession of compositionally and texturally diverse dacitic to andesitic volcanics and associated volcaniclastics intercalated with marine sedimentary sequences. The volcano-sedimentary succession is intruded by dioritic-andesitic stocks and dykes of the Sintang Intrusive suite.
	Five main lithostratigraphic formations are proposed in the Beruang Kanan area on the basis of the dominant facies recorded from the mapping: (1) Western Sedimentary Formation, (2) Central Volcaniclastics Formation, (3) Eastern Volcaniclastics Formation, (4) Andesitic Volcanic Formations, and (5) Eastern Sedimentary Formation. Dioritic intrusive bodies occur throughout the Beruang Kanan District area. Two main intrusive suites appear to be present: (1) Early Sintang Intrusives (Quartz-Feldspar Porphyries) and (2) Late Sintang Intrusives (Microdiorite and Diorite Porphyry).
	Structure:
	Three main fault set directions were identified within the Beruang Kanan Project area: (1) N-S trending thrust faults, (2) NW trending faults, and (3) NE trending faults. At least two major N-S to NNW trending, shallow to moderate east dipping thrust faults occur along the eastern boundary of the Beruang Kanan Project area. These have been named (a) the Eastern Thrust, which forms the contact between the Eastern Sediments (hanging wall) and the Eastern Volcaniclastics (footwall) and (b) the Beruang Thrust. The Beruang Thrust marks the contact of the Eastern Volcaniclastics (hanging wall) and the Beruang Andesitic Volcanics (footwall) and also represents the approximate upper surface of a project- to district-scale, 50 to 150 m thick shear zone that is interpreted to have played a key role in the ore forming history at BKM and BKZ.
	Shearing in the footwall of the Beruang Thrust is evident through the development of a tectonic cleavage and locally intense shear zones throughout much of the Beruang Andesitic Volcanics host sequence at BKM as well as the Eastern Volcaniclastics at BKZ. At BKM measured cleavage dip angles vary between 15 and 48 degrees, averaging around 30 degrees (overall east to southeast dip direction). Cleavage dip directions are also highly variable throughout the BKM area, indicating that the surfaces are irregular (undulating) along strike as well as down dip. The cleavage is

Criteria	Explanation
	generally absent in more competent, massive silica altered host, with deformation more commonly reflected as zones of strong to intense fracturing, brecciation and crush zones. At BKM, cleavage development and local shearing is most intense over a zone of some 50 to 150 m thick from surface.
	A set of at least three significant district-scale NW trending faults were mapped transecting the project area from BKS through BKM and into the northern BKW area. Numerous other smaller faults of the similar orientation were also mapped throughout the area. These faults have dips to the northeast ranging between 59 and 75 degrees and normal to slightly oblique dip-slip sense of movement.
	NE to NNE trending faults were mapped throughout the project area. Dip and dip directions on the faults are variable, ranging from moderate (50-70 degrees) through to sub-vertical (up to 85 degrees) and towards either NW or SE.
	Zones of phyllic and silicic alteration and mineralisation of variable intensity is commonly observed associated with the NW and NE trending faults. Intersection of major fault sets is considered important in focusing the ore forming system at BKM and BKZ.
	BKM Alteration and Mineralisation:
	At BKM, quartz-sulphide and sulphide stockwork mineralisation occurs hosted in and enveloped by a zoned alteration system characterised by an inner zone of intense, pervasive, texturally destructive silica dominant alteration surrounded by an outer zone of intense to moderate sericite- chlorite-clay (SCC) alteration. The mineralised system is largely hosted by the Beruang Andesite Volcanics in the footwall of the Beruang Thrust. The mineralisation and alteration zone trends broadly N-S, parallel and adjacent to the Beruang Thrust and has a sharp eastern boundary against the thrust, rarely extending into the hangingwall of the thrust.
	Primary copper mineralogy at BKM occurs as chalcopyrite±bornite commonly associated with abundant pyrite. Supergene related chalcocite and covellite is common near-surface and extending to depths of greater than 100m. Mineralisation styles at BKM are variable, reflecting a complex alteration and deformation history. In the foliated and sheared outer SCC alteration zone, mineralisation occurs as disseminated, quartz-sulphide veins, sulphide veins, and semi-massive to locally massive sulphide zones

Criteria	Explanation
	that have focused along permeability induced by the tectonic foliation cleavage (interpreted to be related to deformation associated with the Beruang Thrust) and locally as fracture-fill associated with larger quartz veins and zones of more intense silica alteration. Mineralisation associated with the inner silica alteration zone is often higher grade than the outer zone and predominantly as fractured-controlled sulphide and quartz- sulphide veins and veinlet networks that have utilised permeability induced by brittle fracturing of the hard, competent intensely silicified rock and quartz veins. Textural evidence indicates that the main phase of sulphide mineralisation was relatively late.
	It is proposed that several factors have combined to result in the formation of the mineralisation at BKM, including:
	• Extensive quench fracturing and brecciation of andesitic lava due to the water-lava interaction in the sub-marine environment creating a high porosity in the early host;
	 An early phase nodular-textured/perlitic(?) silicification phase that exploited the permeability of the quench fractures and/or breccia matrix and resulted in textures such as the whispy breccia. Later complex polyphase alteration phases (and mineralisation?) further exploited the porosity of fractured nodular quartz silicification overprinted on this earlier quartz phase, commonly leading to further, more pervasive alteration of the host rock; Extensive shearing and development of an anastomosing tectonic cleavage in the footwall below the Beruang Thrust that enhanced permeability for sulphide mineralising fluids and later supergene processes.
	 Extensive brittle fracturing of the inner silicic alteration zones, also increasing the porosity and enhancing fluid low;
	 The intersection of multiple cross-cutting major faults acting to focus district to regional scale fluid flow. In terms of deposit style, the BKM and BKZ mineralisation appears to have more in common with VHMS systems than a porphyry system.
Drill hole	The BKM prospect has been a focus of copper exploration in the KSK CoW
Information	for 22 years, being the subject of drilling for KSK and joint venture partners in nine distinct programmes totalling 318 holes (see entries under "Sampling Techniques and Data" section of this document for details regarding drillhole and drill programme metadata i.e. hole and sample

Criteria	Explanation
	location, extents of drilling, drillhole orientations, drilling and sampling techniques etc.).
	267 holes (totalling 36,857m) intersected significant mineralisation and the BKM resource model is underpinned by 838 nominal 3m drill intervals (2,399m) in historical drill holes and 9,804 nominal 1m drill intervals (10,438m) in holes drilled from 2015 to 2019. 744 individual recognised and modelled intercepts (≥2000ppm) range from 1m to 118m long, averaging 17m (79% are greater than 4m long) and 6960ppm Cu (intercept lengths approximate true thickness as westerly drilled holes orthogonally intersect the mineralised domains). See entries under the "Estimation and Reporting of Mineral Resources" for further details of mineralised intercepts and copper resource modelling.
Data aggregation methods	 Statistical assessment of the copper assay data at BKM shows that three distinct population groupings exist. These being: An extremely low population (25% of the dataset), being less than 60ppm copper. A marginally elevated background population with grades greater than 60ppm and less than ~1000ppm copper. A mineralised population (as defined in the "Estimation and Reporting of Mineral Resources" of this document) with a lower population inflection point on a log probability plot being somewhere along a curve commencing at 1000ppm and ending at 3000ppm copper.
	 Identifying intercepts for inclusion in the resource modelling was a three pass process. These being: 1. Executing a compositing and data coding process that utilized the following parameters, run sequentially: a. Compositing intervals ≥3m where individual sample copper grades are ≥2000ppm. b. Linking sequential copper composites from first run if separated by ≤3m (i.e. maximum of 3m internal dilution). c. Expanding upper and lower contacts of composites from second run incrementally if an interval within 4m has a copper grade >2000ppm (i.e. 3m of edge dilution that is reset and reassessed each time the criteria is met).

