

# Appia Announces Significant Geochemical Critical REE Assay Results at Alces Lake Project, Saskatchewan, Canada

Toronto, Ontario--(Newsfile Corp. - January 15, 2024) - Appia Rare Earths & Uranium Corp. (CSE: API) (OTCQX: APAAF) (FSE: A0I0) (MUN: A0I0) (BER: A0I0) (the "Company" or "Appia") is pleased to announce significant initial geochemical assay results derived from the 2023 drilling program conducted on the Magnet Ridge Zone at its Alces Lake Project in Northern Saskatchewan. These promising findings mark a pivotal milestone in the Company's ongoing commitment to advancing exploration and development initiatives within the prolific Athabasca Basin area. The drilling campaign, instrumental in extending mineralization further to the south-southeast (SSE) underscores Appia's dedication to unlocking the full potential of this project.

## Highlights:

- **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**
- **Highest Grade Intercepts:**
  - **Hole 23-MR-001: 21.91 m width @ 0.366 wt.% TREO, including 2.67 m @ 0.660 wt.% TREO**
  - **Hole 23-MR-002: 25.5 m width @ 0.329 wt.% TREO, including 2.11 m @ 0.389 wt.% TREO and 4.68 m @ 0.520 wt.% TREO**
  - **Hole 23-MR-003: 30.5 m width @ 0.292 wt.% TREO, including 1.00 m @ 0.537 wt.% TREO**
  - **Hole 23-MR-006: 6.31 m width @ 0.267 wt.% TREO**
  - **Hole 23-MR-007: 9.29 m width @ 0.384 wt.% TREO, including 0.50 m @ 0.650 wt.% TREO**
  - **Hole 23-MR-010: 1.80 m width @ 0.246 wt.% TREO**
- **Mineralization intervals occur from near surface to < 85 metres depth (Table 1); multiple intervals in 23-MR-002 and 23-MR-003, extending downward in a westerly direction.**
- **Future exploration to continue in the west-southwest (WSW); extending downward into current intersections towards the mineralization at Magnet Ridge West (MRW)**

Commencing on June 11th, 2023, Appia initiated a comprehensive 3456.72-metre helicopter-supported diamond drilling program, concluding all field operations on August 24th. Prioritizing specific areas spanning the entire property, with dimensions of approximately 20 kilometres in length and 5 to 7 kilometres in width, the drill program systematically targeted key zones. The Company has received all assay results stemming from its 2023 summer geochemical exploration initiative. Appia is engaged in the compilation, review, and interpretation of these results across all investigated areas. Updates will be disseminated as both results and interpretations become available.

Recent petrographic/mineralogical studies indicate that the Rare Earth Elements (REE) mineralization at Magnet Ridge is hosted primarily in monazite.

"The identification of the Magnet Ridge Zone following the 2022 drill campaign was a major success to further delineate potential mineralization at Alces Lake. We can now extend this zone along this segment of the structural corridor," stated Stephen Burega, President. "We completed 11 step-out holes from eight collars, and we are seeing continued mineralization with thick intercepts."

On June 24, 2023, the southern extension drilling at Magnet Ridge concluded, encompassing 11 drill holes with a combined depth of 1092 metres (see Figures 1 and 2, Tables 1, 2, and 3). A press release

dated [July 5, 2023](#), disclosed noteworthy findings, revealing that five drill holes identified significant mineralization intersections, with core intersection widths reaching up to 21.91 metres. Notably, Table 1 details two drill holes that recorded multiple intersections.

