



LAURION's 2023 Drilling Campaign Successfully Defines the Sturgeon River Mineralized System over A Strike Length of 1,600m and to Depth of 600m

TORONTO, ONTARIO – (February 2, 2024) – Laurion Mineral Exploration Inc. (TSX.V: LME and OTC/PINK: LMEFF) (“LAURION” or the “Corporation”) is pleased to announce that, further to its news releases dated December 13, 2023, January 5, 2024 and January 12, 2024, the Corporation's 2023 drilling campaign was successful in confirming the strike length of the Sturgeon River mineralized system over 1,600m at its Ishkoday project, located 220km Northeast of Thunder Bay, ON (the “Property”). The nine (9) drill holes from 2023 intercepted the seven (7) veins comprising the Sturgeon River mineralized system.

The Sturgeon River mineralized system is composed of seven (7) distinct quartz veins and mineralized shear zones. The drilling intercepts vary in true widths between 0.5m and 7.95m, with grades ranging from 0.1 g/t Au and 7.78 g/t Au. The drilling intercepted the No 3 vein, which was historically mined between 1936 and 1942 producing 73,438 ounces of Gold and 15,922 ounces of silver from 145,123 tonnes of ore, milled grading an average 0.51 ounces per ton gold (17.0 g/t) (Mackasey, W.O. 1976 Geology of Walters and Leduc Township, District of Thunder Bay, Ontario Div. Mines, GR149, 58p.). This vein is part of a series of three (3) parallel veins striking roughly N020° with a sub-vertical dip. A second vein system, consisting of 4 parallel sub-vertical veins strike roughly at N030° was also intercepted during the drilling.

Highlights from the 2023 drilling program include:

- Confirmation of the extension of the Sturgeon River Mine mineralization by 600 metres to the northeast, with grade intercepts as high as 29.45 g/t Au over 3.5 metres (along core), including 186.00 g/t Au over 0.55 metres (along core); and,
- Confirmation of the extension of the Sturgeon River Mine mineralization by 320 metres to the southeast, with grade intercepts as high as 3.088 g/t Au over 7.5 metres (along core), including 36.0 g/t Au over 0.5 metres (along core) and including 9.0 g/t Au over 0.65 metres (along core).

The mineralized intervals identified in the drilling are mostly associated with the massive Sturgeon River quartz-bearing diorite and exhibits characteristics typical of orogenic gold deposits. These intervals are predominantly hosted within a massive, quartz-bearing diorite, in association with shear zones and mafic volcanic dykes indicative of a deep-seated and structurally controlled geological environment. The presence of quartz-carbonate veins, often accompanied by chlorite, points towards

significant hydrothermal alteration processes, a hallmark of orogenic gold systems. The alteration is typically associated with the influx of mineral-rich fluids during deformation and metamorphism. The vein types observed, particularly those rich in quartz and carbonate with varying proportions of chlorite, suggest episodic fluid flow and vein formation, commonly seen in orogenic gold settings.

It is interpreted that the veins are associated with a major shear zone trending NE that stems from the Niish shear zone, bordering the south of the Property. The strong structural control of the mineralization and association with the proximity of a mafic dyke are key exploration features that will help in further exploration efforts. Laurion's team will be further refining the current 3D model of the vein system by systematically reviewing mineralized intervals with core pictures and oriented core to improve in further geometric prediction of the vein system.

LAURION's team recognizes its ability to generate actionable insights from its significant exploration database by utilizing Artificial Intelligence ("AI") to analyze data to refine targeting by using machine learning to map out alteration and structural signatures from drilling. LAURION also recognizes that its significant database is able to leverage the power of AI and other advanced technologies, and thus, moving forward, expects to be better positioned to optimize its advancement in exploration efficiencies.

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 263,346,102 outstanding shares of which approximately 72% 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 57.43 km² Ishkoday Project, and its gold-rich polymetallic mineralization.

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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 drill results and highlights described in this press release and the interpretation and expected impact of these results and highlights, the nature, timing and potential results of the Corporation's future exploration efforts and drill programs, including its planned activities for the Ishkoday Project in 2024. 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 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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