Criteria	Explanation
	 the upper and lower domain contacts to reflect and accommodate the interpreted continuity of the domain being considered/modeled. This may include expanding intervals to include lengths of >1000ppm material which statistically may belong to the mineralised population. Including any additional intervals in holes with copper grades ≥1000ppm (and similar dilution parameters as in pass 1) that did not meet the compositing criteria in pass 1 but fit with the spatial continuity of modeled domains within these holes' vicinity.
	An assessment of the assay dataset on completion of the modelling shows that 82% of the assays within mineralised domains are ≥2000ppm copper, 12% of the assays are between 1000ppm and 2000ppm copper and a further 6% are <1000ppm copper. 32 of the 744 modelled intercepts (4%) have copper grades <2000ppm (averaging of 1590ppm copper).
	Of the assay dataset outside of copper mineralised domains there are 1,004 isolated samples that do not fit within the domained mineralisation model (9% of all grades >2000ppm copper and 5% of the intervals outside of the modelled mineralisation). These samples have been included in the estimation of resources via a selective interpolation run (refer section "Estimation and Reporting of Mineral Resources Estimation and modelling techniques" for details).
	The analysis of copper grades proximal to modelled domain contacts adds confidence that the 2000ppm copper modelling cut is a suitable hard boundary to apply in grade interpolation and that there is likely to be a geological control that appears at this lower cut. This grade tenor shift is revealed in the following table:
	Domained MineralisationNot MineralisedAv. Cu Grade (ppm)Av. Cu Grade (ppm)Composites Location wrt Domaim Contact-5-4-3-2-17412345Mineralisation Upper Contact72926422740872906709848732762702732Mineralisation Lower Contact79287362673967485811830868882766900
	3m length weighted composites, cut on mineralised domain boundaries, were generation for copper grade interpolation.
Relationship between mineralisation widths and	The majority of drill holes are oriented such that they intercept the thrust structures and mineralised domains orthogonally. Those holes that are drilled at orientations other than westerly were found to intercept the same number of mineralised interval adding to similar lengths and comparable copper grade tenor to the westerly drilled holes that crossed

Criteria	Explanation
intercept lengths	their paths. There appears to be no issue regarding drilling orientation that would impact materially on the BKM resource estimate.
Diagrammes	A comprehensive set of tables and figures describing the data, data analysis and information regarding mineralisation and associations, the resource modelling and estimation process and results and resource classification can be found in the "Beruang Kanan Main Zone, Kalimantan, Indonesia; 2019 Resource Estimate Report". A comprehensive set of tables and figures describing the modelling of variables utilised by engineers in the definition and reporting of Ore Reserves can also be found in this report. A selection of the figures and tables from each report are included in this document where verbal descriptions do not adequately portray the information in line with the transparency requirement of the JORC Code.
Balanced reporting	The BKM 2019 resource report "Beruang Kanan Main Zone, Kalimantan, Indonesia; 2019 Resource Estimate Report" reports on the entire body of work undertaken in understanding and evaluating the BKM mineralisation and in producing and classifying the BKM Resource Estimate and Ore Reserve modifying variables. This document summarises information in the above mentioned report. The reader is referred to the detailed report for detailed discussions and comprehensive descriptions of the work undertaken and knowledge gained from this work.
Other substantive exploration data	 Studies undertaken in understanding and evaluating the BKM mineralisation and in producing and classifying the BKM Resource Estimate and Ore Reserve modifying variables: 2014: Literature review and summary of all KSK technical reports and memorandums. Review logging data of mineralised intercepts against core
	 photographs to assess fertility and functionality. Complete historic data audit and where required and able, rebuild all logging, SG and assay datasets. Geomorphological and geological/structural interpretation of the BKM prospect and surrounds for guiding resource estimate domaining. Site visit to assess mineralisation styles and extent. Resource data analyses, modelling, resource estimation and reporting.

Criteria	Explanation
	 2015: Site and laboratory visit – protocols review and adjustment. Mineralisation review through multi-element assay association investigation. Update structural interpretation with input from observations obtained in multi-element assay study. Sequential copper assay programme. Periodical assay quality control review (including umpire assay results). Resource data analyses, modelling, resource estimation and reporting.
	 2016: Conditional simulation investigation into optimum drillhole spacing; design resource update drilling. Create and introduce matrix matched standards. Site and laboratory visit – protocols review and adjustment. Two interim resource modelling updates and data analysis programmes for internal use in reviewing and adjusting drilling design.
	 2017: Review and revise drilling programme. Optical mineralogy programme. Sequential copper assay programme. Metallurgical materials logging programme. Identification and modelling of heterogeneous physical properties and clayey domains. Data review and interim resource modelling update for internal use in reviewing and adjusting drilling design. Resource data analyses, modelling, resource estimation and reporting.

Criteria	Explanation
	 2018: Degradation index logging and modelling. Resource data analyses, modelling, resource estimation and reporting. Ore reserve modifying factors data analyses, modelling, estimation and reporting.
	 2019: Resource data analyses, modelling, resource estimation and reporting.
Further work	The resource work to date on the BKM mineralisation was designed to deliver inputs suitable for underpinning a Definitive Feasibility Study on the mineralisation delineated by the drilling completed pre-2016. This has now been completed. Any further resource work on the BKM mineralisation will be identified in the DFS study which will is planned for completion Q2 2019.

Estimation and Reporting of Mineral Resources

Criteria	Explanation
Database	In 2014, all historic drilling (collars and surveys), logging, structural,
integrity	geotechnical (including recoveries and drilling data), SG and analytical
	datasets were reconstructed from primary logging and report files where
	available and assessed against the current datasets delivered by KSK.
	Multiple issues were uncovered (detailed in "Beruang Kanan Main Zone,
	Kalimantan, Indonesia; 2019 Resource Estimate Report") and the
	reconstructed datasets were adopted by H&A as the valid historic (pre-
	2015) data for use in future resource estimates.
	KSK enter all core yard generated data into Microsoft Excel [™] based
	datasheets and transfer these into a Microsoft Access [™] database. ITS
	generates Microsoft Excel TM based assay report files containing both KSK
	supplied samples (including QC samples) and laboratory QC sample results
	which are also entered into the KSK $Access^{TM}$ database.

