Appia

RARE EARTHS & URANIUM CORP.

CRITICAL RARE EARTHS & URANIUM EXPLORATION IN THE AMERICAS

CSE: API | OTCQX: APAAF | FWB: A0I0 | MUN: A0I0 | BER: A0I0

December 2024

Forward Looking Statement

This presentation contains forward-looking statements which may include but are not limited to statements with respect to the future financial or operating performance of Appia and its projects, the future price of uranium, capital operating and exploration expenditures, success of exploration activities, permitting timelines, government regulation and environmental risks and costs. Appia has tried to identify these statements by using words such as "plans", "proposes", "expects" or "does not expect", "is expected", "estimates", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

Forward-looking statements are not based on historical facts and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company, or events, to be materially different from any future results, performance, achievements or events express or implied by the forward-looking statements. These forward-looking statements reflect current expectations of management regarding future events and performance. Such forward-looking statements are based on a number of assumptions which management believes to be reasonable but may prove to be incorrect and involve significant risks, including but not limited to: the general risks associated with the mining industry, lack of operating history, dependence on key personnel, conflicts of interest, the need to raise additional capital, title to properties, competition, speculative nature of the business, acquiring additional properties, uninsured risks, external market factors, government regulation, environmental regulations, exploration risk, calculation of resources, insufficient resources, barriers to commercial production, maintaining property interests, commodity prices, exchange rates, lack of dividends, lack of public trading market, currency risk and controlling shareholder.

Although Appia has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Anyone reviewing this Site should not place undue reliance on forward-looking statements. While the Company anticipates that subsequent events and developments may cause its views to change, Appia specifically disclaims any obligation to update these forward-looking statements, except as required by law. The factors identified above are not intended to represent a complete list of the factors that could affect the Company.

The technical information in this Presentation has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”). The information was reviewed and approved by Dr. Irvine R. Annesley, P.Geo, Consulting Geologist, and Mr. Andre Costa, VP of Exploration, Brazil and Qualified Persons as defined by National Instrument 43-101.

Company Overview

Appia is a publicly traded mineral exploration company that aims to strategically position and capitalize on the increasing demand for critical minerals, such as rare earth elements (REE) and uranium. These resources are essential for meeting the high demand for electric vehicles, wind turbines, advanced renewable electronics, and driving the transition towards a greener environment. Appia is committed to advancing multiple rare earths and uranium projects in mining-friendly regions, including Goiás State, Brazil, the Athabasca Basin area in Saskatchewan, Canada and Elliot Lake, Ontario, Canada.

Ionic Clay Rare Earths

PCH, GOIAS, BRAZIL

- Critical REE (containing MREE & HREE) hosted in ionic clays
- Rare Earths in ionic clays are generally more easily extractable with lower Opex & Capex costs
- ***MRE & NI 43-101** Technical Report completed with SGS*
- *Initial desorption testing proves IAC characteristics*
- *Ongoing exploration & well-developed infrastructure*

Monazite Rare Earths

ALCES LAKE, SASK, CANADA

- *High-grade **monazite** prospect on surface and near-surface of up to 80% coarse-grained monazite*
- *World-class critical REE with grades up to 50% TREO plus gallium*
- Most Attractive Mining Jurisdiction in Canada with access to SRC monazite processing facility

Uranium, Ontario

ELLIOT LAKE, ON, CANADA

- *Holds an extensive **Indicated & Inferred Mineral Resource Estimate (MRE) of over 55 million pounds Uranium***
- *Well-developed infrastructure & 58 Km from Cameco's uranium refining facility near Blind River, ON*
- *Spanning 13,008 hectares (32,143 acres)*

Uranium, Saskatchewan

Uranium Projects, SASK, CANADA

- *4 exploration projects in the Athabasca Basin*
- *Loranger, Eastside, Otherside and North Wollaston projects*
- *Plans for exploration in Summer of 2024 include drilling at Loranger, and further ground prospecting and exploration on the other 3 projects*

Why Appia?

Appia offers a unique opportunity to tap into **the growing demand for rare earth elements and uranium**, which are pivotal in powering various industries. As the world transitions to cleaner energy sources and advanced technologies, the demand for rare earth elements and uranium is on the rise. Appia's strategic positioning in these markets, coupled with its commitment to environmentally conscious exploration practices, makes it a compelling choice for investors looking to align their portfolios with the future of clean energy, high-tech innovation, and responsible resource development.

Strategic Outlook

1. Working towards becoming a major supplier of a secure source of critical minerals, including Uranium and Rare Earths, to supply North American and European markets.
2. Increasing the NI 43-101 resource, and further exploration, at the PCH project. And will work towards identifying potential partners for off-take and/or strategic investment at the PCH project in Brazil. Moving towards the development of a Preliminary Economic Assessment (PEA).
3. Monetizing our non-core assets to fund the PCH project.
    - Announced on May 15th 2024 a MoU for the sale of the Elliot Lake project for $75 million and a 2% NSR.
4. Continue exploration at the Alces Lake project to identify further high-grade targets along the +20 KM structural corridor
5. Drilling and ground exploration at Appia's 4 uranium projects in Saskatchewan.

Capital Structure

(at November 11, 2024)

Issued:

- 149.4M shares (Insiders approx. 27 %)

Fully Diluted:

- 170.8M shares

Debt:

- None

Executive Leadership & Advisors

Appia's Management and Board has over 300 years combined industry experience

Anastasios (Tom) Drivas

CEO & DIRECTOR

Business entrepreneur with over 30 years of experience in various industries, including over 20 years in the mineral resource industry.

Stephen Burega

PRESIDENT

Brings 15 years of management and operations experience in the international mining and natural resources sectors, plus 15 years of experience in finance & communications.

Andre Costa M.Sc., P.Geo., FAIG

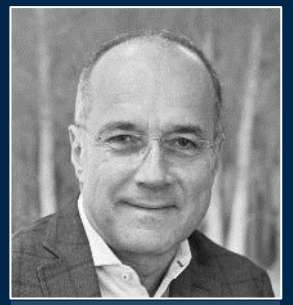
VP EXPLORATION

30 years´ Experience in Canada and Brazil managing exploration projects for Diamond, Potash, Uranium, Gold, Lithium, REE and copper.

Antonio Vitor

COUNTRY MANAGER

Track record as a portfolio manager and valued board member. Since 2015 exclusive dedication to mining industry – Graphite, REE and Silica sands



Constantine Karayannopoulos

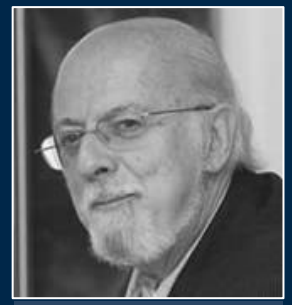
SR. TECHNICAL ADVISOR

30 years of expertise and leadership at NEO Performance Materials as COO, CEO, Chairman of the Board and CEO again from 2020-2023.

Don Hains, P. Geo

SR. TECHNICAL ADVISOR

40+ years' experience as a consulting geologist and QP, with highly advanced Industrial Minerals and Ionic Adsorption Clay expertise.



Jack Lifton

SR. TECHNICAL ADVISOR

Consultant, author, and lecturer on the market fundamentals of technology metals.

Our Projects

Appia is strategically positioned with mining projects in two of the world's most mining-friendly jurisdictions, Canada and Brazil.

Canada

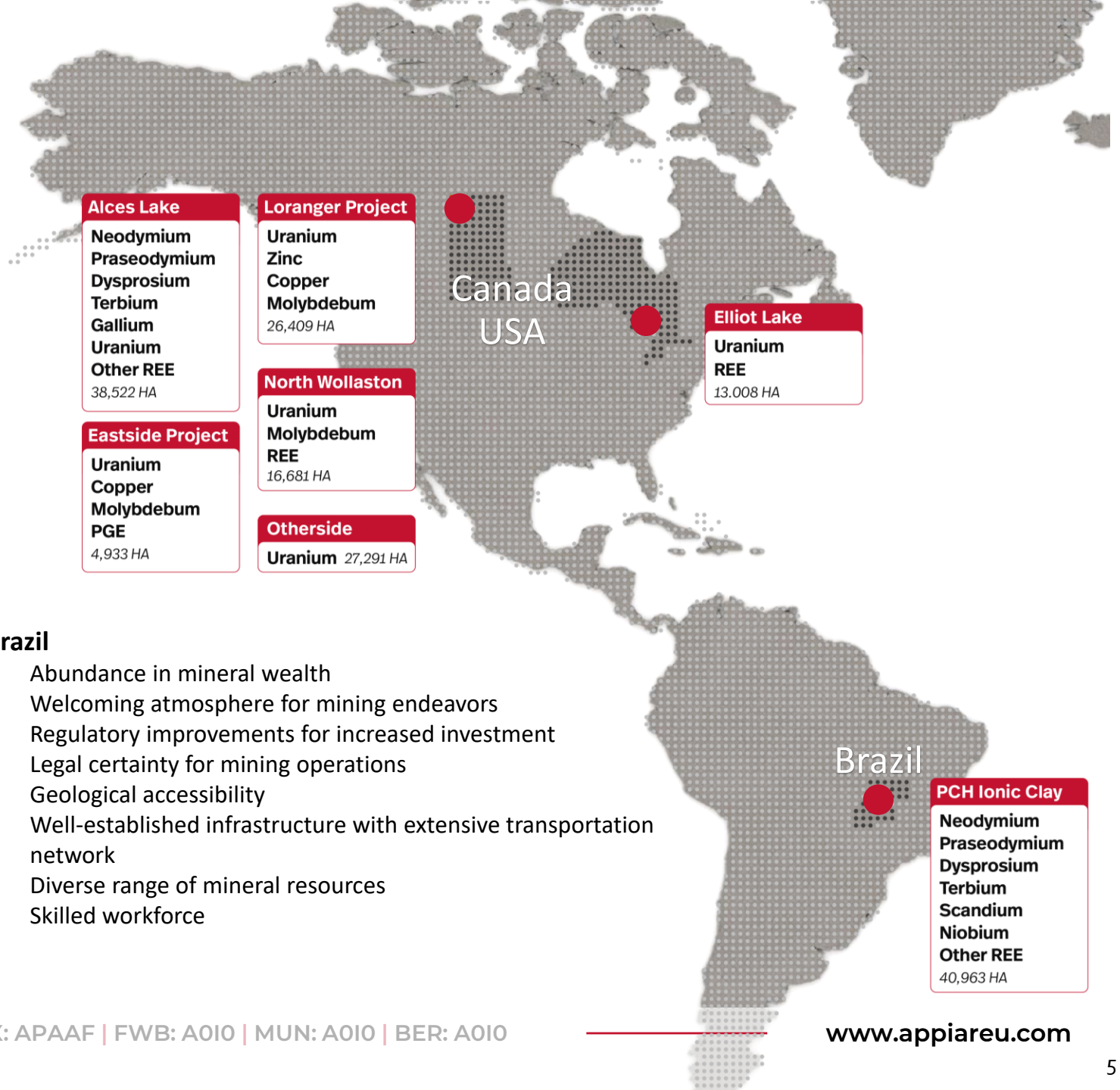
- Renowned for political stability and robust legal framework
- Beacon of security for mining investments
- Rich endowment of mineral resources
- Well-established mining industry
- Secure environment safeguarding investor interests
- Geological diversity for vast resource exploration
- Experienced mining workforce for efficient project execution
- Developed infrastructure supporting mining operations

Company's Projects in Canada

- Alces Lake REE project is a high-grade Monazite project
- Large uranium ground position in Elliot Lake
- Four highly prospective uranium exploration projects in Athabasca Basin area: Loranger, North Wollaston, Eastside, Otherside

Company's Project in Brazil

- PCH Project is a large REE Ionic Adsorption Clay project



Brazil

- Abundance in mineral wealth
- Welcoming atmosphere for mining endeavors
- Regulatory improvements for increased investment
- Legal certainty for mining operations
- Geological accessibility
- Well-established infrastructure with extensive transportation network
- Diverse range of mineral resources
- Skilled workforce

PCH Project, Goiás, Brazil

Highlights:

- 40,963 hectares in Tocantins Structural Province, Brasília Fold Belt, Goiás, Brazil.
- Characterized by IAC REE mineralization associated with the weathered Iporá Granite.
- High-grade REE mineralization associated with Carbonatitic dykes with unprecedented TREO assay results.
- New IAC Targets being drilled and assayed
- Mining-friendly jurisdiction with well-developed infrastructure and substantial government support and initiatives.
- Supported by surrounding landowners and community.

The PCH Project Overview

- The 23-claim PCH Project spans a total of 42,932.24 hectares.
- Located in Goias State of Brazil, 410 km from Brasillia and aprox. 25 km from the town of Ipora.
- Flat easy rolling topography, with access roads and power in place.
- Local residents and communities are in favor of the development.
- The maiden NI 43-101 MRE for the PCH Project is estimated at 52.8 million tonnes (Mt) comprising 6.6 Mt Indicated resource with a grade of 2,513 ppm TREO and 46.2 Mt Inferred resource with a grade of 2,888 ppm TREO.
- MRE with significant concentrations of Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), and Terbium (Tb).
- Desorbable values from RC holes show representative preliminary desorption results with Nd_2O_3 and Pr_6O_{11} ranging from 39.7 ppm to 451.2 ppm, from 1.6% to 48.2% recovery, and Tb_4O_7 and Dy_2O_3 ranging from 5.7 ppm to 70.2 ppm, from 12.0 to 86.7% recovery.
- Quick desorption.

The PCH Project Overview

- The four New IAC zones identified (Merope, Taygeta, Maia and Electra) are being drilled using auger and assayed to test the grades and desorption result. There is potential for an additional 403 million tonnes of material.
- The new zones contain good heavy rare earth grades.
- Identification of a highgrade zone, located in the West portion of Target IV, presenting extremely high TREO grades, up to 92,000 ppm TREO and averaging 23,000 ppm TREO in its inner core.
- Only approximately 10% of the property has been explored today. Excellent potential to discover substantially more resources.
- Appia has option to earn 70% interest on the property by incurring US $10M by 2028 with right of first refusal for the balance of interest, Appia plans are to aggressively explore the property and complete a PEA and PFA advance the PCH project into development.
- Appia is seeking interest from strategic partners and investors to fast track the development of its PCH project.

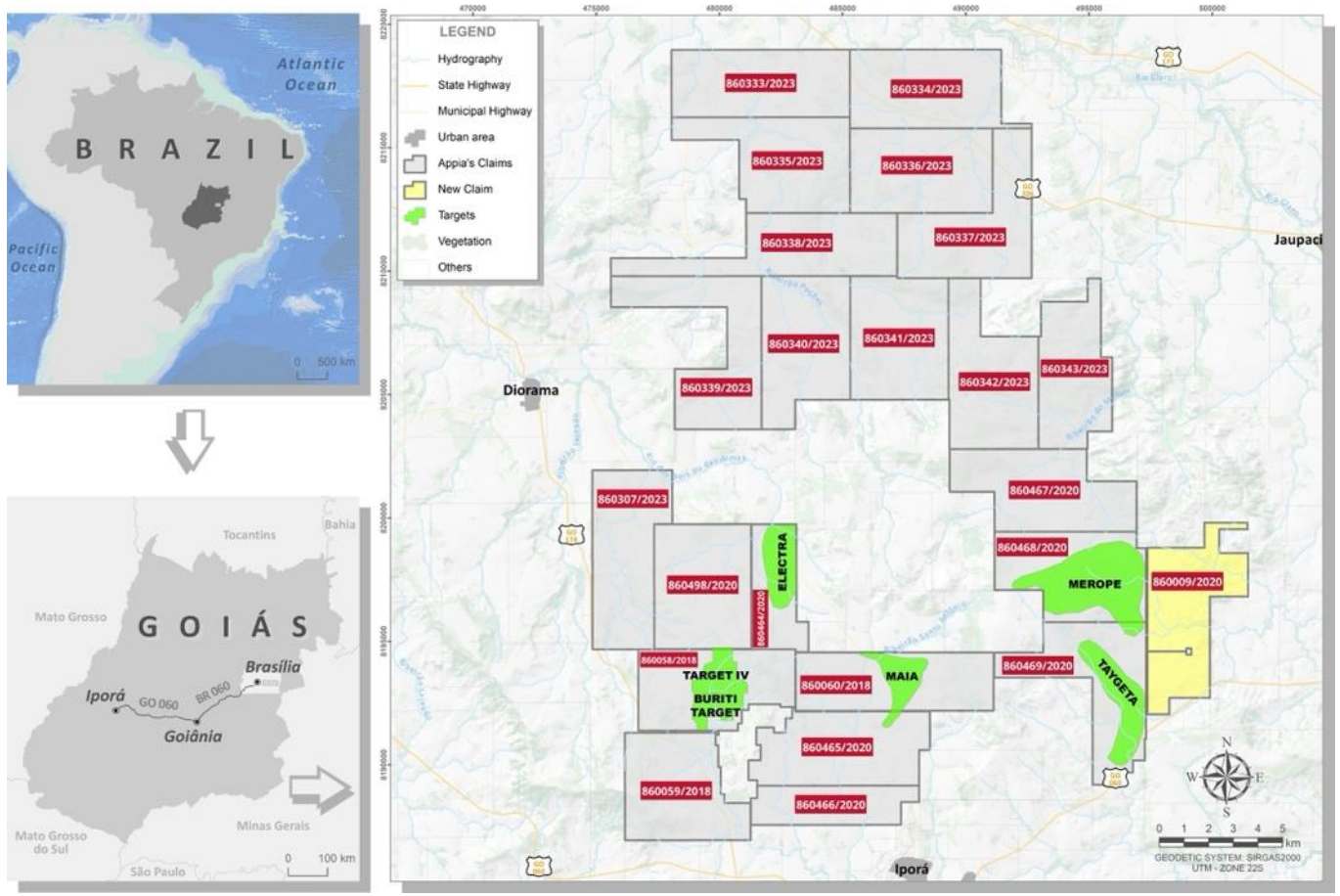
PCH REE Project: Brazil

The PCH Ionic Clay Project

- Located in the Goiás state of Brazil in the Brasilia fold belt, 216 km from Goiânia & 410 km from Brasília.
- 30 km from Iporá, ensuring access to skilled labour.
- Infrastructure includes power and water, & is easily accessible via well-developed regional roads
- The property hosts rare earths including Tb, Dy, Nd and Pr, also scandium, and cobalt
- Experienced Brazilian team.
- 70% Earn in agreement to be completed by 2028

