Ore Reserves Statement BKM Copper Project, Central Kalimantan Indonesia

As at 9 May 2023



Prepared by John Wyche for Asiamet Resource Limited

Authors: John Wyche - AMDAD

Effective Date: 9 May 2023 Submitted Date: 9 May 2023

1 ORE RESERVES STATEMENT

1.1 SCOPE

The May 2023 Ore Reserves Estimate was prepared for Asiamet Resources Limited by Australian Mine Design and Development Pty Ltd (AMDAD). It deals with the resources for the Beruang Kanan Main (BKM) copper deposit in Central Kalimantan, Indonesia, as at 9th May 2023. It is an update of the 2019 Ore Reserves estimate for the project.

All of the reserves are for extraction by open pit mining. Processing will be by heap leaching and solvent extraction / electrowinning (SXEW) to produce copper cathode on site.

At the time of preparing this Ore Reserve Estimate the BKM Project is at the Feasibility Study Stage. There is currently no mining or processing in operation or development on the site.

1.2 CONTRIBUTING PERSONS

The May 203 Ore Reserve Statement prepared by John Wyche is supported by contributions from the persons listed in Table 2.

1.3 ACCORD WITH JORC CODE

This Ore Reserves Statement has been prepared in accordance with the guidelines of the Australasian Code for the Reporting of Resources and Reserves 2012 Edition (the JORC Code 2012).

The Competent Person signing off on the overall Ore Reserves Estimate is John Wyche, of AMDAD, who is a mining engineer and a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Wyche has 35 years of relevant experience in operations and consulting for open pit metalliferous mines.

1.4 ORE RESERVES SUMMARY

The Ore Reserve Estimate is summarised in Table 1.

Table 1 BKM Copper Project Ore Reserves

Ore Category	Mt	Soluble Copper %	Total Copper %	Soluble Copper kt	Total Copper kt
Proved	19.0	0.5	0.7	102	137
Probable	21.8	0.4	0.6	95	135
Total	40.8	0.5	0.7	198	272
Waste	50.3				
Waste : Ore Ratio	1.2				

Notes:

