



## Laurion Nears Completion of Stage 2 Exploration of Mechanized Outcrop Stripping in Key Gold Bearing Areas at the Ishkoday Gold Project

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 (September 25, 2018)** - Laurion Mineral Exploration Inc. (TSX.V: LME) and (OTCPINK: LMEFF) ("Laurion" or the "Corporation") is pleased to update shareholders and stakeholders on the advancement of the Stage 2 Exploration Campaign (the "Campaign") on the Corporation's 47 km<sup>2</sup> Ishkoday Gold Project ("Ishkoday").

Laurion's 18-month exploration program, initiated in May 2018 has the strategic objective of outlining the bulk precious and base metals upside potential at Ishkoday. The Campaign follows a successful Stage 1 field validation work that not only validated precious and base metal results from a number of selective historic mineralized veins, but also produced significant selective grab sample assay results in new areas.

The Campaign is centered on mechanized stripping, channel sampling and assaying along several strategic NW-SE 400m to 500m outcrop stripping lines (the "Lines") as a first pass assessment of the bulk polymetallic veins in the 3km by 1km Target Area. Two lines were completed (T18-1 and 2; see *Figure 1 Location Map*. Trees were cut followed by the mechanized shovel removal of overburden; outcrop cleaning using high pressure water; water recovery in pits and re-use for outcrop washing; channeling at 0.2m to 1.5m intervals using a gas-powered saw; sampling, bagging and tagging by field technicians using ALS Laboratory tags, and geological mapping of the main rock types, structures and mineralization. The field work is being done by qualified geologists and technicians from the exploration service provider Explo-Logik Inc.

Geological and mineralization highlights from the mechanized stripping:

### (1) Line T18-1

Located approximately 1km NE of the part producing Sturgeon Lake Mine's No. 3 Quartz Vein, Line T18-1 extends 500m in a NW-SE direction (*Figure 1*) at right angle to the orientation of geological units. Bedrock outcrop coverage is approximately 60%. The geology consists of felsic to intermediate volcanic and intrusive rocks (mostly rhyolite/dacite flows, Tuff and mafic dykes).

Sulphide mineralization (pyrite, chalcopyrite and sphalerite) is rare but increases in narrow NE-SW trending centimetric and metric shear zones, in addition to sulphide-rich metric-sized veins

similar to those located 700m NE in the "CRK" veins sector. Laurion's previous channel sampling work in 2014 from the "CRK" Showing, yielded typical assay results of 8m width of 1.08 g/t gold, 4.90 g/t silver, 1.11% zinc and 0.08% copper, including 5m width of 1.68 g/t gold, 7.00 g/t silver, 1.27% zinc and 0.10% copper.

The northernmost 140m of Line T18-1 depicts 8 NE-SW trending quartz veins belonging to either the "85-A2" or the "A" vein systems. Both vein systems were historically channel sampled and assayed by Phoenix Gold (1988) and a selected number of assay results are shown in *Figure 2*.

Selected historic gold assay intervals of the "85-A2" Quartz Vein system (*Phoenix Gold, 1988*) from Line T18-1 include 13.41 g/t gold over a 168m length and 19 cm width, including 21.92 g/t gold over a 52m length and 14 cm width and 14.71 g/t gold over a 50m length and 23cm width; as well as 20.26 g/t gold (with visible gold or "VG") over a 20m length and 20cm width from the Glory Hole Quartz Vein. The quartz veins undulate and form anastomosing patterns as observed in the "85-A2" vein system, similar to other structurally hosted lode gold deposits.

Selected historic gold assay intervals of the "A" Quartz Vein system (*Phoenix Gold, 1988*) from Line T18-1 include 14.71 g/t gold over a 50m length and 23cm width ("A-2" Quartz Vein); 0.61 g/t gold over a 25m length and 16cm width ("A-15" Quartz Vein); and 2.31 g/t gold over a 14m length and 24cm width.

*Figures 2 and 3* also show the Stage 1 stripped area located a few meters SW of the main "85-A2" Quartz Vein outcrop. Here, current channel sampling confirmed the gold-bearing potential of the 85-A2 Quartz Vein with a selected assay result of 18.50 g/t gold over a 20cm width (*Figure 3*). A Laurion (2012) selective grab sample yielded 2.86 g/t on an adjacent subsidiary quartz vein (*Figure 3*).

