

November 16, 2022

Re: Rare Earths Sourcing and Refining - Project Highlights

Rare Earth Reserves

- Central America Nickel (“CAN”) and Auxico Resources Canada (“Auxico”), or collectively the “Companies”, control rare earth deposits located in Colombia, Brazil and the Democratic Republic of the Congo (DRC). All deposits are hosted in monazite sands allowing easy processing into commercial concentrates. For more details, please review the presentation ‘Sourcing and Refining of Critical Minerals’ that was submitted to the US Department of Energy in January 2022, and available on the following link: bit.ly/3hF5nWV.

Element	Symbol	Brazil Grade (%)	DR Congo Grade (%)	Colombia Grade (%)	Bolivia Grade (%)	Average UAEx Recovery (%)
Cerium	CeO2	35.90	31.61	31.09	20.86	85.72
Dysprosium	Dy2O3	0.28	0.09	0.72	0.49	86.63
Gadolinium	Gd2O3	0.17	0.73	0.75	4.68	87.47
Lanthanum	La2O3	15.17	9.41	9.40	5.49	85.41
Neodymium	Nd2O3	9.04	12.34	9.49	10.77	84.74
Praseodymium	Pr6O11	0.89	2.58	2.44	1.57	85.94
Samarium	Sm2O3	0.90	1.99	1.81	8.66	86.02
Yttrium	Y2O3	1.14	0.49	0.50	1.63	76.26
	Total RE (%)	63.49	59.24	56.20	54.15	

[Link to submission SOURCING AND REFINING OF CRITICAL MINERALS prepared for the US Department of Energy. Link: bit.ly/3hF5nWV.](http://bit.ly/3hF5nWV)

Rare Earth Sales

- The Companies have been selling rare earths for over 6 months, having sold a total of 720 MT at average grades exceeding 60% total rare earths oxides (TREO) and over 14.95% Neodymium (Nd) and 3.4% Praseodymium (Pr). The overview of the project is available on the following link bit.ly/3EA2G1Z.
- The sales contract is based on 5 rare earths: Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), Terbium (Tb) and Gadolinium (Gd).
- The Companies is currently having end user conversations and negotiations with the Indian Government, the US Government, Samsung, GM and Energy Fuels.

Rare Earth Refining

- Proposition Summary:
 - CMREE Basic Extraction plant with CAPEX of USD \$116.2M.
 - REE Separation Plant from Mixed REE Concentrates with CAPEX of CAD \$68M.
 - **Total CAPEX: CAD \$225M**
- Scoping studies are available for the concentration of non-radioactive rare earths for potential plants to be located: in the industrial park Sorel, Quebec, Canada; in Little Rock Arkansas, USA; and in the port of Santa Marta, Colombia. The critical minerals-rare earth elements (CMREE) plant proposition for Sorel requires a capital investment of USD\$116.2M. The economic concentrates produced would include critical minerals Tin, Tantalum, Titanium, Niobium, Scandium, Zirconium and 16 different rare earths elements. The scoping study for the construction of the CMREE refinery in Canada is available on the following link: bit.ly/3hMwG1H.
- Auxico conducted a research program in collaboration with the McGill University in Montreal; a full engineering study has been prepared for the processing of rare earths into elemental form, that includes a 2 MT per hour processing of rare earth ore (14,000 t/y) with a proposed plant cost of CAD\$68M. The study 'Rare Earth Element Beneficiation and Separation' is available on the following link: bit.ly/3hMypEd.
- CAN has filed patents for the refining of rare earths under the Patent Convention Treaty – please find the copy of the patent application 'Process for Extraction of Rare Earth Elements' on the following link: bit.ly/3g2n3eR. Our technological processes are traditional but are augmented by our Ultrasound extraction technology which reduces OPEX, processing time and the use of reagents by 75-90% depending on the metal extracted.
- Auxico prepared a whitepaper for the US Department of Defense: *Supply, refining, beneficiation, and value-added processing of 4,000,000 tons of strategic and critical materials* available on the following link: bit.ly/3hMsJKo

- We can easily *remove radioactivity from Rare Earth Sands (Monazite)*: Please see here bit.ly/3gaqWyd and here bit.ly/3UIRLbj. In short, we remove Thorium by pH gradation, a process under which Thorium is removed as a pH of 3-4 while REEs are removed at a pH over 5.

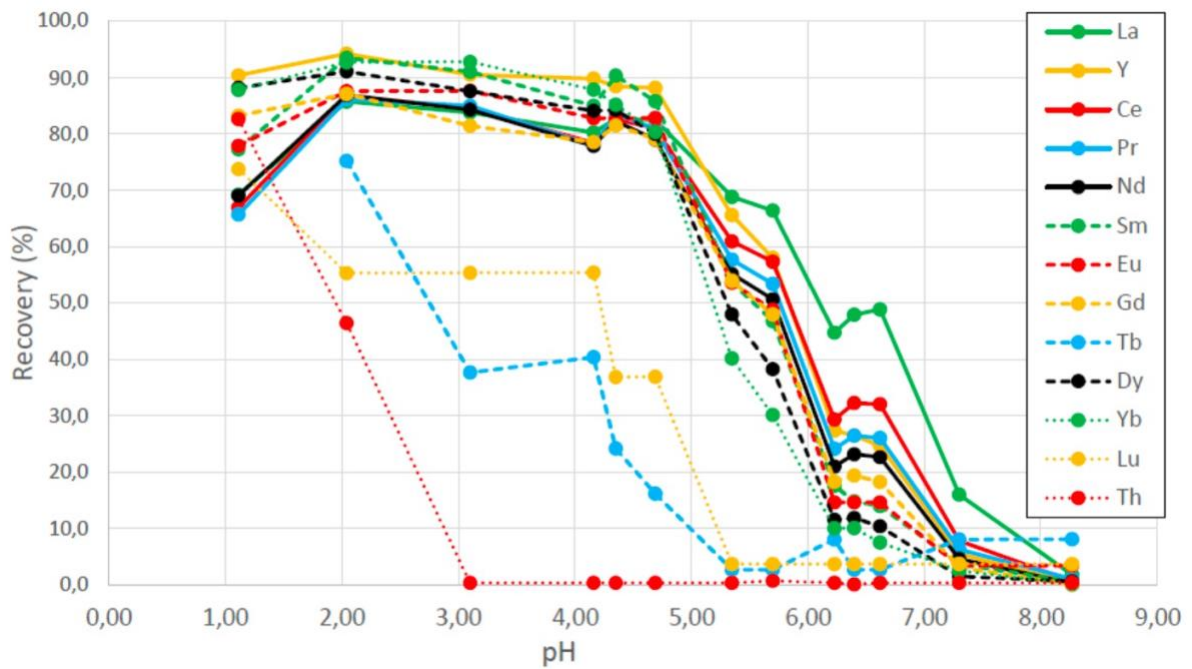


Figure from the patent on rare earths extraction: Thorium separation - Link: bit.ly/3hMypEd.