

Attention set on rare earths in Canada and Brazil, Appia hits 2024 running

written by InvestorNews | January 31, 2024

[Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQX: APAAF) (“Appia”) has several projects located across Canada and Brazil with rare earths and uranium potential, as well as some other valuable metals. The current focus for Appia is on advancing their two key rare earths projects Alces Lake Project in Canada and the PCH Ionic Clay Project in Brazil.

Today we give an update on Appia’s latest activity at these two projects.

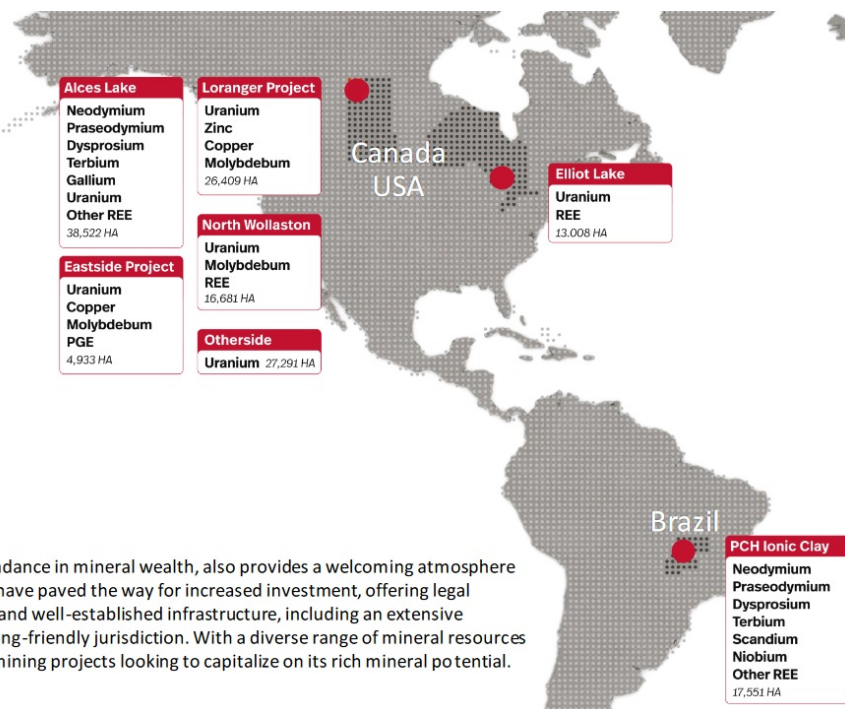
Appia’s projects are located in Canada and Brazil with a focus on rare earths and uranium

Our Projects

Appia is strategically positioned with mining projects in two of the world’s most mining-friendly jurisdictions, Canada and Brazil. These locations offer an array of compelling reasons for our choice.

Canada, renowned for its political stability and robust legal framework, stands as a beacon of security for mining investments. With a rich endowment of mineral resources and a well-established mining industry, Canada provides a secure environment where investor interests are safeguarded. The nation’s geological diversity opens up vast opportunities for resource exploration, and its experienced mining workforce ensures efficient project execution. Additionally, Canada’s developed infrastructure and skilled labour force create an environment where mining operations can thrive with ease. **The Company holds a large uranium ground position in Elliot Lake and four highly prospective uranium exploration projects in the prolific Athabasca Basin area: Loranger, North Wollaston, Eastside and Otherside.**

In the southern hemisphere, Brazil, while boasting similar abundance in mineral wealth, also provides a welcoming atmosphere for mining endeavors. The country’s regulatory improvements have paved the way for increased investment, offering legal certainty for mining operations. Brazil’s geological accessibility and well-established infrastructure, including an extensive transportation network, further underscore its appeal as a mining-friendly jurisdiction. With a diverse range of mineral resources and a skilled workforce, Brazil represents an ideal location for mining projects looking to capitalize on its rich mineral potential.



Source: [Appia company presentation](#)

Alces Lake Project in Canada (100% owned)

The Alces Lake Project is located in Northern Saskatchewan and is known for having exceptionally high rare earths grades and gallium in favorable monazite ore. Appia [state](#): “Alces Lake Project in Saskatchewan’s Athabasca Basin is the highest-grade critical rare earths prospect in North America and one of the highest-grade rare earths prospects in the world.”

Appia is now starting to release their latest results from the 2023 drill campaign from the Magnet Ridge Zone at Alces Lake.

