## METALLICA MINERALS LIMITED



#### 17 December 2020

BN: 45 076 696 092 ASX Code: MLM

## Drilling successfully completed on Cape Flattery Silica Sands Project

### **Key highlights**

- 22-hole drilling program completed on Metallica's 100% owned silica sand project
- Approximately 500m of drilling achieved using a vacuum drilling rig, on time and within budget expectations
- 505 drill samples sent to ALS laboratory in Townsville with assay results expected in early 2021
- Approval to drill in unplanned area provided by Traditional Land Owner groups
- IHC Robbins commissioned to undertake metallurgical studies on the silica sand samples
- Planning underway for initial environmental studies and water monitoring bores
- Project is within the designated Port of Cape Flattery, which is excluded from the Great Barrier
   Reef Marine Park area

Metallica Minerals Limited (**Metallica**, ASX: MLM) is pleased to announce that it has successfully completed its maiden drilling program on the 100% owned subsidiary Cape Flattery Silica Pty Ltd (CFS) project. A total of twenty-two (22) holes were drilled within the CFS Eastern Target Area, see figures below. All drilling was undertaken with permission from the Aboriginal Corporations.

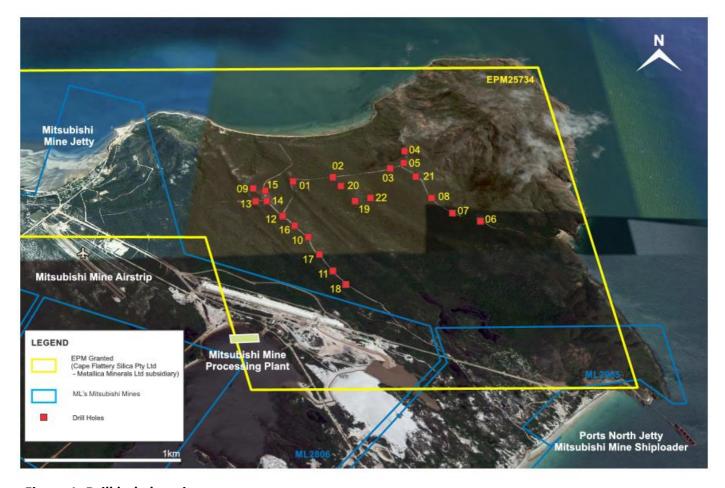


Figure 1: Drill hole locations

Metallica Executive Chairman, Theo Psaros said "we are very pleased to have completed our first drilling program at Cape Flattery. We are encouraged from the samples extracted and we expect to be able to increase and upgrade our Maiden Inferred Resource for the CFS project (see ASX release: Maiden Silica Sand Resource; 30 November 2020) and seek to include an Indicated category. We were also greatly appreciative that Hopevale Congress and Walmbaar Aboriginal Corporation allowed our team access to an old track and to drill holes 19, 20 and 22."

Mr Psaros added "we now turn our attention to non-field activities in early 2021 while the drilling samples are being assessed by ALS and IHC Robbins. We are very keen to start our planning for the environmental studies and will resume discussions with the Traditional Land Owners to complete cultural heritage and other Native Title agreements."



Figure 2: Photos of Chip tray samples from 3 drill holes with white sand in excess of 20m (one metre intervals) from December 2020 drilling program

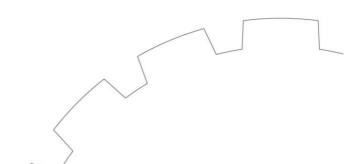




Figure 3: Sample bags with white sand collected from one drill hole during the December 2020 Cape Flattery drill program

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#### About the Cape Flattery Silica (CFS) Project

The CFS project is adjacent to the world class Cape Flattery Silica Sand mining and shipping operation owned by Mitsubishi.

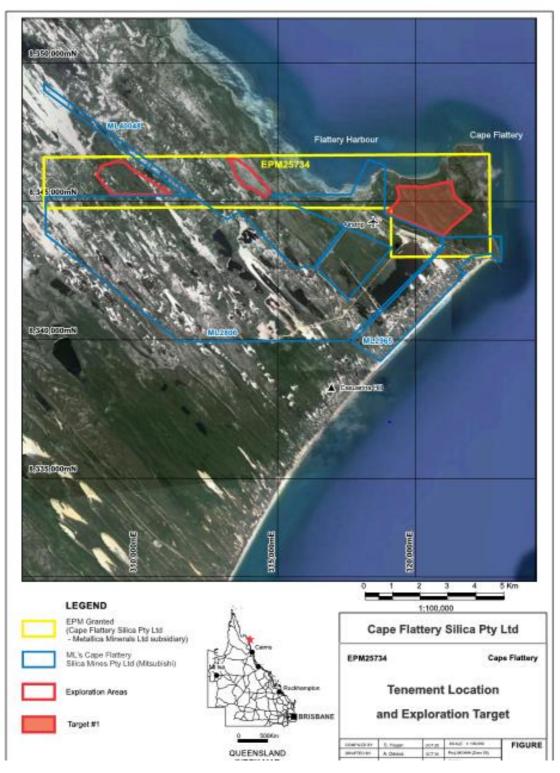
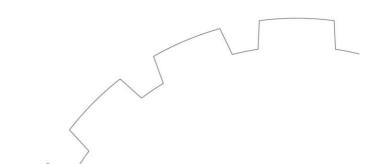