Criteria	Explanation
	H&A has utilised all the KSK supplied datasets except for the sample location data (drillhole collar and survey data and downhole sampling/QC sample location data) and assay data. These datasets were created from source data supplied from site, surveyors and laboratories through the use of programmed import routines. Comprehensive data validation and check routines were applied on import and the final dataset, and once cross- checked against the KSK data the resource dataset, is stored in a Minesight TORQUE [™] database. A time stamped csv copy of the coded resource drillhole assay dataset is exported on the date of each resource estimate and cross-checked against the previous resource export dataset as a check of data stability over time.
	The following data validation and preparation procedures were undertaken on the resource estimation datasets:
	 Sample location: Sampling intervals (overlapping and missing), downhole survey deviations (spurious surveys), collar coordinates (surveyor pickup, check against design and LIDAR topography).
	Sample locations are known to a high degree of accuracy for all but 30 pre-2015 holes where collar coordinates could not be validated and drill hole traces are defined by a single collar spherical survey entry. Any error in the location of samples from these holes is unlikely to impact on the robustness of the resource estimate.
	 Fundamental sample error: 17 holes oriented easterly and 5 southerly oriented holes generate dataset for testing of drill direction bias. Seven twin holes and paired half core sample comparisons test for sample representivity and intra sample variance.
	There would be no material difference between a dataset generated by either drill hole direction for westerly holes and easterly holes and for the lower 60% of the population datasets for holes drilled southerly and westerly.
	The good comparison in the twin hole copper grade populations indicate that holes have reliably tested the mineralisation in their immediate vicinity and that, in alignment with the alteration associated replacement copper mineralisation style at BKM, short range mineralisation features that would impact on the reliability of

Criteria	Explanation
	the resource estimate are unlikely to exist. The 381 half core comparison dataset shows no bias and a low av %MPD of 9% (half core grade vs grade of total core for samples greater than 1000ppm). The fundamental sampling error is considered of low risk to the resource estimate.
	 Sample preparation: QC samples included in batches; these being coarse blanks, crusher duplicates, pulp duplicates. ITS undertook routine sizing analysis (crusher and pulveriser) and ran barren wash material between samples.
	No contamination detected, all sizing tests comply with comminution target and duplicate analyses show high correlation (92% of the 340 coarse crush duplicates returned <5% MPD with the av %MPD being 2.4%. Samples in the batches containing 25 duplicates returning >5%MPD in 2015 drilling programme were re- tested and the reason for diminished correlation could not be identified. KSK suspects a hygiene issue. Any precision issue introduced in these batches will have low impact on the resource estimate.
	 Assay data: KSK and ITS QC samples; cross-check two independently compiled datasets and historic archives; umpire laboratory checks; reconcile against sum of sequential copper assay; compare copper population statistics from each drill campaign.
	Data quality is suitable for underpinning resource estimates being considered for all classification under the guidelines set out in the JORC Code (2012).
	 Specific gravity data: ITS laboratory check measurements and drying tests; QA/QC protocols (scales checking, routine water replacement; static water height check); two programmes testing for sample selection bias; removal of spurious measurements (where greater than 3 standard deviations from mean of measurements for Fe grade range). Porous SG samples routinely dried at ITS for determining dry bulk density.
	4785 SG measurements (dry bulk density) make the dataset for tonnage factor determination.

Criteria	Explanation
	 Core recovery: interval checks (overlapping and missing); re-logging by photograph of 2588 trays containing mineralisation (82% of mineralised trays). Remaining trays not relogged as core yard data showed no reason to suspect loss (i.e. 100% logged recovery, long runs, tray weights as expected; low number of core blocks; no clay logged).
	All mineralised intervals assigned a recovery concern classification (no, minor, moderate, high) for assessing recovery impact on assay and SG reliability. Recovery concern classification modelled spatially to define tonnage factor and classification domains.
	 spatially to define tonnage factor and classification domains. Fe and S assays: QC data available only for 2015-19 dataset show acceptable precision and accuracy for estimation of these elements into the block model for use in applying tonnage factors and estimating the sulphide distribution at BKM Sequential copper assays pre 2019: testwork undertaken to determine leach/digest parameters for BKM material, standards and blanks and duplicates included in batches, two reviews and improvements of protocols during processing of samples. Sum of sequential assays reconciled with total copper assay initially showing a 12% low bias which was reduced to 5% with improved washing and sample transfer protocols designed to minimize sample loss during these procedures. The loss of copper was proportioned back to the cyanide and residual components of the sequential assay results according to their relative concentrations. QC assessment show that the BKM pulps underwent significant oxidation at surprisingly rapid rates impacting on the reliability of the acid and cyanide component (soluble copper component) reconcile reasonably well with the expected values for the certified standards. This data has issues, however modelling of the soluble copper component of the BKM mineralisation will present a reliable understanding of this variable's distribution.
	 2019 NaCN copper leach assays: QC sample assays and spatial comparison of this data with existing pre-2019 acid+CN component of the sequential copper assays confirm that these assays are suitable for inclusion in estimating the soluble copper content of the BKM mineralisation. Copper mineral species data: visual percent estimates of mineral

Criteria	Explanation
	 species from 185 coarse crush rejects of samples selected to form a 50m x 50m x 50m 3D array across the extent of mineralisation. Visual estimates merged with estimates from sequential copper determination of chalcocite, covellite/bornite and chalcopyrite content. Mineral abundance categories (absent, minor, present, prevalent and dominant) assigned to sample locations for modelling and percent soluble copper interpolation. Metallurgical material code: all holes relogged from core photos by a single person (experienced geologist) to classify intervals according to nine material types defined by consulting metallurgist. These codes describe the presence and significant abundance of oxidation, quartz/silica, sericite, sulphide/pyrite, clay and friable/crushed material. Degradation index: all holes re-photographed and relogged from core photos by a single person (experienced geologist) to estimate the degree of degradation over time (none, some, moderate, complete) and utilized to model a material completency factor.
Site visits	Three site inspections and two laboratory inspections undertaken between 2104 and 2016. A further two site inspections planned in 2017 were cancelled as landslips blocked site access. A laboratory inspection was undertaken in 2019. 2014 visit achieved the goal of identifying copper mineralisation in core of the style and grade in the KSK assay dataset, obtained evidence of mineralisation in outcrop and evidence of historic drilling, sampling etc. The 2015 and 2016 site trips achieved their goals of reviewing and upgrading work protocols where necessary. Protocols implemented in 2015 were observed being diligently followed in the 2016 site visit. The protocols setup in 2015 remained unchanged throughout the remainder of the drilling at BKM. All Laboratory visits showed ITS staff to be following protocols and diligently undertaking activities.
Geological interpretation	Copper mineralisation domains are readily modelled as low to moderate angled easterly dipping planar bodies, strongly reflecting their geological low angle trust controls as discussed in the geology section of this document (above). The shearing and structural foliation logged in core is clear evidence of the deformation intensity and it is readily interpreted that the fabric in host rocks would have played a significant role in channelling mineralising fluids if they had the ability to at the time of copper

