

# Appia Reports High-Grade Total Rare Earth Oxide Results up to 22,339 ppm or 2.23% on Diamond Drill Hole #1 Within Target IV at PCH IAC Project, Brazil

written by Raj Shah | February 26, 2024

February 26, 2024 ([Source](#)) – Appia Rare Earths & Uranium Corp. (CSE: API) (OTCQX: APAAF) (FSE: A0I0) (MUN: A0I0) (BER: A0I0) (the “Company” or “Appia”) announces results from its 2023 Diamond Drill Hole (DDH) #1 in the NE zone within Target IV at its PCH IAC REE project in Brazil. The exploratory drill hole aimed to assess the continuity of the alkali breccia present through depth, reaching a total depth of 243.25 metres and collar coordinates 480,250.3E 8,193,820.9N (Datum SIRGAS 2000 ZONE 22S). Results have revealed a true thickness of approximately 217 metres, inclined at -63 degrees.

Stephen Burega, President, commented, “The findings from the ionic clay and saprolite weathered profile on PCH-DDH-001 underscore the exceptional potential of the target zone. The weathered profile along the hole extended to approximately 20 meters of true thickness yielding concentrations of 5,548 ppm or 0.55% Total Rare Earth Oxide (TREO), 1,420 ppm or 0.14% Magnet Rare Earth Oxide (MREO). The results confirm the ultra-high-grade nature of the upper levels, including concentrations reaching up to 22,339 ppm or 2.23% TREO, 6,204 ppm or 0.62% MREO, and 2,074 ppm or 0.21% Heavy Rare Earth Oxide (HREO) across 2 metres from a depth of 2 m to 4 m.”

**Highlights:**

- Composite results across 243.25 metres:
  - 1,901 ppm or 0.19% TREO including 457 ppm or 0.05% MREO, 143 ppm or 0.01% HREO, and 1,757 ppm or 0.18% Light Rare Earth Oxide (LREO).
- Composite results from 0-22.25 metres:
  - 5,548 ppm or 0.55% TREO including 1,420 ppm or 0.14% MREO, 460 ppm or 0.05% HREO, and 5,099 ppm or 0.50% LREO.
- Composite results 0-9 metres:
  - 10,247 ppm or 1.02% TREO, 2,672 ppm or 0.27% MREO, 867 ppm or 0.09% HREO, and 9,380 ppm or 0.94% LREO, including:
    - 22,339 ppm or 2.23% TREO, 6,204 ppm or 0.62% MREO, 2,074 ppm or 0.21% HREO, and 20,265 ppm or 2.03% LREO (from 2-4 m).
- Composite results 25.50-52.00 metres:
  - 2,168 ppm or 0.22 % TREO, 518 ppm or 0.05% MREO, 153 ppm or 0.01% HREO, and 2,015 ppm or 0.20% LREO.
- Composite results 58.00-140.00 metres:
  - 1,648 ppm or 0.16 % TREO, 378 ppm or 0.04% MREO, 109 ppm or 0.01% HREO, and 1,538 ppm or 0.15% LREO.
- Composite results 164.30-243.25 metres (EOH):
  - 1,369 ppm or 0.13 % TREO, 329 ppm or 0.3% MREO, 115 ppm or 0.01% HREO, and 1,255 ppm or 0.13% LREO.

“Appia’s DDH-001 reveals more than 26 meters with over 2,000 ppm TREO below the saprolite. The mineralized breccia indicates in most of the intervals expected concentration of REE common to carbonatitic rocks that serves as a source for the enrichment in REE found on the ionic clay interval (0 to 22.25 metres). Some samples below 22.25 metres returned grades above 4,000 ppm TREO, offering opportunities for exploratory investigation into the hard rock depths. With over 2,000 metres drilled, the total 2023 drilling campaign consisted of 147 Reverse Circulation (RC) holes, 1 DDH, and over 200 exploratory auger holes, the PCH Project continues to demonstrate significant mineralization and high-grade REE contents, validating our strategic approach,” adds Burega.

