

Appia Discovers an Unprecedented High-Grade Mineralized Zone: Total Weighted Average Grade of 7,578 ppm or 0.76% Total Rare Earth Oxide Across 10 Reverse Circulation Drill Holes at Its PCH Ionic Clay Project, Brazil

written by Raj Shah | November 28, 2023

November 28, 2023 ([Source](#)) – Appia Rare Earths & Uranium Corp. (CSE: API) (OTCQX: APAAF) (FSE: A0I0.F) (FSE: A0I0.MU) (FSE: A0I0.BE) (the “Company” or “Appia”) is pleased to announce the further delineation of the SW Extension Zone, a significant high-grade Rare Earth Elements (REE) mineralized zone located in the Southwest (SW) corner of the Target IV zone. **This discovery spans an area of over 1,000 metres by 500 metres, with an average thickness of approximately 19 metres, and builds on the previously announced remarkable PCH-RC-63 results.** ([See Oct. 31st, 2023 Press Release](#))

Highlights:

- **High-Grade SW Extension Zone:**
 - **10 Reverse Circulation (RC) holes with a total weighted average of 7,578 ppm or 0.76% Total Rare Earth Oxide (TREO), including:**

- 1,744 ppm or 0.17% Magnet Rare Earth Oxide (MREO), and 416 ppm or 0.04% Heavy Rare Earth Oxide (HREO); 7,162 ppm or 0.71% Light Rare Earth Oxide (LREO)
 - The SW Extension Zone currently spans approximately 0.5 km² with average hole depths of 19 metres – all open at depth.
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- **Highest-Grade RC and Auger (AH) Intercepts:**
 - PCH-RC-067 from 0 to 11m EOH:
 - 24,309 ppm or 2.43 % TREO, 5,717 ppm or 0.57% MREO, 1,452 ppm or 0.15% HREO, and 22,857 ppm or 2.29% LREO.
 - PCH-RC-066 from 0 to 13m EOH:
 - 12,858 ppm or 1.29% TREO, 2,789 ppm or 0.28% MREO, 524 ppm or 0.05% HREO, and 12,334 ppm or 1.23% LREO.
 - PCH-RC-063 from 0 to 24m EOH:
 - 27,188 ppm or 2.72% TREO, 6,293 ppm or 0.63% MREO, 1,369 ppm or 0.14% HREO, and 25,819 ppm or 2.59% LREO.

 - 2 AH holes have a total weighted average of 10,249 ppm or 1.02% TREO, including:
 - PCH-AH-29 from 0 to 7m EOH:
 - 4,122 ppm or 0.41% TREO, 1,066 ppm or 0.11% MREO, 361 ppm or 0.04% HREO, and 3,762 ppm or 0.38% Light Rare Earth Oxides (LREO).

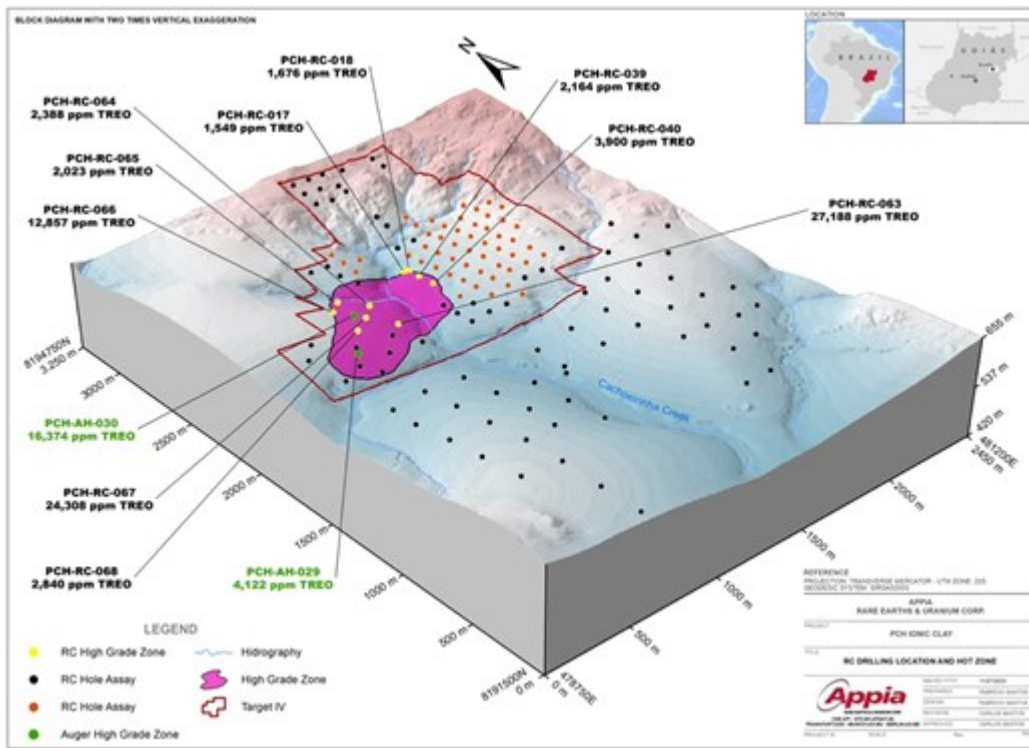
 - PCH-AH-30 from 0 to 7m EOH:
 - 16,375 ppm or 1.64% TREO, 2,955 ppm or 0.30%

