

Final Preparations for Underground Operations Have Begun at Wingdam Placer Gold Bulk Sampling Program

SASKATOON, SK – August 20, 2021 – Omineca Mining and Metals Ltd. (TSXV: OMM) ("Omineca" or the "Company") announces that final preparations for the mining operations of its bulk sampling program have begun at the Wingdam underground Paleoplacer project located in the Cariboo Mining District, British Columbia. Omineca's joint venture partner and mining contractor, now combined under the name Lightning Creek Mining Corp. ("LCM"), has completed dewatering and rehabilitating the 550-meter decline down to the mining face. Staging of the first crosscut is well underway and updates will be provided as operations progress and forward mining plans are finalized.

Staging for 2021 Crosscuts and Processing

With the mine workings dewatered, final installation or completion is underway for (but not limited to):

- Ground/wall preparation, shotcreting, drifting and mucking
- Grout plant above ground with slick lines to run to underground
- Permanent underground electrical
- Permanent water management system (pumps, sump stations, pipes, settling ponds)
- Permanent ventilation system
- Preparation for drifting: surveying, pilot hole drilling and cutter/roadheader preparation
- Assembly/refurbishment of gravity separation facility (trommel and wash plant)

Ground Stability

LCM has engaged Dr. Curtis Berthelot, (P.Eng.), President and Chief Technology Officer of PSI Analytics ("PSI") as their Lead Engineer and Mine Manager for the underground project at Wingdam. PSI conducted extensive lab testing on in situ overburden and bedrock material and performed groundwater behavior analysis in the mine area. This work determined that a specialized injected grout system would be a safe, energy efficient, and time-saving method of stabilizing the "Cariboo Slum" which lies above some parts of the targeted Paleoplacer underground. PSI has engineered a mining model based on this data to safely mine material for the bulk sampling program. PSI's proprietary engineered grouting techniques have been and are currently being successfully applied in several large underground mining operations across North America.

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.