The Company remains committed to advancing exploration activities at its PCH Project with its ongoing auger drilling program and looks forward to providing updates on the NI-43-101 Technical Report and maiden Mineral Resource Estimate in collaboration with SGS Consultants.

DIAMOND DRILLHOLE PCH-DDH-001 (ASSAY IN PPM, BY SGS LAB)							
Interval	0-22.25m	with 0-9m	with 2-4m	25.50-52m	58-140m	164.30-243.25m	0-243.25m
TREO	5,548	10,247	22,339	2,019	1,648	1,369	1,901
MREO	1,420	2,672	6,204	481	378	329	457
LREO	5,088	9,380	20,265	1,876	1,538	1,255	1,757
HREO	460	867	2,074	143	109	115	143
Magnet REO							
Interval	0-22.25m	with 0-9m	with 2-4m	25.50-52m	58-140m	164.30-243.25m	0-243.25m
Nd <sub>2</sub> O <sub>3</sub>	909	1,710	3,956	317	247	208	295
Pr <sub>6</sub> O <sub>11</sub>	271	510	1,173	89	74	63	88
Sm <sub>2</sub> O <sub>3</sub>	141	264	614	45	36	34	45

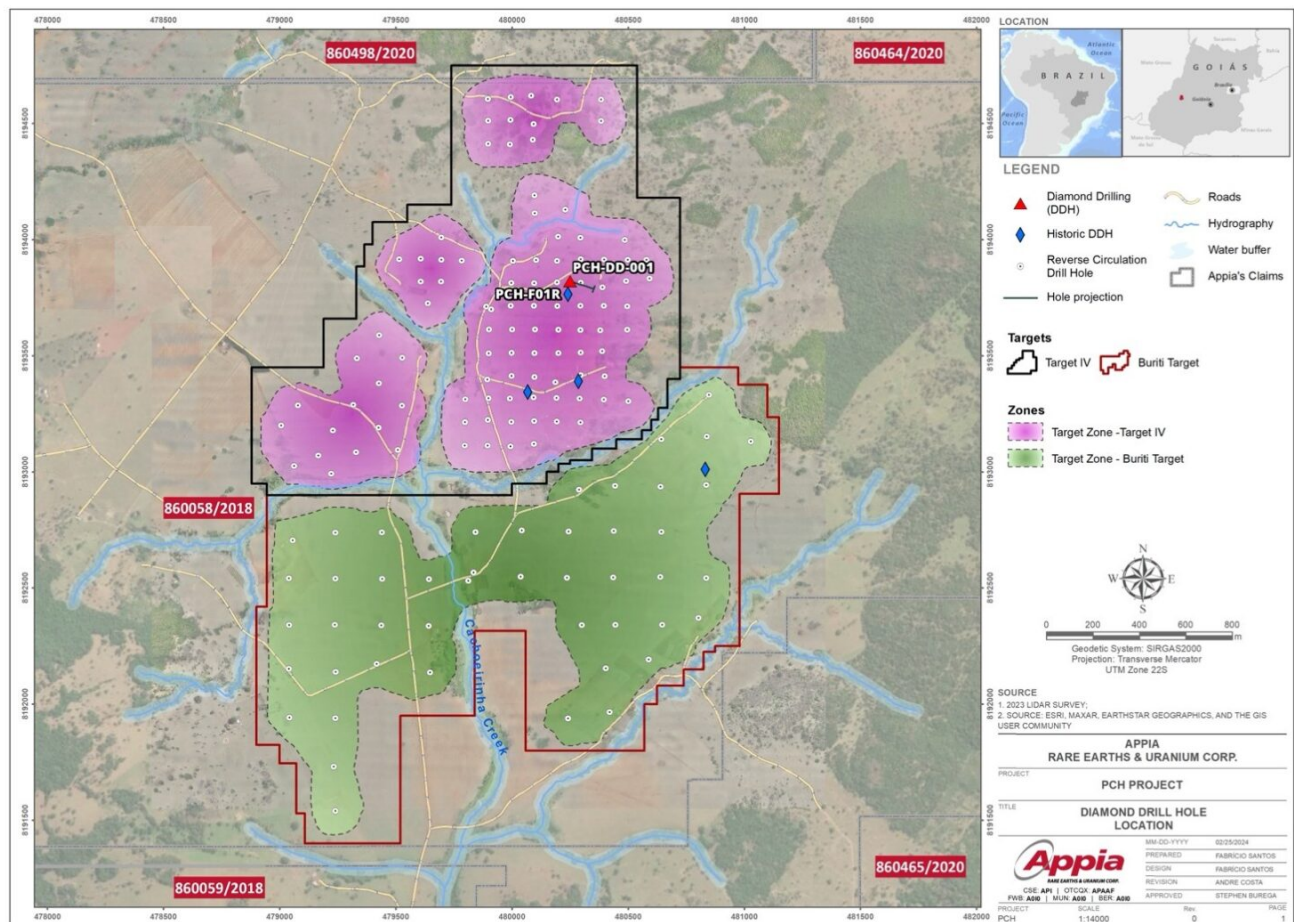
<b>Dy<sub>2</sub>O<sub>3</sub></b>	84	159	392	25	17	20	25
<b>Tb<sub>4</sub>O<sub>7</sub></b>	15	28	69	5	3	4	5
<b>Light – LREO</b>							
<b>Interval</b>	<b>0-22.25m</b>	<b>with 0-9m</b>	<b>with 2-4m</b>	<b>25.50-52m</b>	<b>58-140m</b>	<b>164.30-243.25m</b>	<b>0-243.25m</b>