✓ **2024 Mineral Resource Estimate on Target IV & Buriti**
- ➢ **2024 NI 43-101 on PCH REE project.**

- South of producing Serra Verde project (with an expected 900 million tonnes reserves at 1200 ppm TREO)

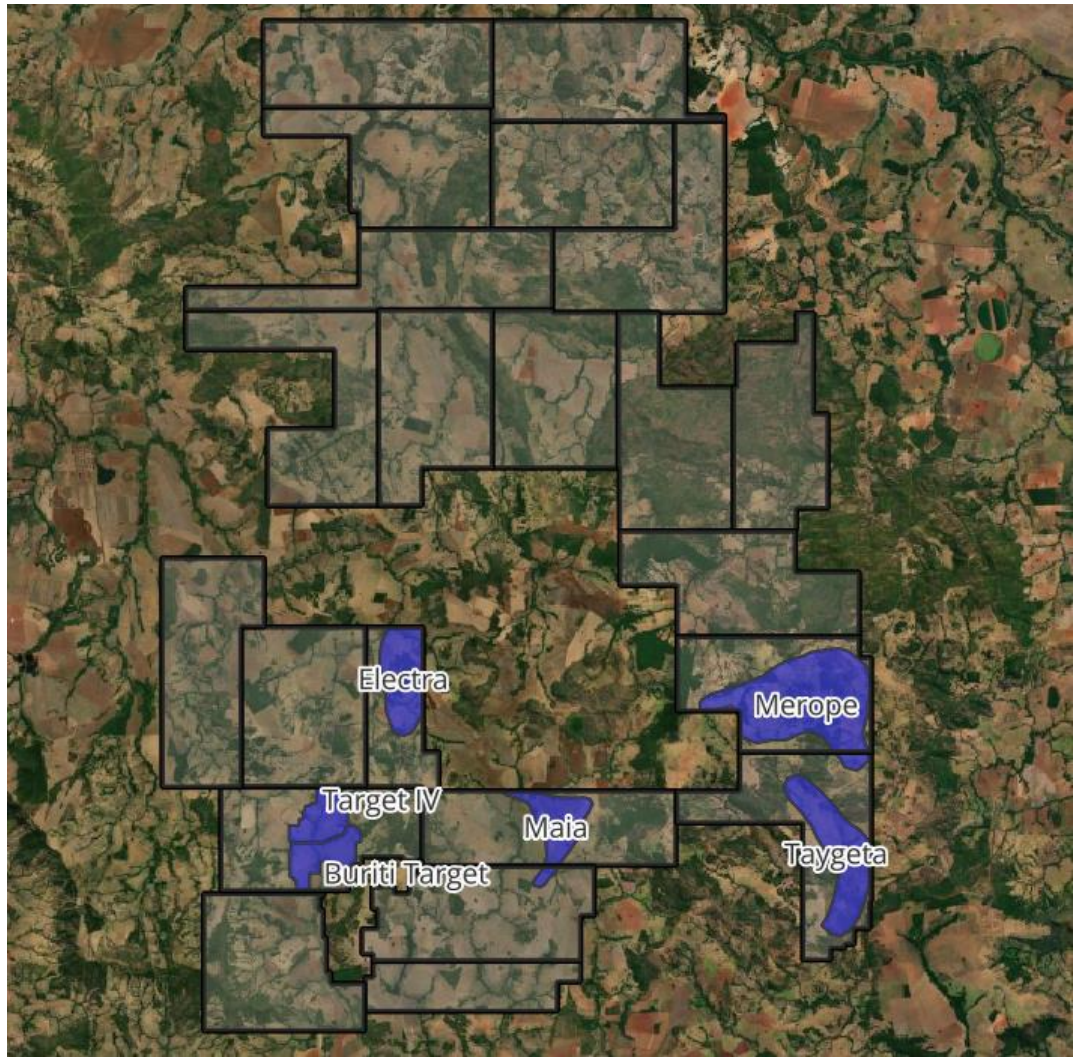


The 22-claim PCH Project spans a total of 42,932.24 hectares

PCH REE Project: Brazil

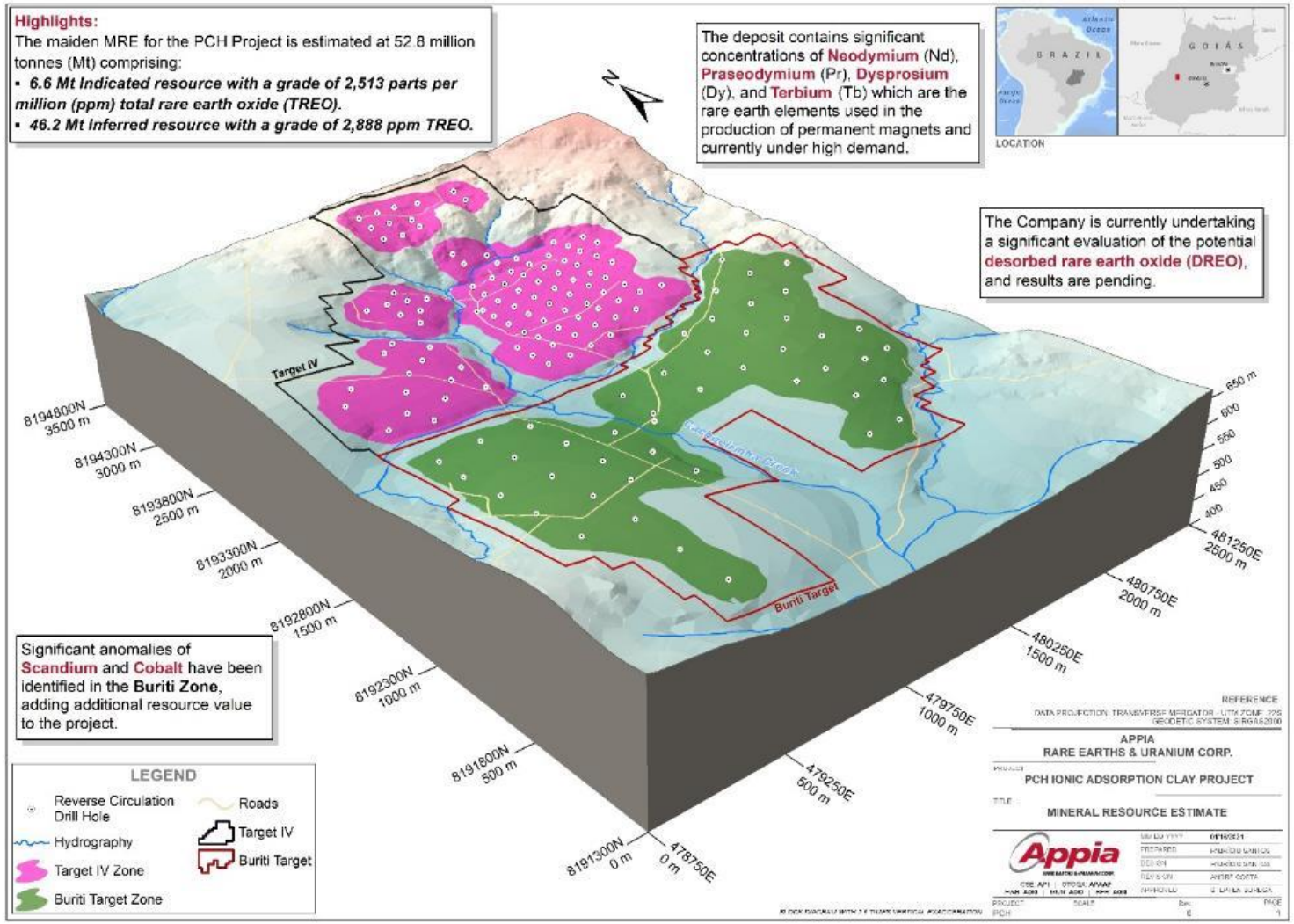
The PCH Ionic Clay Project

- The 22-claim PCH Project spans a total of 42,932.24 hectares.
- Most of the area on pastures and crops.
- Only 10% of the Claim area investigated to date.



Target IV and Buriti Zone: MRE Highlights

- The maiden NI 43-101 MRE for the PCH Project is estimated at 52.8 million tonnes (Mt) comprising:
  - **6.6 Mt Indicated resource with a grade of 2,513 ppm TREO.**
  - **46.2 Mt Inferred resource with a grade of 2,888 ppm TREO.**
- The deposit contains significant concentrations of Neodymium (Nd), Praseodymium (Pr), Dysprosium (Dy), and Terbium (Tb) which are the rare earth elements used in the production of permanent magnets and currently under high demand.



PCH Maiden NI 43-101 Mineral Resource Estimate (MRE) Project:

Mineralized Zone	Classification	Volume	SG	Tonnes	TREO	MREO	HREO	Sm_2O_3	Tb_4O_7	Dy_2O_3	Pr_6O_{11}	Nd_2O_3	Sc_2O_3	Co
		Mm^3		Mt	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Target IV	Indicated	3.3	1.97	6.6	2513	562	186	58.3	5.8	31.1	109	358	15.9	22
	Inferred	6.9	1.96	13.5	7307	1391	331	114.4	9.6	49.4	311	907	24.6	74
Buriti	Inferred	16.7	1.96	32.7	1059	259	101	29.0	3.1	17.8	45	164	68.6	127
TOTAL	**Indicated**	**3.3**	**1.97**	**6.6**	**2513**	**562**	**186**	**58.3**	**5.8**	**31.1**	**109**	**358**	**15.9**	**22**
	Inferred	**23.6**	**1.96**	**46.2**	**2888**	**591**	**168**	**54.0**	**5.0**	**27.0**	**123**	**381**	**55.7**	**111**

- The MRE has an effective date of the 1st of February 2024.
- The Qualified Person for the MRE is Mr. Yann Camus, P.Eng., an employee of SGS.
- The MRE provided in this table were estimated using current Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves, Definitions and Guidelines.
- Mineral Resources that are not Mineral Reserves have not demonstrated economic viability. Additional drilling will be required to convert Inferred and Indicated Mineral Resources to Measured Mineral Resources. There is no certainty that any part of a Mineral Resource will ever be converted into Reserves.
- All analyses used for the MRE were performed by SGS GEOSOL by ICM40B: Multi Acid Digestion / ICP OES – ICP MS and by IMS95R: Lithium Metaborate Fusion / ICP-MS.
- MRE are stated at a cut-off total NSR value of 10 US$/t. The full price list and recovery used to estimate the NSR is in Table 2. The estimated basket price of TREO is US$26.98.
- GEOVIA's WhittleTM software was used to provide an optimized pit envelope to demonstrate reasonable prospection for economic extraction. Preliminary pit optimization parameters included overall pit slope of 30 degrees, in-pit mining costs of $2.10, processing and G/A costs of $9/t, and overall mining loss and dilution of 5%. Full details of the preliminary pit-optimization parameters can be found in Table 2. The basket price and oxides price list in Table 2 are based on forward-looking pricing. These future prices are predicted based on market trends, economic forecasts, and other relevant factors. The actual prices may vary depending on changes in these factors.
- Figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- Resources are presented undiluted and in situ, constrained within a 3D model, and are considered to have reasonable prospects for eventual economic extraction.
- Bulk density values were determined based on physical test work and assumed porosities for each type of material.
- Total Rare Earth Oxides: TREO = Y2O3 + Eu2O3 + Gd2O3 + Tb2O3 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + La2O3 + Ce2O3 + Pr2O3 + Nd2O3 + Sm2O3
- Magnetic Rare Earth Oxides: MREO = Sm2O3 + Tb4O7 + Dy2O3 + Pr6O11 + Nd2O3
- Heavy Rare Earth Oxides: HREO = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3
- The MRE may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

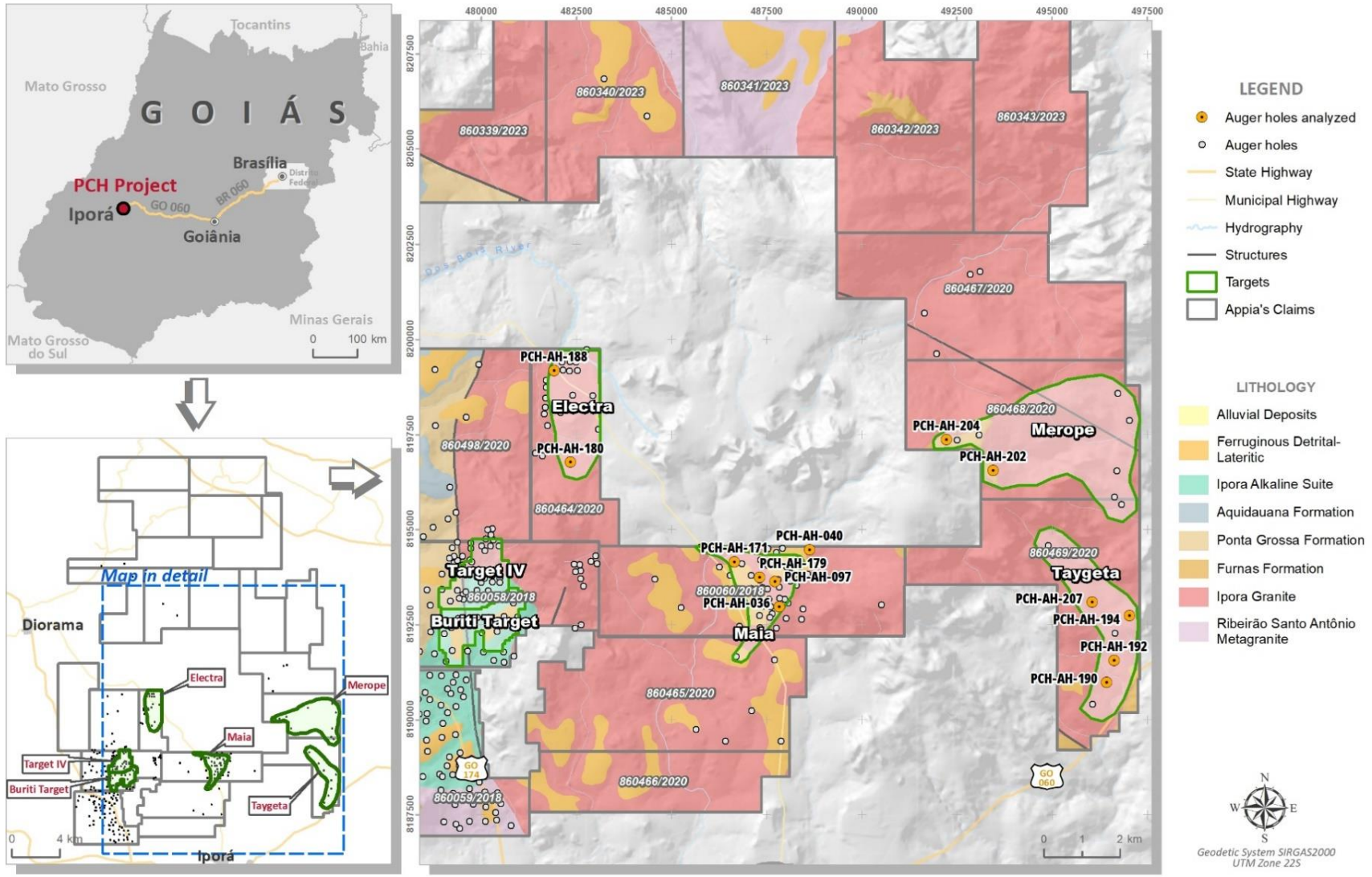
Preliminary Desorption Results From Target IV PCH

- **Desorbable values from RC holes located in the weathered portion of the Ipora Granite show representative preliminary desorption results with Nd2O3 and Pr6O11 ranging from 39.7 ppm to 451.2 ppm, from 1.6% to 48.2% recovery, and Tb4O7 and Dy2O3 ranging from 5.7 ppm to 70.2 ppm, from 12.0 to 86.7% recovery.**

