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# **Update on O Capitão and Premier Drilling Program**

Significant drilling program aimed at increasing resource base as part of refinancing plan progressing well.

# **Highlights**

- RC drilling progressing well at the Lavra project, with initial holes in the "saddle area" completed
  and resource infill holes now being drilled across the proposed mining area.
- The first diamond hole of a three-hole program at Premier has been drilled to 170m depth, confirming the presence of the geology, sulphides and alteration associated with the mineralisation at Premier Metago pit and the neighbouring multi-million ounce Anglo Gold Ashanti Serra Grande Gold Mine.
- A second hole, targeting further along strike and up dip of the same unit, is currently being drilled.
- The holes are in a new area, not previously considered a target by Cleveland.
- The first hole intersected the target geology, starting approximately 50m below surface, precisely where predicted, providing credibility to a model predicting a significantly expanded area of prospectivity for the project.

Cleveland Mining Company Ltd (ASX: CDG) is pleased to provide an update on progress of the previously announced major drilling program now underway by the Company on the O Capitão (Lavra and Dona Maria) and Premier Gold projects, in Goias State, Brazil. The program intends to expand the resource base and associated mine schedules as a condition precedent of a \$US25 million refinancing package arranged with a major US resources fund.

#### **Resource Expansion and Infill Drilling**

Reverse Circulation (RC) drilling is progressing at Lavra as both infill drilling prior to the commencement of mining and extensional drilling to expand the resource inventory. Lavra contains the highest consistent gold grades found to date across Cleveland's project areas, and has just received the approvals required to start mining activities. Drilling is currently focusing on Lavra to

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capitalise on the high grade material for both the immediate effect that it can have on cash flow and with the aim of increasing the resource base with the least amount of drilling possible.

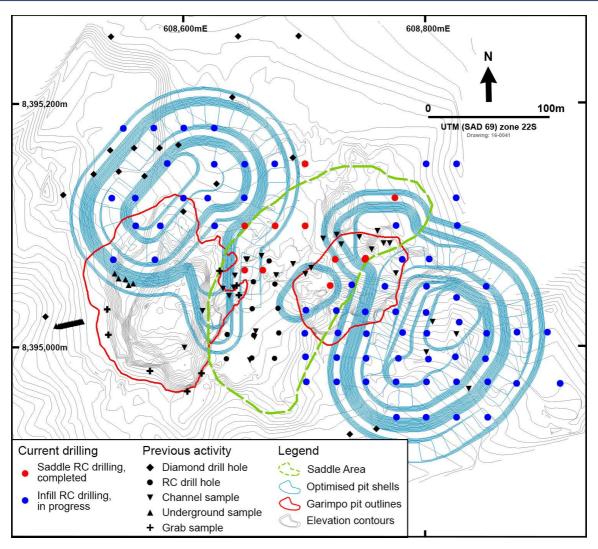
Since starting the current program of works, an initial drilling program of 10 holes on the "saddle area" has been completed for a total of 220m. The Company is now completing infill holes to upgrade and clarify the resource and its geometry within the vicinity of the optimised pits. This program includes 64 holes for about 2,200m, and will be followed by a program of extensional drilling.



RC Drilling at Lavra (O Capitão)

After the drilling is complete at Lavra, the rigs are scheduled to move to Dona Maria to commence extensional drilling on the existing resource.





Current Lavra Drilling Program Over Planned Open Pits

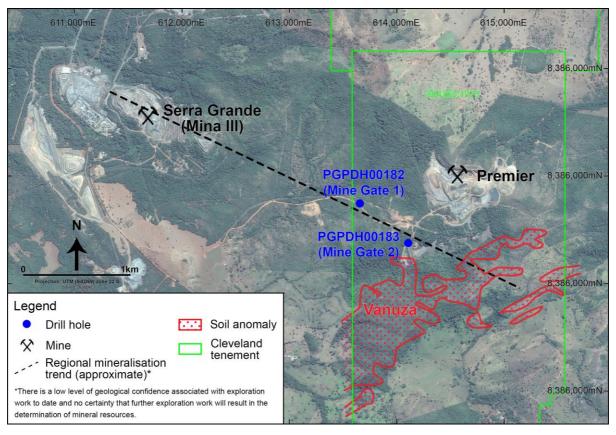
#### **Exploration Drilling**

Exploration on the Premier mining lease has commenced with 3 diamond drill holes planned approximately 1km from Cleveland's active mining area at the Metago pit, in the vicinity of the Mine Gate.