<b>La<sub>2</sub>O<sub>3</sub></b>	1,349	2,471	5,359	499	432	338	477
<b>CeO<sub>2</sub></b>	2,559	4,689	9,776	970	785	645	897
<b>Pr<sub>6</sub>O<sub>11</sub></b>	271	510	1,173	89	74	63	88
<b>Nd<sub>2</sub>O<sub>3</sub></b>	909	1,710	3,956	317	247	208	295
<b>Heavy – HREO</b>							
<b>Interval</b>	<b>0-22.25m</b>	<b>with 0-9m</b>	<b>with 2-4m</b>	<b>25.50-52m</b>	<b>58-140m</b>	<b>164.30-243.25m</b>	<b>0-243.25m</b>
<b>Sm<sub>2</sub>O<sub>3</sub></b>	141	264	614	45	36	34	45
<b>Eu<sub>2</sub>O<sub>3</sub></b>	40	75	177	13	10	9	12
<b>Gd<sub>2</sub>O<sub>3</sub></b>	109	206	496	33	26	27	34
<b>Tb<sub>4</sub>O<sub>7</sub></b>	15	28	69	5	3	4	5
<b>Dy<sub>2</sub>O<sub>3</sub></b>	84	159	392	25	17	20	25
<b>Ho<sub>2</sub>O<sub>3</sub></b>	14	27	66	4	3	3	4
<b>Er<sub>2</sub>O<sub>3</sub></b>	35	66	161	11	7	9	11
<b>Tm<sub>2</sub>O<sub>3</sub></b>	4	7	16	1	1	1	1
<b>Yb<sub>2</sub>O<sub>3</sub></b>	18	32	76	6	5	7	7
<b>Lu<sub>2</sub>O<sub>3</sub></b>	2	3	7	1	1	1	1

**Table 1 – Denotes weighted average chemical assay results of composites DDH samples from Target IV DDH 1. For a full list of assay results, click [HERE](#).**