Holeid	Interval		TREO	TREO D	%TREO D	HREO	HREO D	%HREOD	NdPr	NdPr D	%NdPr D	DyTb	DyTb D	%DyTb D
	From	To		Desorbed	TREOD/TREO*100		Desorbed	HREOD/HREO*100		Desorbed	NdPrD/NdPr*100		Desorbed	DyTbD/DyTb*100
	m	m	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
PCH-RC-001	3.0	4.0	4505.8	**495.1**	11.0	724.6	**147.4**	**20.3**	889.4	120.4	13.5	124.9	**20.3**	16.3
PCH-RC-001	5.0	6.0	4215.9	**760.9**	18.0	806.6	**266.9**	**33.1**	822.9	169.7	**20.6**	141.6	**37.9**	**26.8**
PCH-RC-001	6.0	7.0	3404.6	**488.5**	14.3	815.9	**193.4**	**23.7**	574.3	99.6	17.3	121.6	**26.1**	**21.5**
PCH-RC-007	10.0	11.0	2214.6	**338.9**	15.3	362.8	**136.0**	**37.5**	471.0	74.1	15.7	46.1	15.8	**34.3**
PCH-RC-008	5.0	6.0	2545.4	**858.1**	**33.7**	453.0	**241.8**	**53.4**	508.0	**245.0**	**48.2**	71.3	**35.2**	**49.4**
PCH-RC-008	6.0	7.0	7940.4	**1617.8**	**20.4**	1523.5	**471.8**	**31.0**	1720.5	**451.2**	**26.2**	249.7	**70.2**	**28.1**
PCH-RC-008	7.0	8.0	5708.1	**1184.3**	**20.7**	1146.6	**359.4**	**31.3**	1180.0	**318.2**	**27.0**	181.6	**51.3**	**28.3**
PCH-RC-008	8.0	9.0	2645.2	**648.7**	**24.5**	483.6	**206.3**	**42.7**	535.4	168.5	**31.5**	72.4	**29.2**	**40.4**
PCH-RC-008	9.0	10.0	5741.7	**514.3**	9.0	990.8	**171.1**	17.3	908.1	122.2	13.5	153.9	**24.1**	15.6
PCH-RC-023	9.0	10.0	2163.1	215.2	9.9	236.7	**80.1**	**33.8**	416.3	39.7	9.5	37.9	7.8	**20.6**
PCH-RC-029	3.0	4.0	1548.1	256.3	16.6	93.7	45.7	**48.8**	263.3	81.8	**31.1**	15.5	5.8	**37.6**
PCH-RC-034	9.0	10.0	5357.4	**398.6**	7.4	604.5	**138.5**	**22.9**	1089.0	108.8	10.0	80.6	16.5	**20.4**
PCH-RC-037	4.0	5.0	3166.1	178.9	5.7	96.8	52.6	**54.3**	499.6	48.6	9.7	12.6	6.2	**49.7**
PCH-RC-043	3.0	4.0	2046.5	**380.9**	18.6	70.6	64.3	**91.1**	417.9	133.3	**31.9**	9.2	8.0	**86.7**
PCH-RC-047	6.0	7.0	1870.7	**333.8**	17.8	298.2	**105.7**	**35.5**	425.8	109.8	**25.8**	38.7	13.1	**33.8**
PCH-RC-047	7.0	8.0	2224.2	212.8	9.6	132.1	**70.2**	**53.2**	417.7	66.7	16.0	18.5	8.1	**43.7**
PCH-RC-050	3.0	4.0	1059.0	**307.6**	**29.0**	117.1	**94.1**	**80.4**	245.6	97.9	**39.9**	16.3	11.9	**73.4**
PCH-RC-050	4.0	5.0	1262.0	229.2	18.2	160.0	**82.4**	**51.5**	218.0	69.1	**31.7**	21.1	8.7	**41.3**
PCH-RC-050	5.0	6.0	1236.2	294.2	**23.8**	149.9	**98.9**	**65.9**	276.6	91.2	**33.0**	19.5	12.5	**64.1**
PCH-RC-051	4.0	5.0	9259.6	**560.1**	6.0	215.0	60.7	**28.2**	2042.7	**218.6**	10.7	41.1	8.1	19.6
PCH-RC-051	5.0	6.0	17538.4	**617.5**	3.5	422.1	**70.7**	16.7	3698.9	**242.0**	6.5	73.0	9.3	12.8
PCH-RC-051	7.0	8.0	7110.6	**630.8**	8.9	202.9	**91.2**	**44.9**	1557.1	**220.0**	14.1	31.1	10.4	**33.4**
PCH-RC-060	2.0	3.0	3001.4	**393.6**	13.1	122.1	49.8	**40.8**	631.5	106.8	16.9	20.6	5.9	**28.7**
PCH-RC-066	8.0	9.0	39881.2	**637.6**	1.6	1299.9	**302.9**	**23.3**	8089.2	126.7	1.6	166.9	**20.1**	12.0

Phase II Exploration: Auger Drilling and Assaying Update on New Targets

- The New IAC zones identified (Merope, Taygeta, Maia and Electra) are being drilled using auger and assayed to test the grades and desorption result.
- There is potential for an additional 403 million tonnes of material.
- Desorbability results were conducted using Ammonium Sulfate at 0.5M, pH2, for 20 minutes.
- Desorbability testing at pH4 is currently underway.



Phase II Exploration: Auger Drilling and Assaying Update on New Targets

The IAC style of mineralization is related to the Ipora Granite, and Phase II exploratory auger drilling is under way. Preliminary recovery results include:

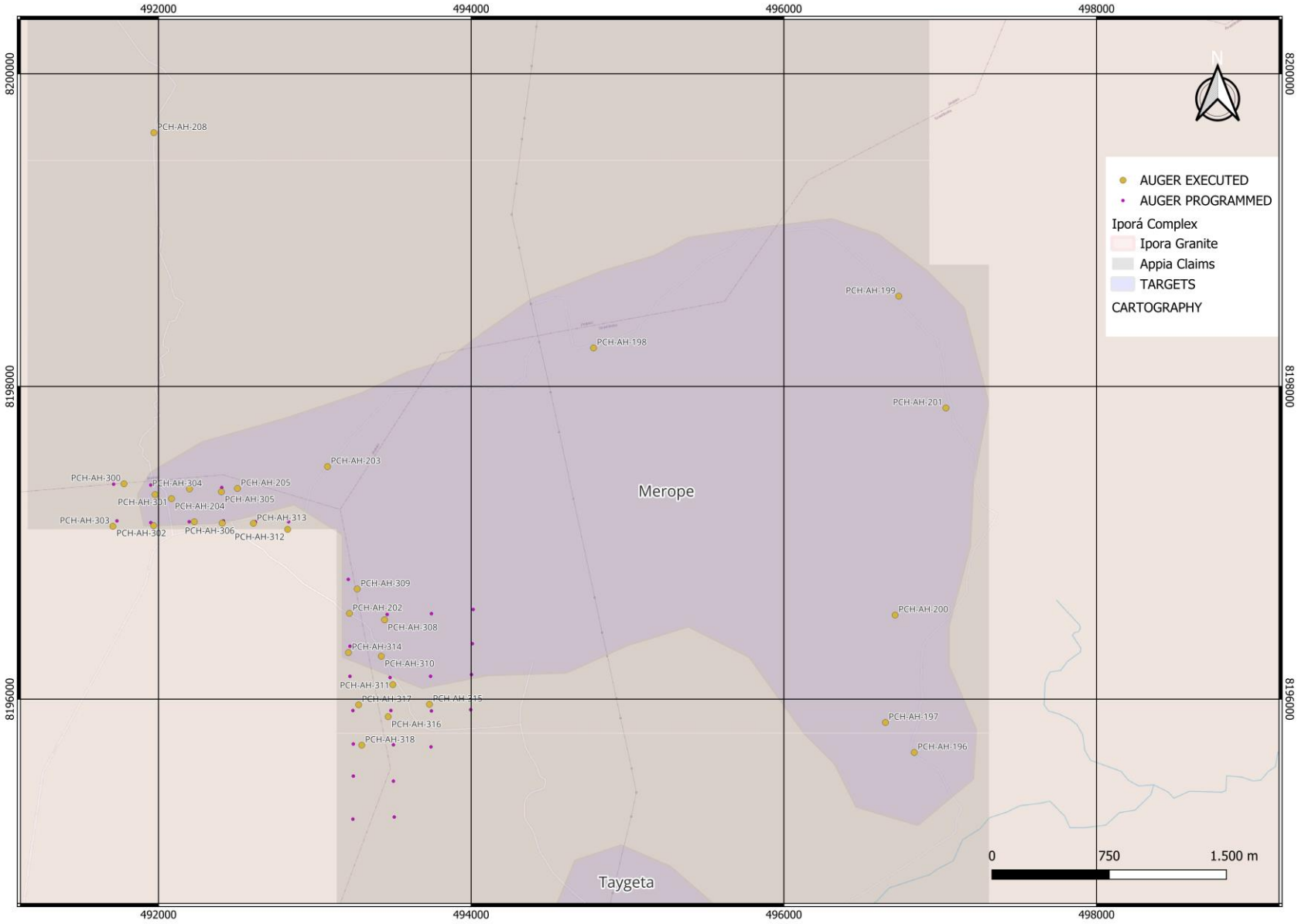
- Maia
  - TREO - up to 36.79%
  - HREO - up to 45.9%
  - NdPr – up to 64.01%
  - DyTb - up to 48.49%
- Merope
  - TREO - up to 58.63%
  - HREO - up to 63.50%
  - NdPr - up to 84.92%
  - DyTb - up to 71.65%
- Electra
  - TREO - up to 28.44%
  - HREO - up to 41.66%
  - NdPr - up to 52.53%
  - DyTb - up to 37.54%
- Taygeta
  - TREO - up to 46.70%
  - HREO - up to 50.83%
  - NdPr - up to 72.36%
  - DyTb - up to 55.47%

				GRADE				AMOUNT DESORBED				AMOUNT EXTRACTED AS %			
HOLEID	FROM	TO	TARGET	TREO	HREO	NdPr	TbDy	TREO D	HREO D	NdPr D	TbDy D	TREO REC	HREO REC	NdPr REC	TbDy REC
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
PCH-AH-036	0	10	MAIA	1129.63	261.10	252.46	32.72	431.77	127.83	164.06	17.09	29.81	35.66	54.89	38.23
PCH-AH-036	3	10	MAIA	1426.11	340.01	339.21	42.85	591.54	178.59	227.16	23.80	**36.79**	**45.75**	**64.01**	**47.87**
PCH-AH-040	0	8	MAIA	648.25	191.30	80.56	20.63	156.33	74.50	36.81	8.33	22.17	33.80	42.25	35.93
PCH-AH-040	3	8	MAIA	728.29	238.74	99.71	25.74	210.59	107.23	49.16	11.70	**26.63**	**43.40**	**47.54**	**44.01**
PCH-AH-097	0	7	MAIA	747.13	216.67	135.33	25.40	209.61	80.98	62.73	10.22	26.57	34.55	45.31	37.57
PCH-AH-097	2	6	MAIA	867.93	247.32	160.17	29.45	288.62	113.77	88.58	14.30	**33.25**	**45.92**	**55.25**	**48.49**
PCH-AH-171	0	8	MAIA	571.16	94.58	115.55	12.87	116.33	33.92	37.16	4.26	19.30	32.07	30.85	30.37
PCH-AH-171	3	8	MAIA	670.28	116.57	149.87	16.26	152.47	48.78	49.78	5.99	**22.57**	**41.89**	**33.02**	**37.35**
PCH-AH-179	0	5	MAIA	935.73	128.36	180.38	17.17	126.56	37.16	47.37	4.77	13.14	25.65	27.29	25.37
PCH-AH-179	2	5	MAIA	1198.45	165.47	253.11	22.72	171.15	53.55	65.40	6.75	**14.36**	**31.23**	**26.32**	**28.89**
PCH-AH-180	0	5	ELECTRA	1584.93	182.62	330.94	24.01	409.48	69.88	160.80	8.32	24.91	36.44	47.05	33.36
PCH-AH-180	1	5	ELECTRA	1720.49	200.98	376.92	26.57	483.72	83.11	191.75	9.82	**28.44**	**41.66**	**52.53**	**37.54**
PCH-AH-188	0	8	ELECTRA	1048.68	138.60	208.18	18.29	150.32	49.60	45.01	5.55	13.53	29.55	23.48	26.60
PCH-AH-188	3	8	ELECTRA	1365.02	175.56	293.77	23.76	210.54	73.52	63.40	8.09	**15.81**	**40.06**	**25.22**	**34.29**
PCH-AH-190	0	5	TAYGETA	1250.09	783.64	138.85	74.43	585.70	364.59	89.54	52.26	40.47	39.92	54.76	47.13
PCH-AH-190	1	5	TAYGETA	1479.23	924.81	167.72	88.74	719.16	449.21	110.15	64.74	**46.70**	**46.92**	**60.88**	**55.47**
PCH-AH-192	0	4	TAYGETA	446.40	256.73	37.63	20.54	140.61	92.21	20.87	7.21	29.63	33.66	53.24	33.16
PCH-AH-192	1	4	TAYGETA	495.24	283.81	41.56	22.74	172.35	114.06	25.36	8.80	**34.46**	**39.81**	**61.46**	**38.43**
PCH-AH-194	0	6	TAYGETA	779.49	195.64	139.76	21.55	246.28	56.24	82.76	6.13	29.62	25.89	59.47	26.16
PCH-AH-194	3	6	TAYGETA	1016.71	248.15	216.17	28.13	385.07	92.15	133.14	9.78	**39.57**	**37.72**	**67.94**	**35.97**
PCH-AH-207	0	9	TAYGETA	906.93	228.59	156.48	24.25	354.82	98.03	107.81	10.79	36.56	39.13	65.62	40.72
PCH-AH-207	3	9	TAYGETA	1052.57	263.71	199.12	28.24	470.57	134.59	143.41	14.68	**44.70**	**50.83**	**72.36**	**51.81**
PCH-AH-202	0	8	MEROPE	1665.73	1051.30	166.41	103.93	897.75	617.76	135.97	70.32	50.25	56.20	73.86	60.35
PCH-AH-202	3	8	MEROPE	2336.07	1521.13	233.43	149.50	1316.28	916.37	199.32	105.46	**58.63**	**63.50**	**84.92**	**71.65**
PCH-AH-204	0	6	MEROPE	1062.45	612.14	135.38	63.79	572.32	369.57	99.69	36.31	46.53	51.90	65.74	48.40
PCH-AH-204	2	6	MEROPE	1334.53	787.31	177.12	81.67	775.57	507.67	135.23	49.86	**53.61**	**59.42**	**71.03**	**55.82**

*Total Rare Earth Oxides: TREO = Y2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3
*Heavy Rare Earth Oxides: HREO = Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3
*NdPr = Nd2O3+Pr6O11
*DyTb = Dy2O3+Tb4O7
*Element to Oxide Conversion Factor - Cerium CeO2 1.2284,, Dysprosium Dy2O3 1.1477, Erbium Er2O3 1.1435, Europium Eu2O3 1.1579, Gadolinium Gd2O3 1.1526, Holmium Ho2O3 1.1455, Lanthanum La2O3 1.1728, Lutetium Lu2O3 1.1371, Neodymium Nd2O3 1.1664, Praseodymium Pr6O11 1.2082, Samarium Sm2O3 1.1596, Terbium Tb2O3 1.1510, Terbium Tb4O7 1.1762, Thulium Tm2O3 1.1421, Yttrium Y2O3 1.2699, Ytterbium Yb2O3 1.1387
* ppm=parts per million and D=the desorbed Amount
* Desorbability results were conducted using Ammonium Sulfate at 0.5M, pH2, for 20 minutes.

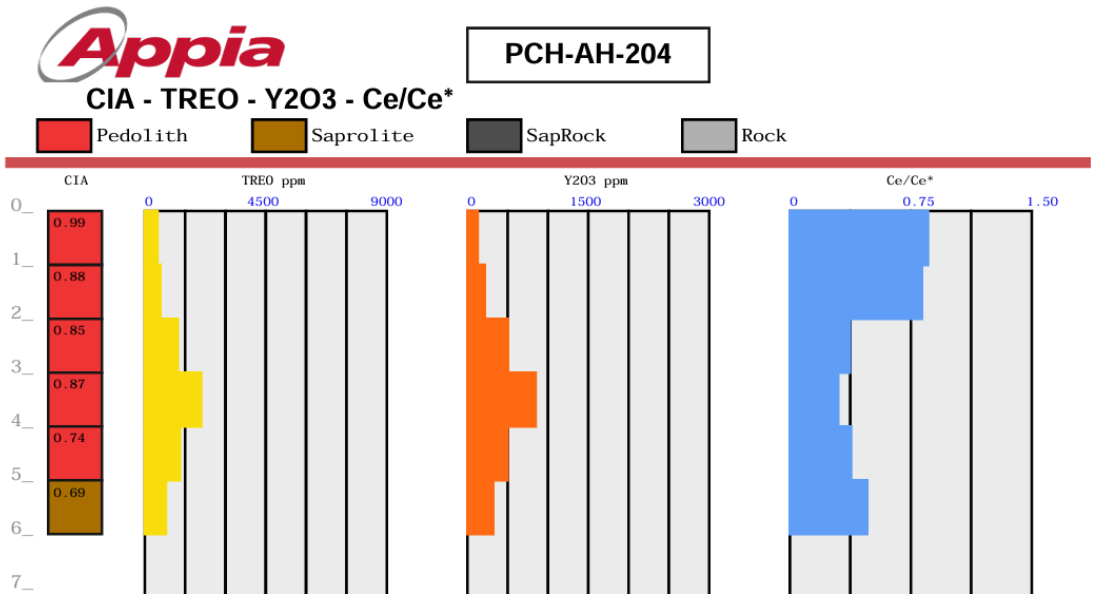
Phase II Exploration Targets : Merope

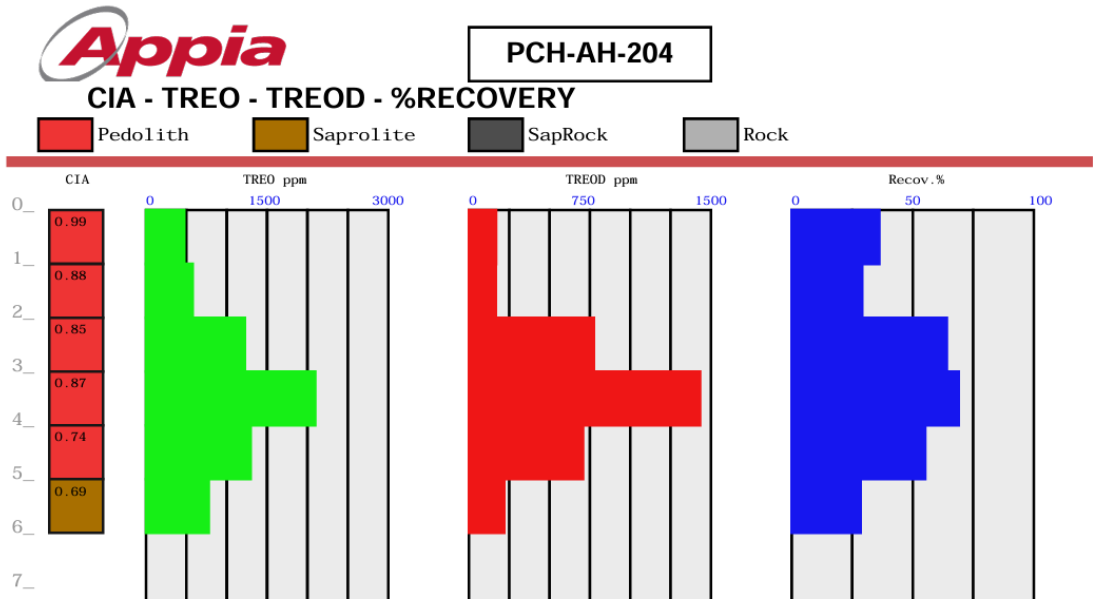
- The Merope target covers an area of 1,134 hectares.
- **204 million tonnes of additional potential**
- The grade distribution signature found at depth in the auger drill holes is compatible with the pattern commonly found on IAC REE deposits.



