

Geophysical Survey at Appia's Athabasca Basin Uranium Property Outlines EM Lineaments Exceeding 10 km In Strike Length

written by Raj Shah | September 19, 2022

September 19, 2022 ([Source](#)) – **Appia Rare Earths & Uranium Corp. (CSE: API) (OTCQX: AAPAF) (FSE: A0I0) (FSE: A0I.F) (FSE: A0I.MU) (FSE: A0I.BE)** (the “Company” or “Appia”) is pleased to announce that the Company has completed (and submitted for assessment purposes) a helicopter-borne gamma-ray spectrometry and VTEM geophysical survey on the 100%-owned Loranger uranium property, eastern Athabasca Basin area, northern Saskatchewan.

Highlights (from 2022 assessment report):

- **The survey extended and discovered some new electromagnetic (EM) conductors, and provided additional structural geophysical characteristics of these conductors.**
- **EM lineaments exceeding 10 km in contiguous strike length are identified.**
- **EM conductors are offset by younger features.**
- **The property will be drill ready once targets are confirmed and permits are submitted/accepted.**

Tom Drivas, CEO of Appia said, “Building on our previous geophysical, prospecting, and drilling experience from 2016 to 2019 at Loranger, Appia has completed all of its geophysical surveys for drillhole targeting. We are now working on complete

data integration and 3D model results to verify the numerous identified high-priority targets, so to plan the next phase of drilling. Then once permits to drill are submitted and accepted, the property will be at a drill-ready stage.”

The geophysical exploration activities on the Loranger property were carried out from September 17th, 2021, to Jan 24th, 2022. Appia commissioned Geotech Ltd. to conduct a helicopter-borne gamma-ray spectrometry and VTEM geophysical survey. Appia acquired 401 line-kilometres of VTEM and 358 line-km of radiometric geophysical data within an area measuring 74 km².

The survey identified several electromagnetic, magnetic, and radiometric anomalies over the 74 km² area, revealing further length to the property’s northeast-southwest oriented EM/magnetic corridors. These corridors represent characteristic geophysical features of basement-hosted type uranium deposits of the eastern Athabasca Basin (e.g. Eagle Point).

The survey outlined a well-defined north-south oriented structure, which is interpreted to be a member of the regional Tabbernor fault system, a known contributing control of uranium mineralization in the eastern Athabasca Basin. The survey also outlined other anomalous intersection zones of interest for drilling.

About the Loranger Project

Loranger 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. The southwestern extension of the Loranger property is situated 10 km from the all-season Provincial highway 905 (Figure 1). The property is next to Wollaston Lake Denesuline First Nation infrastructure and the new all-season road (Highway

905 extension) going to the Reserve is running through the property.

The property straddles the transition zone between the eastern Wollaston Domain and the western Wollaston Domain, similar to the Wollaston-Mudjatik Transition Zone (WMTZ), and extends ~100 km northeast to the Manitoba provincial border. To the southwest, the West Bear U Deposit, the West Bear Co-Ni Deposit, and the Fraser Lakes Zone B uranium deposit occur along this structural corridor.

The Western Wollaston Domain and the WMTZ comprise multiple high-strain zones within reworked Precambrian rocks of the Hearne Subprovince, which host most of the basement and unconformity-type uranium deposits across/along the eastern Athabasca Basin.

There is an abundance of historic uranium anomalies on the property, and the right geological structures/geophysical conductors to focus fluids and heat for producing alteration and mineralization in structural geochemical traps. There also appear to be the non-conductive gravity-low intersection zones that are ideal for concentrating mineralization. Those zones are confirmed (backed up) by identified radioactive boulder trains, uranium in soil profiles, and uranium in drill core from historical and recent Appia drilling.

Historic exploration (before Appia's time) for uranium over the Loranger property has occurred over three separate time-frames; from 1968 to 1969, 1978 to 1979 and 2007. Appia's work commenced with a 2016 helicopter-borne VTEM™ Max Time-Domain EM and magnetic survey over approximately 715 line-km of the property.

Most recently, in 2019 Appia completed eight drill holes for a total of 1,063 m. Drill holes LOR-19-02 to LOR-19-03 intersected

0.066 wt% U3O8 over 0.7 m at 105.5 m drill hole depth and 0.032 wt% U3O8 over 3.15 m at 96.75 m drill hole depth, respectively. Drill holes LOR-19-01 to LOR-19-04A identified uranium mineralization along a 900 m strike length within a new target area.