MREO, 457 ppm or 0.05% HREO, and 15,918 ppm or 1.59% Light Rare Earth Oxides (LREO).

“We believe that the high-grade nature of the SW Extension Zone, which contains Magnet Rare Earth Oxides sample values of up to 13,212 ppm or 1.32%, places this discovery on a global stage. The fact that all of these holes are still open at depth creates an opportunity to discover additional mineralization at depth,” stated Tom Drivas, CEO.

“Appia’s work with exploratory auger drilling has delivered compelling results, particularly when the 2023 auger holes PCH-AH-29 and PCH-AH-30 are included, which returned a total weighted average of over 10,000 ppm or +1% TREO over 7m of depth,” noted Stephen Burega, President, “Follow-up RC drilling successfully expanded the overall total depth of the high-grade mineralization to an average of approximately 19 metres across this zone, and we’ve observed mineralization throughout the length of all RC and Auger holes. For instance, holes PCH-RC-063 with a total depth of 24m and PCH-RC-067 with a total depth of 11m, each yielded grades exceeding 24,000 ppm or 2.4% TREO and over 5,000 ppm or 0.5% MREO at the bottom of each drill hole.”

The lateral extension and the depth of the SW Extension high-grade zone has not been fully tested, and the Company eagerly awaits results from the remaining 7 RC holes drilled within this new zone, in addition to the numerous RC drill holes to the south located outside of the Target IV boundary. Target IV encompasses 1,702 hectares, with the Southwest extension zone occupying about 50 hectares. In total, the PCH project spans 17,551 hectares.



Map #1 – Map of RC and Auger drilling locations at the high-grade SW extension zone.