Phase II Exploration Targets : Merope

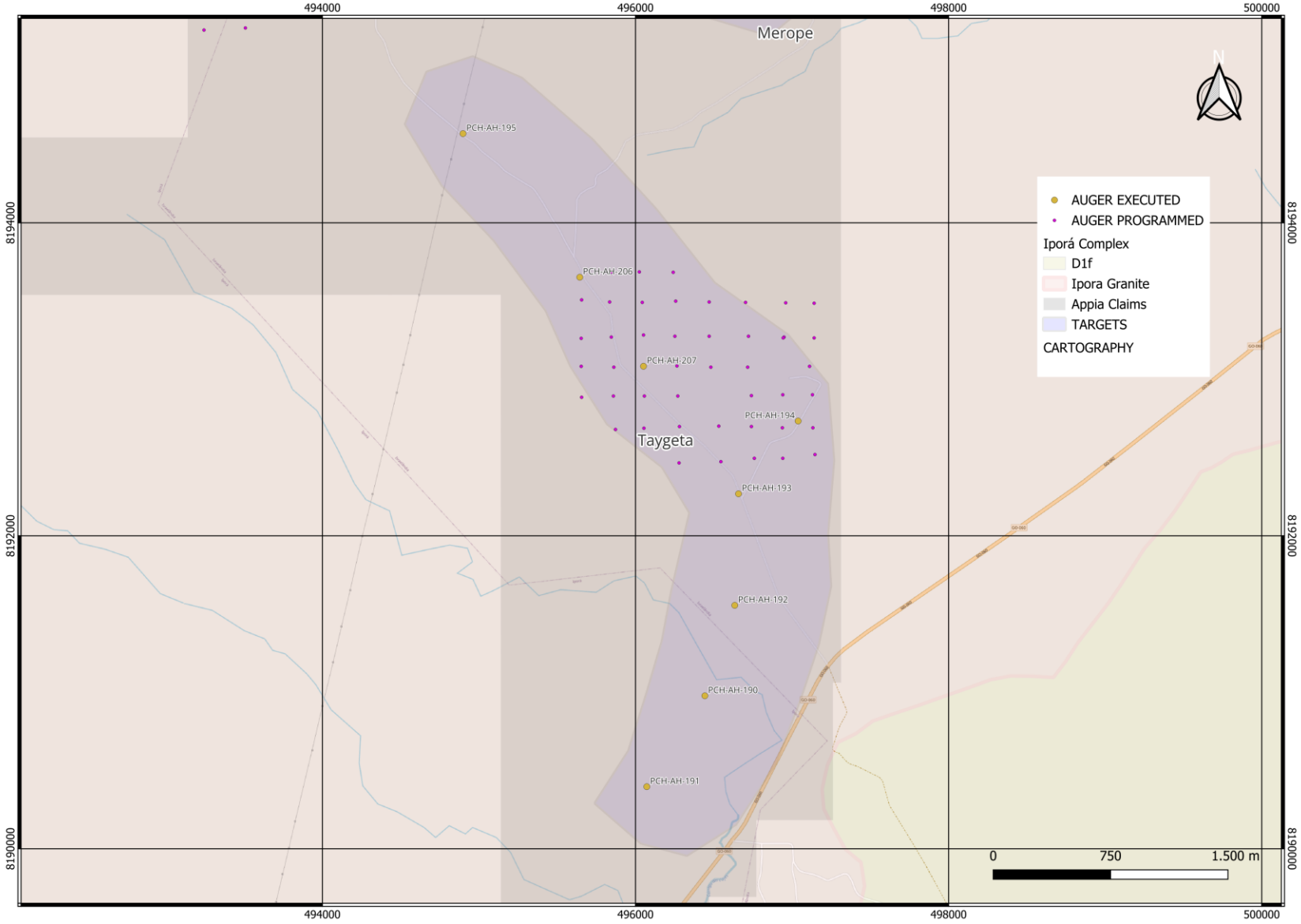
- Assay results showed high concentrations of Neodymium + Praseodymium and Dysprosium + Terbium associated with the boundary of Pedolith and saprolite.
- This is the main characteristic of an IAC REE mineralization.





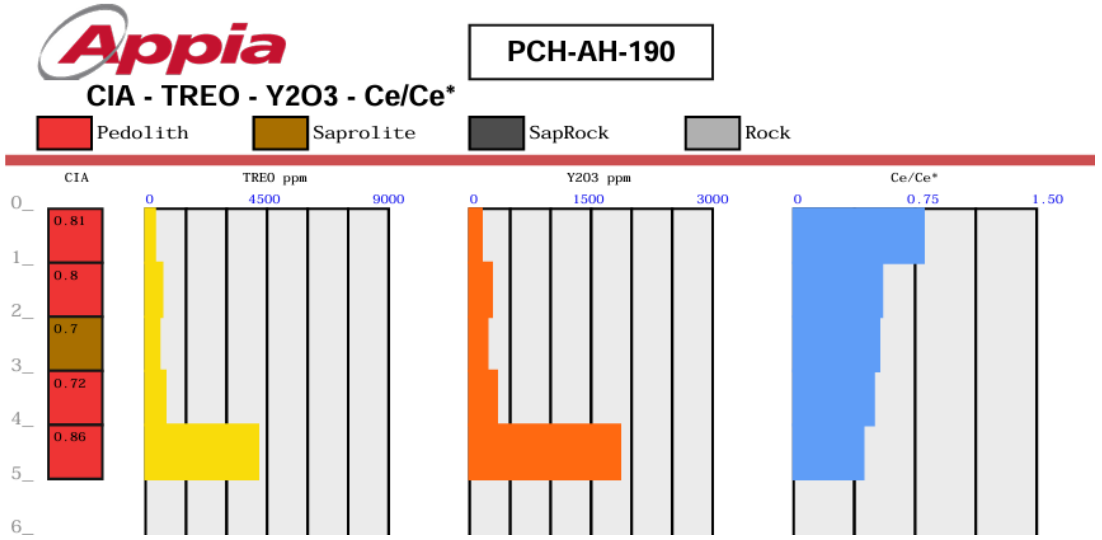
Phase II Exploration Targets : Taygeta

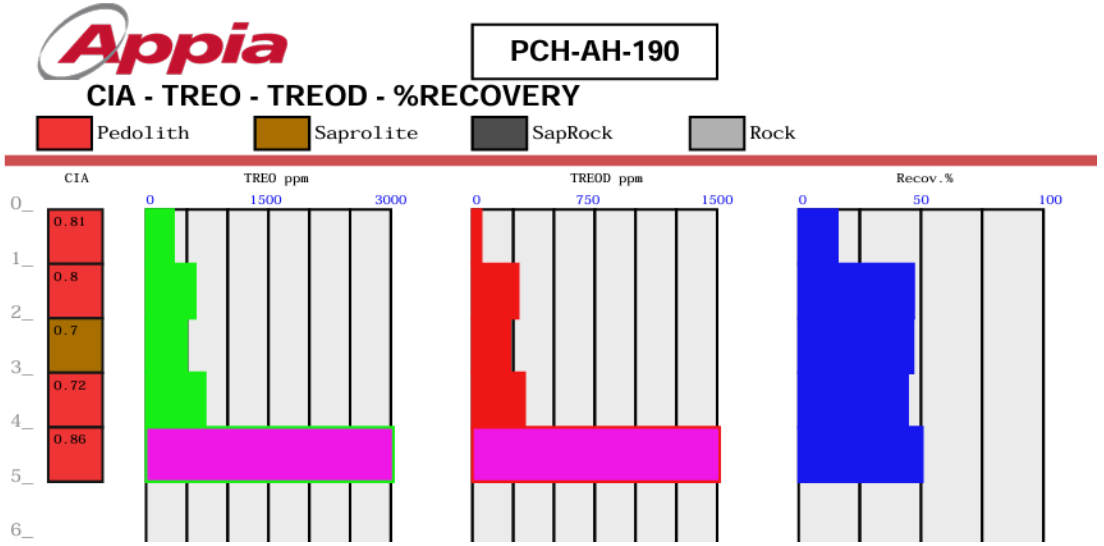
- The Taygeta target covers an area of 546 hectares.
- **98 million tonnes of potential material**
- The grade distribution signature found at depth in the auger drill holes is compatible with the pattern commonly found on IAC REE deposits.



Phase II Exploration Targets : Taygeta

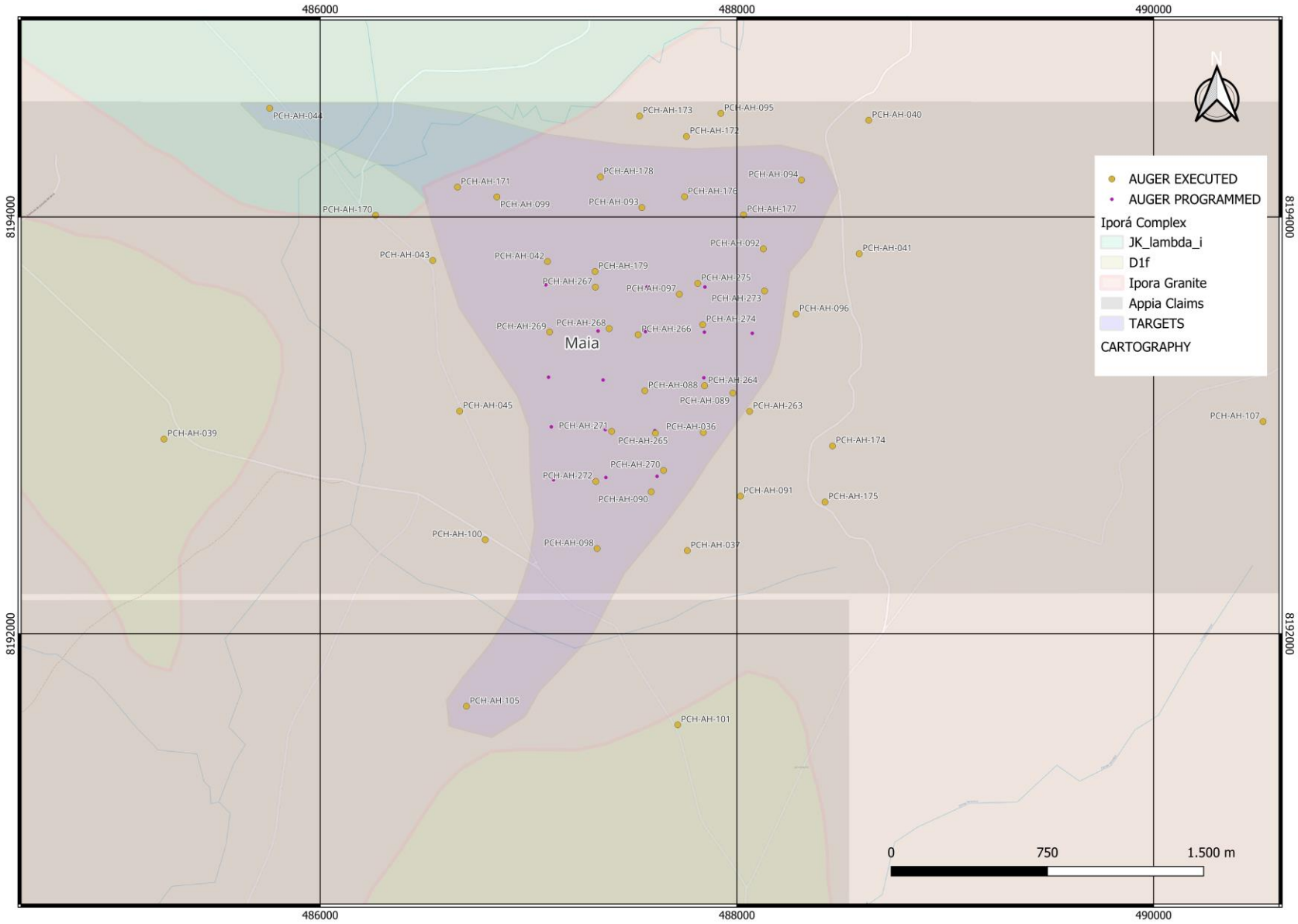
- Assay results showed high concentrations of Neodymium + Praseodymium and Dysprosium + Terbium associated with the boundary of Pedolith and saprolite.
- This is the main characteristic of an IAC REE mineralization.





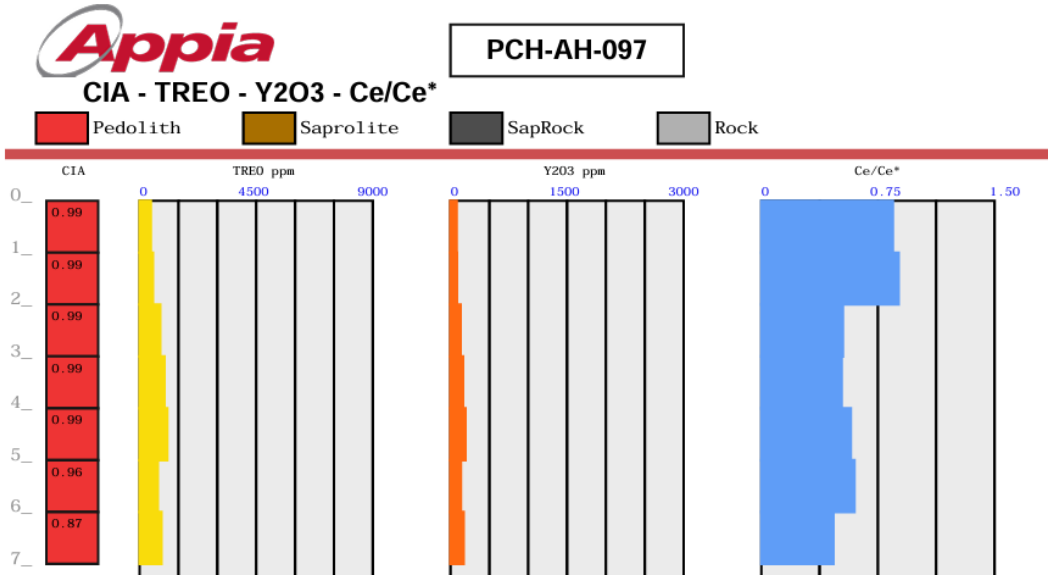
Phase II Exploration Targets : Maia

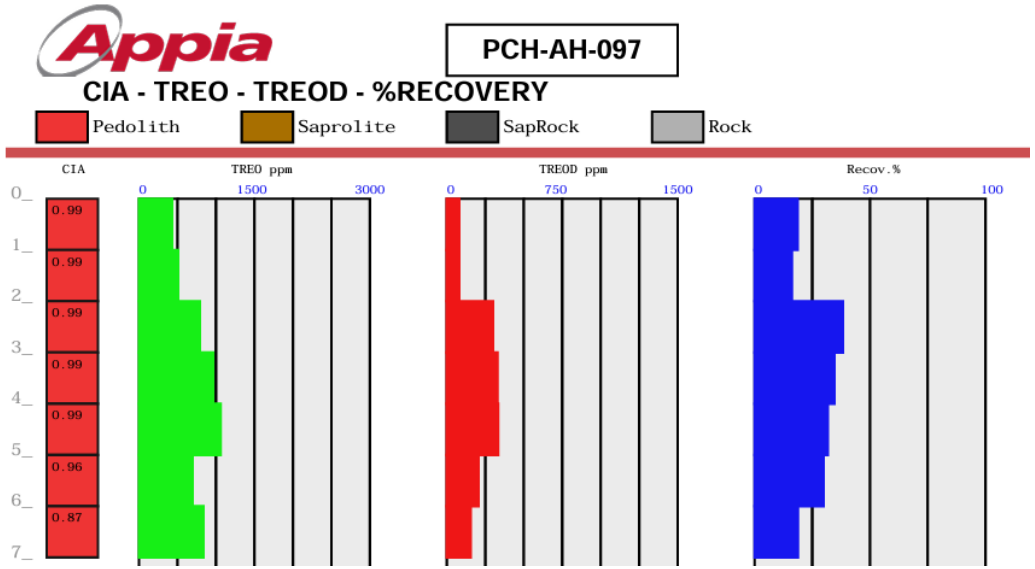
- The Maia target covers an area of 321 hectares.
- **57 million tonnes of potential material**
- The grade distribution signature found at depth in the auger drill holes is compatible with the pattern commonly found on IAC REE deposits.



