



LAURION DISCOVERS NEW SULPHIDE VEINS AT THE CRK ZONE AT ISHKODAY

- ❖ Azurite segment (Outcrop #34) yielded 3 separate channel samples intervals, one of which gave 0.90 g/t gold, 35.26 g/t silver, 0.53% copper and 5.71% zinc over 7.50m

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TORONTO, ONTARIO (September 24, 2019) - Laurion Mineral Exploration Inc. (TSX.V: LME) and (OTCPINK: LMEFF) (“LAURION” or the “Corporation”) is pleased to report new and significant channel samples intervals assay results from the northern portion of CRK Sulphide Veins (the “CRK”) sector, termed the Azurite segment (Outcrop #34), on the Corporation’s wholly-owned Ishkoday Project (“Ishkoday”), located 220 km northeast of Thunder Bay (Ontario).

Discovery of New Sulphide Veins

The Azurite segment covers a 300m² area (30m by 10m) containing a 0.5 to 1.5m wide, 25m long massive sulphides unit consisting of sphalerite, chalcopyrite and galena hosted in a siliceous, highly fractured felsic volcanic or intrusive located at the northern extremity of the CRK, some 260m north of the main CRK (**Figure 1 Location Map; Figure 2 Channel Samples Intervals Assay Results**). The CRK forms part of a northeast-southwest corridor extending some 2.1km in length by 500m wide encompassing multiple areas of sulphide veins of various sizes. The massive sulphides were fully sampled over the exposed 13m length in 3 channel samples intervals yielding: **(1) 0.32 g/t gold, 26.14 g/t silver, 0.38% copper and 8.84% zinc over 4.37m; (2) 44.87 g/t gold, 41.85 g/t silver, 0.43% copper and 4.14% zinc over 1.06m; and (3) 0.90 g/t gold, 35.26 g/t silver, 0.53% copper and 5.71% zinc over 7.50m.**

Individual channel sample assay results from the 3 intervals are outlined in the following table:

UTM COORDINATES (NAD 84, ZONE 16)		CHANNEL LENGTH	AU	AG	CU	PB	ZN
EASTING	NORTHING	(m)	(g/t)	(g/t)	%	%	%
445478	5512289	0.68	0.36	13.70	0.15	0.02	16.20
445478	5512288	0.68	0.26	14.20	0.10	0.04	10.35
445479	5512287	1.09	0.18	21.10	0.30	0.13	9.16
445479	5512286	1.07	0.45	39.40	0.62	0.16	5.01
445480	5512285	0.85	0.335	35.40	0.57	0.07	6.13
		4.37m	0.32 g/t	26.14 g/t	0.38%	0.10%	8.84%
445479	5512286	0.26	0.795	46.30	0.95	0.07	6.06
445479	5512286	0.80	59.20	40.40	0.26	0.05	3.52
		1.06m	44.87 g/t	42.85 g/t	0.43%	0.05%	4.24%
445496	5512267	0.91	1.455	41.10	0.42	0.08	6.16
445496	5512268	0.81	0.02	1.80	0.04	0.00	0.56

445496	5512269	0.77	0.29	19.30	0.41	0.00	1.09
445495	5512269	1.00	0.74	34.90	0.53	0.16	3.57
445494	5512270	1.04	1.06	34.30	0.70	0.22	4.70
445494	5512271	1.18	1.01	33.80	0.52	0.29	15.35
445493	5512273	0.88	0.99	41.60	0.68	0.09	9.32
445493	5512273	0.91	1.46	70.00	0.88	1.36	1.23
		7.50m	0.90 g/t	36.26 g/t	0.53%	0.29%	5.71%

Ishkoday Mineral Exploration Model: Geology and Mineralization

(taken from "The Geraldton-Onaman Transect – Volcanology, Metamorphism, Deformation and Mineralization", MERC 2019 Geraldton-Onaman Field Trip Guide, Z. Toth et al., 2019, pp. 11 to 14; and LAURION's exploration work in 2018-2019)

Ishkoday consists of an outlier of calc-alkaline volcanic assemblage composed of pillowed mafic flows overlain by monolithic to heterolithic felsic to intermediate volcanic flows and tuffs, and volcanoclastic rocks, and intruded by syn-volcanic felsic, intermediate and minor mafic dykes. The largest dyke is the 1km wide Sturgeon River Pluton (the "**Pluton**") which hosts the majority of the known mineralization. The pluton is in-turn intruded by major syn-volcanic intrusions to the southeast (Coyle Lake Batholith) and northwest.

Mineralization at Ishkoday occurs in two separate styles. The first, termed **Ishkoday style**, is an early, syn-volcanic hydrothermal system with discordant, zoned, stockwork-type pipes consisting of a magnetite-actinolite-sulphide core, and a peripheral zone of comb-textured quartz veins, patchy to pervasive epidote alteration, and pods of chlorite alteration and breccia. The second, termed **Sturgeon River style**, are syn- to early-tectonic, fault-filled, crack-seal textured, gold-silver bearing quartz veins with a chlorite alteration halo that includes iron carbonate and pyrite. Based on cross-cutting relationship the Sturgeon River quartz veins postdate the Ishkoday mineralization; however the two mineralized systems have similar northeast-southwest orientations and spacing, suggesting similar structurally controlled mineralizing fluids channels. Some of the intermediate dykes consisting of porphyritic dyke swarms crosscut the earlier Ishkoday style alteration, while others are altered by the latter.

