



Mining Operations Initiated at Wingdam Paleoplacer Project

SASKATOON, SK – December 22, 2021 – Omineca Mining and Metals Ltd.'s (TSXV: OMM) ("Omineca" or the "Company") announces that the Company's joint venture partner and mining contractor, Lightning Creek Mining ("LCM") has begun its hydraulic grouting operations for Omineca's Wingdam underground Paleoplacer project located in the Cariboo Mining District, British Columbia. Grout holes above the crosscut working space are currently being drilled to be followed by a grout curtain hydraulically pumped into place, a setting up period and testing after which the first mining operations will begin. Updates will be provided as the inaugural grout crosscut program progresses.

Ken Hamilton, President of LCM comments, "Work, setup and preparation has gone extremely well, and the BC government has been very cooperative and expeditious in assessing our plans, tests, and data especially as it pertains to safety, water management and environmental stewardship. Their support is also evidenced with the recent grant of a 2-year extension to Omineca's existing permit. We look forward to getting mining operations for this unique project underway".

Further to the August update, to date LCM has:

- Lab tested in situ materials (water pressures, bedrock, paleochannel material)
- Dewatered decline and mine workings, depressurized the paleochannel and associated catchment areas
- Installed, inspected, and reported a grout plug to permanently disconnect the extensive underground workings of the Sanderson Mine from the Wingdam underground operations.
- Completed, submitted design specifications, and plans for hydraulic grout mining operations.
- Completed, submitted the ground water management plan.
- Completed underground electrical system installation
- Completed vent raise enhancement, including new ventilation system, secondary egress, and water discharge system
- Installed water management systems including
 - drain holes below the workings complete with valves and pump hookup
 - water monitoring holes drilled above, below and at mine face
 - pumps, valves, and meters installed
- Procured all equipment required for installation of grout curtain
- Procured all project specific equipment required for mechanical mining underground including an Antraquip 50 roadheader
- Drilled pilot and grout holes (ongoing)
- Prepared for drifting: surveying, pilot hole drilling and cutter/roadheader preparation

- Designed and commissioned gravity separation facility (trommel and wash plant)

Placer Gold Extraction

The mining method will involve a series of crosscuts and drifts running the length of the underground paleochannel starting downstream from the first crosscut bulk sample completed in 2012. Stage 1 will take the series of crosscuts and drifts downstream for the first 300 meters. The Company has mapped through sampling, historic drilling, and 3D seismic, 2.4 kilometers of potentially placer gold bearing paleochannel both upstream and downstream of the successful 2012 crosscut. Omineca has an additional 14 kilometers of claims along the Lightning Creek valley which will be explored for the potential continuation of the gold-bearing paleochannel through drilling and 3D seismic programs. The 2012 bulk sample was extracted from a 2.4m x 2.4m x 23m crosscut and yielded 173.4 troy ounces (5.4 kilograms) of placer gold using freeze mining technology to stabilize the ground.

In the same way as the operations from 2012, the placer gold will be recovered by gravity separation methods. The material excavated from the bedrock sill of the paleochannel (gravel, sand, and silt) will be processed using water with a trommel and wash plant located underground.

Qualified Person

All scientific and technical information in this news release has been prepared by, or approved by Stephen Kocsis, P. Geo Lead Geologist. Mr. Kocsis is a qualified person for the purposes of National Instrument 43-101 - Standards of Disclosure for Mineral Projects.

About Omineca Mining and Metals Ltd.

Omineca Mining and Metals Ltd.'s flagship Wingdam gold exploration and placer recovery project is located along the Barkerville Highway 45 km east of the town of Quesnel. The Wingdam Property includes mineral tenures totaling over 50,000 hectares (500 square kms) and in excess of 15 linear kilometers of placer claims, both encompassing the Lightning Creek valley where topographic conditions created thick layers of overburden, which preserved a large portion of a buried paleochannel containing placer gold-bearing gravels. Omineca also has a diamond drill program currently underway exploring for the potential multiple hard rock sources of the placer gold at Wingdam.

For further information, please contact:

Tom MacNeill

President and CEO

1 (306) 653-2692

Dean Nawata

Vice President, Business Development

1 (604) 561-2821

dean@fnr.ca

Forward Looking Statements

This release includes forward-looking statements regarding Omineca and its business. Such statements are based on the current expectations and views of future events of Omineca's management. In some cases, the forward-looking statements can be identified by words or phrases such as "may", "will", "expect", "plan", "anticipate", "intend", "potential", "estimate", "believe" or the negative of these terms, or other similar expressions intended to identify forward-looking statements. The forward-looking events and circumstances discussed in this release may not occur and could differ materially as a result of the failure to consummate the project financing, the economic feasibility of the Wingdam Project, known and unknown risk factors and uncertainties affecting Omineca, including risks regarding the resource industry, economic factors and the equity markets generally and many other factors beyond the control of Omineca. No forward-looking statement can be guaranteed. Forward-looking statements and information by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statement or information. Accordingly, readers should not place undue reliance on any forward-looking statements or information. Forward-looking statements speak only as of the date on which they are made and Omineca undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise, except as required by applicable securities laws.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.