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

https://images.newsfilecorp.com/files/5416/188883_06c0fcf9c473590f_005full.jpg

REVERSE CIRCULATION AND AUGER HOLE COMPOSITE (ASSAY IN PPM, BY SGS LAB)												
Hole #	PCH-RC-017	PCH-RC-018	PCH-RC-039	PCH-RC-040	PCH-RC-063	PCH-RC-064	PCH-RC-065	PCH-RC-066	PCH-RC-067	PCH-RC-068	PCH-AH-029	PCH-AH-030
TREO	1,549.61	1,676.84	2,163.97	3,900.03	27,188.70	2,388.26	2,023.14	12,857.62	24,308.97	2,840.66	4,122.37	16,374.88
MREO	312.58	362.95	508.42	883.95	6,293.19	523.79	466.63	2,788.80	5,717.47	688.93	1,065.97	2,954.46
HREO	109.90	112.13	137.18	229.03	1,369.46	161.29	166.32	524.08	1,452.30	185.43	360.54	456.82
LREO	1,439.71	1,564.71	2,026.79	3,671.00	25,819.24	2,226.97	1,856.81	12,333.54	22,856.67	2,655.23	3761.8355	15,918.07
Magnet - MREO												
Total depth	0 – 9m (EOH)	0 – 18m (EOH)	0 – 27m (EOH)	0 – 15m (EOH)	0-24m (EOH)	0-16m (EOH)	0-22m (EOH)	0 – 13m (EOH)	0 – 11m (EOH)	0 – 33m (EOH)	0 – 7m (EOH)	0 – 7m (EOH)
Nd203	197.72	233.85	337.41	582.01	4,511.49	337.13	295.04	1,952.89	4,032.79	464.44	689.29	2,018.79
Pr203	60.31	71.77	98.40	179.67	1,026.18	105.97	89.35	552.87	935.84	131.38	189.48	668.72
Sm203	32.68	36.50	48.48	83.43	524.14	49.36	48.61	207.84	469.36	61.78	123.43	209.44
Dy203	18.70	17.59	20.23	32.57	191.04	26.72	28.51	62.17	236.98	26.49	53.20	47.39
Tb03	3.18	3.24	3.91	6.27	40.33	4.61	5.12	13.04	42.50	4.84	10.57	10.13
MREO	312.58	362.95	508.42	883.95	6,293.19	523.79	466.63	2,788.80	5,717.47	688.93	1,065.97	2,954.46
Heavy – HREO												
Total depth	0 – 9m (EOH)	0 – 18m (EOH)	0 – 27m (EOH)	0 – 15m (EOH)	0-24m (EOH)	0-16m (EOH)	0-22m (EOH)	0 – 13m (EOH)	0 – 11m (EOH)	0 – 33m (EOH)	0 – 7m (EOH)	0 – 7m (EOH)
Sm203	32.68	36.50	48.48	83.43	524.14	49.36	48.61	207.84	469.36	61.78	123.43	209.44
Eu203	7.30	8.57	11.21	20.96	133.04	13.48	14.50	49.01	125.46	16.28	31.96	46.95

Gd203	24.39	26.30	31.52	53.97	332.05	36.69	40.15	121.62	329.05	41.15	85.26	100.49
Tb03	3.18	3.24	3.91	6.27	40.33	4.61	5.12	13.04	42.50	4.84	10.57	10.13
Dy203	18.70	17.59	20.23	32.57	191.04	26.72	28.51	62.17	236.98	26.49	53.20	47.39
Ho203	3.26	2.93	3.36	5.22	30.73	4.67	4.88	10.77	43.46	4.89	9.04	7.34
Er203	9.43	7.94	8.70	13.13	69.69	12.57	12.85	29.10	110.41	13.82	23.79	18.07
Tm203	1.23	1.00	1.06	1.56	7.33	1.59	1.54	3.78	13.56	1.85	2.91	2.10
Yb203	8.51	7.00	7.59	10.40	36.79	10.24	9.02	23.48	72.89	12.54	18.14	13.22
Lu203	1.23	1.07	1.11	1.51	4.31	1.36	1.14	3.26	8.64	1.78	2.23	1.70
HREO	109.90	112.13	137.18	229.03	1,369.46	161.29	166.32	524.08	1,452.30	185.43	360.54	456.82
Light -LREO												
Total depth	0 – 9m (EOH)	0 – 18m (EOH)	0 –27m (EOH)	0 – 24m (EOH)	0-24m (EOH)	0-16m (EOH)	0-22m (EOH)	0 – 13m (EOH)	0 – 11m (EOH)	0 – 33m (EOH)	0 – 7m (EOH)	0 – 7m (EOH)
La203	406.30	427.54	587.20	1,046.29	9,004.33	705.08	553.75	3,870.80	7,837.68	724.34	977.03	5,063.70
Ce02	775.38	831.54	1,003.79	1,863.03	11,277.23	1,078.79	918.68	5,956.99	10,050.36	1,335.07	1,906.04	8,166.86
Pr203	60.31	71.77	98.40	179.67	1,026.18	105.97	89.35	552.87	935.84	131.38	189.48	668.72
Nd203	197.72	233.85	337.41	582.01	4,511.49	337.13	295.04	1,952.89	4,032.79	464.44	689.29	2,018.79
LREO	1,439.71	1,564.71	2,026.79	3,671.00	25,819.24	2,226.97	1,856.81	12,333.54	22,856.67	2,655.23	3,761.84	15,918.07

Table #1 – Denotes weighted average chemical assay results of composites RC and Auger samples from high-grade SW Extension zone. For full assay results please [click here](#) for RC and [click here](#) for Auger.

