Laurion Announces Resource Estimate of 144,070 Tonnes of Surface Stockpile Grading 1.59 g/t Gold and 137,501 Tonnes of Tailings Grading 0.67 g/t Gold

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Metallurgical Tests Indicates 87% Gold Recovery in Gravity Testwork from the Waste Stockpile, and 96% Recovery of Gold in Cyanide Leach Testwork from the Low Grade Tailings.

TORONTO, April 23, 2013 /CNW/ - Laurion Mineral Exploration Inc. (TSX.V: LME; OTCQX: LMEFF) ("Laurion") is pleased to announce that NI 43-101 Measured and Indicated resource estimates have been prepared by Laurion's consultants GeoVector Management Inc. ("GeoVector") for Laurion's Ishkoday Property, located approximately 28km northeast of Beardmore, Ontario. The resource estimates are for the low grade stockpile accumulated during mining operations of the old Sturgeon River Gold mine on the Ishkoday property from 1936 to 1942, and for the low grade tailings area associated with the processing of ore feed from the mine.

The resource estimate for the low grade stockpile is 144,070 tonnes grading 1.59 g/t gold for 7,383 contained ounces of gold in the Indicated category. The resource estimate for the low grade tails is 137,501 tonnes grading 0.67 g/t gold for 2,944 contained ounces of gold in the Indicated category. Total Indicated mineral resources for both deposits totals 281,571 tonnes grading 1.14 g/t gold for 10,327 contained ounces of gold.

Cynthia Le Sueur-Aquin, Laurion's President and CEO commented, "Initially, the broad objective of evaluating the low grade stockpile and the tailings area was to prove the encouraging extent and grade of the host rock mineralization between high grade quartz veins.

Ore mined between the years 1936-42, was hand sorted at surface, extracting the higher grade quartz vein material. The lower grade vein selvages were placed on the low grade stockpile. The sampling and resource estimation indicates that this material contains significant gold. We fully anticipate that the base of the low grade stockpile and tailings area may well contain higher gold grade values, as a result of percolation of gold fines over the 70 years of weathering. The highest grade sample in the low grade stockpile was 32 g/t Au. That gold mineralization occurs outside the traditionally mined veins was further confirmed in 2010, with the discovery of 7 new gold zones reported in the assay results of the 3,511 m drill program below the shaft workings. This mineralizing style appears to be indicative of a larger lower grade gold environment and potential to explore a mining opportunity in an around the historical shaft area.

The Ishkoday property continues to surprise and deliver encouraging results. The resource estimates of 7,383 ounces gold contained in the low grade stockpile and 2,944 ounces gold in the low grade tailings is a bonus to the comprehensive sampling program, and is currently being evaluated for potential economic recovery and revenue generation".

LOW GRADE STOCKPILE

MINERAL RESOURCE ESTIMATE of the LOW GRADE STOCKPILE

The resource estimate for the low grade stockpile is 144,070 tonnes grading 1.59 g/t gold for 7,383 contained ounces of gold in the Indicated category for all material in the stockpile. A 10g/t cut on all top assay values was applied. As the resource is for a broken stockpile no cut-off grade was applied to the reported resource, as any practical recovery will require processing of all material in the pile. Results at various gold cut-off grades for the low grade stockpile are tabulated below:

MINERAL RESOURCE TABLE of the LOW GRADE STOCKPILE

Cut-off Au (g/t)	Tonnes	Au g/t Grade (g/t)	Grams (Contained)	Ozs (Contained)
0.1	140,688	1.63	229,619	7,383
0.2	139,821	1.64	229,456	7,378
0.3	138,555	1.65	229,111	7,367
0.4	133,684	1.70	227,435	7,313
0.5	128,603	1.75	225,141	7,239
1.0	96,518	2.08	200,794	6,456

The resource estimate was based on a comprehensive program commissioned by Laurion in 2010 to accurately determine the location and volume of the low grade stockpile, and to sample the stockpile using an excavator. The excavator dug pits to acquire representative samples throughout the pile. This information was used to calculate a 43-101 compliant resource estimate.

The survey of the waste pile was carried out by TBT Engineering Consulting Group ("TBTE") of Thunder Bay, using a Trimble R8 RTK GPS with an accuracy of approximately 1 cm. The excavations were also carried out by TBTE with hole locations determined using the Trimble GPS. Depth of the excavated pits was determined using a tape measure to 10 cm scale accuracy. A total of 30 pits were excavated and 46 samples were collected, with deeper pits (maximum 5.2 metres deep) providing 2 or 3 samples at successively deeper levels.