The first hole, known as Mine Gate 1 (PGPDH00182), is now complete. PGPDH00182, drilled to 170m depth, confirms the presence of the geology that hosts mineralisation at Premier Metago pit and the neighbouring multi-million ounce Anglo Gold Ashanti Serra Grande Gold Mine in an area previously not considered a target by Cleveland.



The hole intersected the top of target geology approximately 50m below surface, precisely where predicted by a conceptual model created by Cleveland. The model was based on 2 holes near outcrop and another 2 holes over 2km away from the outcrop. The precision of the intersection supports the theory that the holes have all drilled the same unit. This contradicts historic mapping of the project, which now appears to be inaccurate as it did not account for the local topography. It appears that the up dip, outcrop of the graphitic schist is at our Vanuza prospect where the company has previously reported the discovery of primary gold mineralisation associated with multi-element and gold in soil geochemical anomalism. At Vanuza the unit outcrops over a strike length of 2.2km.



Premier Diamond Drill Locations

The hole supports the theory that the top of the unit is in fact relatively close to the surface for as much as 2.5km down dip. Correlation with holes previously drilled by the Company indicate that the

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unit is over 400m thick in the area drilled, as compared to the unit currently being mined which is only

up to 30m thick and sits approximately 150m higher in the stratigraphy.

The target rock is composed of intercalated silicified graphitic ± manganiferous schist and carbonate

altered schist. Within the graphitic schist are pervasive laminations of pyrrhotite, between 1 – 4% in

abundance, with trace amounts of chalcopyrite, interspersed by carbonate laminations and thin

quartz-carbonate veinlets. Overlying the graphitic schist is a biotite-quartz schist. The contact

between the graphitic schist and the overlying schist is sheared and gradational.

The intersected unit contains significant alteration and sulphides, similar in appearance to

mineralised material mined from Cleveland's Premier Metago pit and from Serra Grande. At this time,

it is not known if the hole is mineralised as assays will take several weeks to process. The Company

believes that the hole is significant as it demonstrates both the host rock and alteration assemblage

hosting the mineralisation at Serra Grande, appears to be very thick (depth) and laterally extensive.

Cleveland Mining's Managing Director Mr David Mendelawitz said "Even though we have not

confirmed whether this hole is mineralised in part or not, we see this as both a technical success and

an exciting advancement for the project. The hole supports a model suggesting that the main target

for the Premier project may have been misinterpreted by our predecessors. This hole, referred to as

the Mine Gate 1, is in fact on the mine access road 500m before the entrance to the Premier mine.

To date, mineralisation, though not of economic thickness, has been found in all of the holes which

Cleveland has drilled into this unit, so anticipation is positive for this diamond hole. The extent of the

unit is unknown, but lines up directly with the Serra Grande open pit workings about a kilometre away.

We are excited about what the future drill and assay results will bring."





Drill core from PGPHD00182 (Mine Gate 1.), 147m depth: scribe pointing at a pyrrhotite - chalcopyrite lamina. Similar laminations are apparent in graphitic schist along the length of the core from 90m depth.

The second drill hole in the program, Mine Gate 2 (PGPDH00183), is currently being drilled. At the time of writing this update, the hole was approximately 72 m deep, and core has presented interbedded graphite dolomite schist and graphite schist, with pyrite and pyrrhotite in the foliation, and a higher concentration of sulphides within the graphite schist. The hole is expected to reach a maximum depth of 100m.





Drill core from PGPHD00183 (Mine Gate 2)

Following the completion of these 3 holes, the diamond rig will mobilise to Lavra to drill one diamond hole to approximately 250m below surface. This will provide an understanding of the geology beneath the new area of mining.

#### **ENDS**

## **Further Information:**

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#### **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. They 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

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results is based on information reviewed by David Mendelawitz, who is a Fellow of the AusIMM. Mr Mendelawitz has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mendelawitz consents to the inclusion of the matters based on his information in the form and context in which it appears. Mr Mendelawitz is employed by Cleveland Mining Company Ltd.