

ASX Release
29th October, 2013

Revised Mine Plans Provide Further Confidence Towards Achieving Stable Operations

- Cleveland enhances Mine Plans of the “Metago” and “Pit 3” open-pits under the Company’s staged development of its Premier JV Gold Project, located in Goiás State, central Brazil.
- Revised Metago and Pit 3 open-cut mine plans were produced by AMC Consultants and demonstrate production can be lifted to match the planned processing plant capacity and used to underwrite the required servicing of proposed project debt financing for longer-term operations.
- Current processing capacity supports “Base Case” of 15,000 tonnes processed per month (tpm). Additional capital expenditure on refurbishing and installing second ball mill already owned by Cleveland will facilitate a step up to 30,000 tpm, the “Upgraded Case”.
- The Revised Mine Plan includes an increase in material now considered economic through open pit mining in the Metago and Pit 3 areas, compared to the previous mine plan, allowing for underground mining to be deferred and simplifying site operations.
- Mine plans based on Metago and Pit 3 alone at 30,000 tpm would produce approximately 19,000 ounces of gold over 20 months, generating an estimated margin of A\$12.6m¹, providing healthy debt servicing cash flow and also finance resource expansion including at O Capitão.
- Cleveland’s medium-term target of 7,000 gold ounces per quarter derives 15,000 tpm from the Metago pit, with the remaining 15,000 tpm proposed from other higher-grade sources, including O Capitão. AMC’s 30,000 tpm Upgraded Case provides the Company with confidence that the Metago pit alone can provide 30,000 tpm until the other sources can come online to produce the targeted gold output.
- In-fill drilling over open extension of Metago area and at O Capitão is expected to sustain the 30,000tpm integrated plan and the expansion of the resource base.

1 Margin estimate is 100% of the Premier JV mine operation. The margin does not include head office expenses in Australia nor finance or capital costs. Exchange rate is A\$1.00 : R\$2.11 Brazilian Real.

Corporate Information

ASX Code: CDG
Total shares: 240.5 million
Listed options: 11.4 million
Unlisted options: 30.6 million

Contact

Investor & Media Enquiries
investors@clevelandmining.com.au

Board of Directors

Non-Executive Chairman – Russell Scrimshaw
Managing Director – David Mendelawitz
Executive Director – Rod Campbell
Non-Executive Director – Jim Williams
Non-Executive Director – Rick Stroud

Head Office

Suite 3, Level 1, Rokeby Centre
254 Rokeby Road
Subiaco WA 6008
T: +61 (08) 6389 6000
F: +61 (08) 6389 6099
info@clevelandmining.com.au

Summary

Cleveland Mining Company Ltd (“Cleveland”) provides the following update to its gold mining operation known as the Premier JV. Since the capital raising of August 2013, Cleveland has worked closely with AMC Mining Consultants Pty Ltd (“AMC”) to deliver a near-term mine plan for the Company’s Metago and Pit 3 open pits that incorporates a recent upgrade to the Resource Model.

The Metago and Pit 3 open pits were chosen as a focus for detailed planning because these two pits are the areas with the highest density of drilling and JORC Resource classification, and thus provide potential project debt providers with the greatest level of confidence when compared to some of the other proposed mining areas. The plan sets out a mine schedule, together with a profile of cash flow and gross margins.

The work done by AMC provides two scenarios for open pit mining of the Metago and Pit 3 areas to enable a review of the risk/reward of: (1) the 15,000 tonnes per month Base Case; and (2) the management target of 30,000 tonnes per month.

Cleveland has recently purchased an In-line Leach Reactor (“ILR”)² and plans to soon pursue debt funding, which will be used in part to install both the ILR and a second ball mill that is already owned by Cleveland in order to achieve the 30,000 tonnes per month processing capacity by end March Quarter, 2014.

The development plans for the two pits that were studied in detail form part of a larger strategy that includes the fast-tracked start of mining at the Company’s O Capitão project, located approximately 9km to the north of the Premier process plant. The Upgraded Case provides material to meet the plant capacity even if delays are encountered in starting mining at O Capitão.

In conjunction with the AMC mine planning, Cleveland also engaged Malcolm Castle of Agricola Mining Consultants Pty Ltd to conduct an independent Mineral Resource model review. The review covers the area to be mined under the AMC plan and represents only a part of the original 2011 Mineral Resource model.