Phase II Exploration Targets : Maia

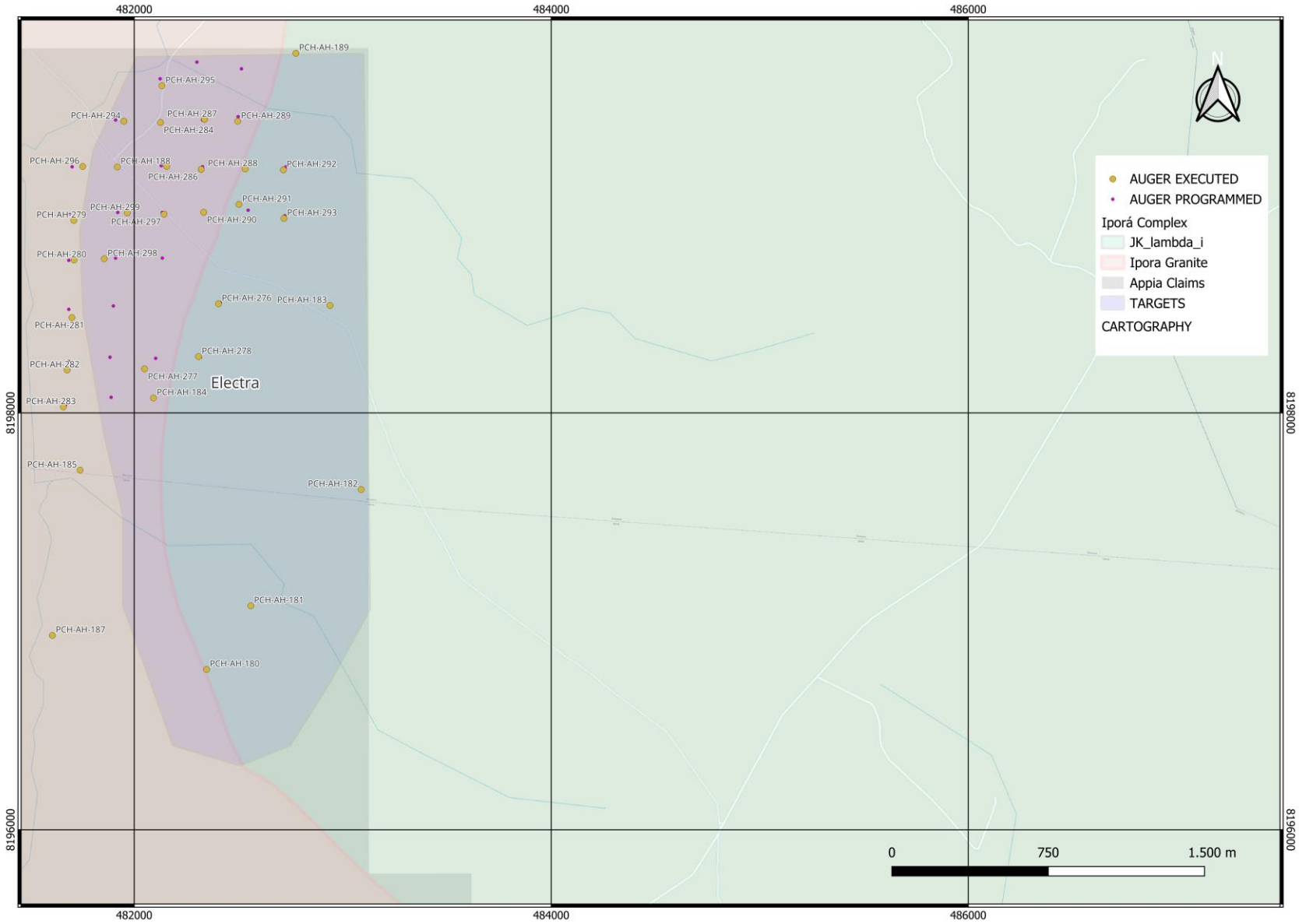
- Assay results showed high concentrations of Neodymium + Praseodymium and Dysprosium + Terbium associated with the boundary of Pedolith and saprolite.
- This is the main characteristic of an IAC REE mineralization.





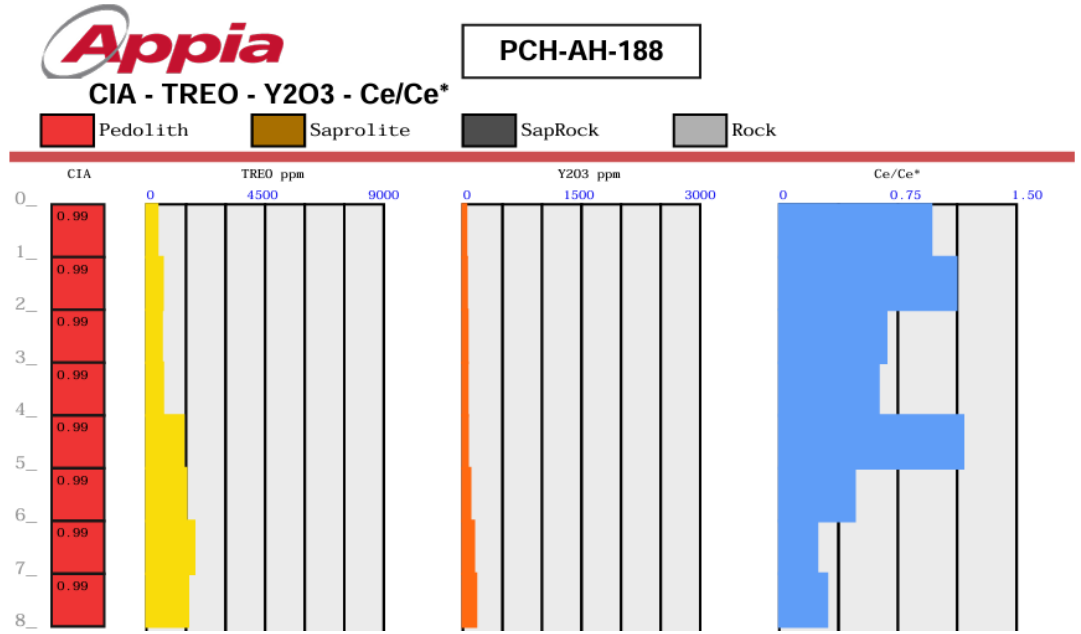
Phase II Exploration Targets : Electra

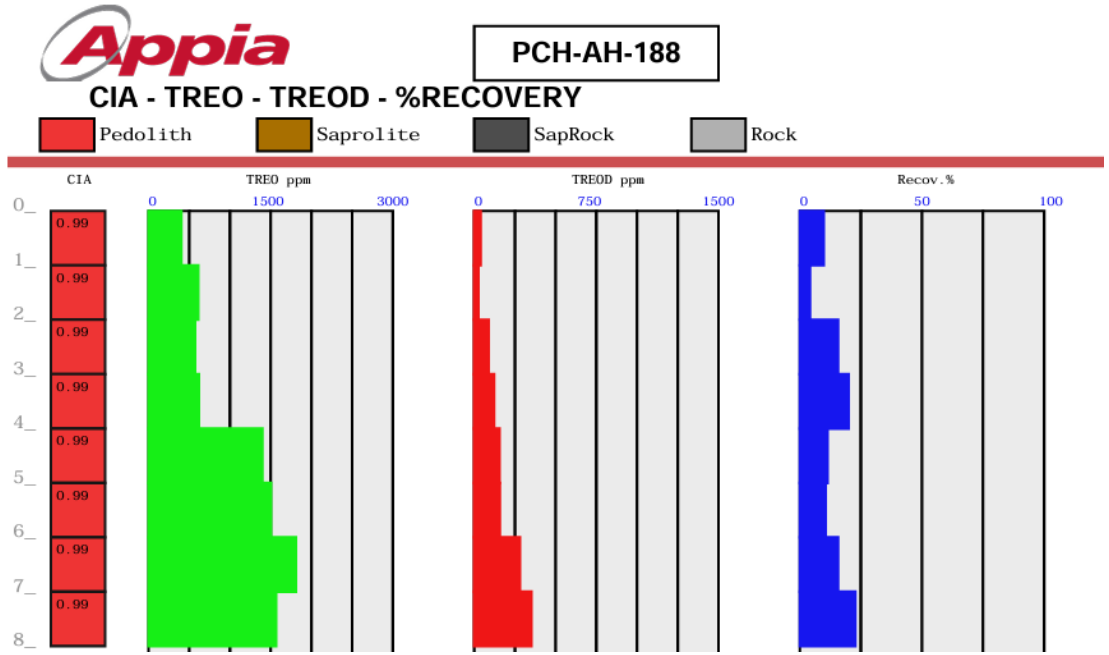
- The Electra target covers an area of 394 hectares.
- **71 million tonnes of potential materials.**
- The grade distribution signature found at depth in the auger drill holes is compatible with the pattern commonly found on IAC REE deposits.



Phase II Exploration Targets : Electra

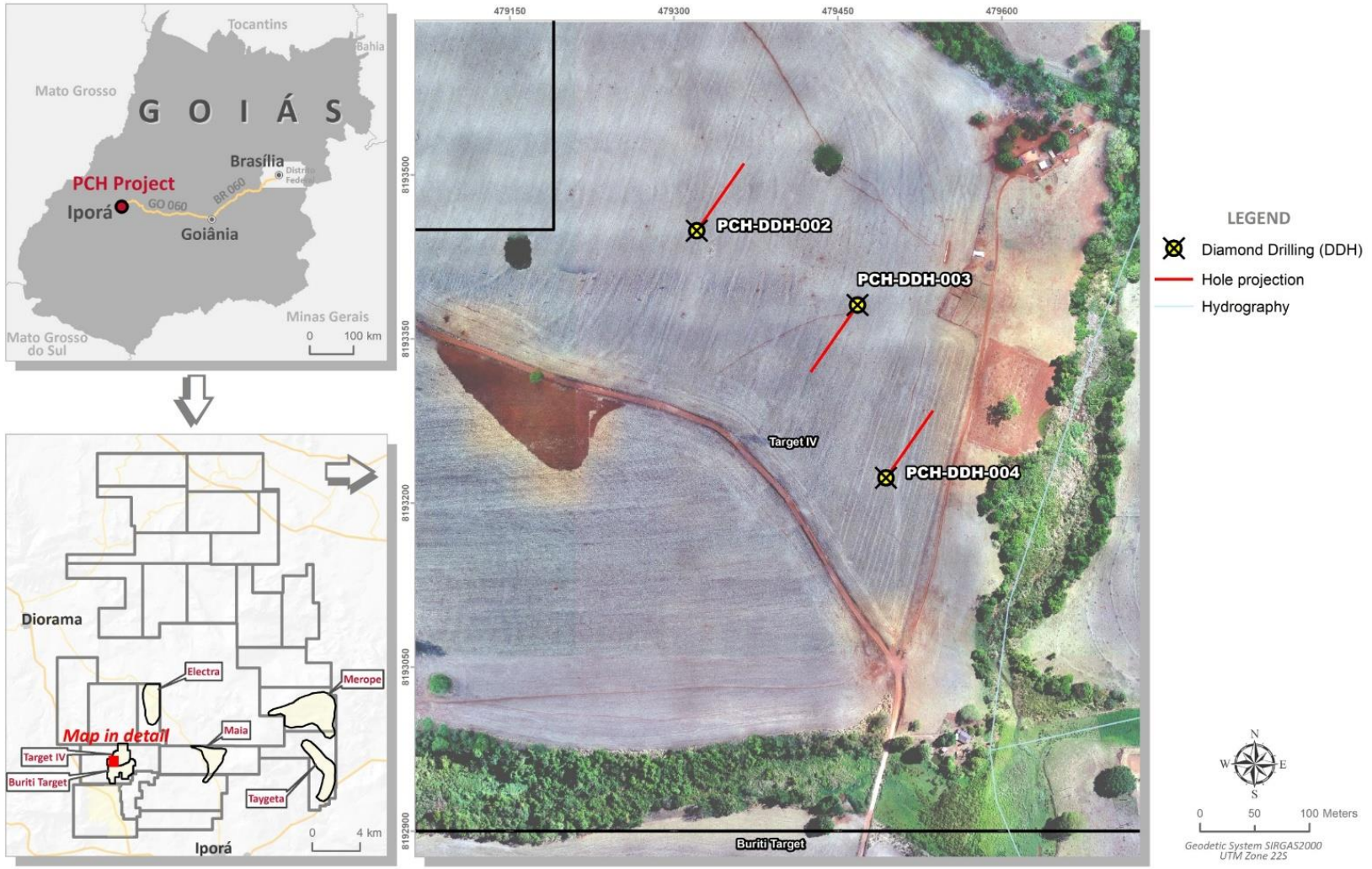
- Assay results showed high concentrations of Neodymium + Praseodymium and Dysprosium + Terbium associated with the boundary of Pedolith and saprolite.
- This is the main characteristic of an IAC REE mineralization.



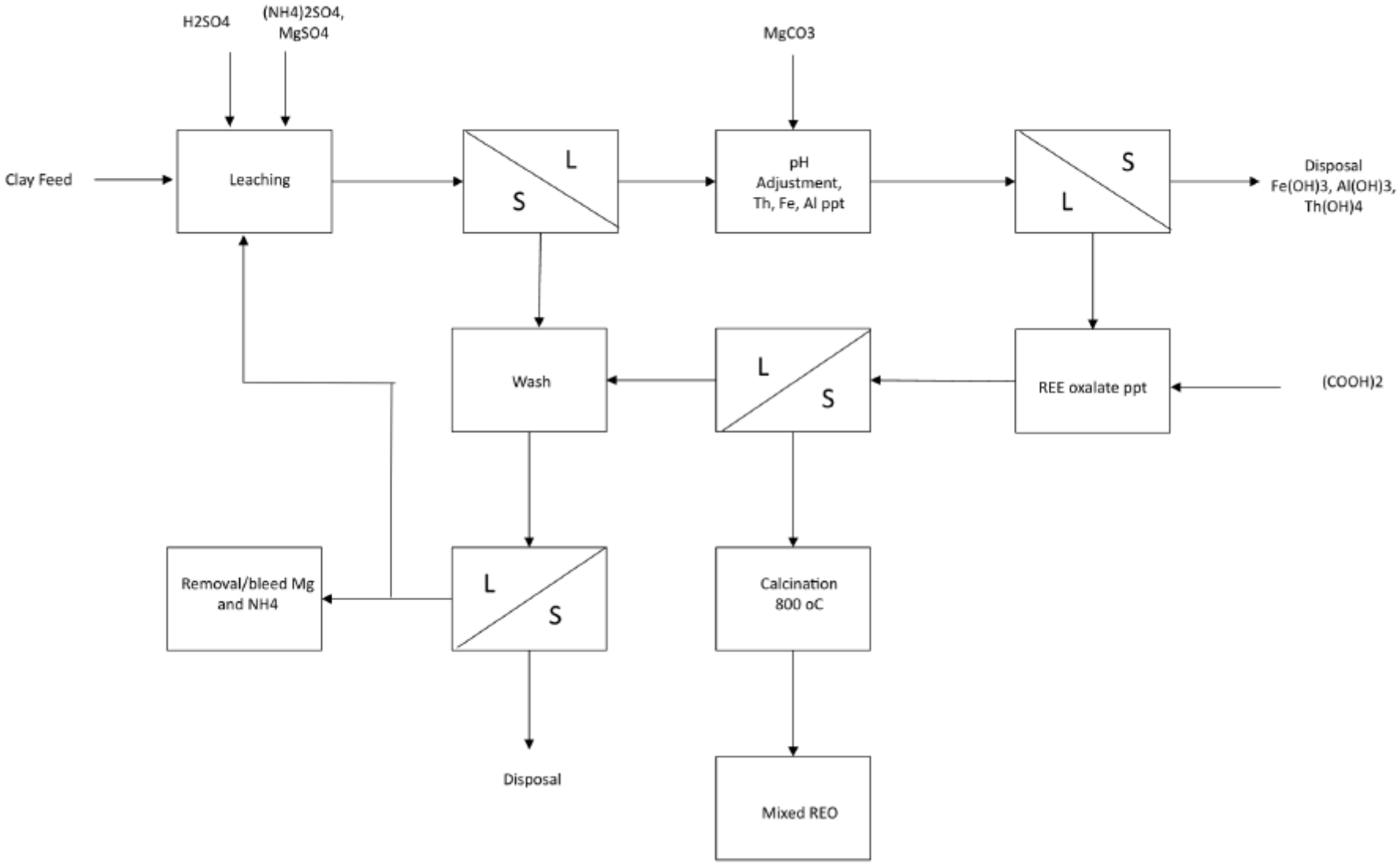


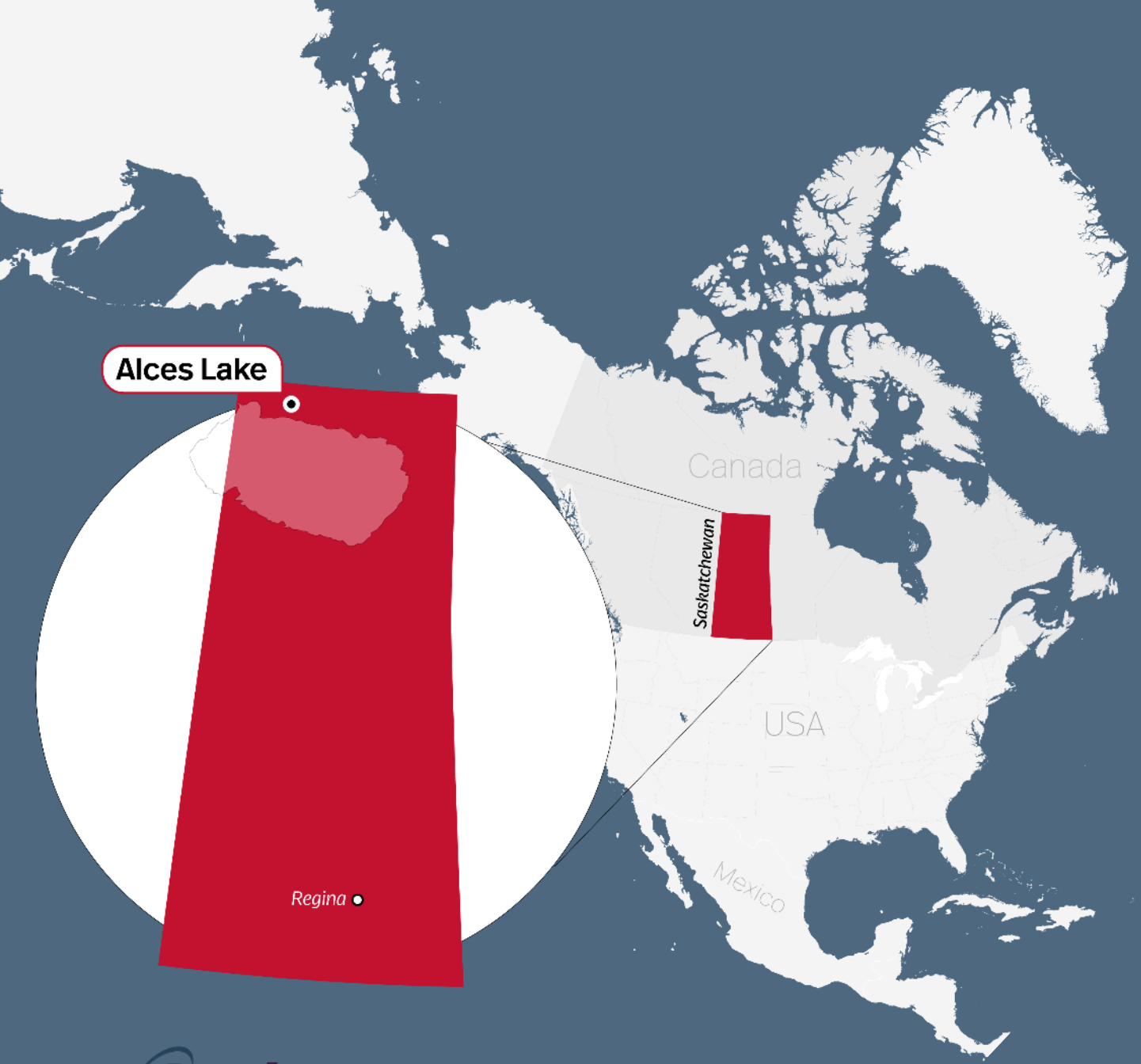
Highgrade Zone

- The highgrade zone, located in the West portion of Target IV, presents extremely high TREO grades, up to 92,000 ppm TREO and averaging 23,000 ppm TREO in its inner core, associated with a carbonatitic breccia intrusion/dike.
- The carbonatite is open in depth and a diamond drill program is underway.
- Location of PCH-DDH-002 (in progress) and programed location of PCH-DDH-003 and PCH-DDH-004 drillholes.