Sampling of the excavated material was carried out by GeoVector to acquire samples that were representative of rock type and broken rock size. Samples were collected in 20 litre pails and delivered to Overburden Drilling Management ("ODM") in Ottawa, Ontario. Individual sample weights were between 20.8-30.7 kg and total sample weight tested was 1.22 tonne. ODM sorted the individual samples into 4 fractions of >63mm, 63-16mm, 16-2mm and

The size fractions from the samples were sent by ODM to Actlabs and they were analyzed by fire assay with AA finish. Any high grade samples over 3000 ppb gold were further treated to fire assay with gravimetric finish to determine a final gold grade. Summary results of the assaying included:

Size Fraction	Minimum Grade (Au g/t)	Maximum Grade (Au g/t)	Average Grade (Au g/t)
>63 mm	Nil	32.00	0.97
63mm-16 mm	0.02	7.16	0.77
16mm-2mm	0.05	4.84	0.98

As indicated by the above table the smallest size fraction (< 2mm) had the highest grade material (6.20 g/t Au average), and all samples in this size fraction had assays greater than 1.75 g/t. The coarsest fraction (> 63 mm) had erratic high values reflecting occasional quartz cobbles, and also contained the highest grade sample (32 g/t Au). These assay results and the survey data were incorporated into an ore resource estimate by GeoVector.

The mineral resource model was constructed in Gemcom GEMS 6.4. The model is based on the survey data. A block model with the origin at 444120E, 5511110N, 347m elevation was constructed using 4 x 4 x 0.5 metre blocks in the x, y, and z direction respectively. Grades for gold were interpolated into the blocks by the inverse distance squared method using between two and six composites to generate block grades. The size of the search ellipse was set at 50 x 50 x 10 metres in the X, Y, Z direction respectively for the indicated resource. The Principal and Intermediate azimuths create a circular ellipse and the Principal dip is oriented at 0°. An average SG value of 2.00, appropriate for broken run of mine material, was applied to all blocks within the block model.

METALLURGICAL TEST RESULTS of LOW GRADE STOCKPILE SAMPLES

Following the assaying of the sample fractions from the low grade stockpile a composite sample was carefully selected from the remaining reject. The composite sample totalled 78.3 kilograms and was designed to be representative of the average grade of material within the stockpile block model. Assayed head grade for the sample was 1.75 g/t gold.

The tests included gravity concentration using a Knelson Concentrator and cyanidation. The results of the

gravity recovery test indicate that at a fine grind of 97% passing -75μm 87.58% of the gold in the sample is able to be recovered by gravity concentration, which indicates an ore exceptionally amenable to Gravity Concentration methods. The cyanidation tests indicated that a grind of 97% -75 μm provided extractions of 92-93%. The combination of Knelson Concentration with cyanidation of the gravity tailings gave a combined recovery & extraction of 98.5%.

TAILINGS

MINERAL RESOURCE ESTIMATE of the TAILINGS AREA

The resource estimate for the tailings is 137,501 tonnes grading 0.67 g/t gold for 2,944 contained ounces of gold in the Indicated category for all material in the tailings. A 10g/t cut on all top assay values was applied. As the resource is for a tailings deposition no cut-off grade was applied to the reported resource, as any practical recovery will require processing of all material. Results at various gold cut-off grades for the low grade stockpile are tabulated below:

MINERAL RESOURCE TABLE of the TAILINGS AREA

Cut-off Au (g/t)	Tonnes	Au g/t Grade (g/t) (Contained)	Grams (Contained)	Ozs (Contained)
0.2	137,190	0.67	91,489	2,942
0.3	130,454	0.69	89,701	2,884
0.5	78,150	0.87	68,326	2,197

As with the waste stockpile Laurion commissioned a comprehensive program to accurately determine the location and volume of the tailings and to sample the tailings pile. An overburden drill was used to acquire representative samples throughout the tailings containment area. This information was used to calculate a 43-101 compliant resource estimate.

The survey of the tailings area was carried out by TBT Engineering Consulting Group ("TBTE") of Thunder Bay, using a Trimble R8 RTK GPS with an accuracy of approximately 1 cm. The overburden drilling was also carried out by TBTE with hole locations determined using the Trimble R8 RTK GPS. Holes were planned on a diamond grid with 20 metre hole spacing. A total of 93 drill collars were spotted and 87 were drilled. Six holes were not drilled as they appeared to be off the tailing area, or were inaccessible. A total of 376 samples were collected, ranging from 0.10 metres to 1.10 metres, with an average thickness of 0.42 metres. Tailings thickness intersected in the drilling ranged from 0.60 metres to 3.90 metres. Most drill holes penetrated through the tailings into the underlying organics, which were also sampled.

Sampling of the overburden drilling was carried out by TBTE with supervision by GeoVector. The samples were sent Actlabs and they were analyzed by fire assay with AA finish. Any high grade samples over 3000 ppb gold were further treated to fire assay with gravimetric finish to determine a final gold grade. Individual assay results ranged from nil Au to 21.50 g/t Au. The Au grade was consistently higher in the lower intervals of the tailings intersections. Drill intersections through the total tailings thickness ranged from a low of 0.13 g/t over 1.0 metre to 9.65 g/t over 0.90 metres. Some of the higher grade drill hole intersections were:

Hole Number	From (m)	To (m)	Average Grade (Au g/t)
BH64	0	0.90	9.65
BH76	0	0.60	6.47
BH73	0	1.20	2.99
BH74	0	1.10	2.30
BH84	0	1.70	2.28

These assay results and the survey data were incorporated into a mineral resource estimate by GeoVector.

