

## Altaley Mining Begins Metallurgical Pilot Plant Testing at Campo Morado.

Vancouver, British Columbia, August 03 2021

Altaley Mining Corporation (“Altaley” or the “Company” (TSX-V: ATLY; OTC Pink: ATLYF; Frankfurt: TSGA) is pleased to announce that it has initiated an extensive metallurgical testing program at its Campo Morado mine designed to investigate the possibility of increasing recoveries of both base metals and precious metals.

The company has engaged Maelgwyn Mineral Services Ltd (“MMS”) of Cardiff, United Kingdom (<https://www.maelgwyn.com>) to investigate the potential for increased recoveries of gold, silver, zinc, lead and copper through MMS patented Imhoflot™ pneumatic flotation technology for concentrate flotation (<https://www.maelgwyn.com/technology/pneumatic-flotation-imhoflot>) and Leachox™ Process for forced oxidation and leach recovery of precious metals. (<https://www.maelgwyn.com/leachox-process-for-flotation-concentrates>)

MMS has shipped an Imhoflot™ pneumatic flotation pilot plant to Campo Morado (Figure 1) and the pilot plant has initiated a 3–4-month extensive metallurgical testing program. Altaley will initially test the recoveries generated by the Imhoflot pilot plant to compare with the recoveries currently being realized within the mine’s traditional mechanical flotation circuit. See the pilot plant in action <[here](#)>.



FIGURE 1

Additional pilot plant testing will be conducted as follows.

- Test the ability to make a gold rich pyrite concentrate which could be marketed for sale,
- Fresh Imhoflot tailings material will be subjected to second phase testing with MMS patented Leachox Process. See note below on 1<sup>st</sup> phase Leachox testing conducted in 2013.
- Historic tailing stored on site within the lower tailing’s facility containing over 3.3 million tonnes of tailings, will be tested with both the Imhoflot Flotation and Leachox Process at micro fine grind levels to potentially recover both base metals and precious metals not originally recovered within the mine’s traditional mechanical flotation cells.

### ABOUT 2013 1ST PHASE LEACHOX TESTING AT CAMPO MORADO

Previous First Phase Leachox testing was conducted very successfully on Campo Morado mineralization during 2013 by the mine’s previous owner. (See the Company’s press release dated [April 1, 2019](#) where historic Leachox testing showed recovery increases up to 65% gold and 86% silver are possible at Campo Morado)



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2013 Leachox testing demonstrated that substantial increases in precious metal recoveries are available at Campo Morado using Maelgwyn Leachox Process. Very positive results were obtained in the 2013 testing of two separate mineralized zones where samples were submitted for testing to MMS. First phase Leachox testing returned recovery results of up to 65% gold and 75% silver at a grind size of 20 microns from the process tailings sample of the G9-Southwest Zone and recoveries of 45% gold and 81% silver at a grind of 40 microns were returned from the Reforma deposit sample. MMS's 2013 report stated, "It should be noted that the above test work was scouting test work only and higher recoveries would probably be achieved with optimization work". Campo Morado current recoveries using only mechanical flotation are approximately 20% for gold and 40% for silver.

#### **ABOUT THE LEACHOX PROCESS:**

The Leachox process is a partial sulphide oxidation process for the recovery of gold and silver from sulphide minerals. Depending upon the mineralogy, several processes are used, but central to the Leachox process is the Aachen shear reactor. In the leach process, it enhances the kinetics and reduces reagent consumptions (oxygen, cyanide, and lime) which otherwise can be prohibitive. The reactor is designed to introduce a high degree of shear which removes passivating films that reduce recovery.

*For more detailed technical information on the process, please visit the Maelgwyn website at: <https://www.maelgwyn.com/leachox-process-for-flotation-concentrates/>*

#### **ABOUT IMHOFLOT PNEUMATIC FLOTATION**

Imhoflot pneumatic flotation technology has evolved through 25 years of industrial applications. This has led to the development of the patented Imhoflot G-Cell where centrifugal forces are used in the cell to quickly separate the phases after mineral collection and therefore considerably reducing the size of vessels required.

**Imhoflot is characterized by:**

- High selectivity in terms of grade versus recovery relationship due to very small bubble sizes initially generated in the reactor and very high energy utilization in mineral collection
- Efficient in also recovering small (<20µm) and coarse (>350µm) particles where tank flotation is inefficient
- Small cell volumes and therefore small flotation plant footprint
- No moving parts
- Lower energy requirement as there is no rotor/stator required to keep the pulp in suspension

#### **ABOUT MAELGWYN MINERAL SERVICES**

MMS is a privately owned limited company registered in England and Wales. It was founded in 1997 with its headquarters in Cardiff, Wales

The company is established as a world leader in the development and implementation of innovative cost-effective technologies and processes in the field of mineral, chemical and waste processing. It has had many patents granted and has won several national innovation awards for its technology. The



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technology can achieve significant environmental benefits in terms of reduced energy and waste for operations.

### **About Altaley Mining Corporation**

Altaley Mining Corporation is a Canadian based mining company with two 100% owned Mexican gold, silver, and base metal mining projects.

Altaley's Tahuehueto Gold Mine project is in north-western Durango State, Mexico where construction has been advanced to an estimated 65% of completion. With the recently announced US \$25 million funding package, Altaley has the funding available to finish construction of its 1,000 tonne per day processing facility and related mine infrastructure to initiate production of gold, silver, lead, and zinc in concentrates at Tahuehueto. The Company is targeting initial pre-production by the end of 2021 and ramping up to full production capacity during Q1 2022.

Campo Morado is an operating polymetallic base metal mine with mining and milling equipment currently producing at an average rate of 2,150 tonnes per day, Campo Morado is currently estimated to be Mexico's 6th largest zinc producer.

Visit: [www.altaleymining.com](http://www.altaleymining.com)

On Behalf of the Board of Directors

*(signed) "Ralph Shearing"*

Ralph Shearing, P. Geol, President and Director

### **CAUTIONARY NOTE REGARDING PRODUCTION DECISIONS AND FORWARD-LOOKING STATEMENTS**

Statements contained in this news release that are not historical facts are "forward-looking information" or "forward-looking statements" (collectively, "Forward-Looking Information") within the meaning of applicable Canadian securities laws. Forward Looking Information includes, but is not limited to, disclosure regarding the planned recommencement of mining operations at Campo Morado; and other possible events, conditions or financial performance that are based on assumptions about future economic conditions and courses of action; the timing and costs of future activities on the Company's properties, such as production rates and increases; success of exploration, development and bulk sample processing activities, and timing for processing at its own mineral processing facility on the Tahuehueto project site. In certain cases, Forward-Looking Information can be identified using words and phrases such as "plans," "expects," "scheduled," "estimates," "forecasts," "intends," "anticipates" or variations of such words and phrases. In preparing the Forward-Looking Information in this news release, the Company has applied several material assumptions, including, but not limited to, that the current exploration, development, environmental and other objectives concerning the Campo Morado Mine and the Tahuehueto Project can be achieved; that recommencement of operations at Campo Morado will proceed as planned; the continuity of the price of gold and other metals, economic and political conditions, and operations. Forward-Looking Information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the Forward-Looking Information. There can be no assurance that Forward-Looking Information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance



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