

Appia Increases Bought Deal Financing as it Ramps Up Rare Earths Drill Program

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[Appia Energy Corp.](#) (CSE: API | OTCQB: APAAF) announced upsizing its previously announced [bought-deal financing](#) to \$5 million that it expects to close later this month.

Appia plans to use part of the proceeds on a multi-million dollar summer exploration program on its Alces Lake property, which includes at least 5,000 meters of drilling and property-wide geophysical work. It also aims to upgrade the camp for winter use and access to extend the drilling season.

Appia is a Canadian-based mineral exploration company targeting the rare earth element (REE) and uranium sectors. The Company is currently focusing on delineating REE and uranium targets on its Alces Lake property, and plans to change its name to Appia Rare Earths & Uranium Corp.

The Alces Lake property is located in the Athabasca Basin of northern Saskatchewan, almost 30 kilometers northeast of Uranium City, which is a major centre in the area with good infrastructure including hydroelectric power, an airstrip, and an ice road connection.

The REE assays are reported as Total Rare Earth Oxides (TREO) and the Alces Lake property hosts some of the highest REE grades in the world and the second-highest average grade at 16.65% TREO.



SOURCE:

Re-analyzing Previous Samples Confirm Gallium Mineralization

Since 2016, Appia has been working on the Alces Lake project and focused on uranium and the critical rare earth elements (CREE) including neodymium (Nd), praseodymium (Pr), dysprosium (Dy), and terbium (Tb).

Recently, Appia re-analyzed some historical samples with high-grade rare earth oxide (REO) results to determine the extent of [gallium mineralization](#) over the property and the correlation between REO and gallium.

The results returned gallium concentrations ranging from 0.01% to 0.104% Ga_2O_3 and a positive linear correlation between gallium and REO.

According to the Company, gallium is considered high-grade when the weight percentage Ga_2O_3 is greater than 0.010% and the combination of the high-grade REO system and gallium gives it the potential of becoming a world-class asset for critical metals.

Frederick Kozak, Appia's President, commented, "The gallium concentrations on the Property are remarkable. Gallium was found in naturally occurring high-concentrations on the Property that far exceed current concentrations required for global production of gallium."

Gallium is primarily used in electronics, semiconductors, and light-emitting diodes (LEDs) as it is able to turn electricity into light.

In March, the current price of high-grade gallium metal (99.99%) was US\$376.71/kg compared to Nd at US\$105/kg, Pr at US\$74.95/kg, Dy at US\$424.95/kg, and Tb at US\$1,468.02/kg. Being able to

recover gallium would increase the ore value to Appia.

Targeting Ore from Deposit in Next 24 Months

Appia's Alces Lake property has the REE hosted in coarse-grained monazite that is exposed at the surface in high-grade outcrops, making it economic to extract.

Monazite processing for REE extraction has a long history of economic viability and was started in the 1950s at the Steenkampskraal Mine in South Africa.

The company is following a low capital pathway to initial production by focusing on the potential of bulk mining the surface mineralization akin to a gravel pit operation and believes it could start production as early as 2023.

Appia would then use gravity and magnetic separation to create a concentrate to ship to a third-party plant and extraction facility for further processing.



SOURCE:

Leveraging SRC's Rare Earth Facility

In August 2020, the Saskatchewan government announced C\$31 million in funding for a Rare Earths processing facility in Saskatoon that will be owned and operated by the [Saskatchewan Research Council](#) (SRC).

The SRC facility will be the first-of-its-kind in Canada and will establish an REE supply chain in Saskatchewan.

In February, Appia announced that [bench-scale monazite processing](#) and metallurgical testing had started at the SRC facility using sample materials from Appia's Alces Lake property

and SRC's current Separation Pilot Plant.

The goal of the test is to process monazite-bearing rocks from the property to determine the ease of metallurgical processing and recovery of REE end products.

The testing results will be a factor in determining the economic viability of the project and are expected to take at least three months before a report is issued by SRC to Appia.

REE Solvent Extraction Process at the SRC Facility in Saskatoon, Saskatchewan



[SOURCE:](#)

Shifting Towards a Green Economy

North American and European economies are focused on developing more environmentally friendly ("green") economies by shifting to low-carbon power generation and renewable energy, including solar and wind, as well as the swing from fossil fuel to electric vehicles. REE play a critical role in these industries.

Last year, the governments of Ontario and Canada announced plans to each spend C\$295 million to help Ford upgrade its assembly plant in Oakville, Ontario to start making electric vehicles.

But it is not just the green economy that requires these metals, they are critical in specialized alloys and magnets for airplanes, computer and military systems, high-speed transit, and satellites. A secure supply chain has become of strategic importance.

Governments Focusing on Critical Metals that Include REE

According to the [Center for Strategic and International Studies](#),

China produced approximately 85% of the world's rare earth oxides and 90% of rare earth metals, alloys, and permanent magnets in 2019. This dominance is a concern for other governments and businesses that want to ensure a stable supply of critical metals.

In 2018, the U.S. Secretary of the Interior published a list of 35 critical minerals or mineral material groups and voiced their concerns about their dependence on imports to meet the demand and supply chain risk due to the source concentration of just one or two countries.

The U.S. Defense Logistics Agency, a combat support agency in the U.S. Department of Defense that manages the global supply chain, currently stores 42 commodities, including chromium, cobalt, iridium, palladium, platinum, and zinc, with a current market value of over \$1.1 billion.

In March, the rare earth's and critical minerals sectors received another boost as the Canadian government unveiled its "[Critical Minerals](#)" list that included 31 minerals the government considers *"essential to Canada's economic security, required for Canada's transition to a low-carbon economy, and a sustainable source of critical minerals for our partners."*

The mineral list was comprised of base metals, battery metals, energy metals, and other elements, including aluminum, cobalt, copper, gallium, lithium, nickel, niobium, REE, uranium, and zinc.

The government of Canada wants Canadian mining to become a global leader and supplier of choice and plans to support Canadian critical mineral projects with policy development, coordinate international engagements, and strengthen research & development in the sector.

Canada's list reaffirms its alignment with the U.S. on its list of "Minerals Deemed Critical to U.S. National Security and the Economy" and Canada's commitment to a "critical minerals" cooperation agreement that was initiated in 2019 and currently in the working-group phase.

Final thoughts

Appia's planned financing should strengthen its Balance Sheet and fund its exploration plans for 2021.

In addition, Appia is not a one-trick pony as it holds exploration rights to 656 square km (162,104 acres) in Saskatchewan, including the Alces Lake, Eastside, Loranger, and North Wollaston properties, and over 125 square km (31,000 acres) of prospective REE and uranium deposits in the Elliot Lake area of Ontario.

If you think it's time to add some REE exposure to your portfolio, Appia might be a candidate to add to your watchlist.

Appia closed yesterday at C\$0.65 with a Market Cap of C\$63.4 million.