

Appia Energy's monazite 'a particular gem in the world of rare earths'

Appia Energy Corp. (CSE: API | OTCQB: APAAF) is a company focused on strategic minerals in Canada, specifically uranium and rare earths. The company has a high-grade rare earths project at Alces Lake and is also targeting uranium in three additional properties, all of which are located in the Athabasca Basin in northern Saskatchewan. In addition, the company has uranium (and associated rare earths) in a property near the town of Elliot Lake, Ontario. Thirteen underground mines on this property produced approximately 360 million pounds of U308 from 1955-1996.

After a very successful summer drilling program on the Alces Lake property, the company has raised new equity in the form of non-brokered private placements of equity and flow-through shares. In early December 2020, the company closed a non-brokered \$0.4 million flow-through financing. This was preceded by another flow-through and equity raise announced in October, which raised a total \$1.8 million in new equity. In addition, the company raised a further \$0.8 million through the exercise of share purchase warrants between September 14 and November 5, 2020. All of the new capital raised is intended for continued exploration on the company's uranium and rare earth properties in Saskatchewan.

Particularly important to the company and shareholders, the rare earths continue to draw more market attention. For industry watchers and participants, the recent global activities are bringing the scarcity and security of supply of rare earths to the fore. So much so that at the end of September 2020, President Trump signed an executive order regarding critical materials, declaring a national emergency

as related to rare earths. To further exacerbate the global focus on rare earths, on December 1, 2020, China implemented its Export Control Law, which is going to have impact on the export of rare earths from the country. China arguably has the world's most complete rare earth industry chain, which means in order to make full use of the rare earths mined in various countries, they must come to China for processing. China produces approximately 80% of the world's rare earths but can only supply about 30% of the input.

Reminiscent of other industries and other parties' attempts to corner particular markets, the world of rare earths appears to be undergoing a seismic shift. Governments outside of the US are also recognizing this trend and the provincial government of Saskatchewan (Canada), via the Saskatchewan Research Council (SRC), announced in August 2020 plans to have an operational rare earths processing facility completed and operational in late 2022. Unknown to most people, the SRC has world renowned rare earths experts who have over 30 years experience in the sector. This facility is a first of its kind in Canada and is strategic for the rare earths properties in western Canada.

All of these global activities are relevant to Appia and the rest of the exploration industry's move away from a stranglehold on rare earths supply from China. In particular, according to the company, the Alces Lake property has the second highest average grade of rare earths in the world. Combine this with access to infrastructure in the immediate area and the further potential of the Alces Lake property (less than 1% of the property explored with diamond drilling), including six new areas of the rare earths system on the property.

One word – monazite. The significance of the Alces Lake property should not be underestimated. Why? The rare earths on the property are 100% hosted within monazite, which has proven simple extraction methods dating back to the 1950s. But more

importantly, the monazite at Alces Lake occurs as isolated grains, 1 – 3 cm thin lenses and as isolated clusters with further metres thick massive clusters which have been found to be outcropping at surface. The monazite ore has critical rare earths Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), and Terbium (Tb) which are necessary for the permanent magnet industry and represent approximately 85% of the potential value at Alces Lake.

While it is far too early to declare Appia Energy a leader in the global race to develop new supply sources outside of China, their Alces Lake asset is compelling and the timing is excellent. Investors should be watching this company keenly, as the global rare earths story evolves.