Geological and geophysical interpretation has yielded valuable insights:

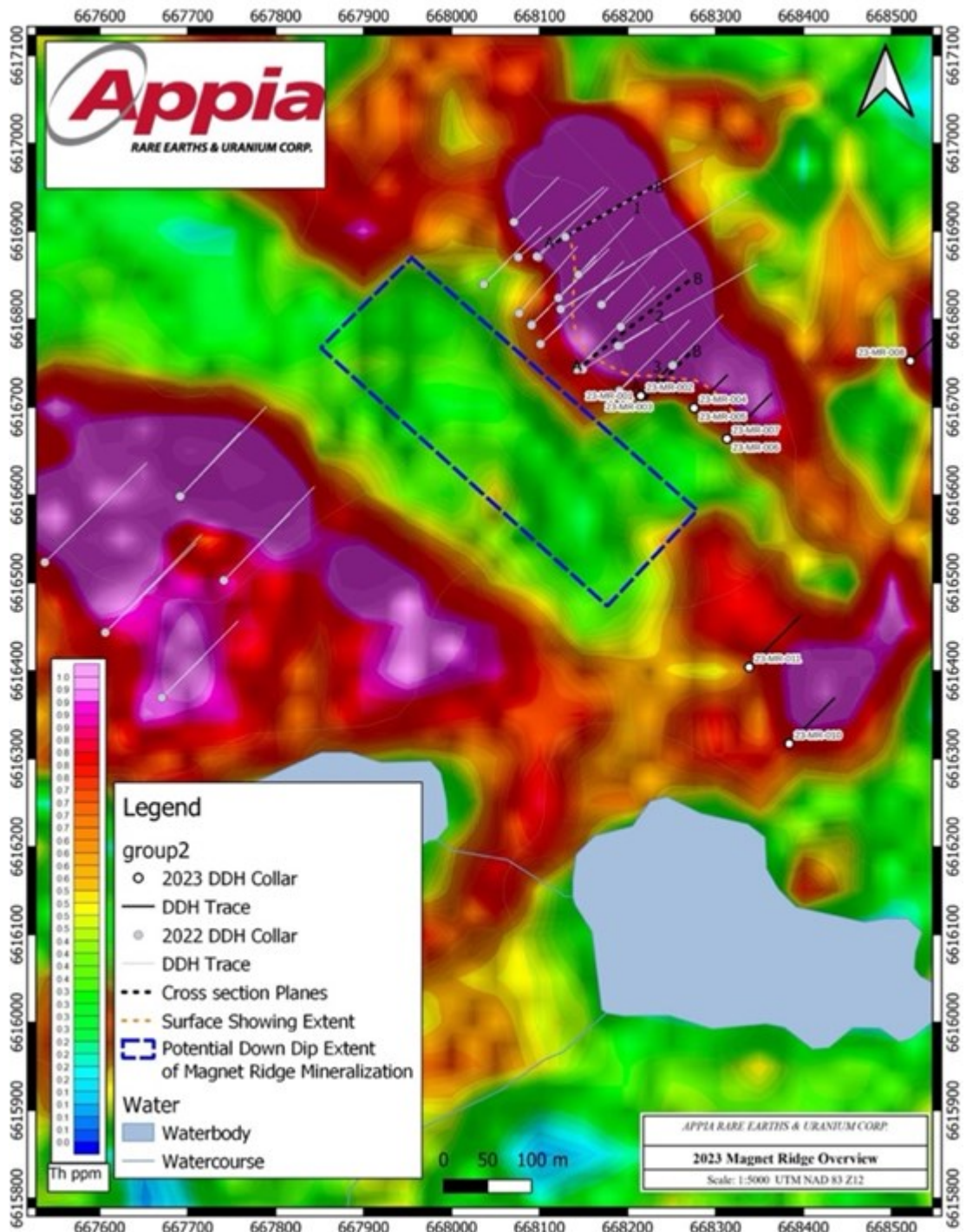
1. The down-dip extension of Magnet Ridge toward the west-southwest (WSW), remains open.
2. Mineralization encountered terminates abruptly at the SSE end of the Thorium (eTh) anomaly, attributed to an east-northeast cross-structure-a steeply dipping fault that vertically offsets the mineralization down-dip on its southern side.
3. The eTh radiometric high exhibits a surface expression approximately 450 metres long by 250 metres wide. The clear down-dip extension to the WSW is evident in the X-section of drill holes 23-MR-001, 002, and 003 (refer to Figure 3, with the location indicated in Figures 1 and 2). This consistency aligns with representative X-sections from prior years' drilling in the northern and central segments of Magnet Ridge (Figures 4 and 5, with locations depicted in Figure 1).

