



## LAURION TO FOCUS 2020 EXPLORATION PROGRAM ON BULK GOLD POTENTIAL OF 3 MAJOR MINERALIZED TRENDS

THIS NEWS RELEASE IS INTENDED FOR DISTRIBUTION IN CANADA ONLY AND IS NOT INTENDED FOR DISTRIBUTION TO UNITED STATES NEWSWIRE SERVICES OR DISSEMINATION IN THE UNITED STATES.

**TORONTO, ONTARIO (December 20, 2019)** - Laurion Mineral Exploration Inc. (TSX-V: LME; OTC/PINK: LMEFF) ("**LAURION**" or the "**Corporation**") is pleased to outline plans for the 2020 Exploration Program at the Corporation's wholly-owned Ishkoday Project ("**Ishkoday**"), located 220 km northeast of Thunder Bay, Ontario ([Figure 1](#)).

Cynthia Le Sueur-Aquin, President and CEO of the Corporation stated "Our 2019 exploration work identified three major gold-mineralized trends, Sturgeon River Mine, M25/Marge and Loki, which extends along strike for 2+km, 1.8+km and 3+km, respectively as shown in [Figure 2](#). The 2018 and 2019 channel and selected grab sampling campaigns returned a substantial number of significant gold and gold-silver-zinc assay results which not only validated historical sampling but also greatly expanded the target strike lengths. These results indicate that the gold-mineralizing event, or events are very widespread. The historic Sturgeon River Mine data further suggests that mineralization may be more extensive at depth. We now have three prime target areas to follow-up with further detailed geophysical surveys to define targets for drilling in 2020. Further surface work including channel sampling will also be carried out to expand our evaluation of these important trends.

The three major mineralized trends occur in the 5km by 1km overall Target Area and are characterized by two separate multi-episodic mineralizing events<sup>1</sup>:

1. An early, likely syn-volcanic, hydrothermal system, termed the **Ishkoday-style Mineralization**, which resulted in discordant, zoned, stockwork-style veins consisting of magnetite (iron oxide), actinolite (calcium aluminium silicate hydroxide), monazite (rare earths rich phosphate), quartz, sphalerite (zinc sulphide), gold and silver (the "**Oxide-Sulphide Veins**"). In addition, there are multiple sphalerite-rich centimeter to meter wide veins, also containing pyrite (iron sulphide), chalcocopyrite (copper sulphide), galena (lead sulphide), gold and silver (the "**Sulphide Veins**") - both centered on the "A" and CRK Zones of the 3+km by 800m "**Loki Trend Corridor**"; and
2. A later, gold-dominant event is linked primarily to later syn- to early-tectonic gold-silver bearing quartz veins, termed the **Sturgeon River-style Mineralization** (the "**Quartz Veins**"), occasionally with a distinct chlorite alteration halo that locally includes iron carbonate and pyrite - the 2+km by 300m "**Sturgeon River Mine Corridor**" and 1.8km by 350m "**Marge Corridor**"

In the **Sturgeon River Mine Corridor**, compilation and synthesis of the historic Sturgeon River Mine underground data, and the mapping/sampling of the No. 3 Quartz Vein and adjacent veins suggest that the 1937 to 1942 mining not only covered the 010° No. 3 Quartz Vein, but also 5 other quartz veins, most of which trend  $\pm 045^\circ$ . LAURION drilling in 2010 (LME-10-008, 009 and 010) intersected several additional veins north of the underground workings.

Based upon mine records, LAURION believes that higher-grade gold-bearing shoots exist at the Sturgeon Gold Mine, and that the compilation now underway should help determine other potential target shoots for future drilling.

The most significant gold grade from selected interval in-vein channel sampling included:

- 92.58 g/t gold over 12.98m strike length from continuous in-vein sampling channel sampling on the No. 3 Quartz Vein South (*refer to the Corporation's news release dated August 20, 2019*).

The most significant historical and recent gold-silver grades from the **M25/Marge Corridor** ("F", "X" and M21 to M25 Quartz Veins) included:

- 314m grading 17.62 g/t gold over an average 36cm true width at the Marge Quartz Vein (Koskitalo, 1988); and
- 58.10 g/t gold and 140 g/t silver from selected grab samples of the M25 Quartz Vein (*refer to the Corporation's news release dated December 3, 2019*).

The **Loki Trend Corridor** is characterized by Oxide-Sulphide Veins which consist of  $\pm 045^\circ$  trending shears, that post-date the earlier  $320^\circ$ - $030^\circ$  trending Sulphide Veins except where the latter have been structurally transposed parallel to the former. The full system extends for a minimum 3+km length over an 800m average width, covering more than half the Target Area.