Appia [announced](#) on January 15, 2024: “Assays of **up to 1.57 wt.% (15,700 ppm) Total Rare Earth Oxides (TREO)** were returned, with thickness and grades increasing to the south-southeast...**Mineralization intervals occur from near surface to < 85 metres depth.**”

Appia also [announced](#) in January 2024 that they have signed a new Cooperation Agreement with the Ya’thi Néné Lands and Resources Office.

Near term catalysts from Alces Lake include further assay results from the 40 diamond drill hole summer 2023 exploration program.

The PCH Project in Brazil (option to acquire [up to 70% interest](#))

The PCH Project is potentially a very significant ionic clay rare earths project located in Goias, Brazil. Ionic clay projects are favored as the extraction process for rare earths is a relatively simple and less expensive process, already

widely practiced in China. Furthermore, Appia's PCH Project has all the key rare earths needed for the powerful magnets used in electric motors in most EVs. Most other projects don't have this complete spectrum as discussed by leading rare earths expert Jack Lifton [here](#).

Drill results [announced](#) in October 2023 from the PCH Project have been very encouraging, including Hole RC-063 that reported 24 metres of mineralization from surface **with a total weighted average of 27,188 ppm or 2.72% of Total Rare Earth Oxides (TREO)**. The hole remains open at depth and has extended the known area of Target IV.

Appia Geology Manager, Carlos Bastos, [stated](#): *"The assay results from PCH-RC-063 are highly promising, revealing sustained mineralization of essential elements including **Terbium (Tb), Dysprosium (Dy), Neodymium (Nd), and Praseodymium (Pr)**. Notably, several elements surpassed the upper detection limit of the assay method being used, and updated results will be reported once received."*

Note: Bold emphasis by the author.

On January 16, 2024, Appia announced [reanalysis](#) of Hole RC-063 resulting in even higher grades of a **Total Weighted Average of 38,655 ppm or 3.87% TREO**.

From the first 10 holes drilled at the PCH Project the total weighted average grade is 7,578 ppm or [0.76% Total Rare Earth Oxide](#).

The January 11, 2024 Appia [announcement](#) highlights the excitement that the Appia team has towards the PCH Project. They announced an extension of their existing mining claims at the Project from 17,551.07 hectares to an expansive 40,963.18 hectares across a total of 22 claim blocks. The substantial 133%

increase in the current land package includes 12 new claims independently staked by the Company and incurred minimal costs.

The PCH Project is situated in a jurisdiction supportive of mining activities with many major mining corporations actively exploring and mining located just ~30 km from the city of Iporá. Access is good using well-developed regional roads with [optimal infrastructure](#) including water and power to the Project. Appia [says](#) that “the Project has the support of both local and state governments”.

Appia is targeting a Maiden Resource for the PCH Project Target IV in [Q1, 2024](#).

Typical differences between ionic clay and hard rock rare earth projects

	IONIC CLAY	HARD ROCK
Location	Mainly China, Brazil, Africa	China, USA, Australia Canada
Type of REE	Contain both Heavy and Light REE	Mainly Light REE
CAPEX and OPEX	Low CAPEX & OPEX	Same as other hard rock mining deposits – higher costs for drilling and blasting
Exploration and Mining	Quick, inexpensive, simple, shallow drilling in weathered granites; mainly found in top 10-30 metres. Easy mining without drilling or blasting. Environmentally friendly and therefore easier to permit.	More expensive exploration: Deeper, diamond core drilling, blasting, open-pit or underground mining; tailings
Processing	Simple leaching and very little radioactivity	High temperature cracking; tailings; often containing higher radioactivity

Source: [Appia company presentation](#)

Closing remarks

Appia is making steady progress on multiple projects with the key focus currently on the Alces Lake Project in Canada and the PCH Project in Brazil. Both Projects have strong potential with good grades and amenable ore, but will take time to develop. Appia also has their various uranium projects, but that's for

next time.

Appia trades on a market cap of [C\\$27 million](#). 2024 could potentially be a very big year for Appia. Stay tuned.

Stephen Burega Onsite at the Appia Alces Lake Project in Northern Saskatchewan

written by InvestorNews | January 31, 2024

In an exclusive onsite interview from the Alces Lake Project in Northern Saskatchewan, Stephen Burega, the President of [Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQX: APAAF), engages with Tracy Weslosky of InvestorIntel to share insights on the progress of the company's drilling program. Burega praises the team's efficiency and the advances made during his inaugural visit to the site, providing Weslosky and her audience with an up-close view of the operations.