AMC Mine Plan for Metago and Pit 3 open pits only (i.e. it excludes potential production from other sources)

Scenario 1	Throughput Tonnes per month	Recovery	Estimated Mine Life	Estimated Gold Production	Estimated Gross Margin
Base Case	15,000	Gravity + ILR	29 months	17,763 oz	A\$10.7m
Upgraded Case	30,000	Gravity + ILR	20 months	19,111 oz	A\$12.6m

Base Case - 15,000 tonnes per month: Estimated Gross Mining Margin of A\$10.7m

Throughput of 15,000 tpm under the Base Case model is designed to reflect a moderate ramp up of operations and provides a 29 month mine-life under the known Mineral Resources. It is a conservative position given that the target processing volumes sit well within the current plant capacity and provides operational head room to accommodate unforeseen issues and opportunities.

² The In-line Leach Reactor is an addition to the existing gravity circuit and uses a chemical extraction process to lift the gold recovery rate from the gravity only level of 60% up to a targeted 75%.

The key variables under the Base Case scenario are:

- 1) The estimated gross margin was based on an assumed gold price of A\$1,375 per ounce, assumed production cash costs of A\$817 per ounce with no account taken of corporate overheads, finance or capital cost. (Exchange rate assumption A\$1.00 : R\$2.11 Brazilian Real);
- 2) Gold recovery is determined in line with current business plan of gravity-only processing until the end March 2014 and then addition of ILR circuit thereafter to lift the recovery rate to 75%;
- 3) Head Grade is assessed at 1.97 grams per tonne and there is an assumed 15% mining dilution factor;
- 4) All operations based on owner-operator model consistent with the business model of acquiring the mining and processing fleet rather than under the contractor model as originally structured.

The pit shell covering the mining activity was generated by AMC using the industry standard Whittle open pit optimization process, which effectively sets out the boundaries for economic mining determined by mining costs, grade and recovery rates. The schedule for mining the shell is then determined and optimized to provide the most efficient way for extraction.

Upgraded Case - 30,000 tonnes per month Estimated Gross Mining Margin of A\$12.6m

The Upgraded Case model represents a production rate that would fully utilise the installed capacity of Premier's plant subject to a planned expansion of the ball mill capacity. The nameplate capacity of the other processing units such as the jaw crusher, the hammer mill, gravity concentrators and the newly-ordered ILR are all able to accommodate the 30,000 tonnes per month rate.

The gold price and the pit shell design used in the Upgraded Case model are the same as the Base Case. The operating cost assumption reduces to A\$778 per ounce on the expectation that certain economies of scale would be achieved with higher throughput.

The Company maintains its medium-term target C1 cash costs of circa A\$400 per ounce once higher-grade material from other sources, including O Capitão is mined and processed with the ultimate proposed process circuit (which includes flotation³) at a rate of 30,000 tpm.

Resources

During the review of the mine plans, the resource model was re-run focusing on the areas of proposed open pit mining. As a result, a proportion of the ore-body was elevated from an Inferred to Indicated confidence level, in order to support project debt finance. The revised Mineral Resource estimate of 950,000 tonnes @ 1.52 g/t for a total of 46,400 troy ounces comprises 18,900 ounces at 2.14 g/t of Indicated Mineral Resource and 27,500 ounces at 1.29 g/t of Inferred Mineral Resource.

This estimate compares to Cleveland's maiden 2011 Mineral Resource of 1.95 million Inferred Mineral Resource tonnes @ 1.42 g/t for 89,000 ounces. The volume reduction is a result of three main factors:

- 1) The deposit area under review was narrowed to include only those areas covered by the mine plan;
- 2) A higher cut-off grade of 0.5 g/t was used for the new estimate compared to 0.3 g/t used previously;
- 3) Mining depletion has occurred since the commencement of operations in late 2012.

³ Flotation circuit is an add-on to the ILR circuit and concentrates gravity tailings before treatment in the ILR.