Typical metal grades and true widths from selected interval channel sampling in 2019 of Oxide-Sulphide Veins and Sulphide Veins included:

- 3.25m yielding 1.44 g/t gold, 6.37 g/t silver, 2.42% zinc, 0.08% copper (CRK NE) (*refer to the Corporation's news release dated October 25, 2019*);
- 1.06m grading 0.18 g/t gold, 45.69 g/t silver, 25.00% zinc, 0.03% copper, 6.21% lead (CRK SE, SJ Showing Sulphide Vein) (*refer to the Corporation's news release dated October 18, 2019*); and
- 0.69m yielding 5.59 g/t gold, 46.80 g/t silver, 5.09% zinc, 0.34% copper (CRK West Sulphide Vein, Trench #37) (*refer to the Corporation's news release dated September 12, 2019*).

The priority target in the Loki Trend Corridor, is the 2.8km by 2 to 20m wide "A" Zone. In 2012, LAURION selectively grab sampled surface outcrops of Sulphide Veins at the "A" Zone yielding:

- 0.70 g/t gold, 28.40 g/t silver, 27.50% zinc and 0.12% copper, and 4.58 g/t gold, 13.60 g/t silver and 18.90% zinc (refer to the Corporation's news release dated July 18, 2012).

Previous diamond drilling by LAURION intersected:

- 4.04m core length (or true widths between 2.00 to 3.60m) grading 5.26 g/t gold, 40.10 g/t silver, 8.38% zinc and 0.29% copper at a vertical depth of approximately 40m (LBX12-010) (refer to the Corporation's news release dated October 18, 2012).

<sup>1</sup> Contributions from "Metal Earth – 2019 Geraldton-Onaman Field Trip Guide: The Geraldton-Onaman Transect – Volcanology, Metamorphism, Deformation and Mineralization, by Z. Tóth, K. Strongman, A. Haataja, B. Mark, B. Lafrance and H. Gibson, MERC, Harquail School of Earth Sciences, Laurentian University (Sudbury, Canada)

## **QA-QC Protocols**

All samples for assay from this program were initially processed and prepared by ALS Global Geochemistry in Thunder Bay (Ontario), with pulps sent to and analyzed by ALS Global Analytical Lab in North Vancouver (BC), using the Fire Assay and multi-element geochemistry methods of analysis. LAURION employs an industry standard system of external standards, blanks and duplicates for all its sampling in addition to the QA/QC protocol used by the laboratory.

## **Qualified Persons**

Mr. Jean Lafleur, P. Geo. (PGO, OGQ). LAURION's VP Exploration is a Qualified Person as defined by National Instrument 43-101 and has reviewed and approved the technical content of this news release.

## **About Laurion**

The Corporation is a junior mineral exploration and development company listed on the TSX-V under the symbol LME and on the OTC/PINK under the symbol LMEFF. LAURION now has 176,710,617 outstanding shares of which approximately 58% is 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 44 km<sup>2</sup> Ishkoday Project, and its gold-silver and gold-rich polymetallic mineralization with a significant upside potential. Ishkoday has a project-wide database (2008 to 2018) that includes 283 diamond drill holes totaling 40,729 m, geological mapping, ground and airborne geophysics, and 14,992 individual samples with assays and geochemical analysis. The mineralization on Ishkoday is open at depth beyond the current core-drilling limit of -200 m from surface, based on the historical mining to a -685 m depth, in the past producing Sturgeon River Mine.

The 2018-2020 exploration initiated in May 2018 is a three-staged program with the strategic objective of outlining the precious and base metals upside potential of the 5km by 1km Target Area of the southern claims block at Ishkoday. The Exploration Team has confirmed the extent of known and new gold bearing quartz and polymetallic sulphide veins that will ultimately help

in completing the construction of the 2-D and 3-D model which will guide future exploration targeting. This Model will provide LAURION with a solid technical foundation to initiate diamond drilling to demonstrate the depth potential across the Target Area at Ishkoday as part of the Stage 3 drill program starting in 2020. The field portion of the Stage 2 Campaign is now completed.

Refer to tables and maps on LAURION's website using the following link:

<http://www.laurion.org/ishkoday-project/highlights/2019-field-exploration-program/>

#### **FOR FURTHER INFORMATION. CONTACT:**

##### **Laurion Mineral Exploration Inc.**

Cynthia Le Sueur-Aquin – President and CEO

Tel: 1-705-788-9186

Fax: 1-705-805-9256

Website: <http://www.laurion.ca>

#### **Caution Regarding Forward-Looking Information**

*This news release contains forward-looking statements, which reflect the Corporation's current expectations regarding future events, LAURION's business, operations and future plans for the development of the Corporation and/or the Ishkoday Gold Project, and management's objectives, strategies, beliefs and intentions.*

*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 Corporation's common shares, 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.*

**NEITHER THE TSX VENTURE EXCHANGE NOR ITS REGULATION SERVICE PROVIDER (AS THAT TERM IS DEFINED IN THE POLICIES OF THE TSX VENTURE EXCHANGE) ACCEPTS RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THE CONTENT OF THIS NEWS RELEASE.**