He underscores the effective utilization of the budget, revealing that they have successfully completed one-third of the project and are strategically directing their efforts towards uncovering new targets. The interview includes a special appearance by Appia Project Geologist, Kahlen Branning, who offers viewers a glimpse into a core shed and elaborates on the critical minerals present in the samples, namely terbium, neodymium, and dysprosium.

Further into the discussion, Burega outlines the instrumental role of helicopters in the movement of drilling equipment,

underscoring the operation's logistical ingenuity. The conversation concludes on an optimistic note as Burega shares the promising future of the Alces Lake project and its potential in rare earth extraction.

To access the full InvestorIntel interview, [click here](#)

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About Appia Rare Earths & Uranium Corp.

Appia is a publicly traded Canadian company in the rare earth element and uranium sectors. The Company is currently focusing on delineating high-grade critical rare earth elements and gallium on the Alces Lake property, as well as exploring for high-grade uranium in the prolific Athabasca Basin on its Otherside, Loranger, North Wollaston, and Eastside properties. The Company holds the surface rights to exploration for 113,837.15 hectares (281,297.72 acres) in Saskatchewan. The Company also has a 100% interest in 13,008 hectares (32,143 acres), with rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario. Lastly, the Company holds the right to acquire up to a 70% interest in the PCH Project which is 17,551.07 ha. in size and located within the Goiás State of Brazil. (See June 9th, 2023 Press Release – [Click Here](#))

To learn more about Appia Rare Earths & Uranium Corp., [click here](#)

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

written by InvestorNews | January 31, 2024

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.

Stephen Burega of Appia Provides Updates on Advancing its Rare Earths Projects in Canada and Brazil

written by InvestorNews | January 31, 2024

In this InvestorIntel interview, Byron W King talks with [Appia Rare Earths & Uranium Corp.](#)'s (CSE: API | OTCQX: APAAF) President Stephen Burega about the [completion of due diligence](#) to acquire a rare earths ionic clay project in Brazil. Situated

in a mining-friendly jurisdiction, accessible by road, with several mining operations nearby, Stephen says that the project's mineralogy is similar to that of Serra Verde which has one of the largest ionic clay deposits outside of China.

Highlighting the expertise of their consulting geologist, Don Hains, who wrote the NI 43-101 report for Serra Verde, Stephen discusses how a positive evaluation from Don reinforced their excitement and confidence in the project.

Stephen also provides [an update](#) on Appia's flagship Alces Lake Rare Earths (REE) Property in Northern Saskatchewan where they have a work program scheduled to start in June on the highest-priority areas of a major structural corridor.

Stephen also indicates that the Company has approximately C\$7 million in the bank with C\$3 million dedicated to the Alces Lake project and C\$1 million earmarked for the Brazil project once the due diligence is completed.

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hectares (31,000 acres), with rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario.

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Tom Drivas of Appia Rare Earths & Uranium Discusses Alces Lake and “Exciting” Brazilian Acquisition

written by InvestorNews | January 31, 2024

In this InvestorIntel interview, Tracy Weslosky talks to [Appia Rare Earths & Uranium Corp.](#)'s (CSE: API | OTCQX: APAAF) CEO and Director Tom Drivas about signing a [letter agreement](#) to acquire up to 70% interest in a prospective rare earths ionic clay project in Brazil. Currently doing its due diligence, Tom discusses how the new Brazilian project, if finalized, would not interfere with their main focus on the Alces Lake project. Tom goes on to say that the Brazilian project will have a new team with direct ionic clay expertise.

With an extensive exploration program planned for this year at the Alces Lake project in northern Saskatchewan, Tom discusses the company's focus on delineating high-grade critical rare earth elements and gallium. Tom also provides an update on

Appia's ongoing relationship with the Saskatchewan Research Council ("SRC") which is developing a rare earths processing facility in Saskatoon and the plans for the SRC to process monazite from the Alces Lake project as early as next year.