Schematic Generic IAC Flowsheet





Alces Lake Project, Saskatchewan, Canada

Alces Lake REE Project: Current Exploration

Resource Characteristics:

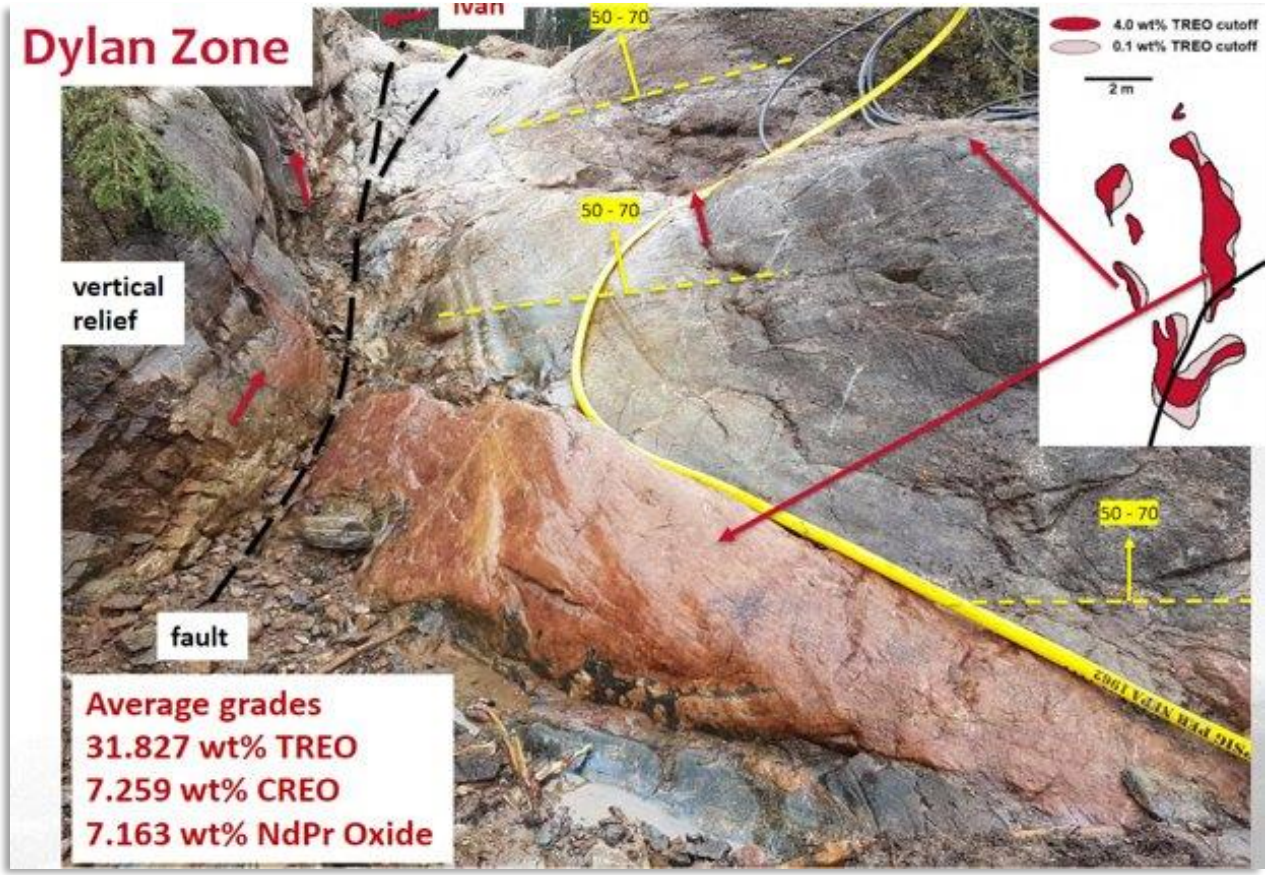
- World-class critical REE with grades up to 50% Total Rare Earths Oxide (TREO) plus gallium.
- Extensive high-grade monazite mineralization.
- Surface and near-surface showings/prospects of up to 80% coarse-grained monazite within pegmatites.
- Simple mineralogy - metallurgical testing confirms processing potential like other producing mines.

Exploration and Discoveries:

- Multiple zones of REE discoveries along geological strike, on sub-parallel trends, and with sub-surface zones open in all directions.
- Recent work: 40 drill holes assessing two new zones, Jesse and the Alces Lake Fold. Expanding the previously discovered WRCB and Magnet Ridge zones.
- Planned work for 2025 diamond drilling campaign.

Geographical and Regulatory Context:

- Located in Saskatchewan's prolific Athabasca Basin: the "Most Attractive Mining Jurisdiction in Canada."
- Access to new REE processing facility at Saskatchewan Research Council facility in Saskatoon, Sask.



High-grade monazite outcrop WRCB zone, Alces Lake Saskatchewan

Alces Lake REE Project: Overview

High-grade monazite outcrop WRCB zone range from 4.209 to 32.17 wt.% total rare earth oxide (TREO)

2023 - Diamond drill results: **11 drill holes spanning 1,223 Metres completed** in southern extension of Magnet Ridge. Five drill holes showcased substantial mineralization intersections, with **widths up to 19 Metres, indicating a potential increase in grade and thickness.** Subsurface expansion of the Alces Lake Fold zone from surface samples reading up to **15.45 wt.% TREO.**

2022 - Diamond drill results: 17,481 Metres of diamond drilling reported **8.98m @ 9.46 wt.% TREO including 0.87 m @ 17.1 wt.% TREO in hole 22-WRC-024 at Wilson Zone** & **12.13 m @ 0.33 wt.% TREO including 5.7 m @ 0.55 wt.% TREO from hole 22-WRC-016 at AMP Zone in a structural corridor.**

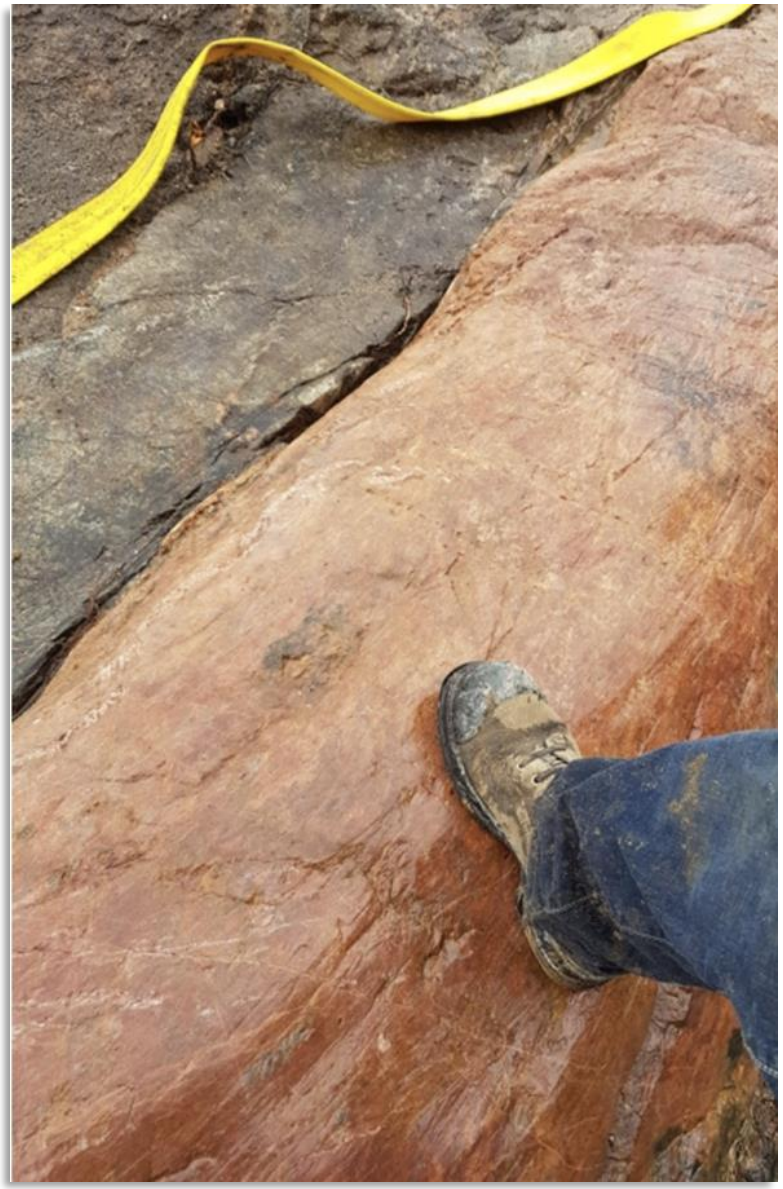
2021 - Diamond Drill results: **21-WRC-015 hole at Wilson North intersected 9.38 metres of 17.53 wt% TREO from 15.22 m- 24.60 m, including 2.14 Metres of 32.17 wt% TREO with assays up to 37.92 wt% TREO**

Exploration strategy covers priority zones, extending approximately **20 kilometres in length and 5 to 7 km in width.**

Bench-scale monazite processing and metallurgical testing results comparable to other producing rare earth projects. Preliminary work done at the Saskatchewan Research Council (SRC) **achieved flotation concentrate TREO of 48% with 73% TREO recovery**. Improvements are expected from future testing.

Permanent 35-person camp with year-around accessibility and promoting Work, Resources, and Employment Expansion for the Local First Nations Community of Fond-du-Lac

High-grade monazite outcrop WRCB zone, **Alces** Lake Saskatchewan



SRC REE Processing Facility: Saskatoon, Saskatchewan, Canada

Landmark Initiative

In August 2020, the Saskatchewan Research Council (SRC), a Provincial Crown Corporation, and the Government of Saskatchewan unveiled ground-breaking plans to finance and establish a unique Rare Earths Processing Facility in Saskatoon, Canada. This strategic move represents a pioneering effort to enhance rare earths processing capabilities and foster regional economic growth.

SRC: A Research Powerhouse

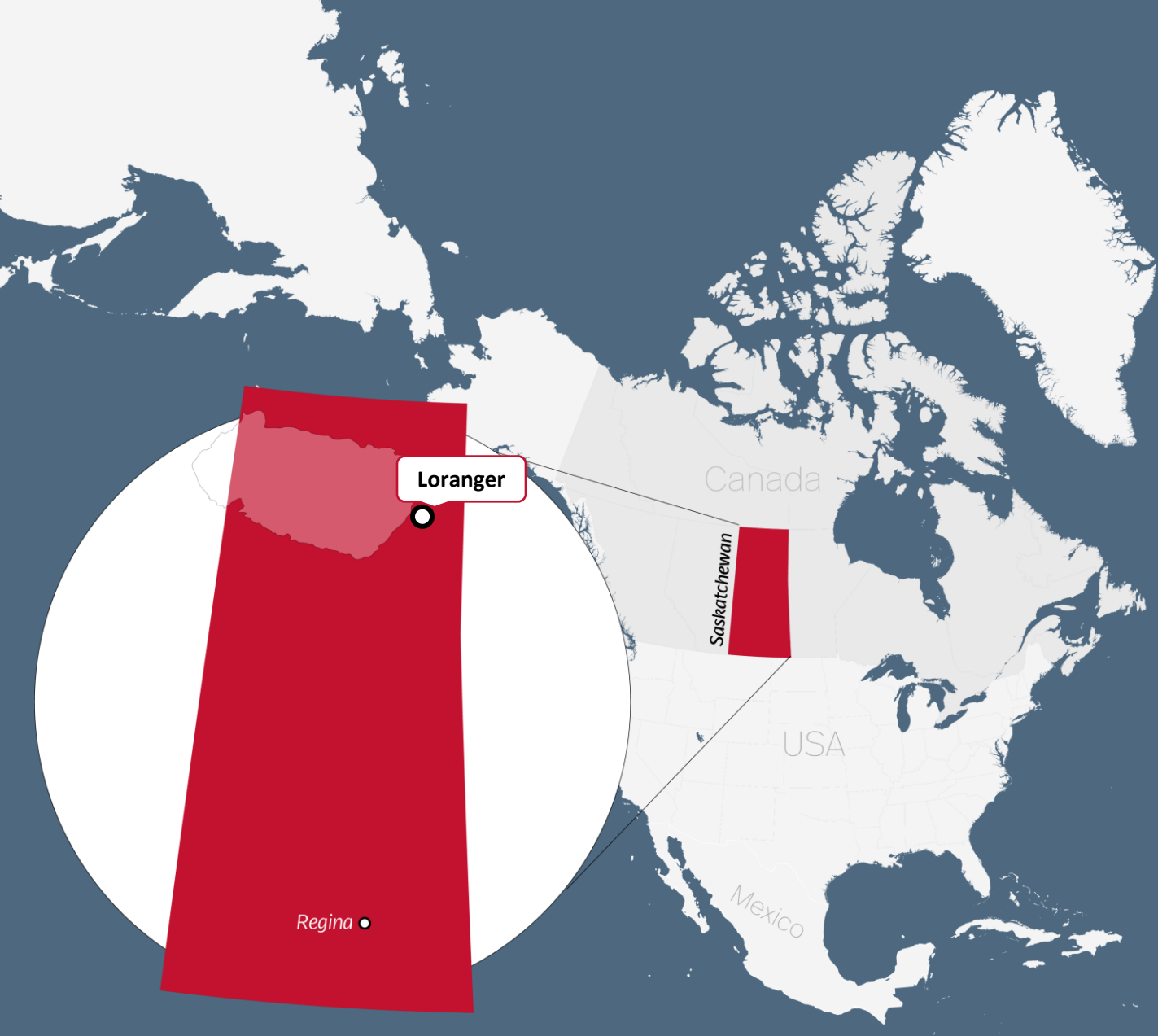
As Canada's second-largest research and technology organization, SRC boasts a global footprint, serving 1,600 clients across 22 countries. This extensive reach positions SRC as a leading force in driving innovation and research in various sectors.

Monazite Processing Expertise

Leveraging existing pilot facilities, SRC has already achieved significant milestones in rare earths processing. By optimizing a monazite processing flow sheet, SRC's facilities have successfully processed monazite sourced from Appia's Alces Lake project. This achievement underscores the practical application of research outcomes in advancing rare earths processing technologies.