As more historic and new quartz vein systems are exposed over the next 12 months, it will be interesting to observe if the anastomosing patterns will repeat themselves on- and across-strike giving them bulk length and width potential. The more gold carrying veins the better the potential. The sulphide mineralization in polymetallic veins, shear zones and as disseminations could definitely add to this potential.

A total of 472 channel samples were taken from Line T18-1 with precious and base metal assays as whole rock geochemistry results pending.

## **(2) Line T18-2**

Located approximately 350m W-SW of the part producing Sturgeon Lake Mine's No. 3 Quartz Vein, Line T18-2 extends 500m in a NW-SE direction at right angle to the orientation of geological units (*Figure 1*). Bedrock outcrop coverage is approximately 80%. The geology consists of felsic to intermediate volcanic rocks (fine to coarse tuffs, rhyolite/dacite flows, and several generations of crosscutting mafic dykes). Sulphide mineralization (pyrite, chalcopyrite and sphalerite) is rare but increases in narrow NE-SW and N trending shear zones.

The southernmost third of the stripped line shows an increase in shearing, brittle deformation and quartz veining and sulphide development, within generally more siliceous host rocks (principally rhyolites) offering a significant positive topographic relief. Two major vein sets were identified

including the newly discovered 040° Bootleg Quartz Vein (the "Bootleg") that may be the SW extension of the "85-A2" Quartz Vein located more than 1km to the NE. Significant shearing of the host rock has produced a quartz-chlorite-sericite-carbonate schist, more than 50m wide, bearing minor pyrite and numerous centimetric NE-SW trending quartz and quartz-iron carbonate veins, located 70m SE of the Bootleg.

A total of 475 channel samples were taken from Line T18-2 with precious and base metal assays as whole rock geochemistry results pending.

A third 500m long NW-SE line was stripped only, T18-3 located 1km SW of the Marge - "F" Quartz Veins, but without further cleaning nor sampling until next season due to wintry weather conditions. Here, the work has likely uncovered what appears has the extension of the historical Marge - "F" Quartz Vein system (17.62 g/t gold over a 314m length and 36cm width (*See News Release October 14, 2008*), as well as 30.72 g/t gold over a 21m length and a 25cm width; *Phoenix Gold, 1988*) some 1km SW of the last known outcrop of the historical vein.

The overall plan of the mechanized stripping, channel sampling and assaying remains to determine if most or a selective portion of the hundreds of quartz veins identified by previous workers, and subsequently by Laurion, carry gold, and if the gold mineralization is restricted to specific areas, whether in higher level intrusives, such as the feldspar porphyry of the Sturgeon River Mine, and/or polymetallic veins and/or structurally more deformed corridors, such as in quartz-sericite schists as identified in several outcrops of the Target Area.

As reported in an earlier news release (*see the Corporation's news release dated August 14, 2018*). Of the 322 selective field grab and channel samples taken, 45 samples were anomalous in either gold, silver, copper or zinc or any combination of these elements. The majority of samples were taken in the southern claims 3km by 1km Target Area. The southern Ishkoday claims lies south of the Namewaminikan River, which is considered a key structure or fault separating the northern and southern claims and geological domains:

- 33 assay results were >0.30 g/t gold and 6 assay results were >18 g/t gold - all in quartz veins with the highest values located in channel samples with Visible Gold from the "85-A2" Quartz Vein yielding 40.80, 43.00 and 1,185.00 g/t gold (*Figure 1*). However, two selective grab samples were not. One is located in a chlorite-sericite schist with trace pyrite yielding 27.50 g/t gold; and a second, in a porphyry with 1% pyrite gave 28.40 g/t gold.
- 10 assay results >12 g/t silver and 4 assay results >34.28 g/t (1 oz/ton) silver. Half the anomalous silver results were found in sericite-chlorite-sulphide schists (up to 30.20 and 47.10 g/t silver); the other half in quartz veins (up to 86.40 and 112.00 g/t gold).
- 13 assay results >1% zinc. Anomalous zinc is found in four rock settings: rhyolites/dacites/rhyodacites (up to 1.74% zinc), sericite-chlorite schists (up to 3.26% and 12.00% zinc), chlorite veins (1.89% zinc) and quartz veins (up to 2.82% zinc).

