

LAURION'S NO. 3 QUARTZ VEIN CHANNEL SAMPLES RETURN SIGNIFICANT GOLD GRADES RANGING FROM 34 G/T GOLD OVER 2.13M TO 0.91 G/T GOLD OVER 2.33M AT ISHKODAY

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TORONTO, ONTARIO (August 20, 2019) - Laurion Mineral Exploration Inc. (TSX.V: LME, OTCPINK: LMEFF) ("LAURION" or the "Corporation") is pleased to issue the second batch of new gold assay results (the "Results") from channel sampling at the No. 3 Quartz Vein (the "3 Vein") located at the Corporation's wholly-owned Ishkoday Project ("Ishkoday" or "Project"), located 220 km northeast of Thunder Bay, Ontario (refer to Map 1). The channel sampling forms an integral part of the Stage 2 Campaign from the 2018-2019 exploration initiated in May 2018, a three-staged 18-month program with the strategic objective of outlining the precious and base metals upside potential at Ishkoday.

The 3 Vein is shown as a single vein on historical maps, but LAURION's stripping and sampling at TR19-1 has established that the 3 Vein is actually a swarm of interconnected, anastomosing quartz veins oriented in two main directions: one north-south, the other northeast-southwest.

The No. 3 Quartz Vein was mined between 1936 and 1942. Of significance is the strike of 200m in length of the ore grade shoot within the No. 3 vein at surface, which increases at depth. At 530m depth, the ore shoot reaches a strike length of 466m. At around the 460m, two other veins intersect the No.3 vein (No. 10 and the "M" veins). This validates the suggestion of the potential for this well-mineralized structure to widen along strike and at depth.

- ➤ Highlights for the 3 Vein South (refer to **Tables 1 and 2**, and **Map 2** for complete assay results)
 - o Significant composite interval results are as follows:
 - 3.60 g/t gold over 3.21m (Line 5-L1)
 - 1.95 g/t gold over 3.26m (Line 5-L2)
 - 9.30 g/t gold over 2.90m (Line 5-L3)
 - 1.40 g/t gold over 3.41m (Line 5-L5)
 - 2.34 g/t gold over 2.95m (Line 5-L8)
 - 3.46 g/t gold over 2.43m (Line 5-L11)
 - 4.04 g/t gold over 2.94m (Line 5-L15)
 - 1.77 g/t gold over 2.30m (Line 5-L17)
 - 4.14 g/t gold over 2.69m (Line 5-L21)

- o In-vein sampling was completed parallel to the vein contact to determine a more accurate gold grade of the 3 Vein South. Composite interval results are as follows:
 - 47.61 g/t gold over 7.95m (5-L26P)
 - 92.58 g/t gold over 12.98m (5-L27P)
 - 79.64 g/t gold over 4.18m (5-L28P)
 - 14.85 g/t gold over 9.45m (5-L29P)
- o The average width of the 3 Vein South is 0.09m
- Highlights for 3 Vein North (refer to Tables 3 and 4, and Map 3 for complete results)
 - o Significant composite interval results are as follows:
 - 3.75 g/t gold over 2.49m (Line 23-L2)
 - 1.01 g/t gold over 1.87m (Line 23-L5)
 - 0.91 a/t gold over 2.33m (Line 23-L6)
 - 34.00 g/t gold over 2.13m (Line 23-L17)
 - 19.46 g/t gold over 1.75m (Line 23-L18)
 - 16.33 g/t gold over 1.64m (Line 23-L19)
 - 1.43 g/t gold over 2.90m (Line 23-L20)
 - 12.39 g/t gold over 5.51m (Line 23-L21)
 - 3.56 g/t gold over 2.89m (Line 23-L22)
 - 3.54 g/t gold over 3.79m (Line 23-L24)
 - o Significant other individual channel assay results from the 3 Vein North includes:
 - 161.00 g/t gold over 0.35m
 - 16.75 g/t gold over 0.46m
 - o The average width of the 3 Vein North is 0.19m.

Assay results from 2019 compare favorably with channel sampling from 1986 as reported by Phoenix Gold Mines (1988). Individual assay results taken directly on the 3 Vein ranged from trace to 240.00 g/t gold over 0.04m to 0.57m. However, 8 of 12 individual channel samples from the same segments of perpendicular and parallel in-vein sampling of the 3 Vein North and South show extreme disparities in gold assay results, such as on Line 5-L7 with 0.96 g/t gold versus 99 g/t gold, respectively suggesting a significant "gold nugget effect" just as at the M24 Quartz Vein. Sample rejects from 59 individual channel samples from the 3 Vein will be re-analyzed using the Metallic Screening method to help mitigate the nugget effect.

The No. 3 Quartz Vein

Completely stripped at surface this year, the 010-015° trending 3 Vein of TR19-1 was fully channel sampled with 394 samples taken. The 3 Vein measures 150m in length and varies between a few centimeters to more than 50 cm wide but remains open at both ends before disappearing under

the overburden. Additional secondary centimeter wide parallel quartz veining occur on both sides of the 3 Vein for up to 20m of exposed stripped outcrop in quartz veined as quartz veinlets stockwork and a sulphide-bearing porphyry host at the south central end of the Sturgeon River Porphyry (the "**Porphyry**").