"The first three holes successfully intercepted pebbly biotite schist (glimmerite) mineralization from 32 to 70 metres depth along core axis," affirmed Dr. Irvine Annesley, VP of Exploration, "Ongoing drilling in 2023 consistently suggests the potential for the down-dip extension of the mineralization to extend WSW, potentially reaching depths connecting to Magnet Ridge West (MRW)."

The Company is poised to explore mineralization at MRW within a fold structure, with plans to conduct grid/drill testing at depths ranging from 50 to 175 metres. This strategic initiative reflects Appia's commitment to advancing exploration to uncover valuable critical mineral resources.

"The 2023 Alces Lake exploration campaign completed a successful season of prospecting, channel sampling, and diamond drilling across the entire large property. Specifically, here at Magnet Ridge, our team was able to delineate the SSE-most extent of the Magnet Ridge mineralization (see Figures 1 and 2)," says Lead Geologist Kahlen Branning, "Our prospecting team has uncovered a multitude of new, potential drill targets on the property that necessitate further detailed exploration, many of these display anomalous radioactive counts, from 5,000 counts per second (cps) to 40,000 cps. These new zones match our original hypothesis regarding the location of low-to-high-grade mineralization along the main regional shear zone and within the fold nose/hinge zone area of a large regional fold structure."

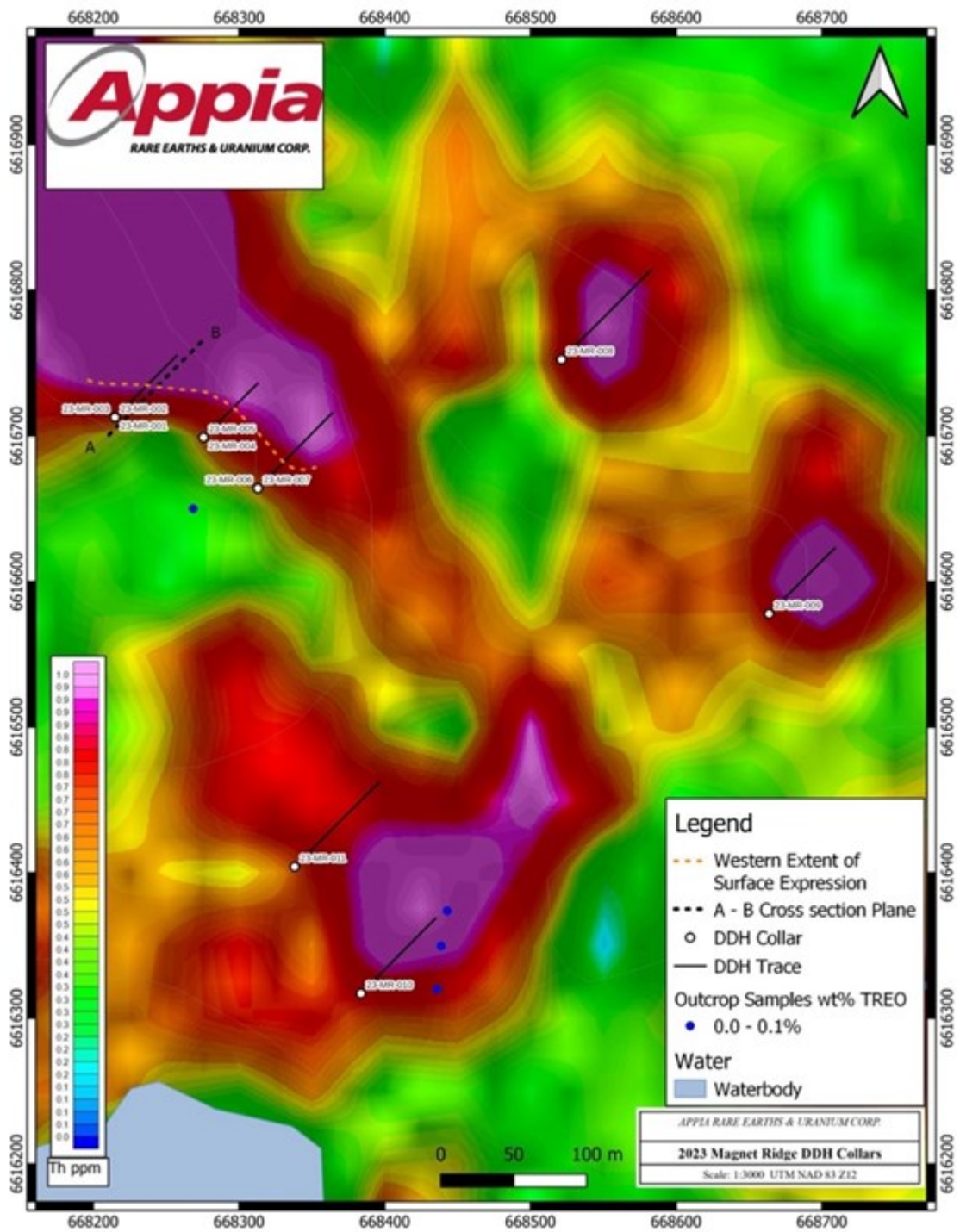
After concluding operations at Magnet Ridge, the drill was relocated to the Jesse Zone where the Company completed 9 diamond drill holes (DDHs). Subsequently, the drill was directed to a particularly promising anomaly within the Western Anomalies area, leading to the completion of 3 diamond drill holes. Advancing further, the drill was repositioned to explore the Hinge and WRCB Zones, to test new targets, exhibiting count rates of up to 30,000 cps, as delineated by the ongoing 2023 prospecting and channel sampling program. Notably, certain targets underwent drilling using both a diamond drill and a backpack drill, the latter validating emerging RAMP-HD targets at the surface for subsequent drilling initiatives.