**TREO** = ([CeO<sub>2</sub> ppm] + [Dy<sub>2</sub>O<sub>3</sub> ppm] + [Er<sub>2</sub>O<sub>3</sub> ppm] + [Eu<sub>2</sub>O<sub>3</sub> ppm] + [Gd<sub>2</sub>O<sub>3</sub> ppm] + [Ho<sub>2</sub>O<sub>3</sub> ppm] + [La<sub>2</sub>O<sub>3</sub> ppm] + [Lu<sub>2</sub>O<sub>3</sub> ppm] + [Nd<sub>2</sub>O<sub>3</sub> ppm] + [Pr<sub>6</sub>O<sub>11</sub> ppm] + [Sm<sub>2</sub>O<sub>3</sub> ppm] + [Tb<sub>4</sub>O<sub>7</sub> ppm] + [Tm<sub>2</sub>O<sub>3</sub> ppm] + [Yb<sub>2</sub>O<sub>3</sub> ppm]). **MREO** = ([Dy<sub>2</sub>O<sub>3</sub> ppm] + [Pr<sub>6</sub>O<sub>11</sub> ppm] + [Nd<sub>2</sub>O<sub>3</sub> ppm] +

$$[\text{Sm203 ppm}] + [\text{Tb03 ppm}]) \cdot \text{HREO} = [\text{Dy203 ppm}] + [\text{Er203 ppm}] + [\text{Eu203 ppm}] + [\text{Gd203 ppm}] + [\text{Ho203 ppm}] + [\text{Lu203 ppm}] + [\text{Sm203 ppm}] + [\text{Tb03 ppm}] + [\text{Tm203 ppm}] + [\text{Yb203 ppm}]$$

$$\cdot \text{LREO} = [\text{La203 ppm}] + [\text{Ce02 ppm}] + [\text{Pr6011 ppm}] + [\text{Nd203 ppm}]$$



**Map 1 – Map of Diamond Drill Hole location and mineralization at Target IV and Buriti zones.**

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

[https://images.newsfilecorp.com/files/5416/199183\\_25dd9843745f888c\\_001full.jpg](https://images.newsfilecorp.com/files/5416/199183_25dd9843745f888c_001full.jpg)

Appia will be participating at this year's Prospectors and Developers Association of Canada's (PDAC) event from March 3-6<sup>th</sup> 2024 at the Toronto Convention Centre. You are invited to visit the Appia booth #2715. Stephen Burega will also be

presenting the Appia Corporate Update on March 6<sup>th</sup> at 10:50 am during the Electric Materials 2 session located in room 801B.

## **QA/QC**

Diamond drill holes (DDH) can be vertical or inclined. If vertical, the reported intervals are true thickness. Inclined DDH true thickness need to be calculated based on the hole inclination angle given by the survey executed in the hole. The core produced from drill holes are described, the intervals are chosen and the core split and sampled at regular intervals within the same lithologic unit. The samples are bagged in a resistant plastic bag, labeled, photographed, and stored for shipment.

The samples are sent to the SGS laboratory in Vespasiano, Minas Gerais. In addition to the internal QA/QC of the SGS Lab, Appia includes its own control samples in each batch of samples sent to the laboratory.

Quality control samples, such as blanks, duplicates, and standards (CRM) were inserted into each analytical run. For all analysis methods, the minimum number of QA/QC samples is one standard, one duplicate and one blank, introduced in each batch. The rigorous procedures are implemented during the sample collection, preparation, and analytical stages to insure the robustness and reliability of the analytical results.

All analytical results reported herein have passed internal QA/QC review and compilation. All assay results of DDH samples were provided by SGS Geosol, an ISO/IEC 17025:2005 Certified Laboratory, which performed their measure of the concentration of rare earth elements (REE) analyses by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analytical methods.

The technical content in this news release was reviewed and

approved by Mr. Don Hains, P.Geo, Consulting Geologist, 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 94,982.39 hectares (234,706.59 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 (See June 9<sup>th</sup>, 2023 Press Release – Click [HERE](#)) 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](#))

**Appia has 136.3 million common shares outstanding, 144.5 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 ([X](#), [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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