1. The tonnes and grades shown in the totals rows are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.



Figure 1 Project Location within Indonesia

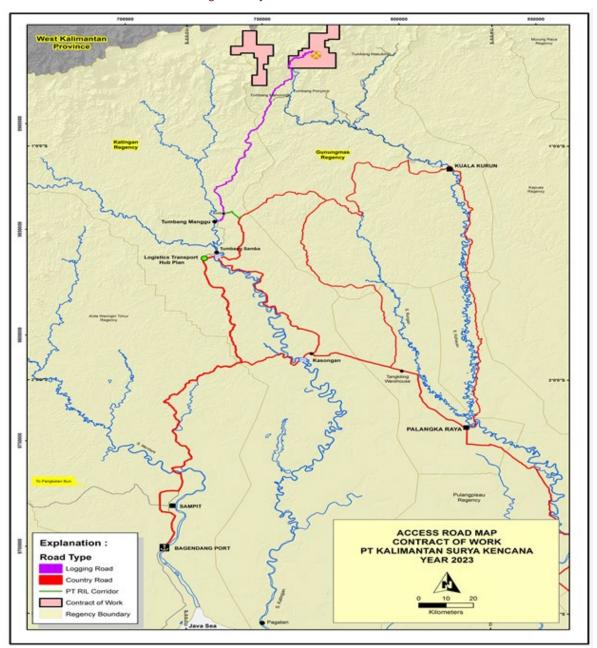


Figure 2 Project Location with Central Kalimantan

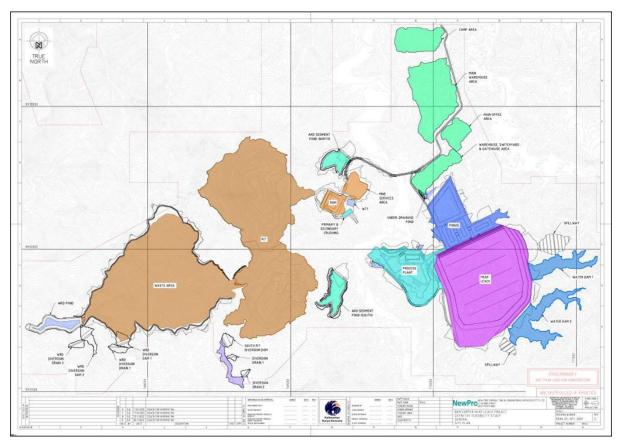


Figure 3 Site Layout

Table 2 Contributing Experts

Expert Person/Company	Area of Expertise	References / Information Supplied
Duncan Hackman Hackman & Associates	Mineral Resource Estimation	Beruang Kanan Main Zone, Kalimantan, Indonesia; 2019 Resource Estimate Report, June 2019 (No changes made to resource model used in 2022/23 Study from that reported in 2019)
Lufi Rachmad PT Geomine	Mine Geotechnical	Original pit slope design parameters from 2019 study, executed update study on pit geotechnical conditions and slope stability for 2023 FS Update Final Pit Design
Peter Joseph Keane PT Douglas Valley Indonesia	Mine Hydrogeology	Update of conceptual groundwater model, coordinated development of finite element groundwater model both used in Open Pit geotechnical assessment
Simon Ballantyne PT Ground Risk Management	Mine Geotechnical and Hydrogeology	Technical guidance capacity through pit geotechnical assessment.
Colin Fraser Lorax Environmental (Canada)	Environmental	Coordinator for updated water balance and water quality modelling performed by Lorax Environmental (Canada), final detailed report on this aspect of the study.
Yuda Nasution UWR Consulting	Mine Water Management Design	Coordinator for design study related to pit and waste dump water management systems to deliver outcomes from water balance modelling.
David Readett Mworx	Metallurgy	Updated, consolidated Metallurgical Testwork Interpretation Report. Copper Recovery modelling. Provision of input into Process Design Criteria.
Paul Newling NewPro Consulting	Process Design	BKM Feasibility Process Design by NewPro Consulting- Detailed Process Design Criteria, Ore Stacking Schedule, Process Design, Capital Cost Estimation, Project Execution Model, Study Report
Darryn McClelland Asiamet Resources	Operational Cost	Detailed modelling for all Operating Cost components including Mining, Processing and Support Services. Coordination of certain inputs in to Capital Cost estimate.
James Deo Asiamet Resources	Commercial / Financial	Coordinated analyst pricing for copper and cathode premium, coordinated compilation of financial modelling of the project
John Wyche AMDAD Pty Ltd	Mining Engineering	Pit Optimisation. Detailed Pit and Waste Dump Design. Detailed Mine/Stacking Production scheduling. Competent Person for Ore Reserves

1.5 ORE RESERVE ASSESSMENT

Table 3 JORC Table 1 Section 4, Estimation and Reporting Ore Reserves

Only Section 4 of Table 1 dealing with the Ore Reserves Estimate is presented here. Sections 1, 2 and 3 of the following Table 1 are as shown in "Beruang Kanan Main Zone, Kalimantan, Indonesia; 2019 Resource Estimate Report" prepared by Hackmann and Associates Pty Ltd. This report was publicly released by Asiamet Resources on 14 June 2019.

JORC Code, 2012 Edition – Table 1

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. 	The Mineral Resource Estimate was prepared by Duncan Hackman of Hackman and Associates Pty Ltd in June 2019.
estimate for conversion to Ore Reserves	 Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	The resource block model "postestimate 2019" was used in the pit optimisation, pit design and production schedule.
		The Mineral Resources are inclusive of the Ore Reserves.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	John Wyche visited the BKM site on 23 and 24 January 2018. Areas inspected included the: Site access road, Pit area, ROM pad area, and Waste rock dump area.
		Several exploration and geotechnical drill hole sites were visited.
		Dense tall vegetation made it difficult to view the overall site but examination of roads and shallow excavations on foot gave a good appreciation of the steep terrain and weathered surface materials.
		Discussions were held with the exploration geologists, a geotechnical engineer who was supervising the pit geotechnical drilling program and a

