Appia adds another rare earths project to their portfolio, this time in Brazil

written by InvestorNews | July 5, 2023

Appia Rare Earths & Uranium Corp. (CSE: API | OTCQX: APAAF) ("Appia") now has 4 rare earths/uranium projects globally. Today we take a look at Appia's newly acquired PCH Project (agreement to acquire 70%) in Brazil and give an update on Appia's Alces Lake rare earths Project in Northern Saskatchewan, Canada.

PCH Project (Brazil)

Appia announced in June 2023 that they had signed a Definitive Agreement to acquire up to a 70% interest in the PCH Project (subject to certain conditions). The PCH Project is 17,551 hectares in size and located within the Goiás State of Brazil. It is located ~30 km from Iporá, a medium size city of ~31,500 population, where infrastructure is well developed.

Sampling data shows enrichment in rare earth minerals from between 8 meters and 20 meters depth in ionic clay ore. Ionic adsorption clays are the main source of the critical rare earth permanent magnet metals, dysprosium and terbium. These projects are also rare outside of China.

Appia states:

> *"The positive results of the recent geochemical exploration work carried out to date indicates the potential for REEs and Niobium within lateritic ionic adsorption clays."*

Appia also states:

> *"Total REE grades in numerous auger holes drilled range up to 16,648 ppm (1.66%), with an average of 1,291 ppm total REE and importantly, the valuable rare earths used in magnet applications (Pr, Nd, Tb and Dy) + Y account for approximately 14% of total rare earths, with a maximum of 28.4%."*

The higher the valuable rare earths percentage the better. Appia state above 14% and in their latest presentation they state it as "*an average value of 16.67%.*"

This is a reasonable figure, especially when considering the shallow depth and the lower mining costs in Brazil. The deposit could potentially be mined with low-cost open pit mining techniques and processed using simple technologies.

Other key points of the PCH Project according to Appia are:

- "One of a few major ionic clay projects in the western world
- Easy to mine
- Simple processing
- Low radioactivity
- Low CapEx
- Low OpEx
- Environmentally friendly processing
- Near infrastructure
- Mining friendly jurisdiction
- Heavy and light critical rare earth."

The PCH (ionic clay rare earths) Project in Brazil (Appia has an agreement to acquire 70%)

Brazilian Rare Earths Ionic Clay Project

- Prior exploration on the property has included stream sediment sampling, soil sampling, geophysical surveys, auger drilling, diamond drilling and trench sampling programs.
- Rare earth mineralization has been identified across a significant portion of the property.
- Rare earth and niobium mineralization comprising both ionic clay development arising from intensely weathered alkaline granites and from a carbonatite intrusion has been defined in an area approximately 2 km in diameter in Target 4, the most intensely investigated exploration target.

Alkaline breccia from Hole PCH-01 containing 1,767 ppm ΣREE and 161 ppm Nb

Source: Appia company presentation – June 2023

An update at Alces Lakes – Discovery of the new high-priority surface showing called the 'Jesse Zone'

On June 22 Appia announced the completion of a NI43-101 Technical Report for their 100% owned Alces Lake Rare Earth Project in the Athabasca Basin, Saskatchewan, Canada. The Project is best known for having one of the highest rare earths grades (16.65 wt% TREO) globally of any project as well as being

found in monazite ore which is amenable to processing.

Appia also gave a June 16 update on the Project stating:

> *"Early successes by our prospecting teams have led to the identification of a new high-priority surface showing called the 'Jesse Zone' which was discovered on the first day of field prospecting," stated Stephen Burega, President. "The prospecting team have now identified anomalies along the regional shear zone with biotite-rich pegmatite showings of up to 21,000 cps (counts per second) and the zone appears to be +85m in strike length and +20 m in width at surface."*

The Jesse Zone is giving high scintillometer readings (measured in counts per second) which are a good pointer towards the monazite rich zones that hold the rare earth mineralization. The Appia team believes that the numerous surface showings may be connected under overburden. Detailed mapping and sampling continues at the Jesse Zone to confirm the full extent of this new zone.

Appia's four projects description summary – Alces Lakes (Saskatchewan, Canada), Elliot Lake (Ontario, Canada), Loranger (Saskatchewan, Canada), and now the PCH Project (Brazil)

Why Appia?

- Four in-demand rare earths and uranium projects in mining-friendly jurisdictions:
  - **Alces Lake Project** in Saskatchewan's Athabasca Basin is the highest-grade critical rare earths - Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy) and Terbium (Tb) - and gallium prospect in North America and one of the highest-grade rare earth prospects in the world.
  - **THE PCH Project** located in Goiás State, Brazil, under acquisition. Recent geochemical exploration work carried out to date indicates the potential for REEs and Niobium in lateritic ionic adsorption clays.
  - **Elliot Lake Property**, in Ontario's historic mining camp, with a large NI 43-101 Uranium and Rare Earths resource.
  - **Loranger Project** is located on the southeastern shores of Wollaston Lake, northern Saskatchewan. Cameco's Rabbit Lake uranium mill and Eagle Point mine operations are approximately 28 km to the northwest.
- Experienced management.
- Almost $7 million in cash with no debt.

Source: Appia company presentation – June 2023

Closing remarks

Appia has now grown to own (including the 70% agreement to acquire the PCH Project) four significant rare earths/uranium projects globally. The very high grade Alces Lakes continues to be the flagship but now the new Brazil Project adds further to their portfolio. It also gives Appia a chance to significantly accelerate towards being a global rare earths producer at some point in the future.

Appia Rare Earths & Uranium trades on a market cap of only C$20 million.