Figure 4: CFS EPM

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On 17 January 2020, Metallica advised the ASX that a sampling program completed in the last quarter 2019 at CFS in Far North Queensland had confirmed the presence of high purity silica sands. This exploration program consisted of eight (8) hand auger holes to a maximum depth of 5m within the CFS Eastern Exploration Target area of the tenement (refer to tenement map on page 5; see ASX Release "High Purity Silica Sands confirmed at Cape Flattery" 17 January 2020).

On 30 November 2020, Metallica advised the ASX that it had achieved a Maiden JORC Inferred Resource of 12.85 million tonnes @ 99.28% SiO<sub>2</sub> for its 100% owned Cape Flattery Silica Sand Project (CFS). This result had been based on hand auger work completed in previous programs (see table below).

The independent assessment of this auger hole drilling was conducted by consultants Ausrocks Pty Ltd. The final marketable product being sought is a high silica ( $SiO_2$ ) grade sand, the  $SiO_2$  content by percentage would be used to quantify in-situ material as a Resource. Cut-off grades were adopted based on analysis of raw assay data and grade tonnage plots completed on the block model to optimise the average  $SiO_2$  grade and quantity of the resource at varied reporting levels.

From the 8 auger holes that were used in the resource estimate the SiO<sub>2</sub> percentage ranged from 95.01%-99.70%:

• Inferred Resource in accordance with the JORC Code 2012 – A cut-off grade 98.4% has been defined based on the surrounding data.

These results show there is potential to produce a premium grade silica product using standard processing techniques.

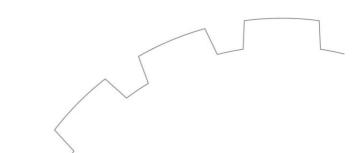
The Cape Flattery Silica Eastern Inferred Resource Estimate is shown below:

Classification	Silica Sand (Mt)	Silica Sand (Mm³)	Density (t/m³)	SiO₂ %	Al <sub>2</sub> O <sub>3</sub>	Fe₂O₃ %	TiO₂ %
Inferred							
Resource	12.85	8.03	1.6	99.28	0.201	0.161	0.226

The target areas within the Metallica EPM 25734 form the basis of an Exploration Target \* of 20-100 Mt of high purity silica sands, with the insitu quality ranging between 96.9% and 99.6% SiO<sub>2</sub>.

This announcement has been approved in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

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<sup>\*</sup> The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource based on the Exploration Target and it is uncertain if further exploration will result in the estimation of a Mineral Resource based on the Exploration Target. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.

For further information, please contact:

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# Competent Person Statement Cape Flattery Silica Sands Resource

The information in this report that relates to Mineral Resources at the Cape Flattery Silica Sands Project is based on information and modelling carried out by Dale Brown, Senior Mining Engineer, Ausrocks Pty Ltd who is a competent person and a Member of the Australasian Institute of Mining & Metallurgy. Dale Brown is employed by Ausrocks Pty Ltd who have been engaged by Metallica Minerals Ltd to prepare this independent report, there is no conflict of interest between the parties.

Dale Brown has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for 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 (The JORC Code). Dale Brown consents to the inclusion in the report on the matters based on their information in the form and context in which it appears.

#### **Cape Flattery Silica Sands Exploration Target**

The information in this report that relates to the Exploration Targets was undertaken by Mr Neil Mackenzie-Forbes, who is a Member of the Australian Institute of Geoscientist and is a Consulting Geologist employed by Sebrof Projects Pty Ltd. Mr Neil Mackenzie-Forbes has in excess of 20 years mining and exploration experience in Australia with major mining and junior exploration companies.

Mr Mackenzie-Forbes 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Neil Mackenzie-Forbes consents to the inclusion of this information in the form and context in which it appears in this release/report.

#### **Forward-looking statements**

Forward-looking statements are based on assumptions regarding Metallica, business strategies, plans and objectives of the Company for future operations and development and the environment in which Metallica may operate.

Forward-looking statements are based on current views, expectations and beliefs as at the date they are expressed and which are subject to various risks and uncertainties. Actual results, performance or achievements of Metallica could be materially different from those expressed in, or implied by, these forward-looking statements. The forward-looking statements contained in this presentation are not guarantees or assurances of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Metallica, which may cause the actual results, performance or achievements of Metallica to differ materially from those expressed or implied by the forward-looking statements. For example, the factors that are likely to affect the results of Metallica include general economic conditions in Australia and globally; ability for Metallica to funds its activities; exchange rates; production levels or rates; demand for Metallica's products, competition in the markets in which Metallica does and will operate; and the inherent regulatory risks in the businesses of Metallica. Given these uncertainties, readers are cautioned to not place undue reliance on such forward-looking statements

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