Criteria	Explanation
	mineralisation emplacement. The initial mineralisation models were constructed in 2014 and the domains modelled at that time continue to exist with infill drilling intersecting contacts where anticipated. The initial 16 planar bodies modelled in 2014 increased to 25 in 2015 and to 34 in 2019, with the majority of the additional lenses being added in the southern area of BKM (where initially only four holes existed). In addition to the confidence gained during the resource drilling of BKM further confidence in the model is gained through the non-westerly drilled holes. These holes (drilled in 2017 and 2019) all support the model, intercepting domain contacts in Measured and Indicated Resources where anticipated.
	It is not possible to model the mineralisation continuity at a 2000ppm threshold at any other orientation.
	Mineralisation domains are utilised in the estimation of the BKM copper resource as hard boundaries. Sample data (3m composites) and the block model are coded by the domains and only those composites within the domains can inform blocks within the domains.
	Ground water leaching has removed copper from the surface oxidised zone. This volume is domained and the block model coded for exclusion of any estimates to be undertaken in the contained blocks.
	A surface clay zone located immediately below the oxide zone exists over most of BKM and this domain has been modelled and utilised for assigning tonnage factors to the resource. It has also been utilised as a hard boundary in generating the metallurgical material and degradation models. No Measured Resources are classified within this zone.
	Two large volumes of fractured material are located at depth along the NNE and NW faults that transgress BKM. These zones are modelled and utilised for assigning tonnage factors to the resource. They have also been utilised as a hard boundary in generating the metallurgical material and degradation models. No Measured Resources are classified within these zones.
Dimensions	The 2019 BKM resource model covers the 1300m north-south strike extent and 800m width of the BKM vein style mineralized system. Mineralisation crops out to the west, is closed-off by drilling to the north and has some potential to be extended to the north-east and south. Three deep holes under the main zones have failed to intersect significant copper mineralisation, however the depth repetition of mineralisation has not

Criteria	Explanation
	been fully tested. There are indications from the structural interpretation
	that repeat systems at depth and proximal to the BKM zone may exist.
Estimation and	Domaining and coding of assay samples was undertaken in Minesight [™]
modelling	software. Compositing, block modelling and grade interpolation was
techniques	undertaken in Vulcan [™] software.
	The BKM block model parameters are:
	Model name : postestimate_2019.bmf
	Format : extended
	Structure : non-regular
	Number of blocks : 553669
	Origin : 0.00 0.00 0.00
	Bearing/Dip/Plunge : 90.00 0.00 0.00
	Schema <parent></parent>
	Offset minimum : 768200.0 9931400.0 100.0
	maximum : 769250.0 9932900.0 600.0
	Blocks minimum : 25.0 25.0 10.0
	maximum : 25.0 25.0 10.0
	No of blocks : 42 60 50
	Schema <subblock></subblock>
	Offset minimum : 768200.0 9931400.0 100.0
	maximum : 769250.0 9932900.0 600.0
	Blocks minimum : 5.0 5.0 2.0
	maximum : 25.0 25.0 10.0
	No of blocks : 210 300 250
	Parent block northing and easting dimensions are ½ drill spacing with
	parent block centroids positioned off sections lines. The parent block RL
	dimension was selected so that block centroids would be located roughly in
	the same relative position to mineralised domains dipping at 20-30degrees.
	Sub-block dimensions are appropriate for adequately representing the
	mineralised domain volumes in the model.
	Ordinary Kriging was employed as the copper interpolation method. The
	kriging neighbourhood investigation and experimental variography was
	undertaken by Posta Pratama of P&a geoscience. Key features of the
	mineralisation and domaining identified in the investigation are:

Criteria	Explanation
	• The general consistency of copper grades within and between the estimation domains.
	 Experimental semi-variograms were assessed for all domains. Variogram models involving a nugget and two spherical structures were fitted to all semi-variograms and primary directions reflect the overall geometries of the modeled domains. Blocks outside of modeled domains can be estimated by the inverse distance squared interpolator.
	block proximity to drilling data and block relationship with mineralization domains. Once estimated, a block is excluded from subsequent estimation run passes. In summary:
	 Pass 1: Within modeled mineralised domains and search radii of nominally 100mX70mX20m. Composites within all domains can inform blocks within domains, composites outside of domains are not used. Five search ellipsoids orientations are employed, each reflecting the overall geometry of the domains they best fit. A minimum of 8 and maximum of 40 composites are used to generate block grades. Octant search parameters are employed with a minimum of 6 octants to be informed before a grade is interpolated (except domain 95 – no octant search). Copper grades greater than 30000ppm are restricted to estimate blocks within a radius of 50mX50mX25m of their location. Pass 2: Within modeled mineralised domains and search radii of nominally 200mX150mX40m. Composites within all domains can inform blocks within domains, composites outside of domains are not used. Five search ellipsoids orientations are employed, each reflecting the overall geometry of the domains they best fit. A minimum of 4 and maximum of 40 composites are used to generate block grades. Octant search parameters are employed, each reflecting the overall geometry of the domains they best fit. A minimum of 4 octants to be informed before a grade is interpolated (except domain 95 – no octant search). Copper grades greater than 30000ppm are restricted to estimate blocks within a radius of search reflecting the overall geometry of the domains and search radii of nominally 200mX150mX40m. Composites are used to generate block grades. Octant search parameters are employed with a minimum of 4 octants to be informed before a grade is interpolated (except domain 95 – no octant search). Copper grades greater than 30000ppm are restricted to estimate blocks within a radius of
	 Pass 3: Within modeled mineralised domains and search radii of nominally 230mX180mX60m. Composites within all domains can inform blocks within domains, composites outside of domains are not used. Five search ellipsoids orientations are employed, each

Criteria	Explanation
Criteria	 Explanation reflecting the overall geometry of the domains they best fit. A minimum of 2 and maximum of 40 composites are used to generate block grades. Octant search parameters are employed with a minimum of 4 octants to be informed before a grade is interpolated (except domain 95 – no octant search). Copper grades greater than 30000ppm are restricted to estimate blocks within a radius of 50mX50mX25m of their location. Pass 4: Outside of modeled mineralised domains, sample selection of only those composites with greater than 2000ppm copper grades, outside of the modeled mineralised domains and within a search radius of 25mX25mX10m. All other parameters are the same as for the Pass 1 for domain 60 except a minimum of 3 and maximum of 10 composites applied and the octant search criteria removed. Copper grades greater than 10000ppm are restricted to estimate blocks within a radius of 25mX25mX10m. Pass 5: Outside of modeled mineralised domains, sample selection of only those composites outside of the modeled mineralised domains and within a search radius of 25mX20mX60m. All other parameters are the same as for the Pass 1 for domain 60 except a maximum of 10 composites applied and the octant search criteria removed. Copper grades greater than 2000ppm are restricted to estimate blocks within a radius of 25mX20mX60m. All other parameters are the same as for the Pass 1 for domain 60 except a maximum of 10 composites applied and the octant search criteria removed. Copper grades greater than 2000ppm are restricted to estimate blocks within a radius of 25mX25mX10m of their location. The resource block model coding was validated visually against both the mineralization domain models and the coded composites. The 30000ppm Cu is a reasonable threshold, two check interpolation runs were undertaken with restrictions set at 44800ppmCu and at no-restriction. Swath plots show that 30000ppmCu is a reasonable level to apply the restriction as there is no significant deviation o
	2.7KT from the Indicated Resources and 9.2KT from the Inferred resources. The copper grade interpolation was cross-checked against the composite
	The copper grade interpolation was cross-checked against the composite