**Figure 1. Location map of 2023 Magnet Ridge drilling with previous 2021 and 2022 DDH from Magnet Ridge and Magnet Ridge West (MRW). Area outlined in blue is the surface expression of the interpreted down-dip mineralization (at depth) to Magnet Ridge.**

To view an enhanced version of this graphic, please visit:

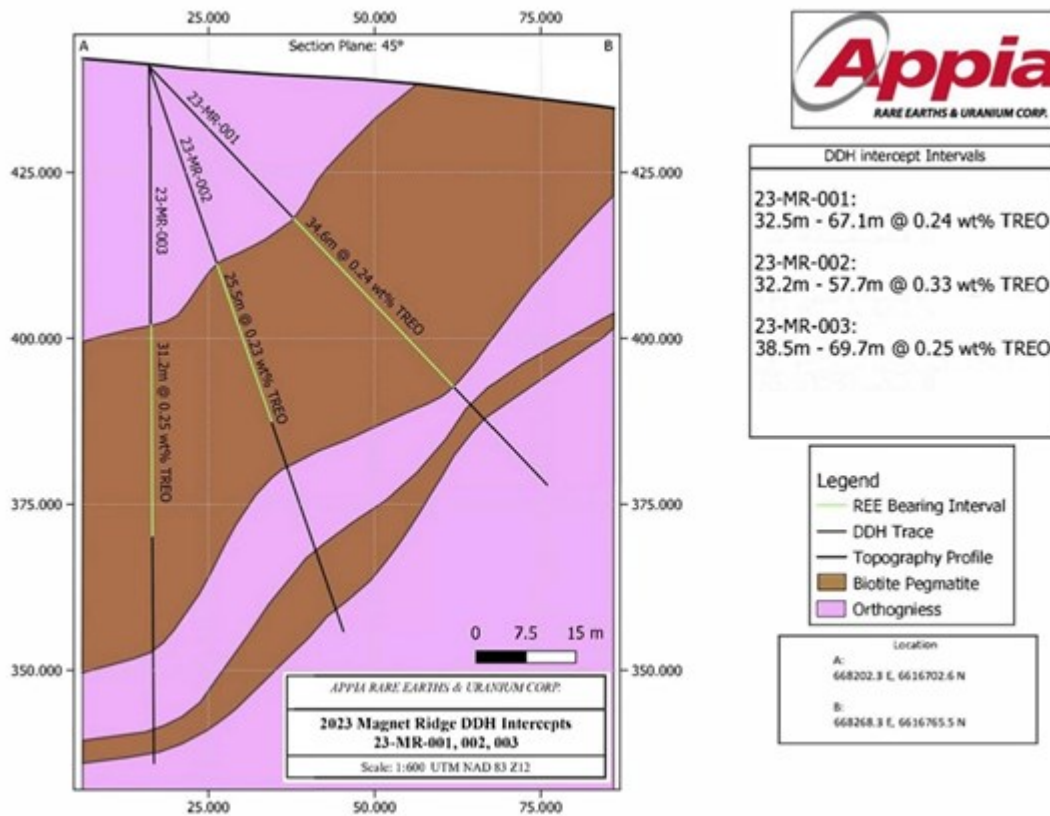
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**Figure 2. Detailed map of 2023 Magnet Ridge drilling.**