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Appia Rare Earths & Uranium by the numbers

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[Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQX: APAAF) recently reported results from its 2021 drilling program and work completed this year on its Alces Lake property in Northern Saskatchewan. While results are still pending from the 34 holes drilled at the recently renamed site Magnet Ridge (formerly Augier), other areas returned values as high as 14.95% TREO over 0.66 metres. This is high compared to most deposits. As of early July Appia has drilled over 14,000 metres in 2022 and plans to drill up to 20,000 metres this year, which should provide them with valuable information on the Alces Lake deposit. Magnet ridge is interesting as Appia has reported it outcrops at surface with a strike length of about 300 metres and a width of 175 metres, and has been penetrated to over 100 metres deep.

The mineral hosting the rare earths at Alces Lake is monazite. Monazite is regularly processed in China to produce rare earths, so making a concentrate and separating the rare earths is an established technology. In several jurisdictions, this could be a problem as monazite is typically associated with the radioactive elements Thorium (Th) and Uranium(U). However, it comes down to the old paradigm, location, location, location. Being situated in Saskatchewan, Appia is in a jurisdiction that understands radioactive materials and that they can be properly handled and stored, and in the case of uranium can be a valuable resource. The other advantage for Appia being in Saskatchewan is that the Saskatchewan Research Council is building a pilot plant for rare earth separation over the next 2 years. This will give Appia the ability to test their material locally, which is a significant advantage.

A 2020 Appia [presentation](#) indicates Neodymium (Nd) oxide levels of 17.4% and Praseodymium (Pr) oxide of 5.4% which gives a combined total of just under 23%. This is close to the Lynas levels from its Mt. Weld deposit, which Roskill's Market Outlook 2015 indicates to be 23.8%. The Mountain Pass Mine, the deposit in California owned by MP Materials, has Nd+Pr levels at 16.3%. so they would have to process up to 50% more material to get the same revenue levels as Appia or Lynas. In addition, Appia's report shows added value in Terbium (Tb) and Dysprosium (Dy). Looking at recent pricing in Shanghai Metal Markets (SMM), the Nd/Pr holds 87.8% of the total value. Terbium and Dysprosium add another 0.3%. This assumes that all the elements are sold, which typically is impossible, especially the Cerium, which is over 49% of the total volume. However, there may be markets in North America and possibly Europe for Cerium and Lanthanum. Their current price in China is \$1.22 and \$1.15 per kg respectively and freight can be a high proportion of the total cost of the product outside of Asia.

One way to look at the value of the deposit is to see what potential revenue can be generated from the four main magnetic elements (Neodymium, Praseodymium, Terbium and Dysprosium). Assuming the long range plans would be to build a 20,000 TPY plant, which is similar to the previous Molycorp output and just below the Lynas present output of around 22,000 TPY, their projected revenues would be around US\$500 million per year. This assumes 90% recoveries and revenues only from Nd+Pr. Any sales of Cerium and Lanthanum would be minimal but an added bonus.

In addition, Appia has properties in the Elliot Lake area in Ontario. This is in the right area code as from the mid-late 1950s to 1990 there were 10 mines producing Uranium. Again location, location, location. Given the push for electric vehicles and the corresponding increase in electrical demand, countries are going to review their long term needs including

Germany and China, and possibly India, and given alternative producing options nuclear is a cleaner way than coal or gas to produce electricity. Also given the current Russian situation more focus will come on nuclear and correspondingly Uranium. Thorium may also come into demand as it can reduce the operating temperature and thereby improve safety.

All things considered, Appia has an interesting opportunity and with the grades shown so far, and is poised to take the next steps to becoming a potential domestic producer of rare earths.

Hunting the big North American rare earths elephant

written by Jack Lifton | January 31, 2024

"Amazing discovery... I keep making this point that there is a deficit of rare earths worldwide and Appia is the premier rare earths discovery in North America." – Jack Lifton, Global Critical Materials Expert

A mineral discovery is the natural occurrence of a specific chemical compound or a mix of chemical compounds, which may be processed mechanically and chemically to isolate one or more forms of individual chemical elements, and then be purified and converted into useful forms for industrial use. If the discovery is extensive enough and the contained chemical compounds are of a sufficiently high enough grade for efficient and economical separation of them from each other and then can be further processed into forms that can be utilized industrially, then the large-scale production and concentration of the initial mineral

concentrate is called mining.

How do you evaluate a rare earth discovery? The best way is to determine if it contains “valuable” rare earth elements, which can be economically and efficiently recovered in the jurisdiction in which it is located, in such quantities that the capital expended can be recovered at a profit.