These selected samples may not necessarily be representative of the mineralization hosted on Ishkoday. Field observations to date, based on the work in the 3km by 1km SE portion of Ishkoday, (the Target Area), indicates a NE-SW trending extensive, and likely anastomosing

quartz and polymetallic vein system hosting the precious and base metals mineralization. Further exploration field work is required to confirm the lateral and cross-strike continuity of the mineralization, and to determine if a bulk tonnage resources model still makes sense. Once confirmed and a geology-mineralization model is built in 2D, Laurion would initiate diamond drilling to prove the model in 3-D as part of the Stage 3 program.

Link to Figures 1 2, and 3, see URL <http://www.laurion.org/2018> accessed on the Corporation's website at <http://www.laurion.ca> or <http://Laurion.org>.

### **Quality Assurance and Quality Control**

A total of 1,269 field samples were taken from the Stage 1 and 2 field exploration programs at the Ishkoday in 2018. All samples including standards, blanks and duplicates were sent to ALS laboratory facilities in Thunder Bay (Ontario) and Val-d'Or (Quebec) for analytical preparation and eventually to Vancouver (B.C.) precious and base metal assays, and whole rock analysis.

Some 322 field samples were taken during Stage 1: 82 channel samples from the Jack quartz-sericite-chlorite-sulphide schists and the "85-A2" quartz vein, and 240 selective grab samples from the quartz veins of the northern claims and both quartz and polymetallic veins from the southern claim blocks. A total of 472 channel samples were taken during Stage 2 from Line T18-1 and 475 taken from Line T18-2. Each channel sample were saw cut individually by a technician to lengths chosen by the senior geologists, ranging from 20cm to 1.5m, 5 to 7 cm widths and 7 to 10cm depths. Individual sample weights ranged from 5 to 10kg for channel samples and 1 to 3kg for selective grab samples.

Individual field samples were taken by either field technicians, prospectors or geologists, and inserted in individual plastic bags, each with ALS sample tags. Samples were checked, catalogued and bags sealed by the senior geologist, then placed in large numbered nylon bags with standards, blanks and duplicates. The bags were then sealed and transported by Explo-Logik employees to the ALS facilities. Once at the ALS facilities, samples were catalogued using the bar coding system, dried, weighed, crushed, pulverized to 70% <2mm, and riffle-split for final pulverization to 85% <75µm. A final split is taken for multi-element ICP-AES analysis (gold plus 33 elements) and ore grade finish on anomalous results in gold, silver, copper and zinc.

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

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 137,965,639 outstanding shares of which 59.4% are owned and controlled by Insiders and within the 'friends and family' category.

The Corporation's emphasis is on the development of its flagship project, the 100% owned mid-stage Ishkoday Project, and its gold-silver and gold-rich polymetallic mineralization with a significant upside potential.

The Corporation has a property-wide database of 283 diamond drill holes totaling 40,729 m, detailed sampling, mapping, assays and geochemical analysis, and ground geophysics. The mineralization 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 "Mine"). The Mine produced 73,322 ounces of gold, and 15,929 ounces of silver from 1936 to 1942 on the No. 3 Vein at 24 g/t gold, and generated a large gold and silver bearing stockpile of 144,070 tonnes grading 1.59 g/t gold in the Indicated Mineral Resources category (based on a *NI 43-101 Technical Report filed on SEDAR in June 2013 – refer to the Corporation's news release dated April 23, 2013*).

*Mr. Jean Lafleur, P. Geo. (APGO, OGO), 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.*

**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>

For links to photos and images of the Ishkoday Project, please visit the Corporation's website at URL <http://www.laurion.ca> or LinkedIn at URL <https://www.linkedin.com/in/cynthia-le-sueur-aquin-04b03017/detail/recent-activity/>

The Viewer should note that images and photos displayed on these websites show selected mineralization that may not necessarily be representative of the mineralization hosted on the Ishkoday Gold Project.

Follow us on Twitter: @Laurion\_LME

**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 details, anticipated timing and completion of the transactions and other matters described in this press release, including without limitation, the timing, completion and future results of the Corporation's exploration program at Ishkoday. 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.*