To view an enhanced version of this graphic, please visit:

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**Figure 3. X-section of the 23-MR-001, 23-MR-002, and 23-MR-003 drill holes. The intersection in 23-MR-001 is interpreted to be close to true width.**

To view an enhanced version of this graphic, please visit:

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Hole ID number	From (m)	To (m)	Drilled Length (m)	TREO wt%	Ga2O3 wt%	Zone	Including				
							From (m)	To (m)	Drilled Length (m)	TREO wt%	Ga2O3 wt%
23-MR-001	32.5	67.1	34.6	0.24	0.004	Magnet Ridge	32.47	54.38	21.91	0.366	0.005
						Magnet Ridge	46.88	49.55	2.67	0.660	0.005
23-MR-002	32.2	57.7	25.5	0.329	0.005	Magnet Ridge	32.20	35.21	3.01	0.309	0.005
						Magnet Ridge	39.59	41.70	2.11	0.389	0.005
						Magnet Ridge	52.55	57.23	4.68	0.520	0.006
23-MR-003	38.5	69.74	31.24	0.25	0.005	Magnet Ridge	39.24	69.74	30.50	0.292	0.005
						Magnet Ridge	45.17	46.17	1.00	0.430	0.005
						Magnet Ridge	50.17	51.17	1.00	0.537	0.005
						Magnet Ridge	55.19	56.19	1.00	0.363	0.005
23-MR-006	71.19	77.5	6.31	0.267	0.004	Magnet Ridge					
23-MR-007	74.64	83.93	9.29	0.384	0.004	Magnet Ridge	77.37	77.87	0.50	0.65	0.004
						Magnet Ridge	80.78	80.92	0.14	0.880	0.004
23-MR-010	32	33.8	1.8	0.246	0.004	Magnet Ridge					