Criteria	JORC Code explanation	Commentary
		consultant structural geologist who was on site at the time.
		The visit confirmed that assumptions made for the mine design and operations are appropriate for the site logistics, climate and topography.
Study status	 The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	Asiamet Resources presented a Feasibility Study to the Government of Indonesian to demonstrate that the BKM Project meets Indonesian regulatory standards. The Government of Indonesia formally approved the Indonesian Feasibility Study in March 2019.
		In mid-2019 Asiamet Resources issued a Detailed Feasibility Study (DFS) which incorporated additional drilling and further information gathered since the Indonesian Feasibility Study.
		The 2019 study inputs and outcomes were updated during 2022 and early 2023. Key components of the update included:
		 Further work on heap leach copper recoveries leading to a more reliable approach based on the ratios of modelled copper species rather than specific ore types, Review of mining costs against pit and waste rock designs and schedules including quotations from four Indonesian based mining contractors, Revision to heap leach pad design to move away from the very challenging valley fill design to more standard graded pad arrangement making operation of the heap leach more consistent, Revision to process, site and transport operating costs based on current power, fuel, reagent and labour costs, Increased detail and cost estimation for site water management including mine acid water. Revision of project capital costs for the revised mine, leach pad, SXEW plant and water management designs. Updated copper price forecast.
		The current Ore Reserves have been compiled as part of the 2023 DFS

Criteria	JORC Code explanation	Commentary
		update. The updated DFS covers all aspects of the project:
		 Mineral resource estimation (no change from 2019 Resource model) Geotechnical assessment of stability of final pit wall design utilising updated assessment of rock mass quality and updated hydrogeological conceptual model and finite element numerical model, pit stability assessed in both 2D and 3D limit equilibrium analysis. Heap leach assessment based on column test work and heap stability and permeability assessment, consolidated reporting of all heap leach test work and updated interpretation of copper recovery model, iron dissolution and acid consumption/generation characteristics, Updated site climate assessment and revised water balance and water quality modelling, Mine cost estimation based on detailed budget pricing from experienced local mining contractors utilising equipment considered appropriate for scale of mining, Feasibility Study design of the heap leach pad earthworks, liners and reticulation, Feasibility Study design of the crushing, conveying and stacking system, Feasibility Study design of the Solvent Extraction and Electrowinning Feasibility Study design of Process Plant Neutralisation and Mine ARD water treatment facilities, Processing and maintenance cost estimation for the designed facilities matched to the scheduled ore feed from the mine, Site services and administration cost estimation, Copper price forecasting for cathode product,
		 Cost estimation for Transport and Logistics for inbound operational cargo and cost estimation for cathode backhauled to

Criteria	JORC Code explanation	Commentary
		 central facility, Open Pit optimisation based on the above parameters to define the pit shape and overall strategic plan, Detailed pit design including staging and design of access for ore and waste to the ROM pad and waste rock dump respectively, Detailed production scheduling of the mine, heap leach stacking and copper cathode production, Capital costs for the above items based primarily on quotations on equipment, from detailed material take offs, Sustaining capital cost estimation based on a range of staged planned investments such as pit dewatering capacity, heap leach interlift liners and ARD water treatment capacity. Preliminary mine closure cost estimation, Financial modelling, Environmental and social assessment through the Indonesian AMDAL process, completed previously.
		The Feasibility Study is based on development of an open pit mine targeting extraction of predominately secondary copper sulphides from the BKM deposit as those are amenable to the treatment regime of heap leaching followed by Solvent Extraction and Electrowinning. A strategic imperative for Asiamet regarding this first project is production of copper cathode which meets the Government of Indonesia requirements for downstream processing. The development of the BKM Heap Leach SXEW project is important for Asiamet's strategy to develop the BKM mineral district and the broader KSK contract of work as it acts as the enabler via the development of infrastructure that supports this future development.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Copper cut off grades are calculated using: Soluble copper grades adjusted for estimated mining loss and dilution, An empirical relationship for heap leach copper recoveries based

Criteria	JORC Code explanation	Commentary
		on column leach tests adjusted for commercial scale leach pads: y = 380.72x3 - 827.02x2 + 590.58x - 58.837 where: y = recovery of soluble copper to cathode x = ratio of soluble copper species in each block. Chalcocite% / (Chalcocite% + Covellite% + Bornite%)
		 Process, site general and administration operating costs and incremental ore costs (additional cost of mining 1 tonne as ore instead of waste), Copper price less realisation costs (cathode transport). Royalties. Forecast copper price.
		Cut off grades were calculated as:
		Process + G&A +Inc Ore Cost per tonne Recovered value of 1% Cu _{sol} per tonne-Realisation costs-Royalties
		The ratio of soluble copper species varies through the deposit making it impossible to state a unique cut off grade. Ore tonnes are reported by using the recovery and costs and copper price above to calculate the net value of soluble copper within each block in the resource model. Positive value blocks are potentially Ore and negative value blocks are waste.
		Grade tonnage reporting of the positive value blocks in the resource model shows the cut off grade can be reasonable approximated as 0.13% soluble copper (Cu _{sol}).
Mining factors or assumptions	or Feasibility Study to convert the Mineral Resource to an Ore	Ore Reserves are based on opencut mining using hydraulic excavators and trucks. The ore zones are shallow, often outcropping in the hillside and most of the copper grades are too low to support underground mining.
•		Wall slopes for pit optimisation and design are based on assessment by PT Geomine geotechnical engineers. Their work was the third in three phases of pit geotechnical assessment. Each phase added more dedicated geotechnical drilling, analysis of geotechnical logging in resource drill holes, groundwater analyses and structural modelling. Final