All samples from the 2010 waste pile program were delivered by GeoVector Management Inc. personnel to the Activation Laboratories ("Actlabs") facility in Geraldton. Actlabs is an ISO/IEC 17025 accredited analytical laboratory.

The mineral resource model was constructed in Gemcom GEMS 6.4. The model is based on the survey data. A block model with the origin at 444120E, 5511110N, 330m elevation was constructed using 4 x 4 x

0.3 metre blocks in the x, y, and z direction respectively. Grades for gold were interpolated into the blocks by the inverse distance squared method using between two and twelve composites to generate block grades. The size of the search ellipse was set at 40 x 40 x 5 metres in the X, Y, Z direction respectively for the indicated resource. The Principal and Intermediate azimuths create a circular ellipse and the Principal dip is oriented at 0°. An average SG value of 2.20, appropriate for compacted ground tailings, was applied to all blocks within the block model.

METALLURGICAL TEST RESULTS of TAILINGS SAMPLES

Following the assaying of the tailings samples composite samples were prepared from all remaining from the remaining sample reject. The composites formed two populations, the sand to silt size tailings, and the organic layer beneath the tailings. Averaged assayed head grade for the tailing sample was 0.42 g/t gold. The organics had an averaged assayed head grade of 1.57 g/t gold. The organics samples required ashing prior to metallurgical testing to reduce preg-robbing effects of the organic carbon and the ashed organics had an averaged assayed head grade of 3.31 g/t gold.

The tests included gravity concentration using a Knelson Concentrator and cyanidation. The gravity concentration tests indicated that the ash samples were not amenable to gravity concentration (less than 1% recovery). Likewise the gravity tests on the tailings sample using the Knelson Concentrator had relatively poor results with only recovered 22% of the gold.

The cyanidation tests indicated that a tailings/ash composite had dissolution of over 96% of the gold and required leaching time of less than 12 hours. The tailings alone required longer (48 hours) leaching times and the maximum dissolution achieved was 67-72%. Test results indicate that the low grade tailings resource would be amenable to gold recovery using cyanide. In all cases the cyanide and lime consumptions were fairly low.

About the Ishkoday Project

The Ishkoday reported a historical production of 73,322 ounces of gold and 15,929 ounces of silver from 145,123 tons taken primarily from No. 3 Vein during 1936 to 1942, but also from the No. 10 Vein and the M Vein that were encountered at the lower depths of the mine in the later years of mine life. During mine life the mine development material was hand sorted at surface and stockpiled next to the mine shaft and mill locations. The higher grade quartz veins were milled with tailings placed in a natural depression next to the mill site. Both the low grade stockpile and tailings areas have been largely undisturbed since the mine closed during World War II due to manpower shortages.

QUALIFIED PERSON

Joe Campbell, B.Sc. P. Geo., a director of Laurion Mineral Exploration Inc., is the Qualified Person, as defined by NI 43-101, for the Ishkoday Project and has reviewed the technical information in this release.

The Indicated mineral resource estimate has been prepared in compliance with the standards of NI 43-101 by Dr. A. Armitage, P. Geo. Mr. Armitage is independent of the Corporation under NI 43-101. A NI 43-101 report will be finalized and filed on SEDAR within 45 days of the date of this news release.

About Laurion Minerals Exploration Inc.

Laurion Mineral Exploration Inc. is a junior mining company focusing on the upside of its 100%-owned Ishkoday Property, a high impact VMS project, having a primary focus on gold and base metals.

With proven ability to develop early stage projects and create shareholder value by monetizing its discoveries and assets, Laurion has realized a total of $6.35 million in the last two years from monetization of its assets.

The Corporation's current emphasis is on resource development at the Ishkoday Property, located in Beardmore, Ontario, approximately 220 km northeast of Thunder Bay.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This news release includes certain forward-looking statements concerning the future performance of

Laurion's business, operations and financial performance and condition, as well as management's objectives, strategies, beliefs and intentions. Such statements include, but are not limited to, statements concerning the approval of Laurion's application to trade its common shares over the facilities of the OTCQX and the commencement of such trading. Forward-looking statements are frequently identified by such words as "may", "will", "plan", "expect", "anticipate", "estimate", "intend" and similar words referring to future events and results. Forward-looking statements are based on the current opinions and expectations of management. All forward-looking information is inherently uncertain and subject to a variety of assumptions, risks and uncertainties, including the speculative nature of mineral exploration and development, fluctuating commodity prices, competitive risks and the availability of financing, as described in more detail in our recent securities filings available at www.sedar.com. Actual events or results may differ materially from those projected in the forward-looking statements and Laurion cautions against placing undue reliance thereon. Laurion and its management assume no obligation to revise or update these forward looking statements.

For further information:

Laurion Mineral Exploration Inc.
Cynthia Le Sueur-Aquin - President
Tel: 1-705-788-9186
Fax: 1-705-788-9187
Website: www.laurion.ca