Criteria	Explanation
	Resources (JORC 2012, at 0.2% copper reporting grade).
	The 2018-19 drilling was designed to improve the confidence in deeper resources in the northern and southern areas of the mineralisation, to obtain metallurgical testwork samples and collect geotechnical data for engineering studies, thus holes were targeted within the defined body of mineralisation and hence there are only incremental updates to the 2017 models and minor-material changes to the resource estimate between 2017 and 2019. The refinement of the estimate has resulted in the increase in Measured Resources by 0.1MT an increase in Indicated Resources by 5.6MT and a reduction in Inferred Resources of 2.7MT.
	Additional resource to reserve modifying variables coded and interpolated into the resource block model and made available for Ore Reserve determination and reporting:
	Sulphur and iron: these elements were estimated by ordinary kriging utilising parameters in run passes 1 to 3 and pass 5 of the copper estimated excluding the high grade treatment (not applied).
	Copper Mineral Species: Copper mineral species percentages determined from the sequential copper assay programme and the optical mineralogy programme were visualized together in Minesight [™] and copper mineral species TIN models were used in interpolating soluble copper percentages. The coding of assay data and the block model was undertaken according to the following procedure:
	 A TIN model was individually generated for each copper mineral species. These models overlap where more than one mineral species co-exist. Each model was used to individually populate one of four variables, these being: Chalcocite: inside blocks/samples = 1000; outside = 0 Covellite: inside blocks/samples = 0100; outside = 0 Bornite: inside blocks/samples = 0010; outside = 0 Chalcopyrite: inside blocks/samples = 0010; outside = 0 The final copper mineral species code was generated from the sum of the individual variables to generate a four digit binary code representing the minerals present in domains. For example a code of 1010 would refer to chalcocite and bornite minerals hosting the majority of the copper grade in a sample.

Criteria	Explanation
	The concentrations (%), relative to the total copper concentration, for the following variables are estimated in the BKM 2019 resource Vulcan [™] block model:
	 ccperc : Percent copper in Acid soluble + Chalcocite minerals of total Cu
	 coboperc : Percent copper in Covellite and Bornite minerals of total Cu
	cpyperc : Percent copper in Chalcopyrite mineral of total Cu
	The copper mineral species percentage data generated from the sequential copper assays was composited at 1m lengths and, along with the block model, coded according to the copper mineral species codes. Appropriate composite search and selection parameters were borrowed from the copper mineralisation grade interpolation strategy and the relative percentages of mineral species estimated utilising the Vulcan TM ID ² interpolator.
	Percent Soluble Copper: The soluble copper is determined from the sequential copper assay data as the sum of the acid plus cyanide leach component (adjusted for losses, see "Database Integrity" section of this document) for the pre-2019 dataset and as the cyanide leach assay data for the 2019 dataset. The soluble copper content is expressed as a percentage of the total copper assay.
	Kriging neighbourhood analyses and semi-variogram modelling was undertaken to determine composite length, ordinary kriging and sample search parameters for interpolating soluble copper content into the variable "solcu100" in the BKM resource block model.
	Key points regarding the interpolation of percent soluble copper are:
	 The general consistency of percent soluble copper within the following grouped copper mineral species estimation domains: a. Predominantly chalcopyrite free mineralisation. These domains were combined for composite selection in interpolating soluble copper content. b. Mixed chalcopyrite and blends of chalcocite, bornite and covellite copper mineralisation. These domains were combined for composite selection in interpolating soluble copper content. c. Chalcopyrite rich mineralisation. This domain was estimated

Criteria	Explanation
	 independently in interpolating soluble copper content. Experimental semi-variograms were assessed by the independent copper mineral species domains. Experimental variograms were fitted with models containing a nugget and two spherical structures. Primary continuity directions reflect the overall geometries of the domains. Composite search ellipsoid orientations are borrowed from the
	 Composite scaren empsoid orientations are borrowed from the variogram models, while search extents and sample selection parameters are borrowed from the total copper estimate interpolation runs. Only those blocks with an estimated total copper value were
	 selected for interpolating percent soluble copper. 1m composites were utilized in the estimation. Only those composites within the grouped domains (a, b, c above) were utilized in interpolating soluble copper content into blocks within the same grouped domains.
	The model was validated visually and through comparison with the source data through northing, easting and elevation swath plots. The estimate and source data matches well for the predominantly chalcopyrite free mineralisation (domains 1000, 1110, 1010 and 1100) which shows greater data density and a de-clustered distribution compared with the mixed chalcopyrite blends and chalcopyrite rich mineralisation (domains 1001, 1111, 1011, 1101 and 0001). The estimate is however suitable for use as an indication of the distribution of percent soluble copper at BKM.
	Metallurgical material type model: this variable is estimated utilising both the mineralisation and tonnage factor domains (zones of significant clayey areas) as hard boundaries. Blocks within the model were stamped by their closest sample (nearest neighbour estimate, variable "matcode") within the same mineralisation/tonnage-factor domain code combination.
	Degradation index model: Data and block model coding and populating of the degradation intensity code variable "degradation" into the resource block model follows the same parameters and procedures as undertaken for populating the material code variable.
Moisture	The BKM resource tonnages are estimated on a dry basis as SG measurements applied to the model are the dry bulk density measurements. Assays were undertaken on oven dried core.

