

# LAURION Provides Corporate Update on Environmental Permitting and Ore Sorting Analysis

**TORONTO, ONTARIO (April 21, 2023) – LAURION Mineral Exploration Inc. (TSX.V: LME and OTCPINK: LMEFF) ("LAURION" or the "Corporation")** is very pleased to provide an update on the progress on the environmental permits and ore sorting analysis on LAURION's 100% wholly-owned 47km<sup>2</sup> lshkoday property. The lshkoday project is located in northwestern Ontario, 56 kilometres west of Geraldton, and just 10 kilometres north of the Trans-Canada highway No. 11 along Provincial Road 801.

LAURION is well funded and continues to make significant progress in further de-risking the Ishkoday Project ahead of its exploration and development. LAURION will commence their field work program at the end of May. Field work will consist of stripping and channel sampling existing (and new) gold bearing veins to outline wide gold bearing stockworks together with structural mapping to better define the mineralization controls of orogenic type mineralization.

### **Environmental Permitting**

LAURION has completed over 2 years of environmental baseline studies, including surface water, groundwater and biological studies. The Corporation has initiated work required to apply for environmental permits in support of the Advanced Exploration Ishkoday Shaft project. The project currently entails dewatering an existing shaft for access and exploration purposes, and treating the dewatering output to acceptable limits prior to discharge. Permits will be required from the provincial government of Ontario, and are anticipated to include a Mine Closure Plan, Permit to Take Water and Environmental Compliance Approvals. The Mine Closure Plan will require LAURION to describe rehabilitation measures that are to take place, and to post Financial Assurance for the rehabilitation work prior to commencing Advanced Exploration. The Permit to Take Water and Environmental Compliance Approvals, obtained through the Ontatio Ministry of Environment, Conservation and Parks, are required to allow for dewatering and treatment activities.

Consultation regarding Laurion's plans and permits with our Indigenous partners and stakeholders have been initiated and will be ongoing throughout the permitting, exploration and closure phases.

Blue Heron Environmental ("Blue Heron") has been coordinating the baseline studies, and will lead the permitting efforts for Advanced Exploration. Linda Byron, Director at Blue Heron, stated "We are excited to be at the forefront of this project and continuing to work with LAURION and their partners to initiate Advanced Exploration at the Ishkoday site!".

## Ore Sorting Analysis

The Saskatchewan Research Council ("SRC") recently completed test work in Q1 2023 using a two-tonne sample of 20-60 mm sized material sourced from the stockpile to simulate a sensorbased sorting ("SBS") operation and develop a sorting algorithm for future pilot plant work. A table showing the results of the sorting tests conducted in 2022 and 2023 is provided below.

Sensor Criteria	2022 Test (+35-105mm) % Rejection	2023 Test (20-60mm) % Rejection
Laser Sorting	64.3	92.6
Color Sorting	68.5	89.6
X-ray Transmission	53.7	

The results of the test work demonstrated that the SBS laser and color sorting methods were successful in removing a significant proportion of vein host rock rock while still efficiently recovering small, fragmented quartz particles that are often associated with gold. Specifically, the SBS laser threshold setting could remove an estimated 92.6% of host rock (compared to vein material), while the SBS color and optical tests removed an estimated 89.6% of host rock, with efficient recovery of the quartz fragments oftentime associated with gold.

SRC recommended that pilot plant testing be completed on Ishkoday material using the sorting algorithm to economically validate the use of sorting technology. These promising results suggest that SBS could be a valuable tool for improving the efficiency and profitability of gold extraction processes.

The objective of ore sorting is to reduce handling costs and increase gold grades of ore sent for processing.

## Corporate Update

In light of its re-evaluation of the Ishkoday Property and consequent enhanced interpreted potential of the Sturgeon River Mine area, in particular, management and the technical team has decided to focus on completing additional surface work and drilling in the area of the shaft and stockpiles associated to the historical Sturgeon mine, prior to committing the capital necessary to process the stockpile resources, however environmental permitting will continue as planned.

LAURION's 2023 field work will focus on those areas where there is potential for a sufficient concentration/density of the several well-mineralized veins. Given insights derived from the recent breakthrough exploration work, the area within the western sector of the Ishkoday Property, and particularly the area between the historical Sturgeon River and Brenbar Mines, is of marked interest. The historic Sturgeon River Mine data further suggests that mineralization may be more extensive at depth and along strike, which could potentially generate feed for future operations.

It is anticipated that processing of the surface ore-bearing stockpiles will facilitate the mineral characterization representative of the host rock mineralized trends, simultaneous with evaluation and development of the 'proximal mine' gold mineralization within 1 km of the stockpiles.

For further information, please see the Corporation's National Instrument 43-101-compliant Technical Report entitled "Technical Report on the Resource Estimate on the Sturgeon River Mine Waste Pile and Tailings, Ishkoday Property, Northern Ontario", dated June 7, 2013, which is available on SEDAR, as well as the Corporation's news release dated April 23, 2013.

#### **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 OTCPINK 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 development of its flagship project, the 100% owned mid-stage 47 km<sup>2</sup> lshkoday project, and its gold-silver and gold-rich polymetallic mineralization.

## 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, and the nature, focus, timing and potential results of the Corporation's future exploration efforts, including its planned activities for Ishkoday in 2023. 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.

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