TREO = ([Ce02 ppm] + [Dy203 ppm] + [Er203 ppm] + [Eu203 ppm] + [Gd203 ppm] + [Ho203 ppm] + [La203 ppm] + [Lu203] ppm) + [Nd203 ppm] + [Pr203 ppm] + [Sm203 ppm] + [Tb03 ppm] + [Tm203 ppm] + [Yb203 ppm]). **MREO** = ([Dy203 ppm] + [Pr203 ppm] + [Nd203 ppm] + [Sm203 ppm] + [Tb03 ppm]). **HREO** = [Dy203 ppm] + [Er203 ppm] + [Eu203 ppm] + [Gd203 ppm] + [Ho203 ppm] + [Lu203] ppm) + [Sm203 ppm] + [Tb03 ppm] + [Tm203 ppm] + [Yb203 ppm]).

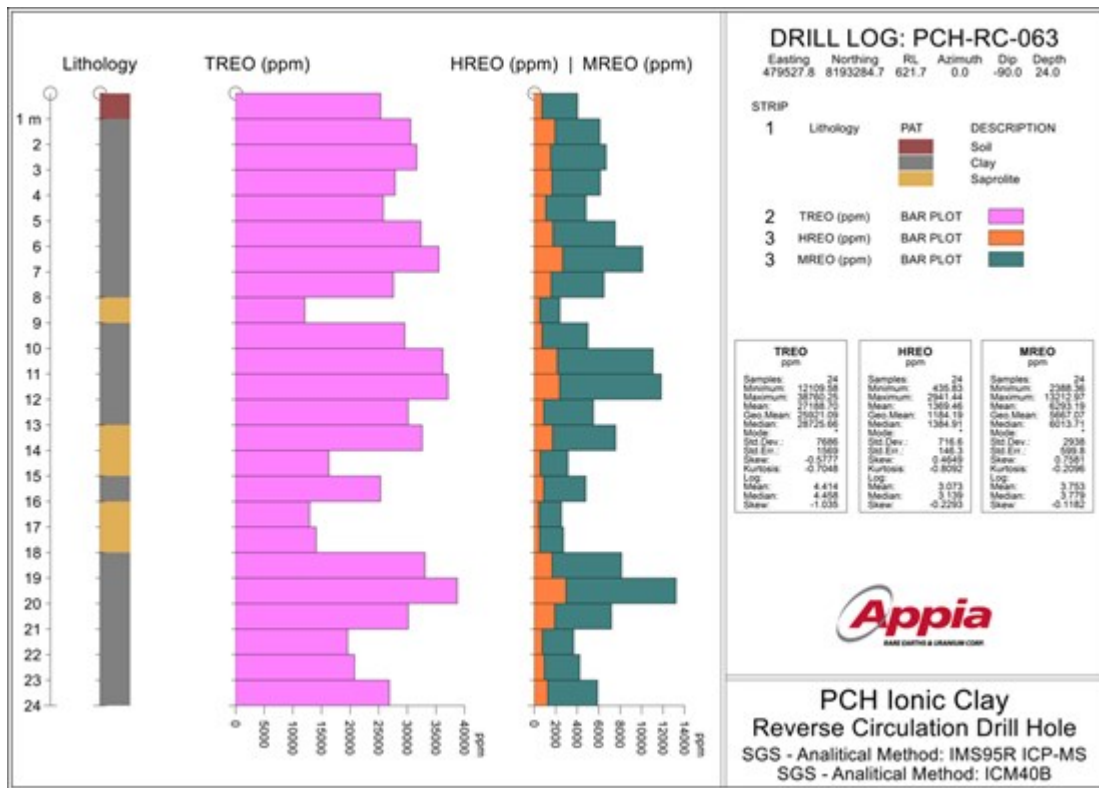


Chart #1 – Denotes the Drill Log from CH -RC-063.