Criteria	Explanation
Cut-off parameters	 Details within the 2016 BKM PEA study, subsequently updated in the June 2019 Feasibility Study (to be finalised end June 2019), where the life of mine schedule was developed utilizing a variable cut-off grade strategy that is optimized over time to maximize the project value determine that the optimized cut-off grade ranges between the Break Even Cutoff Grade of 0.11% Cu (Soluble) and an elevated cut-off of approximately 0.14% Cu (Soluble) over the life of the project. This equates to a Cu (Total) cut-off grade range of approximately 0.16% to 0.20%. Therefore the use of a resource cut-off of 0.2% Cu (Total) can be considered appropriate for reporting of the 2019 Resource Estimate. 0.2% copper is also a natural or geological cut in drill intervals that intercept significant and modeled mineralisation. In addition, a review of parameters utilized for determining reporting cuts from similar deposits uncovered that, utilising a similar approach and parameters as those in the June 2019 Feasibility Study: GeoVector Management Inc. determined a 0.2% copper reporting cut for the Las Posadas Copper Deposit, Chile, as part of PEA prepared for Global Hunter Corp. (October 2012). Tetra Tech Inc. determined a 0.25% copper reporting cut for the Zonia Copper-Oxide Deposit, Arizona, USA, as part of a resource report prepared for Cardero Resource Corp. (December 2015). A 0.2% Cu cut is an appropriate base case reporting cut in stating the BKM Mineral Resources and that any upward movement in reporting cut to 0.3%Cu (based on any sensitivity studies) would not materially alter the reported Maximum 2019 prepared for carder or prepared for carder or prepared for sensitivity studies) would not materially alter the reported Maximum 2019.
Mining factors or assumptions	Mining factors and assumptions were addressed in the 2016 PEA study and subsequently updated in the June 2019 Feasibility Study which showed positive and favourable economics for the project and concluded that there are reasonable prospects for eventual economic extraction of copper at BKM.
Metallurgical factors or assumptions	Metallurgical factors and assumptions for heap leach SX/EW recovery of copper are addressed in the 2018 Ausenco "Feasibility Study Report" Rev B 102399-RPT-001 June 2018. These factors and assumptions were incorporated in the June 2019 Feasibility Study which showed positive and favourable economics for the project and concluded that there are reasonable prospects for eventual economic extraction copper at BKM.

Criteria	Explanation
Environmental factors or assumptions	Environmental factors and assumptions are addressed in the 2016 PEA study and subsequently updated in the June 2019 Feasibility Study which showed positive and favourable economics for the project and concluded that there are reasonable prospects for eventual economic extraction copper at BKM.
Bulk Density	 The tonnage factors (variable "dbdregress") were stamped onto the model according to the following: Soil and oxide domain: Tonnage Factor = 1.77 t/m³ (determined from 68 validated dry bulk density measurements). Surface clay/poor-recovery heterogeneous domain: Tonnage Factor = 2.25 t/m³ (determined from 139 validated dry bulk density measurements). Deep heterogeneous and variable porous domains: Tonnage Factor = 2.61 t/m³ (determined from 370 validated dry bulk density measurements). Homogeneous and predominantly non-porous domain: Tonnage Factor = (0.025 * Block_Fe_OK_grade + 2.65) t/m³ (determined from 4208 validated dry bulk density measurements). The application of tonnage factors to the resource was checked visually and by swath plots which confirm that the tonnage factors in the model vary with iron grade where intended. The average for tonnage factors assigned to the homogeneous and predominantly non-porous domain is 2.88 t/m³ which is in agreement within 1% of the average of the dry bulk density measurements taken from samples in this domain (av. 2.85 t/m³).
Classification	 The resources at Beruang Kanan as estimated in 2019 are classified as Measured, Indicated and Inferred Resources under guidelines set out in the JORC Code (2012). The key considerations in assigning this classification are as follows and risk reduction associated with these criteria will assist with expanding the Indicated and Measured Resources by assigning higher classifications to the Indicated and Inferred Resources in future estimates: Low to moderate risk associated within the three volumes showing significant intervals of poor core recovery and variable physical properties reducing confidence in the assay and DBD samples used to determine the copper estimate and tonnage factors for these zones. Low risk associated with the current drill spacing and orientation in reliably testing Indicated mineralisation in the north of the deposit

Criteria	Explanation
	 where mineralisation is tested only by westerly drilled holes. Low risk associated with the unknown suitability of the sample comminution and sub-sampling strategy employed by historic workers. Low risk associated with inability to directly validate historic data.
	The classification process involved:
	 Utilising findings from a conditional simulation study undertaken in early 2016 and designed to determine the maximum (optimal) drill/sample spacing for defining Measured, Indicated and Inferred resources at BKM. Defining volumes of the resource for Measured Resource consideration by: Delineating the mineralisation where geological and grade continuity is proven by holes drilled at orientations other than (and along with) the primary westerly testing direction. Identifying volumes of the mineralisation where conperimented in the mineralisation where conperimented is a structure of the mineralisation where context is a structure of the mineralisation where of the mineralisatis a structure of the mineralisatis a structure of the mineralis
	 identifying volumes of the initeralisation where copper grades were estimated; in the first interpolation pass, with more than 35 composites, with the average composite distance being less than 50m, with composites being sourced from more than three drillholes (mostly more than six drillholes), with a Kriging variance of less than 0.2.
	 Defining exclusion volumes where confidence in copper grade estimate is compromised by poor core recovery and confidence in tonnage factors is compromised by suspected selective sampling and low sample numbers where material heterogeneity exists.
	 Defining volumes of the resource for exclusion from Measured and Indicated resource consideration by: Identifying volumes of the mineralisation where copper
	 grades were estimated; in the second and third interpolation pass, with less than 35 composites, with the average composite distance being greater than 50m (mostly greater than 75m),

Criteria	Explanation
	 with composites being sourced primarily from 3 to 6 drillholes (but can be significantly more), with a Kriging variance of greater than 0.2 (mostly 0.3 to 0.4). Identifying all mineralisation not belonging to modeled estimation domains. By default any resources not classified as Measured or Inferred are classified as Indicated Resources. Copper grades for 97% of the Measured Resources and 86% of the Indicated Resources were interpolated in the first pass of the estimation runs. This pass has most stringent criteria in selecting samples for estimating block grades. In contrast 49% of Inferred resources were interpolated in the first pass of estimation runs. The following lists the technical areas considered in classifying the BKM 2019 Copper Resource Estimate: Geological understanding (geological and copper grade continuity): KSK and joint venture workers have undertaken sufficient work to understand the style(s) of mineralization at BKM for the classification of Measured Resources. Geological and grade continuity has been tested by holes drilled at orientations other than the primary testing direction of 270° in volumes of the mineralisation classified as Measured Resources. Of concern regarding confidence in the Indicated and Inferred mineralisation is that: There is no structural control to assess the suitability of drilling direction with respect to the geometry of mineralization and where mineralisation thins and copper grade tenor diminishes the grade continuity is assumed by extrapolation from volumes where continuity is confirmed. The vein mineralization continuity is not understood and may be at orientations other than tha tescribed by the overall geometry of the mineralization which presents as a higher risk to local estimates where mineralisation is thinner and of lower grade tenor than in thicker, higher grade volumes.