The old-timers (aka, experienced exploration geologists and mining engineers) have just two simple metrics they use in first determining whether or not there is any point in answering this question: Grade and accessible tonnage.

[Appia Rare Earths & Uranium Corp.](#)’s (CSE: API | OTCQB: APAAF) rare earth discovery at Alces Lake, Saskatchewan, meets the first of the above requirements, and the company is now in the process of a comprehensive drill program to determine if the second one is met as well.

The Appia discovery is of the mixed rare earth mineral, monazite, the most desirable rare earth bearing mineral on the planet. Monazite was the original rare earth mineral mined commercially in the late nineteenth century, not for rare earths, but for its contained thorium, which was heated, as an oxide in the form of a mixed ceramic mantle, with natural gas, to produce a brilliant white light for illuminating the stage in theatrical performances. Monazite fell out of favor as a mineral resource after World War II because of thorium’s natural radioactivity being highlighted as a danger in the early atomic age. Of course, electric lights, had by then long eclipsed the need for thorium.

In the 1950s though, thorium again became of interest when it was discovered that nuclear reactors for the commercial production of electricity could be fueled with thorium, which could not easily be used to make nuclear weapons. Anglo-American

Mining in that period discovered the highest-grade thorium and rare earths deposit then known in the world in South Africa and began producing thorium for the UK's civilian nuclear reactor program. Thorium reactors fell out of favor by the mid 1960s and thorium (monazite) mines were shut down, even though they were associated with high grade rare earths, because of the problems of disposing of the thorium and the then extremely expensive processes for separating the rare earths from each other, ion exchange, and fractional crystallization.

The discovery of a huge primary, accessible, mineable deposit of the rare earth mineral bastnaesite at Mountain Pass, California, in the late 1940s, and the development in the 1960s of the commercial application of solvent extraction to the separation of the rare earths, led to the eclipse of the use of high thorium monazites by bastnaesite as the primary mineral for rare earth mining.

The development of the rare earth permanent magnet in the late 1970s, at first using the rare earth element, samarium, and the rare earth elements neodymium and praseodymium, revived interest in monazite, because monazite contains 50% more, by weight, of neodymium and praseodymium, than bastnaesite.

However, the low thorium bastnaesite in California, because of its accessibility, became the world's largest source of the magnetic rare earths, samarium , neodymium and praseodymium by the early 1980s. It was eclipsed by the bastnaesite recovered, more economically, as a byproduct of iron mining in China's Inner Mongolia by the late 1980s. The Chinese iron deposits also contained some monazite, and this was processed there also to recover the rare earths. The thorium co-produced was stored, but its radioactivity ultimately led China to bring its control under the aegis of its China Nuclear Corporation (CNC), which stored it along with any other thorium produced as a byproduct

of rare earths or its own uranium minerals processing.

Today, as Chinese bastnaesite grades seem to have declined from high grading and as pollution (environmental) consciousness has come of age in China, monazite, as a source of magnetic rare earths has revived dramatically in China. And China has become the world's largest processor of monazite. Chinese mining and processing companies already import nearly 40% of their rare earth ore needs annually. They get bastnaesite from California and CNC is licensed to process up to 50,000 tons per year of monazites containing up to 30,000 tons of rare earths. All monazite imported into China must first go to CNC for thorium and uranium removal, before it goes to the Chinese purchaser, which will then recover the rare earths contained. China buys monazites as ore concentrates from the USA (until very recently), Brazil, Madagascar, Australia, and Myanmar, and Chinese companies are scouring the world seeking more.

The Chinese had the use of monazites as a source of magnetic rare earths to themselves until 2017, when Australia's [Lynas Rare Earths](#) (ASX: LYC) went into commercial production and separation of the individual rare earths from its massive monazite mine at Mt. Weld, Australia. Then, in 2020, the only privately owned licensed uranium ore processor and thorium storage facility in the USA, [Energy Fuels Inc.](#) (NYSE American: UUUU | TSX: EFR), began a project to process monazite for its rare earths and to stockpile and sell the uranium recovered and store the thorium. Energy Fuels is and remains the sole such facility in the Americas. Its business plan is to become vertically integrated by building, on-site, a separation facility, and a rare earth metals and alloys operation also.

Energy Fuels has acquired domestically produced American monazite from the heavy mineral sands operations of The Chemours Company, and is actively seeking additional materials both

domestically and internationally. Energy Fuels has already produced and sold commercial quantities of mixed rare earth carbonates cleaned of uranium and thorium.