JORC Code explanation Commentary Criteria slopes, stope sizes, etc), grade control and pre-production drilling. slope recommendations are based on rock mass strength modelling • The major assumptions made and Mineral Resource model used for modified around major structural features. The work was peer reviewed by PT Ground Risk Management geotechnical engineer who assembles pit and stope optimisation (if appropriate). geotechnical information and final pit wall recommendations. • The mining dilution factors used. The mining recovery factors used. Mining loss and dilution factors were estimated by re-blocking the irregular • Any minimum mining widths used. block sizes in the resource block model to 5x5x5 (EWxNSxElev) metres. • The manner in which Inferred Mineral Resources are utilised in The resource model blocks are clipped against interpreted boundaries for mining studies and the sensitivity of the outcome to their inclusion. the mineralisation. The regular re-blocked block size reflects a workable • The infrastructure requirements of the selected mining methods. mining size for the proposed scale of mining and grade control and the geometry of the mineralisation. If mining loss and dilution were applied on a global basis, the re-blocking would be equivalent to 96% mining recovery with 11% dilution at 0.11% soluble copper. Whittle™pit optimisation was run on the re-blocked resource model. Inputs for the pit optimisation included: Overall wall slopes by geotechnical domain as advised by PT Geomin. Mining costs based on mining contractor quotes and estimated owner costs. • Processing costs based on power from a new Biomass Power Station and updated assessments of acid and limestone costs, owner labour and other operating costs, Quotations for cathode transport, Updated royalty calculations, and An updated copper price forecast. Where appropriate the pit optimisation inputs were varied spatially through the deposit. These include slopes, mining cost and copper recovery. Other inputs, such as process costs and copper price were fixed. Average values of kev inputs used are: • Copper recovery – variable, average 78.6% (applied to soluble

copper grades)

• Mining cost – variable, average US\$3.37 per tonne

Criteria	JORC Code explanation	Commentary
		 Process cost – US\$5.16 per ROM tonne (including crusher feed but excluding electrowinning power) General and administration – US\$3.02 per ROM tonne Electrowinning power – US\$253.65 per tonne cathode Cathode transport – US\$60.00/tonne of cathode Copper price – US\$3.96/lb Cathode premium - \$US 100.00 per tonne of cathode Royalty – Government of Indonesia 2% Royalty – Freeport, formula (approximately 0.74%) A check pit optimisation was run at the end of the study. It confirmed the pit shell remained consistent with inputs that were revised over the course
		of the study. The inputs are discussed further in later sections of this Table 1, Section
		The working pit design was prepared using the optimised pit as a guide and berm / batter configurations consistent with the wall slopes recommended by PT Geomine. Most of the pit height opens onto the eastern side of the hill containing the mineralisation so it was possible to keep ramps off the final western wall which is the highest wall with highest risk of localised wall failures. The pit is designed in stages to access high grade ore early, defer waste stripping costs and to limit the length of the final western wall above current working areas.
		The ROM stockpile and crusher area is immediately east of the pit at close to the same elevation as the pit exit.
		The waste rock dump is in a narrow valley immediately west of the pit. The mid-height of the waste rock dump is at the elevation of the pit exit. The toe of the waste rock dump falls within the main valley therefore noncontact water will be diverted around the dump and discharge out of the valley avoiding treatment. The dump will have additional roller compaction applied to assist in reducing water and oxygen ingress into the waste as part of the acid rock drainage (ARD) mitigation strategy. This will also