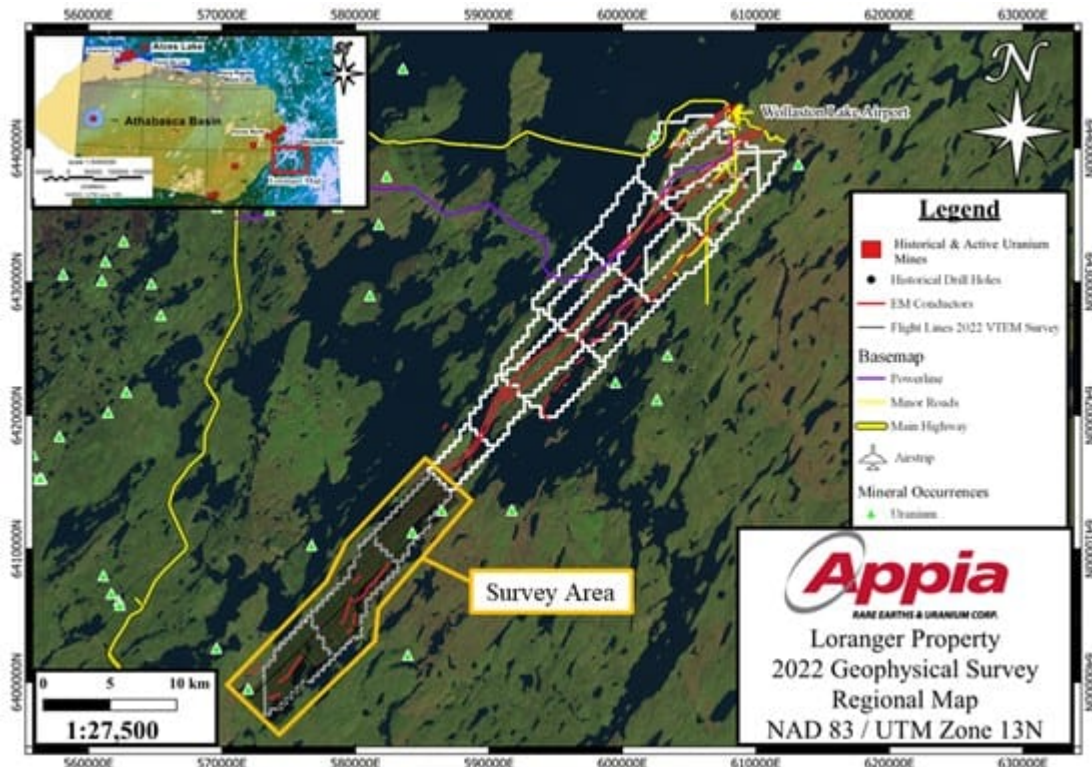


Figure 1. Loranger Property 2022 geophysical survey map with historical properties and nearby uranium deposits.

To view an enhanced version of Figure 1, please visit:

https://images.newsfilecorp.com/files/5416/137651_ed86da1a94198a42_005full.jpg.

About Appia

Appia is a publicly-listed 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 Alces Lake project is located in northern Saskatchewan, the same provincial jurisdiction that is developing a “first-of-its-kind” rare earth processing facility in Canada (currently under construction by the Saskatchewan Research Council and scheduled to become operational in early 2023). The Alces Lake project area is 35,682 hectares (88,173 acres) in size and is 100% owned by Appia.

The Alces Lake project encompasses some of the highest-grade total and critical* REEs and gallium mineralization in the world, hosted within several surface and near-surface monazite occurrences that remain open at depth and along strike.

* Critical rare earth elements are defined here as those that are in short-supply and high-demand for use in permanent magnets and modern electronic applications such as electric vehicles and wind turbines (i.e: neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb)).

All geophysical results were provided by Geotech Ltd. in Aurora, ON. All geophysical results reported herein have passed internal QA/QC review and compilation.

The technical content in this news release was reviewed and approved by Dr. Irvine R. Annesley, P. Geo, Advisor to Appia's Board of Directors, and a Qualified Person as defined by National Instrument 43-101.

The Company holds the surface rights to exploration for 110,997 hectares (274,280 acres) in Saskatchewan. The Company 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.

Appia has 123.1 million common shares outstanding, 141.3 million shares fully diluted.

Cautionary Note Regarding Forward-Looking Statements: This News Release contains forward-looking statements which are typically preceded by, followed by or including the words “believes”, “expects”, “anticipates”, “estimates”, “intends”, “plans” or similar expressions. Forward-looking statements are not a guarantee of future performance as they involve risks, uncertainties and assumptions. We do not intend and do not assume any obligation to update these forward- looking statements and shareholders are cautioned not to put undue reliance on such statements.

Neither the Canadian Securities Exchange nor its Market Regulator (as that term is defined in the policies of the CSE) accepts responsibility for the adequacy or accuracy of this release.

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