Now, at last, we come to Appia and Canada's entry into the rare earths' mining and processing arena.

Australia's [Vital Metals Limited](#) (ASX: VML | OTCQB: VTMXF) is now mining bastnaesite just outside of Yellowknife in Canada's Northwest Territory from a high-grade deposit discovered by [Avalon Advanced Materials Inc.](#) (TSX: AVL | OTCQB: AVLNF) and licensed to Vital. The ore concentrate will be first sent to an operation being built by the Saskatchewan Resource Council (SRC), a Crown Corporation, where the uranium and thorium will be removed and a mixed rare earth carbonate produced for use in further downstream processing. The first such production has already been pre-sold to both American and European processing customers.

But the SRC has plans to construct not only a cracking, leaching, and radioactive recovery and storage system (Saskatchewan is Canada's largest uranium mining and processing province, so the business there is well established and understood), but also a rare earths separation system in the form of a dedicated solvent extraction facility, the first of its kind in Canada.

Now we come to Appia Rare Earths & Uranium Corp., a Canadian company, originally exploring for uranium in Saskatchewan's world-famous Athabasca Basin. About 5 years ago its then geologist discovered a dramatically high-grade sample of monazite on the company's Alces Lake Property in Saskatchewan. He soon found that the sample had come from an outcrop showing extensive monazite veining. He continued to explore the area and predicted that the monazite field was extensive. Analysis of

samples he took showed that it was also the highest grade neodymium rich monazite ever found in North America.

I was a speaker that year at a Metal Events' Rare Earth Conference in Henderson, Nevada, and the Appia geologist, James Sykes, was an attendee. I had never met him, but we shared a cab to the airport, and he excitedly told me the Alces lake, monazite, story. I was intrigued, but I had reservations about the thorium and uranium that would be present in such a high-grade material. I thought of the highest grade rare earths deposit ever worked, Steencompskraal, in South Africa, which was actually worked as a thorium mine with no interest (in the 1960s) in the rare earths contained. I didn't then know of the monazite project in China or CNC's role in it. I listened politely to Mr Sykes and wondered what anyone would do with this discovery if it were confirmed to be extensive enough to qualify as a NI 43-101 resource.

Did I mention that James Sykes also said that he believed the extended discovery to be near surface, so that a quarrying operation would obviate the need for underground operations?

It is now the Spring of 2022, and Appia has raised approximately \$15.5 million in the last year. This funding is for a [drilling program](#) which is underway to prove a resource.

Energy Fuels is processing monazite, the Saskatchewan Resource Council has approved \$31 million to acquire monazite, and other rare earth ore concentrates, and build a first of its kind in Canada cracking and leaching and separation facility dedicated to rare earths, and Canada's [Ucore Rare Metals Inc.](#) (TSXV: UCU | OTCQX: UURAF) has begun construction of a Strategic Metals Center in Alaska for the central processing of critical metals, beginning with rare earth mixed carbonates from a variety of sources including Canadian and Australian monazites.

Appia's drilling results so far are very encouraging, and have been extensively reported.

I think we may see the highest grade neodymium-rich monazite in the America's flow from Alces lake before 2025. If so, It will certainly be in high demand.

Did I mention that the Appia monazite discovery contains 1% of xenotime, the hard rock mineral source of yttrium, dysprosium, and terbium? A one-stop-shop for magnet makers?

The stars and this planet are coming into alignment for this one. Monazite is back.

Disclosure: Jack Lifton is a member of Appia Rare Earths & Uranium Corp.'s Advisory Board and the Advisory Board for Energy Fuels Inc., and may hold securities or options in some of the companies mentioned in the above article.

Leading rare earths junior Appia adds a new uranium claim block to their expanding asset portfolio

written by InvestorNews | January 31, 2024

Two of the best-performing commodities in the past year have been the key rare earth magnet material blend, neodymium, praseodymium (NdPr), and the energy metal, uranium. Today's company has established itself as a leading rare earths junior

in Canada, but recently [changed its name](#) and expanded its uranium portfolio. This means investors get exposure to both the key magnet rare earths and also uranium. Even better, it controls 3 projects/properties.