Criteria	JORC Code explanation	Commentary
		assist with dump stability.
		Infrastructure for the mining operation included in the DFS includes:
		 A mining contractor area adjacent to the pit including workshop, offices and fuel storage, Cut off drains above the pit and waste rock dump and perimeter drainage to divert clean water around the mining areas, Mine ARD water management ponds downstream of the North and South areas of the Open Pit. Pumping systems in each of these ponds will pump water to central ARD water treatment plant. Waste Rock Dump ARD water management pond at the toe of the dump with pumping facilities to return this water back to the mining area for treatment in central ARD water treatment plant. A high explosives magazine as well as Ammonium Nitrate Storage and Emulsion preparation facility.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. 	Copper ore will be processed using heap leaching and solvent extraction and electrowinning (SXEW) to produce copper cathodes on site. Ore from the pits will be crushed and agglomerated prior to conveyor stacking on the heap leach pads. Sulphuric acid will be used as the leaching agent on the heaps but will not need to be added at all times due to acid generation from the oxidation of pyrite.
	 Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the 	Heap leaching and SXEW is a well established method of copper ore processing for amenable ores throughout the world. The method is practised in areas with similar climate and topography at another project in Indonesia.
	 orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	Project assessment is based on the soluble copper portion of the mineralisation which was determined using extensive sequential assays throughout the deposit.
		Crush size, target copper recoveries and leach time curves were

Criteria	JORC Code explanation	Commentary
		estimated using extensive column test work. Recoveries from the column test work were down rated to allow for loss of efficiency from the columns to a full scale leach pad.
		Sample selection for the column test work was designed to be representative of spatial, mineralogical and grade variability through the deposit. Sufficient variability testing was conducted to develop empirical relationships for leaching time and terminal recovery of the soluble copper based on the ratio of soluble copper species present. This improves local reliability of copper recovery estimation through the deposit.
		Geotechnical test work was undertaken to confirm the proposed stacking arrangement, lift heights and over-stacking for the heaps.
		A detailed stacking schedule was prepared to maximise copper recovery within the heap configuration. This schedule was used to guide the mining production schedule to avoid accumulation of an excessive ROM stockpile between the mine and the heap.
Environmen- tal	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The environmental impacts of the development and operation of the site as defined by the current study will be similar to those previously reported. A significant difference with respect to the 2023 BKM project is the much smaller footprint of the Heap Leach Facility and the smaller footprint of the Waste Rock dump as the total project is mining only 67% of the volume as proposed in the 2019 Ore Reserve. The reduction in footprint of the project has had positive flow-on effects with respect to water treatment capacity requirements and eventual restoration of the site.
		For the purpose of the 2023 BKM study update there have been no significant additional site-based studies completed other than an additional baseline water quantity and quality survey. This was performed in the "Wet Season" period of November 2022 and followed the previous surveys so data could be directly correlated. There has been no new additional test work relating to environmental aspects as part of this study update.
		A complete review of all climate data available was made as part of this study update. Climate data is available from a site based weather station,

Criteria	JORC Code explanation	Commentary
		four regional stations and two sources of gridded climate datasets. A significant period of additional site rainfall data was made available for comparisons with regional data sets. The total time period of overlapping data from the site weather station and other data sets is 33 months whereas previously only 13 months was available. The other primary data source used in the 2023 study update was from ERA5 (5th generation ECMWF reanalysis dataset) which has a grid point located very close to the BKM station and is therefore considered an excellent source of new climate data. From this analysis a new baseline mean annual precipitation (MAP) value was determined and updated daily precipitation record for site applied to the ERA gridded climate data set to deliver a set of daily rainfall figures from 1979 to present day.
		With a new climate dataset as input the BKM project has had a complete review and update of its water balance model. The model developed as part of the 2023 study update is fully integrated with mine and heap leach/processing water management brought together in the one water balance model. The model is integrated with the two areas of impacted water treatment, Mine ARD water and Heap Leach/Processing solution. The updated water balance forms the basis for water pond storage volumes, pumping rates and water treatment capacity. The water balance assumptions with respect to separation of contact and non-contact water were used as basis for performing design studies in drainage and water diversion infrastructure.
		From previous studies the acid generating potential of both ore and waste is known to be high. Acid Rock Drainage (ARD) is known to occur and must be managed. An updated assessment of the ARD source terms used in the water quality modelling was undertaken in this study, with some additional test work results being available that were not previously considered as well as improved understanding of ARD characterization and behavior from other sites. Updated interpretation of the previous test work and other similar projects has led to a new set of geochemical source terms being used in the water quality modelling. This data is combined with the water balance model to deliver new ARD water treatment requirements which have been incorporated into the design and operating