Criteria	Explanation				
	 Drilling density and configuration: The drilling is mostly oriented at -60^o towards 270^o and at nominal 50m centres along 50m spaced grid lines over the main zone of mineralization. Measured Resources have also been drill tested at alternate orientations. Of concern regarding confidence in the Indicated and Inferred Resources is that: 				
	 There has been no investigation into attitude of the mineralised veins/vein-sets or on the controls on the replacement style mineralisation and therefor no evaluation as to the suitability of drill hole orientation with respect to the styles of mineralization. The drill density is such, and the structural information negligible, that it is not possible to assess the internal grade distribution, therefor the estimate can only be considered for classification at a global scale where continuity is not proven at local scale by alternate drilling directions. 				
	 Sample location: The collar locations of holes are considered well known. Down hole survey information is lacking for 30 of the holes drilled into the BKM mineralisation. Of concern regarding confidence in the resource estimate is that: 				
	 Although the locations of samples from these holes delineating the mineralization cannot be validated, the reasonable predictability of hole trace locations for those with survey information lends support to the reliability of hole traces defined by a single collar survey azimuth and declination. The 2015 drilling results support the earlier hole results indicating that collar location issues are likely to pose only a minor risk to the estimate. The sample locations are considered well enough established to consider the BKM resource estimate for classification at local and global scales. 				
	 Primary sample size: The mineralization has been tested primarily with HQ triple-tube core however holes have been drilled at sizes of PQ, NQ and BQ. Workers for the pre 2015 drilling employed a nominal 3m sample 				

Criteria	Explanation
	interval (5% of samples within mineralisation) and a significant number of 2m intervals were sampled by workers in the 2015 drilling campaign (also 5% of samples within mineralisation). Of concern regarding confidence in the resource estimate is that:
	 There is an observed copper grade tenor shift of 26% between the NQ-BQ drill core samples (lower) and the PQ-HQ drill core samples (higher). This is most likely due to natural grade variability throughout the mineralization but may reflect a fundamental sampling error effect in dealing with inherent heterogeneity of the mineralization. The dataset for the 2019 BKM resource estimate now comprises of <9% samples from NQ/BQ drilling which are spatially interspersed with HQ/PQ samples and the impact of any sampling error, if present, on the 2019 resource estimate will be minimal. The large primary sample size and the sample comminution and reduction process employed are not theoretically ideal (according to Gy's generalized sampling nomogram) however the relatively narrow band of copper assays within the mineralization suggests that any issues may not be of significance when the risk is assessed at the global scale. The coarse crush duplicate analysis undertaken in the 2015 and 2016-19 QC programmes show no concern wrt sample reduction procedure's effect on copper assay reliability.
	Sample preparation and assay:
	Large mineralised samples (2m and 3m lengths) were crushed to - 4mm (3m samples) and -2mm (2m samples) before being sub- sampled to 1kg for pulverizing. All digests were conducted by 3 acid digest. Of concern regarding confidence in the resource estimate is that:
	 The sample comminution and reduction process employed are not theoretically ideal (according to Gy's generalized sampling nomogram) however the relatively narrow band of copper assays within the mineralization suggests that any issues may not be of significance when the risk is assessed at the global scale. The QC evaluation of the coarse crush and split duplicates undertaken during the 2015 and 2016-19

Criteria	Explanation
	 drilling campaigns showed no concern regarding sample preparation procedures on the reliability of copper assays for the BKM resource estimate. Three acid digests are akin to total digests. This is only an issue if copper silicates are present within the mineralization at BKM. There is one recording of the copper silicate, chrysocolla, in an early thin section report and none in the 2017 petrology work or core logging. Three acid digests will give total copper content of samples and hence the 2019 BKM resource estimate is a total copper estimate.
	 Assay data quality: The 2015-19 assay QC programme and QC work undertaken by ENJ-KSK contains sufficient quality control samples to assess reliability of the copper assays. Earlier work by OX-KSK contained limited quality control samples and there were no quality control samples submitted with assays for the early work undertaken by KSK (pre 2002). Of concern regarding confidence in the resource estimate is that:
	 Quality control samples submitted with the 2015, 2016-19 KSK programmes show that the copper assaying for these periods are of acceptable quality for classifying resources. Quality control samples submitted with the ENJ-KSK programme show that the copper assaying for this period is of acceptable quality for classifying resources. Quality control samples submitted with the OX-KSK programme show that there may be issues with copper assays from early batches of their work, however only one hole is affected by this issue and therefor assays from this period are of acceptable quality for classifying resources. Resources in the proximity of the affected hole have been classified as Inferred. The copper assays data population from the early OX-KSK and early KSK work is comparable with the assay population from the 2015 KSK and ENJ-KSK work, leading H&A to conclude that, even though there is limited/no quality control on the early work, the copper assays from these periods are suitable for inclusion in the BKM 2019 Resource

Criteria	Explanation				
	Estimate and acceptable for classifying resources.				
	 Tonnage factors: Dry Bulk Density measurements were taken from core during KSK 2015 and 2016-18 drilling programmes. Of concern regarding confidence in the resource estimate is that: Diminished confidence exists in the tonnage factors applied 				
	to the resources from two heterogeneous and variably porous areas of the BKM mineralisation due to low DBD sample counts and suspected sample selectivity. Mineralisation in these areas has been held back from being classified as Measured Resources.				
	 Resource copper grade interpolation: The copper grade has been estimated by ordinary kriging interpolation methods. Of concern regarding confidence in the resource estimate is that: 				
	 The resource estimate reconciles well with the source (composite) dataset and compares well with alternative estimates utilising ID² methodologies and various check high grade restriction and composite selection strategies. The copper grade interpolation strategies are robust for the BKM estimate and acceptable for classifying the resource at the local scale. 				
Audits or	An interim BKM 2018 resource model (undertaken according to the				
reviews.	descriptions within regarding the 2019 Resource Estimate), resource report				
	findings:				
	1. AMC considers the BKM Mineral Resource estimate has been completed using usual industry practices and in accordance with the				
	requirements and guidelines of the JORC Code 2012.				
	2. AMC considers that the model, a global estimate, forms a suitable				
	basis for Mineral Resource reporting and for use in Ore Reserve and mining studies.				
	3. Notes the diligence with which the copper mineral species have				
	been evaluated, modeled and reported in the Feasibility Study				
	resource report and considers this adds to the effectiveness of the				

Criteria	Explanation					
	 resource model as input to the Feasibility Study. 4. Conclude that the estimate is considered to provide a robust global estimate however they believe that the copper estimates are overly smoothed and are not likely to reflect local grade variability. 5. Identifies risk associated with the mineralised domaining, however concur with KSK that the main mineralised bodies demonstrate overall three-dimensional continuity. AMC expresses concern regarding the grade distribution in the peripheral, narrower wireframe domains which does not necessarily affect the global estimate but may be an issue at SMU sized blocks. 					
	KSK, on the review of the additional studies undertaken by H&A and advice from AMDAD, has opted to accept the AMC opinion that the BKM 2018 model (and hence 12019 model) is "suitable for use in Ore Reserve and mining studies" and, at this stage, not to pursue any additional studies to investigate the accuracy and impact of the unsupported statement that AMC "believe that the copper estimates are overly smoothed and are not likely to reflect local grade variability". H&A and KSK's additional investigation on possible over smoothing and conditional bias has not uncovered any conclusive evidence to support AMC's statement and, supported by the AMDAD assessment, believe that any increase in local resource variance will be countered by the smoothing effect of the mining and treatment processes and the impact of the leaching rates (curves) on copper production that underpins the financial modelling in the feasibility study.					
	KSK acknowledges that additional geostatistical investigations are available to investigate the degree of smoothing/conditional bias within the BKM resource model, however have advised H&A that they will not instigate these at this time.					
Discussion of relative accuracy/ confidence	The risk associated with the current resource estimate is reflected in the assigned Measured, Indicated and Inferred classifications (JORC, 2012). The drilling density and orientation suitability, primary sampling reliability, certainty in geological and grade continuity, tonnage factor representivity, sample reduction strategy suitability and the unknown reliability of historic assay data are the key factors in determining the resource classification. The completed 50mX50m spaced drilling at BKM is deemed statistically acceptable for assigning Measured and Indicated Resource classifications however only those resources with confirmed geological and grade					

