Auxico Reports Thorium Extraction Results on Rare Earth Concentrates From Tin Tailings, Massangana Project, Brazil

written by Raj Shah | March 16, 2022

March 16, 2022 (Source) – **Auxico Resources Canada Inc.** (CSE: AUAG) is pleased to provide the results of the metallurgical testing done on the samples from the Massangana project located in the state of Rondonia, Brazil. The Massangana properties cover an area of 18,000 hectares and have been the object of important tin production over the last 100 years. The Massangana project contains **30 million tonnes of tailings**, as estimated by a study titled 'Investigation of tin and tantalum ores from the Rondonia Tin Province, northern Brazil, to develop optimized processing technologies' prepared by the German Mineral Resources Agency and the Geological Survey of Brazil[1]. The study indicates that three types of products could be generated from the tin tailings: columbite concentrate containing 34.07% niobium, monazite concentrate containing 37.74% total rare earth oxide (TREO), and cassiterite concentrate containing 54.92% tin. For reference, please see below the table outlining the products as provided within the study. The Company intends to build a concentration facility in order to produce these concentrates, generating sales of niobium, tin, and rare earths. To view the study referenced above, please visit the Company's website (www.auxicoresources.com/reports).

Massangana Tin Tailings	TREO	Sn	Th	U	Ta	Nb
	%	%	%	%	%	%
Tailings	4.56	0.65	0.49	0.07	0.07	0.37
Columbite Concentrate	5.67	0.97	0.47	0.09	4.83	**34.07**
Monazite Concentrate	**37.74**	9.61	3.37	0.13	0.42	0.19
Cassiterite Concentrate	0.09	**54.92**	0.09	0.03	1.7	2.87

The property owners provided the Company with the concentrate from the tailings that has been produced by magnetic separation and gravity methods from feed material averaging **2.83% total rare earth oxide content (TREO).** The provided concentrate contained **63.49% TREO**, therefore having a rare earth content in the value of **±US$ 19,626** per tonne at current market prices. For reference, please see table in the second part of this news release. This concentrate has been treated using the Company's licensed ultrasound extraction process (UAEx), achieving recoveries exceeding 90% of most rare earth oxides, as per the table below. The rare earth content in the tailings is in the order of 1,000,000 tonnes, according to the study referenced to above.

The Company is pleased to announce that it has successfully removed the thorium content, making the concentrate non-radioactive and eligible for international shipping. Using the UAEx process, the thorium content in the concentrate was reduced to less than 0.1%. For reference, please see the table below.

Brazil	
Thorium Grade (%)	**Thorium Grade (%)**
Before UAEx	After UAEx
6.23	< 0.1

The Company intends to build a processing plant in Brazil in order to create a non-radioactive rare earths concentrate, by

extracting thorium and uranium using the ultrasound extraction process and precipitating the thorium as a separate concentrate that could be sold independently.

Please see below the estimated value per tonne based on the rare earth oxide grades and the achieved recoveries.

Element	Symbol	Brazil Concentrate Grade (%)	Brazil UAEx Recovery (%)	Effective % Recovery	USD $/MT 2022-03-03	USD $ Element/ tonne
Cerium	CeO_2	35.90	94.43	33.90	1,465	496
Dysprosium	Dy_2O_3	0.28	83.54	0.23	492,000	1,150
Gadolinium	Gd_2O_3	0.17	100.00	0.17	99,905	169
Lanthanum	La_2O_3	15.17	94.24	14.30	1,425	203
Neodymium	Nd_2O_3	9.04	92.51	8.36	190,000	15,889
Praseodymium	Pr_6O_{11}	0.89	100.00	0.89	173,000	1,539
Samarium	Sm_2O_3	0.90	93.28	0.84	4,735	39
Yttrium	Y_2O_3	1.14	80.80	0.92	14,850	136
TREO (%)		**63.49**				**19,626**

Auxico’s QP is preparing a program involving bulk sampling in several areas as well as a LIDAR survey which would give a more precise map to calculate the tailings area. LIDAR stands for Light Detection and Ranging, which is a remote sensing technique utilizing light in the form of pulsed laser.

Earlier this year, Auxico entered into a Memorandum Of Understanding with the Brazilian mining cooperative Cooperativa Estanífera de Mineradores da Amazoônia Legal Ltda (“CEMAL”), with regard to the exploitation and commercialization of rare earths from the tin tailings in Massangana. The properties are located in the counties of Ariquemes and Monte Negro, in the state of

Rondonia, Brazil. Auxico and CEMAL are in the process of finalizing a joint venture agreement.

The metallurgical testing described in this news release was done on behalf of the Company by the research institute Coalia in Thetford Mines, Quebec.

This news release was reviewed and approved by Joel Scodnick, P.Geo., an independent consultant to Auxico, in his capacity as a Qualified Person, as defined by National Instrument 43-101.

***Disclaimer**: The samples presented in this press release from Brazil were not under the supervision of the Qualified Person and therefore do not conform to National Instrument 43-101. As well the estimated resource of the tailings has not been verified by the QP and therefore does not comply with National Instrument 43-101.*

Grant of Options

Auxico recently granted 1,000,000 options to consultants of the Company. These options have a strike price of $1.00, no vesting period, and expire on March 2, 2023.

About Auxico Resources Canada Inc.

Auxico Resources Canada Inc. (“Auxico”) is a Canadian company that was founded in 2014 and based in Montreal. Auxico is engaged in the acquisition, exploration and development of mineral properties in Colombia, Brazil, Mexico, Bolivia and the Democratic Republic of the Congo.

Additional information on Auxico can be found on the Company’s website (www.auxicoresources.com) or on SEDAR (www.sedar.com) under “Auxico Resources Canada Inc.”

ON BEHALF OF THE BOARD OF DIRECTORS

« signed »	« signed »
Pierre Gauthier	Mark Billings
CEO, Auxico Resources Canada Inc.	President, Auxico Resources Canada Inc.

The Canadian Securities Exchange (CSE) has not reviewed and does not accept responsibility for the adequacy or the accuracy of the contents of this release.

[1]Buch T., Marbler H., Goldmann S., Haubrich F., Trinkler M. (2018). *Investigation of tin and tantalum ores from the Rondoˆnia Tin Province, northern Brazil, to develop optimized processing technologies*. German Mineral Resources Agency (DERA) and Geological Survey of Brazil, Berlin, Germany.

SOURCE Auxico Resources Canada Inc.

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