

LAURION Provides Exploration Update and Announces Discovery of New Mineralized Outcrop

TORONTO, ONTARIO – August 10, 2021) – Laurion Mineral Exploration Inc. (TSX.V: LME and OTCPINK: LMEFF) ("LAURION" or the "Corporation") is pleased to announce the following update on its exploration program of 2021 at the Ishkoday Property:

Highlights:

- Trenching and stripping exposed 4 new mineralized areas of interest: The A Zone, the Niish and Garvey Zone and a new zone, the Pond, located near the McLeod prospect.
- New mineralized lenses of semi-massive sulfides were stripped on the A-Zone.
 Further assays are pending.
- A new mineralized zone of 4 sub-parallel veins, called 'The Pond' has also been exposed. These veins are part of the McLeod mineralized system, which is hosted in a sequence of felsic-intermediate volcanic and strikes N215 with a 70 dip to the South. Mineralization can be found in 4 distinct sub-parallel veins which are 20m apart and are composed of brecciated quartz with disseminated fine pyrite (up to 15%), chalcopyrite and sphalerite. The LiDAR survey shows a possible extension of more than 400m along strike. Mapping, interpretation, and final assay results are still pending.
- A soil sampling survey has been designed to cover 3 magnetic high anomalies located north of the Namewaminikan River. The areas show low historical prospecting, low outcrop density and thick vegetation. The magnetic anomalies are interpreted to represent a possible extension of the north-south feature observed in the southern portion of the Property. Historic grab samples from this area produced anomalous values (0.082 g/t Au, 11.9 g/t Ag and 0.89% Cu and 0.356 g/t Au, 37.6 g/t Ag and 1.52% Cu) for both base and precious metal in exposed trenching.
- A LiDAR survey was conducted at the end of May over the entire property. This high
 precision laser imaging survey provided Laurion with a high-definition digital
 elevation model (DEM). The new DEM model is key in the interpretation of the
 structural feature on the property. Historical trenches are also evident on the survey
 and are aiding the geological team in the further expansion of already known
 mineralized zones.

 The 10,000m 2021 diamond drill program has been paused due to the current forest fire hazards (see press release from July 21st, 2021). Of the initial of 6,079 meters of drilling completed to date, assay results for 4,758 meters of drilling have been received and highlights are shown in Table 1 below.

Exploration drilling in 2021 started with the objective of defining the mineralized system along a strike extension of 1.25 km from the A-Zone, (Behzik Zone) 2020 Niish discovery zone to the McLeod Zone. Preliminary observations and results confirmed the existence of an extension of the new Niish structure 850m to the northeast in drill hole LBX21-032. Drilling confirmed the extension at depth of the Behzik zone at around 410m below surface level as well of its steep dip to the northwest.

The initial drill holes targeted unexplored areas to depths, approximately 650m from surface, across the 1.25 km strike to investigate the geometry and grade distribution of the greater Niish and Behzik zone. The drilling was also conducted with the objective of understanding the litho-structural model and define the mineralized system as seen in historic (1980s and 1990s) and LAURION (2012 to 2020) drilling, which intersected significant grades and widths of gold and base metal mineralization.

Highlights from the 7 initial exploratory holes:

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Hole ID	From	То	Length*	Au g/t	Ag g/t	Cu %	Zn %	AuEq
LBX21-032	206.20	228.80	22.60	0.01	0.81	0.02	0.60	0.36
	286.00	293.70	7.70	0.08	3.12	0.09	1.39	0.97
	653.50	655.30	1.80	0.44	13.30	0.13	5.08	3.42
LBX21-033	359.70	361.50	1.80	1.95	4.27	0.22	1.15	2.96
	492.00	494.90	2.90	0.37	8.53	0.26	1.01	1.43
LBX21-034	131.10	133.00	1.90	1.55	9.47	0.07	2.26	2.94
	150.40	153.40	3.00	0.34	4.52	0.10	1.42	1.28
	304.30	312.70	8.40	0.15	2.34	0.05	1.19	0.86
LBX21-035	423.40	432.40	9.00	1.50	10.63	0.33	1.04	2.71
	429.20	432.40	3.20	4.13	26.20	0.90	2.22	7.07
LBX21-036	108.00	109.00	1.00	3.94	1.30	0.00	0.01	3.97
	438.80	441.90	3.10	0.93	15.80	0.43	0.81	2.26
	512.50	515.80	3.30	0.20	3.23	0.10	2.52	1.68
	522.30	532.20	9.90	0.03	0.66	0.03	0.56	0.37
LBX21-037	125.00	127.80	2.80	1.73	1.79	0.02	0.07	1.84
	416.40	425.60	9.20	0.03	3.69	0.16	1.54	1.11
	517.30	532.00	14.70	0.24	0.25	0.00	0.01	0.25
LBX21-038	303.10	306.50	3.40	0.04	3.78	0.09	1.30	0.89

^{*}True thicknesses have yet to be estimated since the 3D modelling of the zones is still pending updates

Table 2: Drill hole coordinates for holes LBX21-032 to LBX21-039. (UTM NAD83 Zone 16N)

Hole ID	Azimuth	Dip	Length	Easting	Northing	Elevation
LBX21-032	126	-50	725	446400.4	5513397.7	319.8
LBX21-033	306	-50	644	446611.6	5512751.5	323.2
LBX21-034	263	-54	350	446779.3	5513212.1	326.5
LBX21-035	126	-50	800	445840.3	5512815.8	325.0
LBX21-036	126	-50	705.8	445794.9	5512667.7	326.0
LBX21-037	310	-50	604	446123.6	5512450.0	329.0
LBX21-038	307	-51	459	446066.5	5512430.8	330.7
LBX21-039	307	-52	467	446122.0	5512588.7	321.5

Exploration for Remainder of 2021:

The remaining 3,550m of drilling will focus on in-fill drilling the areas between the A Zone and McLeod Zone as well as the extension of the McLeod to the southwest, which in turn could extend the A-Zone/McLeod strike length to over 1.4 km.

The McLeod southwest extension hosts encouraging historical surface trenching results and a magnetic high anomaly and an associated IP chargeability high date as seen in <u>Figure 1</u> showing mineralized interval based on 3m over 0.5 g/t AuEq. No drilling has been conducted in this area todate.

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 Ishkoday Project, and its gold-silver and gold-rich polymetallic mineralization with a significant upside potential. 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 Brenbar Property, acquired in 2020, is contiguous with the Ishkoday Property, hosts the historic Brenbar Mine. LAURION believes the mineralization to be a direct extension of mineralization from the Ishkoday Property.

FOR FURTHER INFORMATION, CONTACT:

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