



## **LAURION Announces Successful Completion of Sensor-Based Ore Sorting Campaigns from the Surface Stockpile at the Ishkoday Project**

**TORONTO, ONTARIO (June 6, 2023) – LAURION Mineral Exploration Inc. (TSX.V: LME and OTC: LMEFF) (“LAURION” or the “Corporation”)** is pleased to announce that it has completed two test campaigns of sensor-based ore sorting from the Sturgeon River Mine surface stockpile. The test work was completed by the Saskatchewan Research Council (“SRC”).

Stated Cynthia Le Sueur-Aquin, President and CEO of LAURION: *“The Ishkoday stockpile mineralization responds very well to both laser and colour sensor-based sorting. We are optimistic that laser and colour sensor-based sorting will reduce downstream processing costs. During the trade-off study, it became apparent that if mill throughput rates are low (250 – 1000t/day), the cost of ore sorting could be prohibitive. CAPEX and OPEX savings can be anticipated with further definition of inground resources that will warrant a processing plant that will process more than 1,000t/day. Sensor-based sorting may very well improve the economics of the project and result in a more compact processing facility. If the stockpile at the Ishkoday site is to be representative of the host rock from #1 and #3 gold bearing veins on the property, the assumption is that if sensor-based sorting can be successfully implemented on the stockpile, then it will likely be applicable to potential unmined resources in the vicinity of the mine area.”*

The first test campaign was based on samples from the stockpile sent for ore sorting targeted gold bearing minerals based on visual inspection and were shipped in bags categorized by their mineral content. The sampling's objective was to test the amenability of sorting particles with X-Ray Transmission (XRT) which sorts by difference in particle density combined with laser illumination (laser technology) sorting which utilizes a sensor to detect the light diffraction reflected from particles. Both technologies could select high grade particles to some extent, but the laser technology proved to be more effective.

The XRT testwork indicated a potential to reject 30% of the coarse particles and accept 70% while upgrading the sample by 15% (from 5.9g/t head grade to 7.8g/t head grade), with a sorting efficiency of 72%. (Sorting efficiency is the number of particles above cut-off grade that report to the accepts pile divided by the total number of particles that are above cut-off grade.) These results are sub-par and are likely a result of minimal particle density differential between gangue and mineralization.

Laser illumination sorting showed more promising results, since much of the gold appears to be associated with quartz in the mineralized samples tested. The laser sorting resulted in upgrading the sample by 75% (from 5.9g/t head grade to 10.4g/t head grade) with a sorting efficiency of 74.4%.

The second test campaign's sample was a large sample taken from the stockpile with an excavator, crushed and split before shipping to SRC. The second sample is more representative of the mineralization in the stockpile. This sample was washed and screened out to material below 10mm (generally considered un-sortable in this process). The amount of minus 10mm material made up approximately 50% of the mass of the sample. One hundred +10mm particles were then selected at random to test laser and colorimetric sensors. A semi-empirical model for the laser sorter was established that indicated 69% of the mineralization could be rejected as waste while only losing 0.6% of the gold to the reject pile. The test work upgraded the mineralization by 220% (from 2.63g/t head grade to 8.42g/t head grade) which exceeded expectations.

Similar results came from the colorimetric testing with a reject rate of 60% with a loss to the reject pile of 0.94% of the gold and an upgrading of 145% (From 2.63g/t head grade to 6.44g/t head grade) in the accepts pile.

### **Qualified Person**

The technical contents of this release were reviewed and approved by Jean-Philippe Paiement, PGeo, MSc, a consultant to LAURION, and a qualified person as defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects.

### **About LAURION Mineral Exploration Inc.**

The Corporation is a junior mineral exploration and development company listed on the TSXV under the symbol LME and on the OTC under the symbol LMEFF. LAURION now has 256,909,855 outstanding shares of which approximately 80% are owned and controlled by Insiders who are eligible investors under the "Friends and Family" categories.

LAURION's emphasis is on the exploration and development of its flagship project, the 100% owned mid-stage 47 km<sup>2</sup> Ishkoday Project, and its gold-rich polymetallic mineralization.

LAURION's chief priority remains maximizing shareholder value while simultaneously embracing and considering the principles and best practices of environmental, social, and corporate governance (ESG) issues. A large portion of the Corporation's focus in this regard falls within the ambit of its mineral exploration activities and more specifically, advancing the Ishkoday Project.

A consequence of LAURION's success and advancement over the past several years is that the Corporation has become positioned as an acquisition target for appropriate potential acquirors. Accordingly, the Corporation's Board of Directors is aware that possible strategic alternatives and transactional opportunities may arise and/or could be procured in the short or medium terms. The Corporation will promptly issue a press release if any material change occurs. In the meanwhile,

LAURION will continue to explore opportunities and potential transactions that are strategically beneficial to the Corporation and its shareholders.

**FOR FURTHER INFORMATION, CONTACT:**

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**Caution Regarding Forward-Looking Information**

This press release contains forward-looking statements, which reflect the Corporation's current expectations regarding future events including with respect to LAURION's business, operations and condition, management's objectives, strategies, beliefs and intentions, the Corporation's ability to advance the Ishkoday Project, the nature, focus, timing and potential results of the Corporation's future exploration efforts, including its planned activities for Ishkoday in 2023, the results of the test campaigns described herein, the potential use and impact of sensor-based ore sorting, and any possible strategic alternatives and transactional opportunities that may arise and/or could be procured in the future. The forward-looking statements involve risks and uncertainties. Actual events and future results, performance or achievements expressed or implied by such forward-looking statements could differ materially from those projected herein including as a result of a change in the trading price of the common shares of LAURION, the interpretation and actual results of current and future exploration activities, changes in project parameters as plans continue to be refined, future prices of gold and/or other metals, possible variations in grade or recovery rates, failure of equipment or processes to operate as anticipated, the failure of contracted parties to perform, labor disputes and other risks of the mining industry, delays in obtaining governmental approvals or financing or in the completion of exploration, as well as those factors disclosed in the Corporation's publicly filed documents. Investors should consult the Corporation's ongoing quarterly and annual filings, as well as any other additional documentation comprising the Corporation's public disclosure record, for additional information on risks and uncertainties relating to these forward-looking statements. The reader is cautioned not to rely on these forward-looking statements. Subject to applicable law, the Corporation disclaims any obligation to update these forward-looking statements.