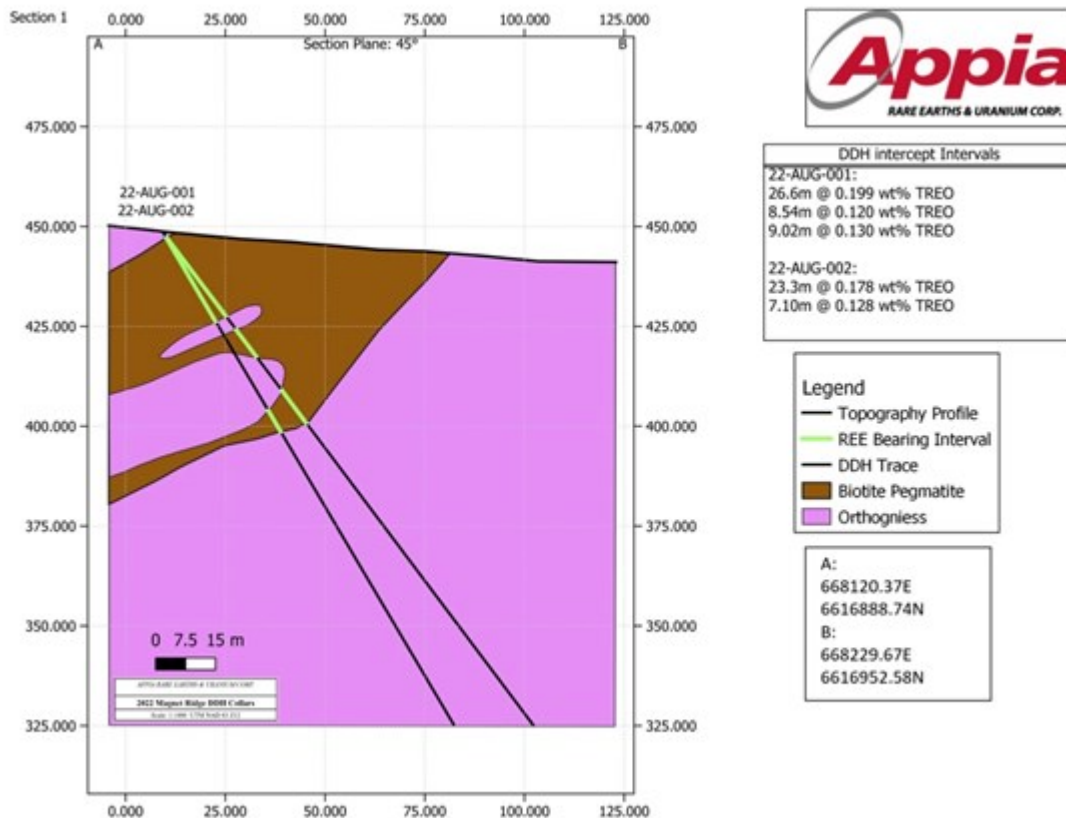
**Table 1. Summary of Highlighted Drillhole Composites from 23-MR-001, 002, 003, 006, 007, 010.**

**Note to Table 1. Highlighted TREO assay composites from 2023 diamond drillholes in the Magnet Ridge Area. wt.% TREO = ([CeO2 ppm] + [Dy2O3 ppm] + [Pr6O11 ppm] + [La2O3 ppm] + [Nd2O3 ppm] + [Sm2O3 ppm] + [Eu2O3 ppm] + [Gd2O3 ppm] + [Tb4O7 ppm] + [Ho2O3 ppm] + [Er2O3 ppm] + [Yb2O3 ppm] + [Lu2O3] ppm + [Y2O3 ppm] ) / 10000**

Final Name	Easting	Northing	Elevation	Azimuth	Dip	EOH
23-MR-001	668214.837	6616712.684	440.992	45	-46.48	87
23-MR-002	668214.837	6616712.684	440.992	45	-71.02	90
23-MR-003	668214.837	6616712.684	440.992	45.02	-89.59	105
23-MR-006	668312.89	6616663.925	441.428	44.54	-44.55	102
23-MR-007	668312.89	6616663.925	441.428	44.72	-70.52	90
23-MR-010	668383.563	6616317.018	413.058	44.77	-44.64	102