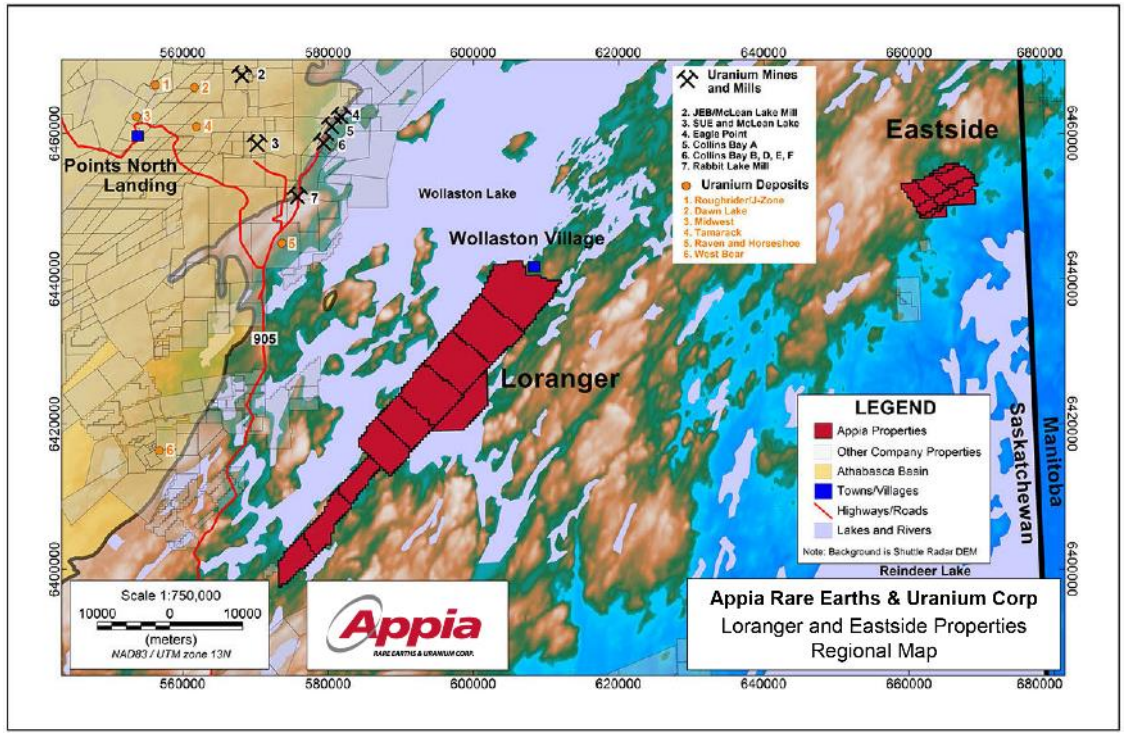
SRC Rare Earth Element Extraction Lab

The processing facility is expected to be operational in 2024



Loranger Uranium Project, Saskatchewan, Canada

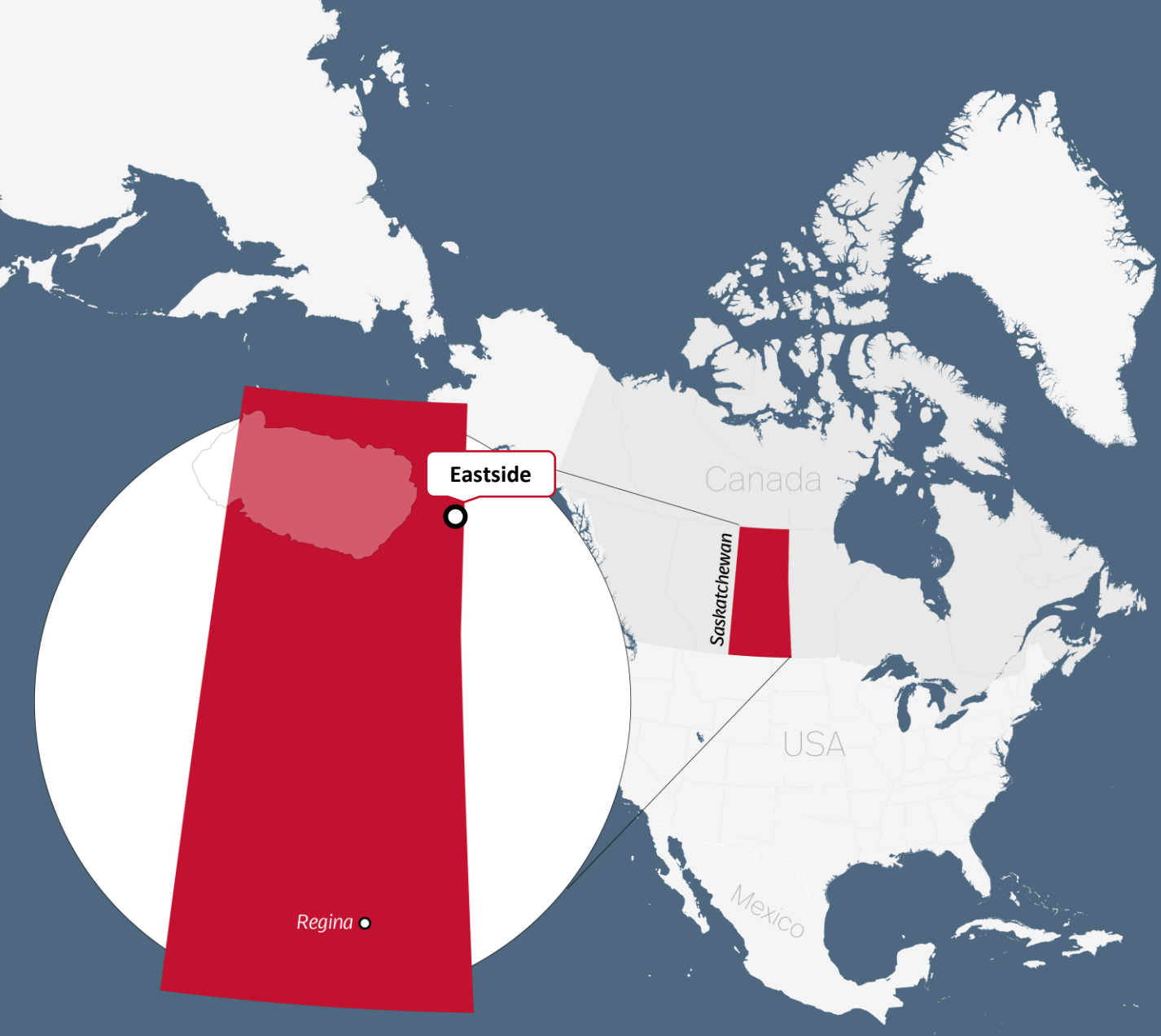
Loranger Uranium Project: Athabasca Basin Area, Saskatchewan, Canada



The property is situated within the Eastern Wollaston Domain, next to the Western Wollaston Domain & Wollaston-Mudjatik Transition Zone (WMTZ), which is renowned for hosting over **1 billion pounds of high-grade U_3O_8.**

Project Highlights:

- June 2024 diamond drilling program tested 3 conductors and resulted in new uranium and rare earth discoveries while following up 2017 and 2019 exploration programs.
- Previous drilling campaigns covered 4,630.8 metres across 34 drill holes
- Up to 0.34 wt% U3O8 has been uncovered through previous exploration in the core drill-zone.
- Uranium exploration at Loranger boasts surface rights of approximately 26,408.8 hectares, measuring 57 km by 9 Km.
- Exploration in the Nuhenéné region will progress through a collaborative partnership with the Ya'thi Néné First Nations and local Wollaston residents.
- Appia's Athabasca Basin area properties are located near Cameco's Rabbit Lake uranium mill and Eagle Point mine operations.



Eastside Uranium Project, Saskatchewan, Canada

Eastside Uranium & REE Project: Exploration Overview

Resource Characteristics:

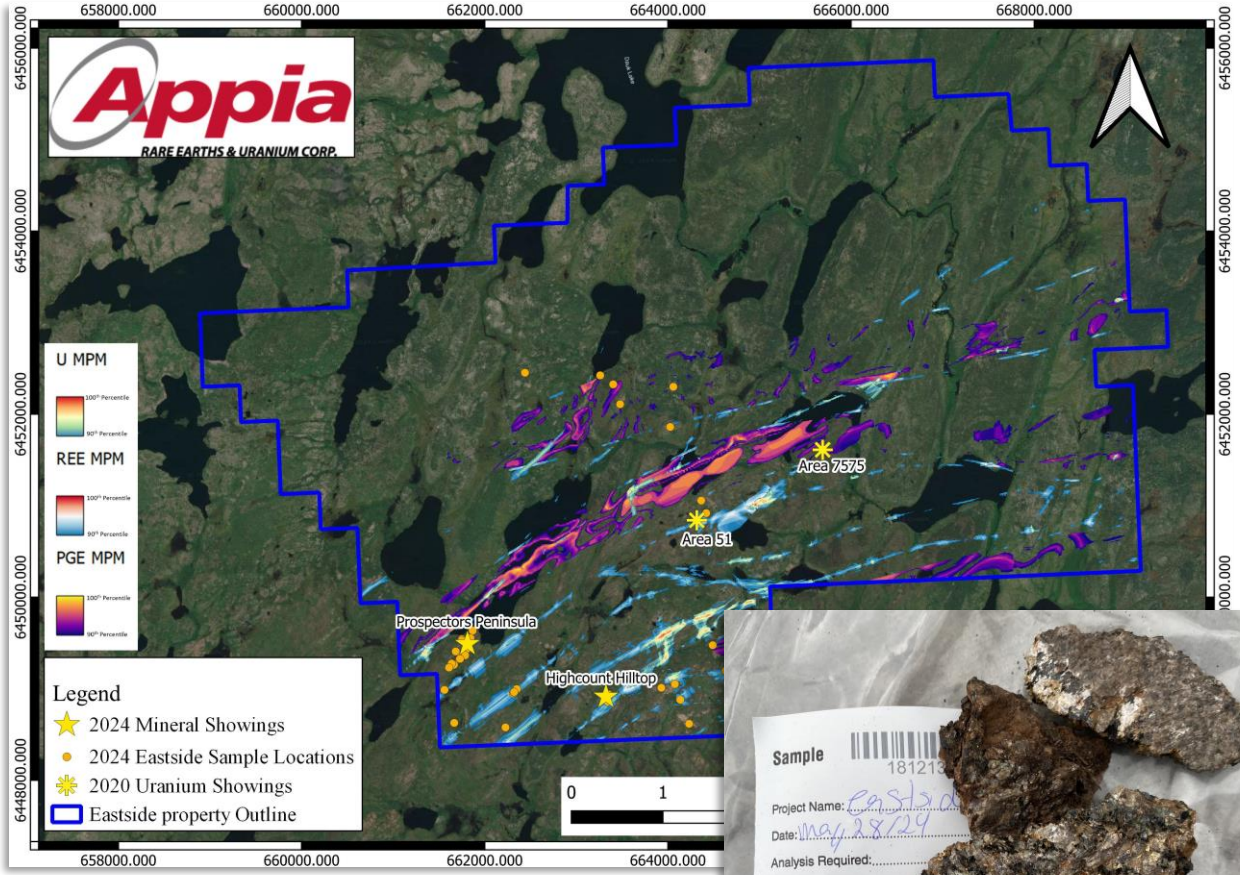
- Pegmatite-hosted uranium, rare earth element, and platinum group element (PGE) mineralization.
- Mineralogical sequence characteristic of sub-Athabasca high-grade basement-hosted uranium deposits.

Exploration and Discoveries:

- Host to two (2) generations of geologic exploration, including 1975 to 1980, and 2017 to present day.
- Multiple uranium and rare earth element samples discovered on the property.
- Ground prospecting samples revealed uranium concentrations of 2,523 ppm.

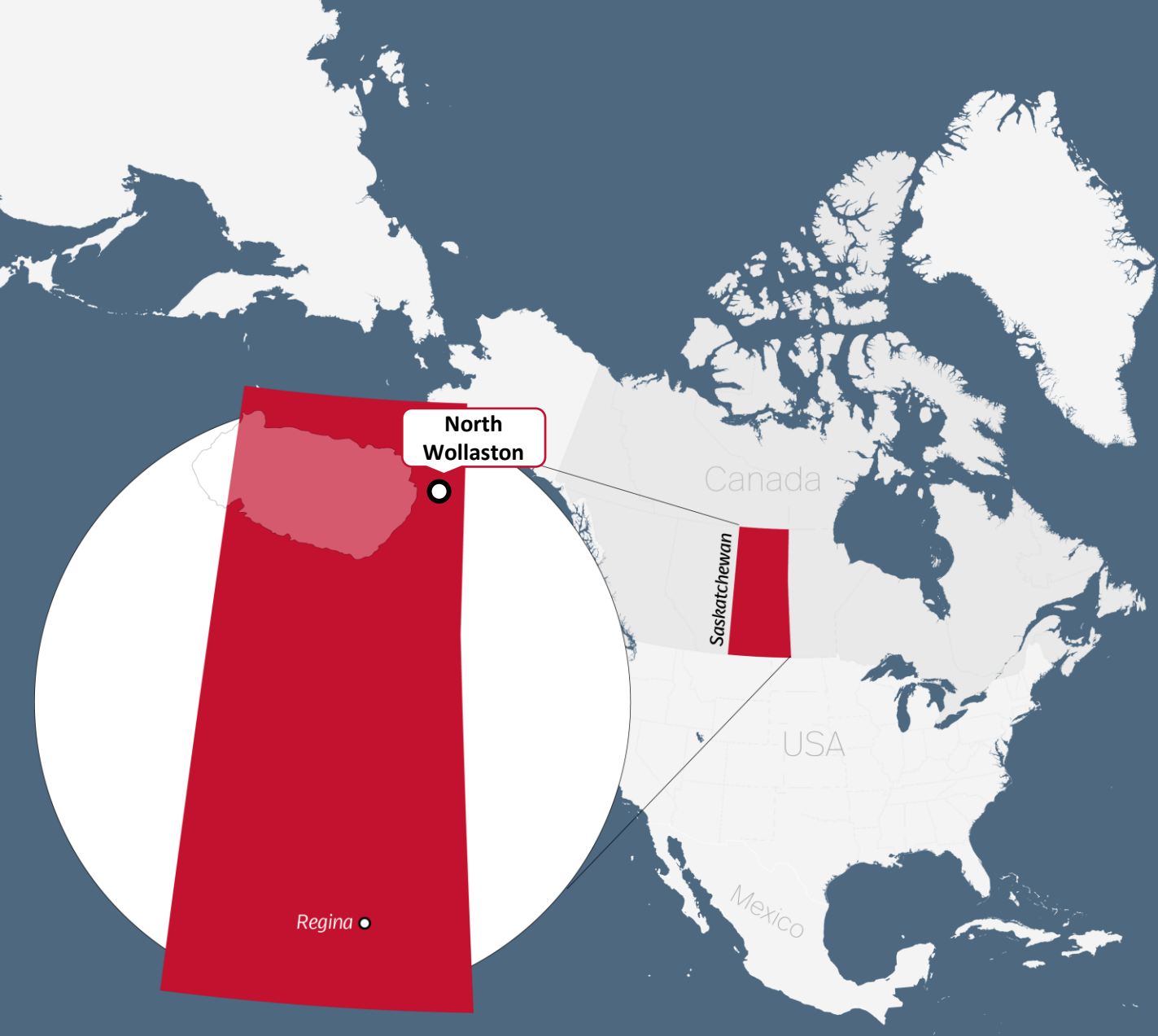
Geographical and Regulatory Context:

- Located in Saskatchewan's "Hearne Craton", host to several high-grade uranium mines, including McArthur River, Cigar Lake, and Key Lake.



Exploration sites with potential for uranium, rare earth elements, and platinum group elements hosted on the Eastside property.

A sample of uranium mineralization hosted within massive biotite pegmatite discovered on the Eastside property.



North Wollaston Uranium Project, Saskatchewan, Canada

North Wollaston Uranium Project: Exploration Overview

Resource Characteristics:

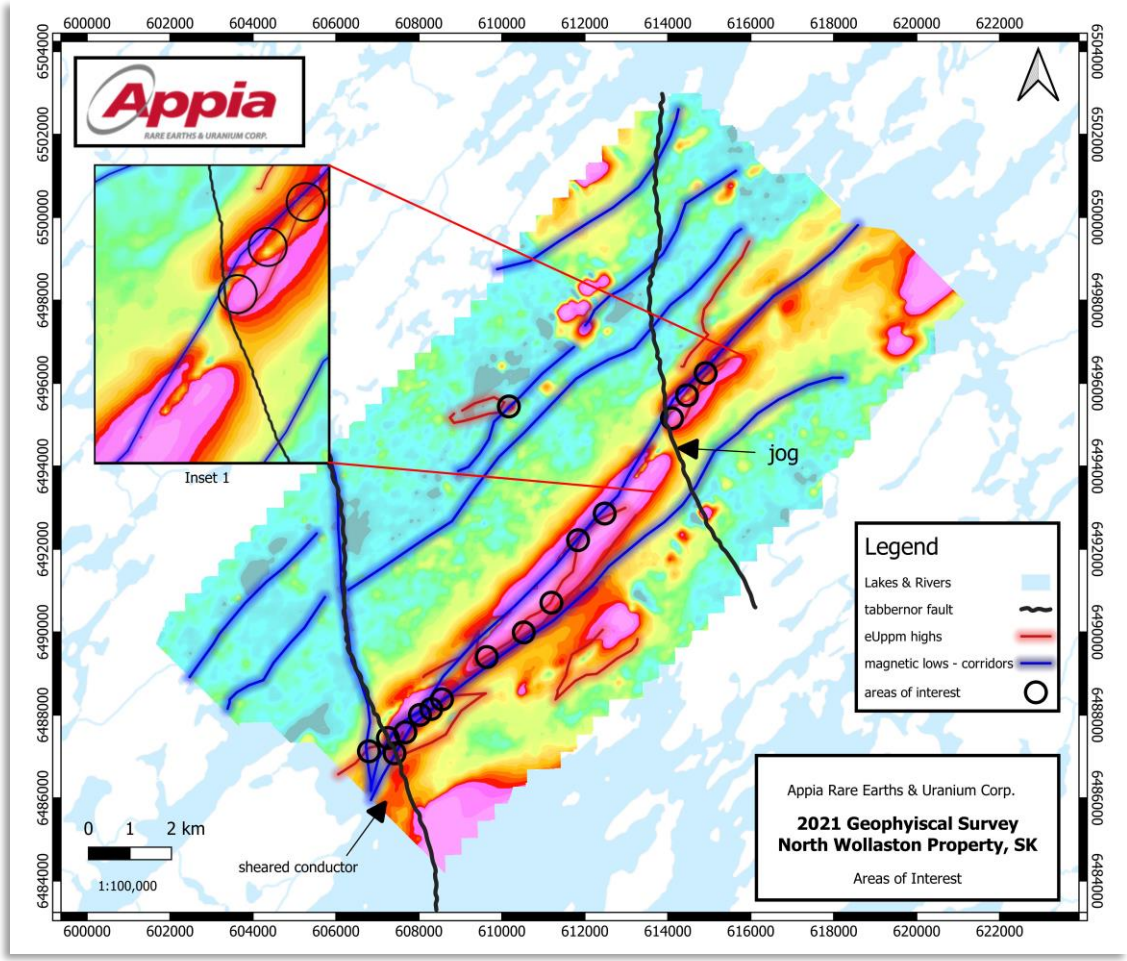
- Uranium and rare earth element mineralization hosted within structurally controlled pegmatite veins and pods.
- Geophysical methods like electromagnetic, magnetic, and gravity surveying are employed to detect alteration envelopes and geological structures that potentially lead to uranium mineralization.