Criteria	JORC Code explanation	Commentary
		cost models.
		The BKM project has an approved Environment and Social Impact Assessment (AMDAL) in which all previous impacts of an environmental and social perspective were assessed with monitoring and management plans developed. With the reduction in footprint of the BKM project and resulting changes in water management and treatment strategy an Addendum to the existing AMDAL will be necessary. This is a standard process to follow and expected as a project evolves over time. Importantly, there is no new type of impact that needs to be assessed as BKM remains an open pit, heap leach project to produce copper cathode that is being developed within the same permitting boundary.
		With respect to mine closure an assessment of costs of this activity have been made as part of the overall financial modelling of the project. Progressive rehabilitation of the site will be possible during operations, particularly with respect to the waste rock dump where its construction method allows the operation to commence rehabilitation of its downstream surface very soon after development begins. Closure costs relating to topsoil recovery and placement, rehabilitation, infrastructure removal, water treatment and personnel costs are accounted for at a high level, it is recognised that more work will need to be done as the site moves into operations.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk)	Current infrastructure at the BKM site is limited to the exploration camp and associated facilities.
	commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The DFS includes design and cost estimation for all infrastructure required by the project including:
		 Mining contractor's area, workshop and offices, Explosives magazine, ROM stockpile, Crusher and conveyor to the pad area, Agglomerator, Leach pad conveyors and stacker, Leach pads,

Criteria	JORC Code explanation	Commentary
		 SXEW and process and stormwater ponds, KSK offices, stores, workshops and laboratory, Power station BKM Site switchyard, primary transformer and main incoming substation followed with site and electricity reticulation, Fuel storage for non-mining contractor requirements, KSK and contractor camp, Site access road, Off-site facilities (road to port, port facilities), Surface and groundwater management, and Acid neutralisation facilities. The overall level of infrastructure design and capital cost estimation is commensurate with a Feasibility Study.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	Mine operating costs have been developed from a range of sources. Primary mining activity (clearing, blast hole drilling, load and haul, ROM rehandle) costs have been sourced from mining contractors who are familiar with the nature of mining at BKM, with respect to expected equipment, ground and climate conditions. Blasting costs were provided by quotation from two well-credentialed suppliers. Owners costs in Mine Geology and Mining have been derived from a company organization structure. Mine Geology proposes to employ reverse circulation grade control drilling for at least the first five years.
		Processing costs are based on a range of inputs. Power supply costs have been provided by proponent of the Biomass Power Station. Key consumables such as sulphuric acid, lime, solvent extraction reagents have had recent quotations provided. Limestone costs have been derived on the basis of developing a new limestone quarry at the Rinjen prospect with mining and crushing costs estimated. Equipment maintenance costs have been estimated on the basis of capital costs of the equipment. Costs for processing and maintenance personnel have been derived from a company organizational structure, salary structure applied and oncost model.
		Support Service costs have been estimated for the planned workforce

Criteria	JORC Code explanation	Commentary
		covering the remaining functions outside mining and processing. A range of activities with costs have been allocated to each of the support function departments. Major cost areas such as Transport and Logistics for the operation and the provision of Camp Services on site have been based on cost estimate from reputable service providers in these areas.
		The capital cost estimate has been built up from a range of sources with all major fixed plant equipment being based on vendor quotations. The costs for site/Heap Leach civil earthworks has been provided by an experienced civil infrastructure contractor. Engineering design has been taken to a Feasibility Study standard. Growth allowance has been allocated at varying levels depending on confidence in the cost information provided.
		Royalties are based on the current Government of Indonesia standards as it relates to production of Copper Cathode.
		Cost estimates cover the periods through construction, operation, closure and post closure.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	Copper pricing is derived from average pricing provided in April 2023 from 16 investment banks and resource analyst firms. Th efinancial model uses average pricing for years 2023, 2024, 2025 and 2026 and a long-term price beyond 2026.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	The outlook for the copper market is strong with a range of analysts conceding the market is potentially going to see a structural deficit forming this decade. BKM's copper production ranging from 16,000 to 20,000 tonnes per annum should not pose any issue with placing in the current market. Copper cathode from BKM will be sold either domestically or internationally. Refined copper production in Indonesia is set to increase significantly within the next 2 years with completion of two new copper smelting complexes.