The Company is [Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQB: APAAF) (Appia) formerly known as Appia Energy, with its Alces Lake rare earths project and its newly acquired uranium mineral claim block (Otherside), as well as other uranium properties located in Northern Saskatchewan, Canada, and its Elliot Lake uranium and rare earths property in Ontario, Canada.

Appia's very high-grade rare earths project at Alces Lake

For background on Appia's rare earths projects you can read some past articles [here](#) which focus on Appia's tremendous asset at Alces Lake, Canada which has the 2nd highest average rare earth's grade in the world, at [16.65 wt% TREO](#). High-grade zones are up to 49 wt% TREO. The rare earths are hosted in favorable 'monazite' ore at or near surface spread over 27sq km of tenements. There is a [23-25%](#) Critical Rare Earth Oxide (CREO) component, including neodymium (Nd), praseodymium (Pr), dysprosium (Dy), and terbium (Tb).

Appia's 100% owned Alces Lake Project has the world's second highest average grade of TREO



Source: [Company presentation](#)

Appia has access to use the Government funded Saskatchewan Research Council (SRC) processing facility in Saskatoon, Canada. Existing pilot facilities there(1,000 tpa capacity) have already optimized a monazite processing flow sheet for Appia. The SRC production-scale processing facility is expected to be partially

operational in early 2023.

Appia plans a smaller surface and near-surface operation to start production with an open-pit scenario which is easier to permit and manage and should have a low CapEx/Opex.

Appia's latest results include:

- Drill results at Wilson North (Alces Lake) with [average 17.5 wt% TREO over 9.38 metres](#) with up to 37.9 wt% TREO.
- [High grade REE mineralization](#) identified over an estimated 27 square kilometre area. Channel sample of 14.71 wt % TREO from Sweet Chili Heat and 11.94 wt % TREO from Diablo. 10.35 wt % TREO returned from grab sample at Zesty. 7.86 wt % TREO returned from grab sample along the Oldman River trend. New discovery of REEs with 2.27 wt % TREO grab sample from "Train Domain". Elevated critical electronics metal, Gallium, values have also been returned for all samples enriched in TREO.
- Promising Results from Initial Metallurgical Tests on a Composite Sample from Alces Lake. Laboratory heavy liquid separation tests recovered 95% of the total rare earth oxide (TREO). Appia President Frederick Kozak [stated](#): "TREO recoveries and the percentage of TREO in concentrate are comparable to other producing global rare earths projects, supporting the potential for Alces Lake as a future monazite rare earths supply."

Appia is waiting on further drilling core and channel sample assay results from the 2021 program. In terms of major near-term catalysts, Appia [states](#): "Analysis of 2021 drilling and assays may lead to NI 43-101 report early 2022."

Saskatchewan Uranium Properties

Appia recently [announced](#) that they significantly increased their

uranium claims by acquiring the Otherside claim block of 27,291 contiguous hectares. Appia [states](#): “The claims were staked on the basis of similar geological and geophysical signatures to the Company’s Loranger property as well as other known high-grade, large-tonnage uranium deposits in the Athabasca Basin including Fission Uranium Corp’s Triple R deposit, NexGen Energy’s Arrow deposits and others.”

Appia now owns 4 uranium properties/claims over a total of 69,344 hectares – Loranger, North Wollaston, Eastside, and Otherside. The properties are well located with proximity to infrastructure such as roads, highway, powerline, an airstrip as well as two uranium mills. The properties are ready to explore, with at or near-surface high-grade uranium, no sandstone cover, and negligible overburden.

Saskatchewan Uranium Properties – Loranger, North Wollaston, Eastside, and Otherside



Source: [Company news January 10, 2022](#)

Appia [stated](#) on January 10, 2022 that the next steps are: “Appia has commenced the permitting process for a winter drilling program on the Loranger property and anticipates commencement of drilling in approximately one month, depending on weather and permits. The Company is fully funded for this program.”

Elliot Lake (Ontario, Canada)

Appia also has a 100% interest in 12,545 hectares (31,000 acres), with rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario. The Resource details are shown in the table below.



Source: [Company presentation](#)

Closing remarks

Appia is becoming a significant rare earths and uranium junior. Appia now owns three very promising projects – Alces Lake (very high grade and critical rare earths), Saskatchewan Uranium Properties (Loranger, North Wollaston, Eastside, and Otherside), and Elliot Lake (rare earths & uranium).

Appia trades on a market cap of [C\\$54 million](#).