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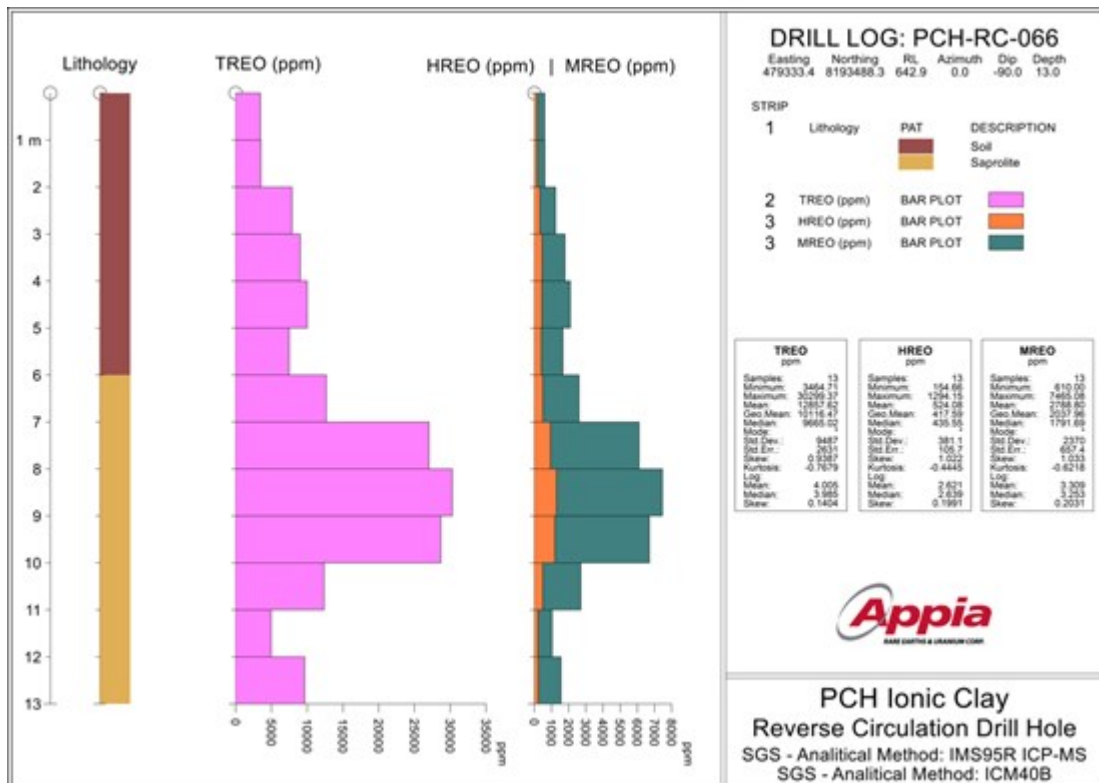


Chart #2 – Denotes the Drill Log from CH -RC-066.

