

19A Hampshire Road Glen Waverley VIC 3150

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Ciemas Open Cut Scoping Study, June 2014. Check List of Assessment and Reporting Criteria (JORC 2012)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or 	 Mineral Resource (SRK June 2014) is Reported Against the 2012 JORC Code. Ore Reserves are not Reported
conversion to Ore Reserves	inclusive of, the Ore Reserves.	Ore Reserves are not reported
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. 	 Mr Tim Akerman visited the project site in November 2013. His visit was prior to the study and thus designed pit locations where not known. Further site visits are required.
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. 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. 	 The most recent study completed by Mancala is considered a Scoping Study. It does not meet the JORC Code requirements to allow an Ore Reserve to be reported. Further work is required in resource definition, operating and capital cost estimation.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	• The cut-off grade was calculated using the benchmarked costs. The study used Au 3.0g/t as the direct ore cut-off grade and Au 1.0g/t as the low grade cut-off. The minimum grade allocated for delivery to the ROM Au 1.0g/t. Material in the 1-3g/t is stockpiled for processing at the end of the schedule or during production shortfalls. The economic processing cut-off grade based on the benchmarked figures is Au 1.25g/t.
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). 	 Input parameters for pit optimisation have been based on benchmarked costs and previous reports completed for the project. Commodity price was US\$1,300/oz gold. These input parameters were considered appropriate for the type of mining and location of the deposit. Detail open pit designs were prepared based on the results of the pit optimisation.
	 The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. 	 Four near surface deposits have been identified, being Pasir Manggu, Cikadu, Sekolah and Cibatu and are amenable to open pit mining. Mining rates are scheduled at approximately 2.1 to 3.1million BCM per year. Underground mining
	 The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. 	 following the completion of the open cuts is recommended. The current Geotechnical analysis is limited in both quantum of data and its representativeness of material types. Further geotechnical drilling, logging and geotechnical analysis is required.



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	 The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). 	 An estimate of 35,020m of grade control drilling has been included in the project costs. The Mineral Resource was estimated by SRK in June 2014. The resource block model was converted to a regularized block model with a block size of 5m x 5mx 5m, which
	The mining dilution factors used.	was considered suitable for the proposed mining method and equipment. The regularized model was used in the optimization.
	The mining recovery factors used.	 Mining dilution and mine recovery were calculated based on the proportion of ore
	Any minimum mining widths used.	in each block. The % of dilution was equal to half the % of waste in the block.
	 The manner in which Inferred Mineral Resources are utilised in mining studies and 	 Recovery was 95% for all diluted ore
	 the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	 Inferred Mineral Resources are included in the pit optimisation and mining schedule. The inclusion of inferred resources has a substantial impact on the mine design and optimisation. The optimisation includes 1.7 million tonnes of inferred resources.
	The infrastructure requirements of the selected infilling methods.	 No detailed infrastructure design has been considered. Benchmarked infrastructure costs are included in the cost estimate.
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 processing methodology has not been definitively determined. A combination of gravity, floatation and CIL has been previously proposed for the recovery of gold. Silver recovery has not been considered.
	 The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding 	 Mancala has not substantially reviewed the proposed processing system or re- estimated its operating or capital costs.
	metallurgical recovery factors applied.Any assumptions or allowances made for deleterious elements.	 No metallurgical domaining has been used. A global processing recovery of 90% has been used for all ore.
	 The existence of any bulk sample or pilot scale test work and the degree to which 	 No allowance has been made for deleterious elements.
	such samples are considered representative of the orebody as a whole.	 No bulk sampling or pilot test work has been undertaken.
	 For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	No Ore Reserve estimate has been made
Environmental	 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. 	 No environmental impacts have been considered by Mancala. The potential for Acid mine drainage is not yet researched or planned for. Mancala is unaware of the current status of environmental approvals.
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	 Plant location has not been adequately assessed the plant and waste dump locations requires sterilisation and geotechnical drilling. Details of the power distributor and capacity are not known by Mancala. The construction sizing and cost for overhead transmission line to site is not known by Mancala. A detailed water balance has not been undertaken for the project.



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		 Labour is expected to include local and national personnel, with some expatriate senior management. Accommodation has been based on personnel living locally where possible. A camp will be constructed to house both national and expatriate staff that drive or fly in and out of site.
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 derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. 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. 	 Non-Mining capital costs were based on a prior study (The SRK Report). Mine related capital cost were derived from prior experience and benchmarking. Mine operating costs have been based on benchmark figures obtained by Mancala for similar projects in Indonesia and similar locations. No deleterious elements have been identified for the project. Test work to determine such is limited. Commodity prices and exchange rates have been based on long term projections. All costs have been estimated in US dollars. Selling costs have been estimated from benchmarking and experience. Definitive selling costs require determination. Indonesian government royalties and corporate tax have been included in financial model.
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. 	See comments above
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. 	 Gold is freely globally traded materials, with prices determined by demand and supply. As such, specific market studies have not been undertaken.
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. 	 Cost inputs have been taken from bench marked studies. Detailed estimated from quotations and/or by competent specialists including current labour rates for the region are still required. Sensitivity analysis has indicated that the project drivers are commodity prices and metallurgical recovery followed by operating costs; with a 10% change in revenue factors causing a 21% change in NPV a 10% change in mining or process operating costs causing a 7.5% change in NPV; a 10% change in capital costs causing a 3%



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		change in NPV
Social	• The status of agreements with key stakeholders and matters leading to social license to operate.	The status of agreements is unknown by Mancala.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: 	 The Project is located in the tropics and experiences high rainfall throughout the wet season and significant rainfall events can occur throughout the year. Mine and project design has made only conceptual allowances for suitable drainage and water storage and production delays due to wet weather. Further work is required in this regard. A risk analysis for the project has not been conducted.
	Any identified material naturally occurring risks.	 Naturally occurring risks include topography, climate, seismic, and high rainfall events. Water and rainfall management requires significantly more work to reduce the risk to an acceptable level. The project needs to be designed for a 1:100 year storm event, an operating basis earthquake with an appropriate return period. A comprehensive risk analysis needs to be developed for the project.
	 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. 	 Mancala is unaware of the status of any legal or marketing agreements. Mancala is unaware the status of any government agreements and approvals. A Reclamation and Closure plan has not been completed.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	 The current work does not currently reach the standard for an Ore Reserve. The Mining Inventory that is reported is for a cut-off grade of 1.0 g/t within the designed open pits has been modified by the application of suitable mining recovery and mine dilution factors.
	 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). 	
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The report has not been externally audited. Ore Reserves are not reported.
Discussion of relative accuracy/	 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 	 Ore Reserves cannot at this study level be started. The current report contains too large a proportion of Inferred resources and a very low % of measured resources. The costs assumptions are based on benchmark studies and may not accurately



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confidence	 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. 	reflect the actual costs for this individual project.

The production schedule presented in the Scoping Study does not constitute an Ore Reserve. The production schedule has been compiled based on low level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage or to provide certainty that the conclusions of the Scoping Study will be realised.