Criteria	Explanation
	continuity gained from holes drilled at orientations other than, and in addition to, the predominant westerly orientation have been assigned the Measured Resource classification. Volumes of the mineralisation where confidence in copper grade and tonnage factors is questioned, due to drill core recovery issues and dry bulk density sample representivity, have been restricted to Indicated and Inferred Resource Classifications. Geological and grade continuity and grade interpolation confidence are the primary factors in separating Indicated (thicker and higher grade domains) from Inferred Resources at BKM. The BKM mineralisation has been classified into 33% Measured Resources and 47% Indicated Resources, with 20% Inferred Resources (JORC Code 2012, at 0.2% copper reporting grade). Risks associated with the 2019 BKM resource estimate can be better understood or alleviated with further work on the project which will involve infill drilling and appropriate studies on core and sampling protocols (particularly core recovery and DBD) aimed at improving the confidence in the data and greater understanding of grade continuity and geological controls on mineralisation (at all scales). However KSK may choose not to undertake this work if they deem that the current resource classification is sufficient for a definitive feasibility study which, in part, is
	related to acceptable risks for their selected project advancement strategy.

Abbreviation	:	Meaning
%	:	Percent
%Difference	:	Percentage difference (duplicate - original)/original
%RSD	:	Percentage Relative Standard Deviation, StdDev/Average *100
°C	:	Degrees Celsius
3D	:	Three Dimension
A.B.N.	:	Australian Business Number
AAS	:	Atomic absorption spectroscopy - method for measuring element concentrations in solution (assays)
Ag	:	Silver

Explanatory Notes: Copper Mineral Resource Estimate, Beruang Kanan Main Zone, June 2019.

Abbreviation	:	Meaning
AIM	:	formerly the Alternative Investment Market - a sub-market of the London Stock Exchange
Au B.App.Sc., MSc., MAIG	:	Gold Bachelor Applied Science, Master of Science, Member Australian Institute of Geoscientists
ВК	:	Beruang Kanan
ВКМ	:	Beruang Kanan Main Zone Prospect/mineralization
BSc.(Hons)	:	Bachelor Science with Honours
cm	:	centimetres
CoW	:	Contract of Work
CRM	:	Certified Reference Material
Cu E ENJ	: : :	Copper East PT Eksplorasi Nusa Jaya (a PT Freeport Indonesia subsidiary)
et al.	:	and others
g/cc	:	unit for measurement of specific gravity - grams per cubic centimetre (also can be expressed as T/m ³)
g/t	:	grams per metric tonne - a measurement of element concentration, interchangeable with ppm
GA	:	PT GeoAssay (laboratory)
Grade	:	Quantity of metal per unit weight of host rock.
GT	:	Grade Tonnage
H&A	:	Hackman and Associates Pty Ltd
ha.	:	hectare(s)
ICP-MS	:	Inductively coupled plasma mass spectrometry - method for measuring element concentrations in solution (assays)
ICP-OES	:	Inductively coupled plasma optical emission spectrometry - method for measuring element concentrations in solution (assays)

Abbreviation	:	Meaning
ICP-OES AAS	:	methods for measuring element concentrations in solution (assays)
IP	:	Induced Polarization - involves transmitting a current into the ground using two electrodes and measuring the voltage between another pair of electrodes.
IUP	:	Mining Business License (Izin Usaha Pertambangan).
JV	:	Joint Venture
kg	:	kilogram(s)
KGCL	:	Kalimantan Gold Corporation Limited
km	:	kilometre
4 km ²	:	kilometre squared
KNA	:	Kriging Neighbourhood Analysis
КР	:	Mining Authorization (Kuasa Pertambangan) - now defunct.
КЅК	:	PT Kalimantan Surya Kencana
KSK CoW	:	the 6th generation Contract of Work (CoW) held by KSK
Lat	:	Latitude
LIDAR	:	Lidar is a remote sensing technology that measures distance by illuminating a target with a laser and analyzing the reflected light.
m	:	metre(s)
MAIG	:	Member of Australian Institute of Geoscientist
max	:	maximum
mesh	:	grid mesh (measurement of aperture)
mm	:	millimeters
Mo MPD	:	Molybdenum Mean Paired Difference (expressed as a percent)
MPRD	:	Mean Paired Relative Difference (expressed as a percent)
Ν	:	North

Explanatory Notes: Copper Mineral Resource Estimate, Beruang Kanan Main Zone, June 2019.

Abbreviation	:	Meaning
NB	:	Please note
NI 43-101	:	"Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects" defines and regulates public disclosure in Canada for mineral projects and it relies on resource and reserve classification as defined by CIM.
Ordinary Kriging	:	3D interpolation method.
ОХ	:	Oxiana Limited
Pb pH	:	Lead measure of the acidity or basicity of an aqueous solution
ppm	:	parts per million - a measurement of element concentration, interchangeable with grams per metric tonne
PQ HQ NQ BQ	:	Diamond Drill Hole Core sizes
РТ	:	Perseroan Terbatas ("Limited Liability")
Ру	:	Pyrite
QA	:	Quality Assurance
QC	:	Quality Control
Q-Q	:	Quartile - Quartile (plot)
Rd	:	Road
RE	:	Reference to
RL	:	reduced level (relative to vertical datum - usually ASL - Average Sea Level)
S Sb SEDAR	::	South Antimony System for Electronic Document Analysis and Retrieval (Canadian - www.sedar.com)
SFK	:	PT Sucofindo (Persero) Laboratory
SG	:	Specific Gravity (mass/volume)
Si	:	Silica

Explanatory Notes: Copper Mineral Resource Estimate, Beruang Kanan Main Zone, June 2019.

Abbreviation	:	Meaning
SOP	:	Standard Operating Procedure
StdDev	:	Standard Deviation
Т	:	metric tonnes
TIN	:	Triangulated Irregular Network (computer solid model shape that domains features of projects in 3D)
ТМ	:	Trade Mark
UTM	:	Universal Transvers Mercator (Cartesian coordinate grid system)
vol%	:	Percentage of total volume
W	:	West
WA	:	Western Australia
WGS84, UTM Zone 49S	:	Spheroid projection and grid datum for the geographical location of data at Beruang Kanan
yrs	:	years
Zn	:	Zinc