Sulphides of the Ishkoday style mineralization consists of disseminated, stringer and massive sulphides containing iron, zinc, copper, gold and silver. The later lode gold-silver quartz veins are associated with fracturing/shearing with the quartz vein transitioning into fractures or shears and vice-versa. Both styles of mineralization extend 100's to 1,000's meters lengths, occurring as multiple individual sinuous and anastomosing centimeter to meter wide vein sets, and forming corridors several hundred meters in width (**Figure 3 Ishkoday Project Target Area Geology Map**).

The base (and precious) metal vein sets are the 1.1 km "**A**" **Zone** with its 9 individual sulphide veins, followed 750m to the southwest by the 1.2km long, 10 sulphide veins of the **CRK Zone**, which transitions 250m further to the southwest into the 18 quartz veins of the **85-A2 Quartz Vein** with secondary metric long sulphide veins. The **Miron, McLeod, Joe, Ahki (A-6), Azurite-Johnny (A-5)** and **Tehya** showings encompass additional sulphide veins along and across strike, forming as a whole a 2.3km by 600 wide corridor of the Loki Trend, termed **Domain 1**.

The gold bearing vein sets are the **No. 3 Quartz Vein** encompassing 11 individual veins (**Nos. 1, 2, 3, 3A to 3E, Coniagas and Nos. 8/11** in a second corridor extending some 750m in length by 375m wide as part of **Domain 2**. The peculiarity of this corridor is the dominant 010° trend (with

secondary 040° quartz veins forming anastomosing veins) of the gold-rich No. 3 Quartz Vein of the historic Sturgeon River Mine. Gold grades recently reported by LAURION on the No. 3 Quartz Vein South (refer to the Corporation's news release dated August 20, 2019) included in-vein composite interval assays of 47.61 g/t gold over 7.95m (sample line 5-L26P), 92.58 g/t gold over 12.98m (sample line 5-L27P), 79.64 g/t gold over 4.18m (sample line 5-L28P) and 14.85 g/t gold over 9.45m (sample line 5-L29P).

The **Marge Quartz Vein** has four distinct quartz veins (Marge, Marge South "F" and "X") on trend at 040° with the **M24-25 Quartz Veins** that hosts some 15 quartz veins (M-series quartz veins) covering a 1.8km by 225m wide corridor of **Domain 3**.

Quartz veins dominate the central, west and southwest portions of the Target Area, whereas the sulphide veins occur generally in the northeast segment of the Target Area. The Pluton hosts the No. 3 Quartz Vein at the Sturgeon River Mine (South Pluton), the Marge Quartz Vein (Central Pluton); and the M25 Quartz Vein (West Pluton). The Pluton also hosts centimeter-wide sulphide veins/veinlets as shears/fractures, with or without quartz veins. Multiple veins of the A-2 Quartz Vein (A-2, A-4 to A-6 and V-2 to V-9) overlap the multiple sulphide veins of the CRK and "A" zones.

Ishkoday Mineral Exploration Model: Geological Modelling

Project wide sections covering 90% of the LAURION and historic drilling were compiled across at 50m sections (**Figure 4 Mineralized Corridor Longitudinal Section; Figure 5 – Interpretative Cross-Section of the "A" Zone Sulphide Veins**). Bedrock descriptions from drill core and outcrop were standardized across all drill programs to ensure consistency. A geological and structural model is being constructed.

For now, three mineralized zones showed sufficient continuity along a northeast-southwest strike with the drill density to support the construction of wireframes of quartz veins and sulphide veins. Explicit modeling was done on 25m and 50m spaced sections where appropriate. The mineralized zones, the Sturgeon River Mine, CRK and "A" Zone, were wire-framed on sections using a 1 g/t gold cut-off for geological continuity. The mineralized zones were plotted on a longitudinal section over a km strike length corridor, some 500m wide. All areas were modelled using historic drill intercepts with exception of a small area at Sturgeon River Mine where higher grade gold 2019 summer results have been returned (refer to LAURION's news release dated August 20, 2019).

The modelling will be revisited once all 2019 channel sample results have been returned, with the primary area of infill being within the 4 km corridor sulphide and quartz veins centered on the "A" and CRK zones. The modelling showed extension at depth. The Sturgeon River Mine was only zone that was extended to include the deeper drill holes drilled by LAURION in 2010 to a depth of -825m from surface.

Refer to Figures 1 to 5 on LAURION's website using the following link:

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

QA-QC Protocols

Samples for assay from this program are 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 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-bladed saw by a LAURION field technician to lengths chosen by the senior geologists, approximately a 5cm width and 10cm depth. Individual samples weighed from 3 to 8kg. Each channel was sampled other LAURION 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. 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 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 again 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 Persons

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. The 2D/3-D geological modelling work is being done by Ms. Francine Long, P. Geo. (PGO), LAURION's Technical Consultant, using the Geosoft™ Target software.

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 **165,630,869** outstanding shares of which **58.7%** 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. Ishkoday has a project-wide database (2008 to 2018) that includes 283 diamond drill holes totaling 40,729 m, geological mapping, ground 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, as evidenced in the past producing Sturgeon River Mine.

The 2018-2019 exploration initiated in May 2018 is a three-staged 18-month program with the strategic objective of outlining the precious and base metals upside potential at Ishkoday, part

of the 5km by 1km Target Area of the southern claims block. 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 and helping guide future exploration targeting. This Model will provide LAURION with a solid technical foundation to initiate diamond drilling to demonstrate upside potential across the 5km by 1 km Target Area at Ishkoday as part of the Stage 3 drill program starting later in 2019. The field portion of the Stage 2 Campaign is now completed.

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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