Criteria	JORC Code explanation	Commentary
		Cathode copper will be sold within Indonesia and internationally. As a producer of copper cathode the BKM Project will not be affected by Indonesian restrictions on export of unrefined products.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	The BKM 2023 Feasibility Study update financial model is driven by the new pit design and production schedule. The current production schedule includes a small volume of inferred resources, 2.7% of ore scheduled to be processed is coming from inferred resources. Mining and processing costs are applied to these resources and the copper production revenue from the inferred resources has remained in the financial model. The Inferred tonnes are not included in the Ore Reserve estimate.
		A key factor of the current studies approach to production scheduling is that the heap leach ore stacking schedule defines activities upstream, i.e. mining (ore delivery) and downstream by way of copper production. The BKM heap leach facility is being developed as a single stage facility with no further expansion which effectively sets the ore stacking rate available based on the copper leaching cycle (how many days of leaching to reach required copper recovery).
		Inputs for the financial model have been described elsewhere but include construction capital cost, sustaining capital costs, operational costs over the life of mine including pre-production and operational closure costs post completion of heap leaching. Revenue is generated on the sale of copper cathode at the assumed long term copper price less realization costs.
		Net present value (NPV) estimated on an after tax basis using an 8% real discount rate is strongly positive. Taxation is applied in accordance with the laws of Indonesia.
		Sensitivity analysis conducted varying capital cost (construction plus sustaining), Operating Costs (across all areas), Copper Pricing and Discount Rate showed the project to be economically robust against all these variables. The project is most sensitive to copper price, with a 10% reduction in assumed long term copper price halving the NPV of the project however it remains significantly positive with payback under 5 years.

Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	PT KSK has completed its required Community Development and Empowerment (PPM) plan which sets forth the programs that have been agreed to be developed with local communities. Importantly this document also describes in detail the budget to be allocated to the programs over the life of mine and forms the blueprint for all activities moving forward. KSK will be required to formally report on its implementation of this plan and budget spend as part of its annual review process with Directorate of Mineral and Coal.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	Risk Assessment
		An updated risk assessment has been completed as part of the study update. Many risks remain consistent with previous works and appropriate mitigation measures and controls have been adopted as part of the study update.
		Legal Agreements
		The existing agreement with Freeport is accounted for in the pit optimization and financial modelling of the project.
		Marketing Arrangements
		No specific marketing arrangements have been entered into at this stage of the project. Interest is high in new sources of LME Grade A copper cathode coming to market so there is not envisaged to be any issue with placing copper to buyers. The market within Indonesia is relatively small at this time and new refined copper volume is coming to market over the next two years with two new large copper smelters being commissioned. Consumption of copper within Indonesia is expected to increase with increases in renewable energy projects and EV development plans.
		Asiamet will make decisions on any marketing agreements at an appropriate time
		Government agreements and approvals
		BKM amended Contract of Work (CoW) is in good standing and valid for a period of 30 years from commencement of mining operations with 2 potential extensions, each for 10 years, in the form of a Special Mining

Criteria	JORC Code explanation	Commentary
		Licence, the licencing system under Indonesian Mining Law of 2009 which replaced the CoW system.
		The 4 key permits/approvals in support of the construction permit for the BKM Projects are: 1) Environmental and Social Impact Assessment (AMDAL in Indonesian) and associated Environmental Licence; 2) Government of Indonesia Feasibility Study; 3) 5-year Reclamation and Mine Closure plans; and, 4) Operations/Production Forestry "Borrow- to-Use" Permit. The status of these permits/approvals are as follows:
		 BKM AMDAL was approved by the Government of Central Kalimantan and the associated Environment Licence was issued in January 2019 BKM Government of Indonesia Feasibility Study was approved by the Ministry of Energy and Mineral Resources (MEMR) in February 2019. KSK received its approval of the 5 year reclamation plan on 5th February, 2020.
		PT KSK received its conditional PPKH in April 2022 which is the first step in the approval process to convert the 864 hectares of project area from a forestry concession to mining concession. KSK has to complete several activities to convert the PPKH from provisional to definitive. At the time of writing the company had submitted all of its documentation for this permit with one outstanding item remaining to be concluded. It is expected this process will be concluded within 2023.
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	Probable Ore Reserves are derived from the economically mineable portion of Indicated Resources within the pit design.
		Proved Ore Reserves are derived from the economically mineable portion of Measured Resources within the pit design.
		No Probable Ore Reserves are derived from Measured Resources.
		In the opinion of the Competent Person, John Wyche, technical,