Exploration and Discoveries:

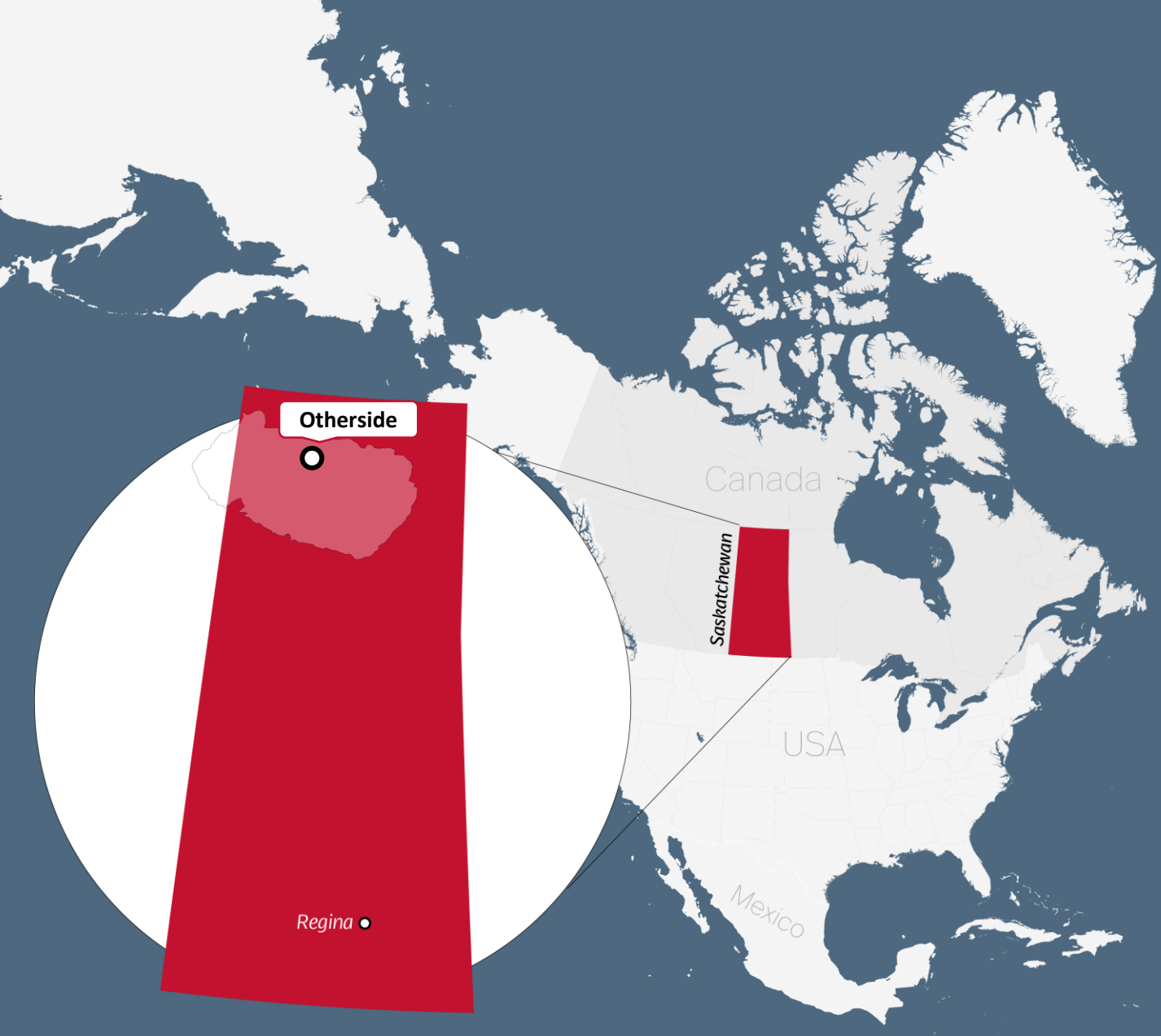
- Substantial geological and geophysical exploration from 1978 to 1984 inclusive of ground prospecting, geophysical surveying, and diamond drilling.
- Numerous surface boulder clusters discovered with elevated U3O8 in range of hundreds to thousands of p.p.m.
- Deep graphitic faults within metapelitic gneiss suggesting potential for subsurface uranium deposits.

Geographical and Regulatory Context:

- Situated in Saskatchewan's "Wollaston-Mudjatik Transition Zone", an area renowned for hosting the province's uranium mining operations.



North Wollaston exploration sites of interest for potential uranium discovery based on surface uranium anomalies and magnetic/electromagnetic structural breaks.
Overlay map is an electromagnetic survey (B-field Z component).



Otherside Uranium Project, Saskatchewan, Canada

Otherside Uranium Project: Exploration Overview

Resource Characteristics:

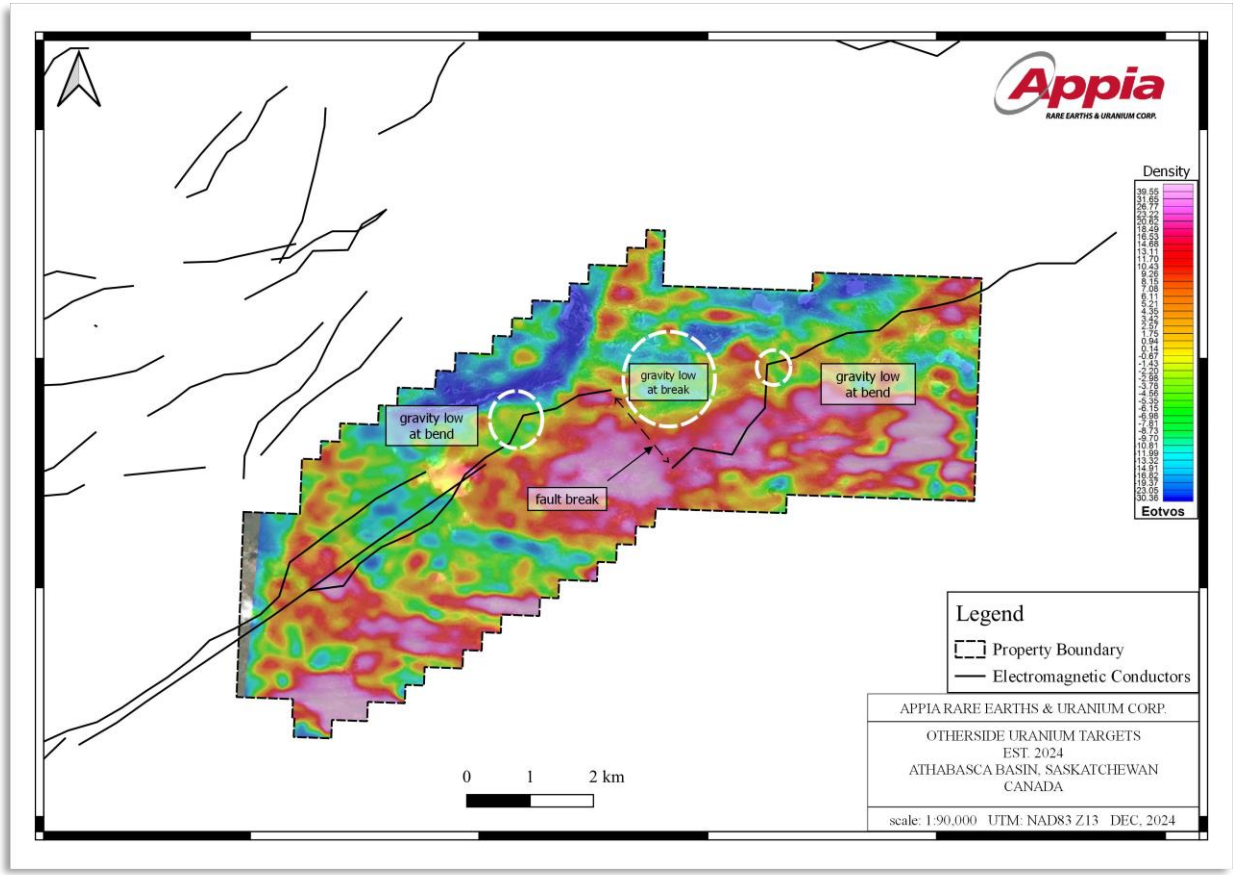
- Deep-seated conductive corridor with potential host for high-grade uranium.
- Geophysical characteristics such as electromagnetic “breaks and bends” and gravity anomalies suggesting a traditional setting for Athabasca Basin uranium hosting.

Exploration:

- Host to several generations of geologic and geophysical exploration including the 60’s, 70’s, 90’s, and early 2000’s.
- Previous Exploration: Airborne electromagnetics, magnetics, gravity, and audio-frequency magnetotellurics.
- Two drill holes 10 km and 20 km south of the property.

Geographical and Regulatory Context:

- Located in the center of Saskatchewan’s “Athabasca Basin”, host to several of the world’s largest uranium deposits.



Geophysical drill targets suggesting potential for uranium mineralization.
Otherside Property, Athabasca Basin, Saskatchewan

Elliot Lake, Ontario, Canada

Elliot Lake Uranium & REE Project: Ontario, Canada

Ownership and Size:
- Appia holds a 100% interest in the Elliot Lake property.
- The property spans approximately 13,008 hectares (32,143 acres).

Strategic Location:
- Adjacent to Denison Mines Corp. and Rio Algom Limited past-producing uranium and REE mines.

Historical Significance:
- The Elliot Lake camp has a rich history, having produced over 300 million lbs. of U3O8.
- Unique distinction as the only Canadian mining camp with significant historical commercial rare earth element production (yttrium).

Exploration Potential:
- Current resources show substantial potential for expansion.
- Resources are largely open along strike and at depth based on historical drilling data.

Metallurgical Testing:
- Various process methods employed in metallurgical testing.
- Indications of a high recovery rate, approximately 90% for uranium and most REE falling in the 80% to 90% range.

Geological Features:
- Uranium and REE metals are hosted within quartz-pebble conglomerate beds.
- These beds are situated in the Matinenda Formation, the basal unit of the Elliot Lake Group.
- The uranium and REE-bearing horizon is characterized as a clean, well-sorted, coarse-pebble conglomerate.

Elliot Lake Uranium & REE Project: Historical Mineral Resource Estimate (Non-Compliant

The Company holds a large ground position in Elliot Lake with a historical resource (non-compliant) totaling approximately 199 million lbs. of uranium at a grade of 0.76 lbs. U_3O_8/ton.

Zone	Quantity (tons)	Grade (lbs. U3O8/ton)	Contained U3O8 (lbs.)
Teasdale Lake	17,458,200	1.206	20,787,200
Gemico Block #3	42,800,000	0.38	16,264,000
Gemico Block #10	20,700,000	0.75	15,525,000
Banana Lake Zone	175,800,000	0.76	133,608,000
Canuc Zone	7,000,000	1.86	13,020,000
Total	**263,758,200**	**0.76**	**199,204,200**

Notes

1. *The historical resource was not estimated in accordance with definitions and practices established for the estimation of Mineral Resources and Mineral Reserves by the Canadian Institute of Mining and Metallurgy ("CIM"), is not compliant with Canada's security rule National Instrument 43-101 ("NI 43-101"), and unreliable for investment decisions.*
2. *Neither Appia nor its Qualified Persons have done sufficient work to classify the historical resource as a current mineral resource under current mineral resource terminology and are not treating the historical resources as current mineral resources*
3. *Most of the historical resources were estimated by mining companies active in the Elliot Lake camp using assumptions, methods and practices that were accepted at the time, and based on corroborative mining experience.*

Elliot Lake Uranium & REE Project: NI 43-101 Mineral Resource Estimate

	Indicated Resource				Inferred Resource			
	Tonnage (M Tons)	Average Grade (lbs./ton)	Contained Metal U_3O_8 (M lbs.)	Contained Metal TREE (M lbs.)	Tonnage (M tons)	Average Grade (lbs./ton)	Contained Metal U_3O_8 (M lbs.)	Contained Metal TREE (M lbs.)
Teasdale Lake Zone								
U_3O_8	14.4	0.554	8.0		42.4	0.474	20.1	
TREE	14.4	3.30		47.7	42.4	3.14		133.2
Banana Lake Zone								
U_3O_8					30.3	0.912	27.6	
Total for both zones								
Total	14.4		8.0	47.7	72.8		47.7	133.2

2013 NI 43-101 Mineral Resource Estimate

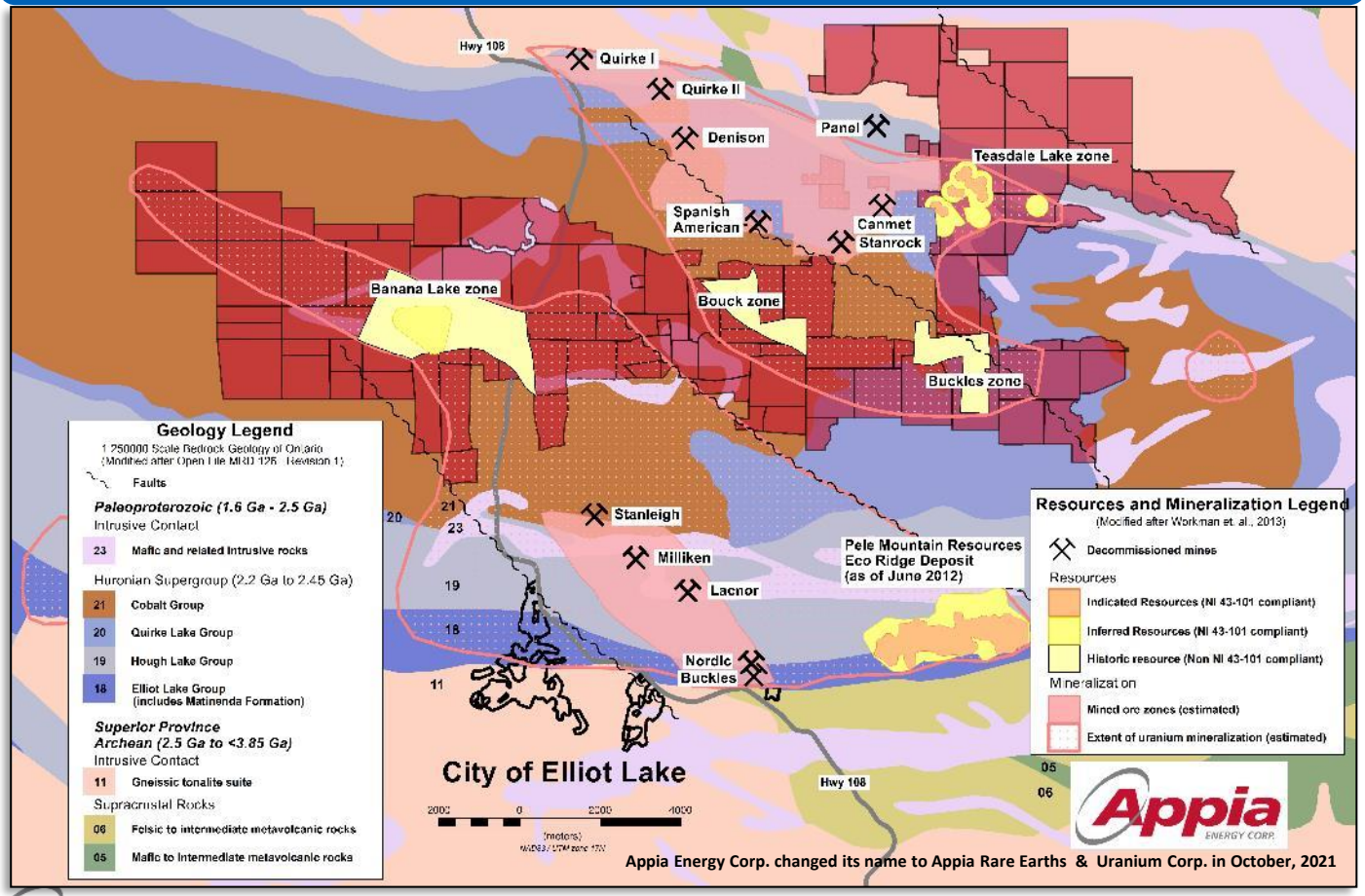
The NI 43-101 Indicated Mineral Resource for the Teasdale Lake Zone stands at 14,435,000 tons with a grade of 0.554 lbs U_3O_8/ton and 3.30 lbs TREE/ton, resulting in **a total of 7,995,000 lbs U_3O_8** and 47,689,000 lbs TREE. In the Inferred Mineral Resource category, the Teasdale Lake Zone comprises 42,447,000 tons, grading 0.474 lbs U3O8/ton and 3.14 lbs TREE/ton**, totaling 20,115,000 lbs U_3O_8** and 133,175,000 lbs TREE. Additionally, the Inferred Mineral Resource for the Banana Lake Zone is 30,315,000 tons, with a grade of 0.912 lbs U3O8/ton, resulting in **a total of 27,638,000 lbs U_3O_8**. The resources are largely unconstrained along strike and down dip. *Refer to the NI 43-101 Mineral Resource Estimate page for qualifying notes regarding the Mineral Resource estimates, and individual element grades supporting the reported TREE results.

Elliot Lake Uranium & REE Projects

Located in the historic mining camp of Elliott Lake, Ontario, Canada

The Elliot Lake uranium-REE property comprises a group of 101 staked mineral claims, approximately 3 km north of the town of Elliot Lake.

Strong potential to increase the size of the current resources as they are largely unconstrained along strike and down dip.



Appia Energy Corp. changed its name to Appia Rare Earths & Uranium Corp. in October, 2021

2013 drilling program at Elliot Lake

Appia

RARE EARTHS & URANIUM CORP.

CSE: API | OTCQX: APAAF | FWB: A0I0 | MUN: A0I0 | BER: A0I0

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