**Table 2. Drill hole collar details for DDH 23-MR-001, 23-MR-002, 23-MR-003, 23-MR-006, 23-MR-007, 23-MR-010.**

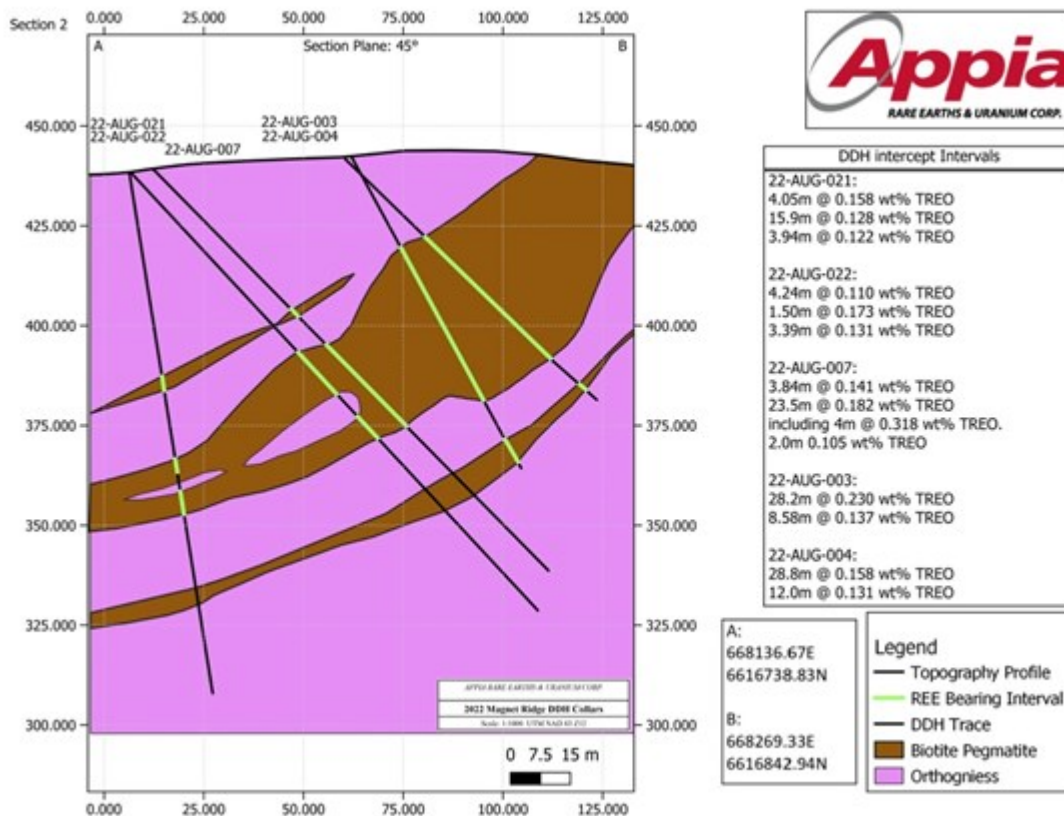
**Table 3. The complete assays results are available by clicking on [this link](#).**



**Figure 4. Representative X-section from northern part of Magnet Ridge (see Figure 1 for location).**

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**Figure 5. Representative X-section from central part of Magnet Ridge (see Figure 1 for location).**

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## About the Alces Lake Project

The Alces Lake project encompasses some of the highest-grade total and critical\* REE 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 that enable modern electronic applications such as electric vehicles and wind turbines. The "magnet alloy" rare earths are neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb).

The Alces Lake project area is 38,522.43 contiguous hectares (95,191.00 acres) in size and is 100% owned by Appia.

All lithochemical assay results of core samples were provided by Saskatchewan Research Council's Geoanalytical Laboratory, an ISO/IEC 17025:2005 (CAN-P-4E) certified laboratory in Saskatoon, SK. All analytical 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., Vice President Exploration, and a Qualified Person as defined by National Instrument 43-101.

## About Appia Rare Earths & Uranium Corp. (Appia)

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 elements 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 40,963.18 ha. in size and located within the Goiás State of Brazil. (See January 11<sup>th</sup>, 2024 Press Release - Click [HERE](#)) The Company successfully added 23,412.11 ha to the PCH project's total hectares bringing the overall project size to 40,963.18 ha.

**Appia has 136.3 million common shares outstanding, 144.1 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.*

For more information, visit [www.appiareu.com](http://www.appiareu.com).

As part of our ongoing effort to keep investors, interested parties and stakeholders updated, we have several communication portals. If you have any questions online ([Twitter](#), [Facebook](#), [LinkedIn](#)) please feel free to send direct messages.

To book a one-on-one 30-minute Zoom video call, please [click here](#).

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