The 3 Vein historically appeared as a single vein (L. Koskitalo, Phoenix Gold Mines, 1988), but LAURION's stripping at TR19-1 has established that the 3 Vein consist of a swarm of interconnected, anastomosing quartz veins oriented in two main directions: one north-south, the other northeast-southwest, that includes the 040° oriented Nos. 1 and 2, Coniagas and Nos. 8-11 Quartz Veins (the "3 Vein Quartz Vein System or 3QVS") along with additional secondary (for now) quartz veins and shears of different sizes and trends.

The 3QVS is also accompanied by centimeter and millimeter wide sub-vertical and flats veins, veinlets and stringers forming stockworks, tens to hundreds of meters in lengths and widths, based on LAURION's 2010 diamond drilling (LME-10-008, 008Wedge, 009, 009Wedge and 010) that undercut the 3QVS. In addition, geology maps from the underground drifts and crosscuts of the historic Mine (past production from 1937 to 1942) indicate a similar pattern of veining to -685m below surface (L. Koskitalo, Phoenix Gold Mines, 1988), also validated by the presence of significant quartz veinlets with gold in Porphyry "waste rock" from the Mine's stockpile.

The 3QVS extends at surface some 425m in length by 245m wide, and remains open. Underground working were reported to extend the 3 Vein gold mineralization for approximately 500m. The Porphyry already hosts the northeast trending Marge, "X" and "F" (the "Marge") and the M21, 22, 23, 24 and 25 (the "M24QVS") gold-bearing quartz veins located 850m south and 550m west, respectively, of the 3QVS. The central 314m long by 36cm wide Marge Gold-Quartz Vein previously yielded 17.62 g/t gold; whereas a 21m long by 25cm wide segment of the "F" graded 30.72 g/t gold (L. Koskitalo, Phoenix Gold Mines Ltd., 1988). The M24 Quartz Vein yielded surface channel sample grades ranging from trace to 16.35 g/t gold over widths ranging from 0.20m to 1.66m (refer to the Corporation's news release dated August 1, 2019).

All the gold-bearing individual quartz veins, whether from the Marge, the M24QVS and 3QVS were observed to be interconnected, creating the braided or anastomosing pattern.

Confirming the extensions of known and new gold bearing quartz and polymetallic sulphide veins will ultimately help in completing the construction of the 2-D and 3-D geological-mineralization model (the "Model"). This Model will be provide LAURION with a solid technical base to initiate diamond drilling to prove the upside potential as part of the Stage 3 program to start later in 2019-2020. LAURION's work continues confirming the extensive quartz and sulphide veining across the Target Area. The field portion of the Stage 2 Campaign is slated for completion at the end of Q3-2019.

To access Tables 1 to 4 and Maps 1 to 3, click on following link at: ...

QA-QC Protocols

Assay samples from this program are being prepared by ALS Global Geochemistry in Thunder Bay, Ontario, and analyzed by ALS Global Analytical Lab in North Vancouver, BC, using the Fire Assay method 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 employed by the laboratory.

Each channel sample was individually cut using a double-blade saw by a technician to lengths chosen by the senior geologists, approximately a 5cm width and 10cm depth. Individual samples weighed from 5 to 10kg. Each channel was sampled field technicians, and inserted in individual plastic bags, each with ALS sample tags, and sealed. Metal tags with the ALS sample number were inserted at the beginning of each sample channel cut and are used during the field mapping of individual channel sample cuts. The field data gathered includes sample number, azimuth of the channel, channel/sample lengths, geology and geo-reference using UTM coordinates.

Individual plastic sample bags were then sealed on-site, returned to the LAURION field office where they are catalogued and inserted in large nylon bags with standards, blanks and duplicates in a pre-established sequence. The nylon bags were then sealed and transported by LAURION technicians to the ALS facility in Thunder Bay, Ontario. Once at ALS, individual samples are catalogued using the bar coding system, dried, weighed, crushed, pulverized to 70% <2mm, and riffle-split for final pulverization to 85% <75µm. A final 50 gram pulp split is taken for Fire Assay using Au-ICP22 gold analysis up to 10,000 ppb gold. Samples giving results beyond 10,000 ppb gold are re-analyzed with a new 50 gram pulp split to ore grade levels using a gravimetric finish.

Qualified Person

Mr. Jean Lafleur, P. Geo. (PGO, OGQ), LAURION's Technical Advisor to the Board of Directors, is a Qualified Person as defined by National Instrument 43-101 guidelines, and has reviewed and approved the 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 OTCPINK under the symbol LMEFF. LAURION now has **158,656,425** outstanding shares of which **60.8%** 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 44 km² Ishkoday Project, and its gold-silver and gold-rich polymetallic mineralization with a significant upside potential. The Ishkoday Project has a project-wide database (2008 to 2018) that includes 283 diamond drill holes totaling 40,729m, geological mapping, ground geophysics, and 14,992 individual samples with assays and geochemical analysis. The mineralization on the 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, as evidenced in the past producing Sturgeon River Mine.

FOR FURTHER INFORMATION, CONTACT:

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Caution Regarding Forward-Looking Information

This news 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, 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 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.

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