Criteria	JORC Code explanation	Commentary
		commercial and other modifying factors for the BKM Copper Project are well enough defined in the DFS that classification of Probable Ore Reserves from Indicated Resources and Proved Ore Reserves from Measured Resources is appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	No external audits or reviews of the Ore Reserves have been undertaken.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	As a pre-mining Ore Reserve with no operational results to reconcile against, assessment of the relative accuracy and confidence in the Ore Reserve is based on the Mineral Resource Estimate and the mine plan and processing system designed to recover the copper metal. The Mineral Resource Estimate has been thoroughly documented and audited so the Measured and Indicated portions forming the basis of the Ore Reserve are at the levels of confidence described in the JORC Code 2012. The mine plan has been developed over several years by experienced Indonesian and Australian based engineers. Mining methods and rates are consistent with similar Indonesian projects and mining costs are well supported by contractor and vendor quotations. Process methods, recoveries and costs are well supported by metallurgical test work, detailed designs, vendor quotes and local costs. While further adjustments will be required as the project is developed there is a high degree of confidence that the general plan and cost estimate is adequate to allow the global Ore Reserve to be realised. Until sufficient mining benches have been exposed, mapped and grade controlled to allow reconciliation and any necessary adjustment of the mining model, the Ore Reserve should be regarded as highly reliable for Measured Resources and reliable for Indicated resources at a global level. Information from operations should allow local reliability to be established over the first year of operations. As a pre-mining Ore Reserve estimate it is likely that will be variable reconciliation between the Ore Reserve and the as-mined tonnes and grades on a month to month basis but the variability should be much less over a three to six month period. Future Ore Reserve updates incorporating knowledge of the exposed orebody should allow closer reconciliation on a local short term basis.

Criteria	JORC Code explanation	Commentary



1.6 RESOURCE AND RESERVE CATEGORIES – EXPLANATION

According to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2012 Edition:-

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include



application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The guidelines in the JORC Code state that the term 'economically mineable' implies that extraction of the Ore Reserves has been demonstrated to be viable under reasonable financial assumptions. This will vary with the type of deposit, the level of study that has been carried out and the financial criteria of the individual company. For this reason, there can be no fixed definition for the term 'economically mineable'.

A '<u>Probable Ore Reserve</u>' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

A '<u>Proved Ore Reserve</u>' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The guidelines provided in the JORC Code note that "A Proved Ore Reserve represents the highest confidence category of reserve estimate and implies a high degree of confidence in geological and grade continuity, and the consideration of the Modifying Factors. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits."

The following figure, from the JORC Code, sets out the framework for classifying tonnage and grade estimates to reflect different levels of geological confidence and different degrees of technical and economic evaluation.

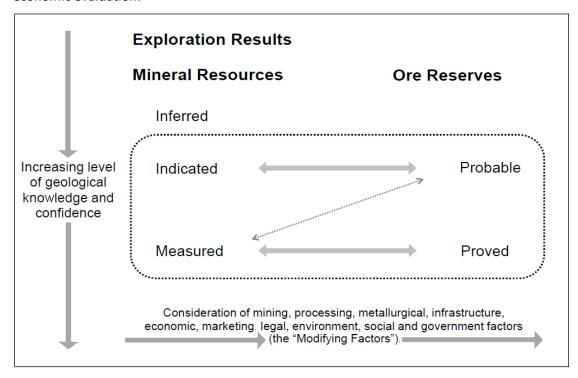


Figure 4 General relationship between Exploration Results, Mineral Resources and Ore Reserves, from 2012 JORC Code Figure 1

Mineral Resources can be estimated on the basis of geoscientific information with some input from other disciplines. Ore Reserves, which are a modified sub-set of the Indicated and Measured Mineral



Resources (shown within the dashed outline in the Figure above), require consideration of the Modifying Factors affecting extraction, and should in most instances be estimated with input from a range of disciplines.

Measured Mineral Resources may be converted to either Proved Ore Reserves or Probable Ore Reserves. The Competent Person may convert Measured Mineral Resources to Probable Ore Reserves because of uncertainties associated with some or all of the Modifying Factors which are taken into account in the conversion from Mineral Resources to Ore Reserves.

Inferred Resources cannot convert to Ore Reserves.