In-fill and exploration drilling on the down-dip and lateral extension of the mineralization will be conducted during the first stage mining operation, aimed at expanding the open cut mining area resource through the continued conversion of Inferred to Indicated resources, plus the inclusion of new resource tonnages. The previously identified potential resources best suited for underground mining will be a secondary focus and delayed for future exploration programs.

Change in Production Guidance

In previous guidance Cleveland had targeted the Premier JV to be running at a production rate of around 7,000 ounces per quarter from 2014. This forecast was predicated on an average monthly rate of around 25,000 tonnes with an average head grade of approximately 3.2 g/t and assuming a 90% recovery rate.

Cleveland has taken a more conservative view of the ramp up profile, particularly in relation to the further investment in a flotation circuit required to increase the estimated gold recovery rate from the forecast 75% under the gravity + ILR circuit, up to the targeted 90%. While the economics for this investment appear sound, the decision to add the flotation circuit is best made after alterations to the gravity circuit are bedded down and optimized, enabling a better understanding of the scope and scale of the flotation circuit required.

Cleveland intends to recommence processing at 15,000 tpm from Premier and expand the rate to 30,000 tpm once the additional ball mill is installed. Under the AMC mine plan, an average quarterly production rate of around 2,870 ounces would be forecast. Over the medium term additional tonnes outside of Metago and Pit 3 mine area are expected to be introduced into the mining operation, including higher head grade sources from O Capitão. The Lavra pit within the O Capitão tenement area appears to have a head grade well above that of Metago, which is expected to lift the overall head grade above 3 g/t. The upgraded throughput rate at the targeted head grade of 3 g/t and a recovery rate of 90% through the addition of flotation, would align with the original longer-term forecast target of 7,000 ounces per quarter.

- Ends -

Further Information

Mr Rod Campbell
Executive Director
+61 8 6389 6000
investors@clevelandmining.com.au

Competent Person's Statement

The information in this release refers to an Independent Resource Assessment Report that relates to Exploration Targets, Exploration Results or Mineral Resources is based on information compiled by Malcolm Castle, a competent person who is a Member of the Australasian Institute of Mining and Metallurgy ("AusIMM"). Mr Castle is a consultant geologist employed by Agricola Mining Consultants Pty Ltd. Mr Castle has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC code). Mr Castle consents to the inclusion in this Report of the matters based on his information in the form and context in which it appears.

About Cleveland Mining Company Ltd

Cleveland Mining Company Ltd is an Australian-managed, ASX-listed minerals company squarely focused on developing projects into mines.

The Company's management team have a track-record for building successful new mining projects providing Cleveland with the expertise to secure and develop robust projects.

Cleveland has gold and iron ore assets in Brazil in areas with excellent mining credentials:

- Mining and production are underway at Cleveland's Premier Gold Mine JV in Goiás State in central Brazil. The share structure under the Premier JV is 50% interest held by Cleveland and 50% held by a Brazilian incorporated and domiciled company, Edifica. Edifica was the holder of the original Premier tenements and Cleveland earned its 50% interest by developing the same. Cleveland has also funded the full development cost and as such Edifica owes Cleveland for its 50% share. This is to be repaid through a profit distribution of 70% to Cleveland and 30% to Edifica until the internal debt is repaid.
- Since the JV was established, Cleveland obtained the rights to the O Capitão project and these tenements are now held within the Premier JV.
- Separate to the Premier JV, Cleveland also holds tenement rights to other gold prospective areas within Brazil and these are considered early stage exploration opportunities.
- Also separate to the Premier JV, Cleveland has formed a strategic alliance with ASX-listed company BC Iron Ltd (ASX: BCI) to co-acquire and co-develop new iron projects in Brazil as joint venture partners. The companies recently signed binding Option Agreements for three Brazilian iron projects.

Cleveland has a different approach to project selection with project economics driving target selection. Projects are chosen according to their likelihood of generating returns at the bottom of the economic cycle.

Forward-looking Statements

Forward-looking statements can be identified by the use of terminology such as 'intend', 'aim', 'project', 'anticipate', 'estimate', 'plan', 'believe', 'expect', 'may', 'should', 'will', 'continue' or similar words. These statements discuss future expectations concerning the results of operations or financial condition, or provide other forward looking statements. These forward looking statements are not guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this ASX update. Readers are cautioned not to put undue reliance on forward looking statements.