

LAURION's Channel Sampling on the A-Zone Identifies High Grade Polymetallic Mineralization

TORONTO, ONTARIO – August 24, 2021) – Laurion Mineral Exploration Inc. (TSX.V: LME and OTCPINK: LMEFF) ("LAURION" or the "Corporation") is pleased to announce the results of the 2021 channel sampling program on A-Zone and the McLeod areas on the Ishkoday Property, located 220 km northeast of Thunder Bay.

Highlights:

- Stripping of the northeast portion of the A-Zone, exposed surface mineralization that correlates with a high-grade historic diamond drill hole intercept. Stripping on the A-Zone revealed a series of sub-parallel horizons with folded semi-massive lenses, hosting up to 45% sulphides (See Figure 4).
- A newly discovered polymetallic vein, the Pond, was located southeast and subparallel to the McLeod quartz vein. This new mineralized area hosts gold, silver, copper, lead and zinc over a strike length of 130m and a width up to 2.7m (**See** <u>Figure 5 and 6</u>).
- The current assay results, combined with new geological understanding, confirms the presence of early volcanogenic mineralization (A-Zone type) that is, in turn, overprinted by a later orogenic veining event. Both event host Au mineralization and are polymetallic in nature, due to the remobilization of the primary sulphides.

A-Zone Summary:

As part of the 2021 summer exploration program on Ishkoday, the northeast extension of the A-Zone was stripped, revealing semi massive sulphide lenses. A total of five (5) subparallel mineralized horizons were discovered, all striking to the northeast. These horizons are converging toward what have been interpreted as a fold hinge, with a reconcentration of lens-shaped sulphide. These sulphide lenses consist of brecciated quartz within a sulphide matrix comprised of pyrite, chalcopyrite, sphalerite, and galena (see Figure 1) and are believed to be part of the volcanogenic mineralization at the Ishkoday Property. A total of 82 channels were sampled across the newly discovered A-Zone extension and 255 samples were taken on all the trenches (see key assays result in Table 1).

Channel Line	From	То	Length	Au g/t	Ag g/t	Cu %	Pb %	Zn %
AZ-L13	0.00	4.84	4.84	2.70	41.98	0.31	0.90	6.81
including	0.72	2.27	1.55	4.88	87.34	0.66	1.51	11.69
AZ-L14	7.93	10.32	2.39	1.82	18.59	0.30	0.14	2.01
AZ-L11	0.00	2.38	2.38	1.03	12.84	0.15	0.03	1.82
AZ-L30	0.53	3.77	3.24	1.21	1.83	0.01	0.01	0.69
AZ-L10	0.00	1.35	1.35	0.67	38.31	0.19	0.03	4.36

McLeod Zone Summary:

The main focus of the stripping at McLeod was to expose vein hosted mineralization since historical stripping on the McLeod had revealed a metre-wide quartz vein over 130m in length. Laurion's stripping effort revealed a series of sub-parallel quartz-sulphide veins, striking to the southwest with a steep dip to the northwest. These orientations are comparable to the ones observed at the A-Zone. Sampling focus was put on the 2 main veins: 1) the McLeod quartz vein and 2) the newly discovered polymetallic vein dubbed the Pond (see Figure 2).

The McLeod quartz vein contains low pyrite (<2%), with sericite and chlorite alteration. A section of the vein is cut by a regional shear zone and presents a brecciated texture with strong epidote and chlorite alteration. The sheared McLeod quartz vein was power washed for approximately 7 m and four samples were collected. Highlights of sampling on the McLeod quartz vein is shown in **Table 2**.

Sample #	Length	Au g/t	Ag g/t
2060	0.45	23.60	19.50
2061	0.68	0.96	5.80
2062	0.89	28.90	16.90
2063	0.40	0.88	3.20

Table 2: Results from Channel Sampling on the McLeod Quartz Vein.

The Pond is a polymetallic vein composed of brecciated quartz in a sulphide-chlorite matrix and is 0.30m to 1.3m wide. Mineralization of the wall-rock has also been identified at the vein selvedges. The mineralization contains up to 75% sulphides comprised mainly of pyrite, sphalerite and specks of chalcopyrite and galena (see Figure 3). The Pond mineralization appears to have a strike length of 750 m and is interpreted to represent the continuity of in the "V" Veins exposed in a cross-trench of the CRK Zone located further west of the McLeod Zone. Mineralization at the Pond zone is similar to what has been observed on the A-Zone, which comprises a succession of sub-parallel sulphide rich lenses composed of a quartz breccia with a sulphide-rich matrix (see key results in Table 3).

The LiDAR survey interpretation revealed historical trenches along the whole of the McLeod zone strike length, which were re-exposed and sampled. These results are pending. Furthermore, the LiDAR information and historic drill hole on the A-Zone and the McLeod, leads Laurion to believe that the sulphide-rich mineralization could extend up to 1,600m in strike length. In-fill diamond drilling between the A-Zone and the McLeod zone is currently in progress.

Channel Line	From	То	Length	Au g∕t	Ag g/t	Cu %	Pb %	Zn %
TP-L12	0.00	0.37	0.37	12.80	142.00	0.44	0.19	2.82
TP-L04	0.00	1.42	1.42	9.66	40.25	0.05	0.32	0.27
With	0.00	0.47	0.47	16.30	55.10	0.06	0.15	0.27
TP-L03	0.00	1.96	1.96	4.45	25.64	0.08	0.27	0.35
TP-L06	0.00	1.72	1.72	2.56	35.79	0.08	0.68	1.93
With	0.00	0.46	0.46	7.93	116.00	0.25	2.49	6.46
TP-L14	0.00	1.75	1.75	1.98	51.77	0.12	0.15	2.87

Table 3: Results from the Polymetallic Pond Zone Located on McLeod.

Qualified Person

The technical information in this news release has been prepared in accordance with Canadian regulatory requirements and has been reviewed and approved by Jean Philippe Paiement, PGeo, MSc, a consultant to Laurion, and a "qualified person" within the meaning of National Instrument 43-101.

About LAURION

The Corporation is a junior mineral exploration and development company listed on the TSXV under the symbol LME and on the OTCPINK under the symbol LMEFF. LAURION now has 233,473,342 outstanding shares of which approximately 79% 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 midstage 47 km² lshkoday Project, and its gold-silver and gold-rich polymetallic mineralization with a significant upside potential. The mineralization on lshkoday 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 Brenbar Property, acquired in 2020, is contiguous with the lshkoday Property, hosts the historic Brenbar Mine. LAURION believes the mineralization to be a direct extension of mineralization from the lshkoday Property.

FOR FURTHER INFORMATION, CONTACT:

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