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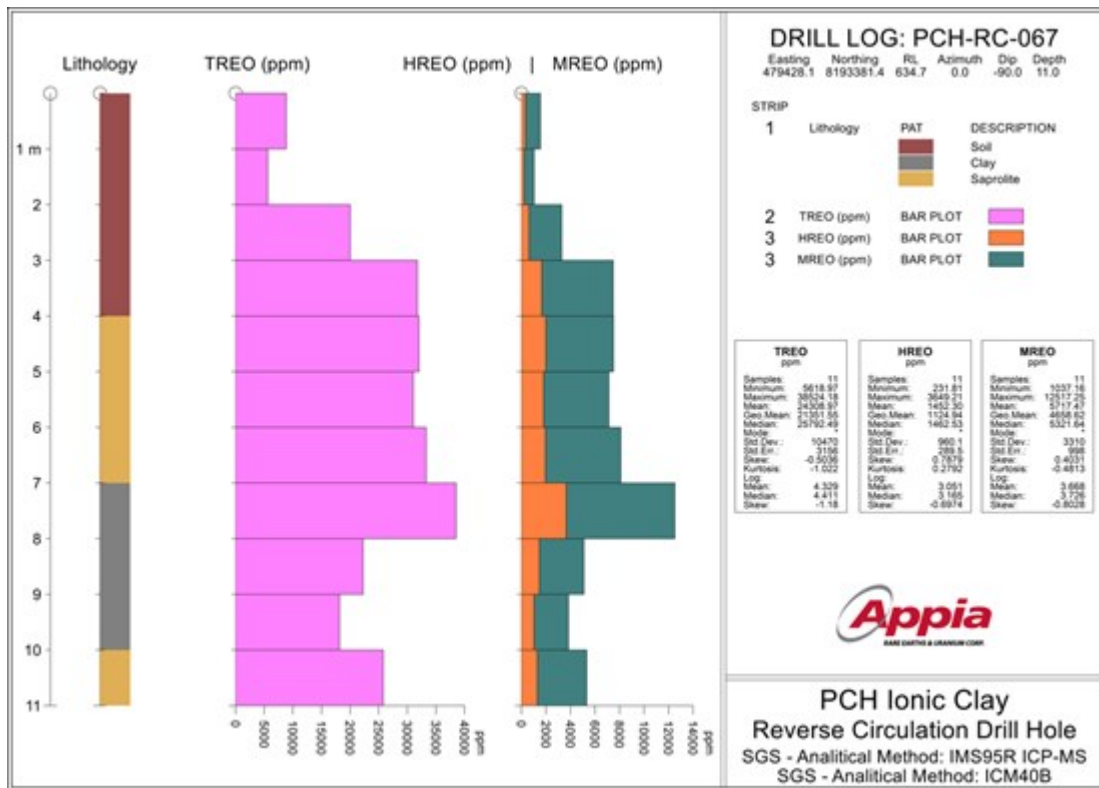


Chart #3 – Denotes the Drill Log from CH -RC-067.

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

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Table #2 – PCH Target IV Reverse Circulation and Auger collar details – SIRGAS 2000 – UTM zone 22S – [Click Here](#)

Appia has previously provided details on a total of 57 RC drill holes, showcasing an extraordinary overall total weighted average grade of 2,287 ppm TREO, ([see press release dated November 9, 2023](#)). The Company will provide timely updates to investors as assay results are received from the remaining 85 RC, 128 Auger, and 1 diamond drill holes which are located both within Target IV and from various extension zones outside of the main Target IV zone.

Background on the PCH Project

The PCH Project is located within the Tocantins Structural

Province in the Brasília Fold Belt, more specifically, the Arenópolis Magmatic Arc. The PCH Project is 17,551.07 ha in size and located within the Goiás State of Brazil. It is classified as an alkaline intrusive rock occurrence with highly anomalous REE and Niobium mineralization. This mineralization is related to alkaline lithologies of the Fazenda Buriti Plutonic Complex and the hydrothermal and surface alteration products of this complex by supergene enrichment in a tropical climate. The positive results of the geochemical exploration work carried out to date indicates the potential for high-grade REEs and Niobium mineral resources within the lateritic ionic adsorption clays.

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.

QA/QC

Reverse circulation (RC) drill holes are vertical and reported intervals are true thicknesses.. Each are sampled at one metre intervals, resulting in average sample sizes of 5-25 kg. A small representative specimen was taken from each sample bag and placed into a chip tray for visual inspection and logging by the geologist. Quartering was performed at Appia's logging facility using a riffle splitter and continued splitting until a representative sample weighing approximately 500g each was obtained, bagged in a resistant plastic bag, labeled, photographed, and stored for shipment.

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

Quality control samples, such as blanks, duplicates, and standards (CRM) were inserted into each analytical run. For all

analytical methods, the minimum number of QA/QC samples is one standard, one duplicate and one blank, introduced every batch which comprise a full-length hole. The rigorous procedures implemented during the sample collection, preparation, and analysis stages underscore the robustness and reliability of the analytical results obtained.

All analytical results reported herein have passed internal QA/QC review and compilation. All assay results of RC 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 113,837.15 hectares (281,297.72 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. 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](#))

Appia has 130.5 million common shares outstanding, 138.0 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.

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