Appia Intersects up to 11.035 wt% Total Rare Earth Oxide and 0.025 wt% Gallium Oxide over 2.8 Metres and Discovers New Uranium Mineralization on the High Grade Alces Lake Property

written by Raj Shah | January 25, 2021

January 25, 2021 (Source) – **Appia Energy Corp. (CSE: API) (OTCQB: APAAF) (FSE: A0I.F) (FSE: A0I.MU) (FSE: A0I.BE) (the "Company" or "Appia")** is pleased to announce the lithogeochemical assay results from the diamond drilling program (the "**Program**") completed on the Company's Alces Lake high-grade rare earth element ("**REE**"), gallium and uranium property (the "**Property**"), northern Saskatchewan.

Appia completed 2,506.8 m in 18 drill holes, with 15 of those drill holes intersecting the REE minerals system (the "**System**", see News Release dated October 1, 2020). Drill hole assay results are reported in Table 1. Individual drill hole highlights include;

- **RI-20-004 (Richard zone)**: 6.546 wt% total rare earth oxide ("**TREO**") and 0.016 wt% gallium oxide ("**Ga_2O_3**") over 5.80 metres ("**m**") core length starting at 7.60 m down hole depth, including 11.035 wt% TREO and 0.025 wt% Ga_2O_3 over 2.80 m core length starting at 10.60 m down hole depth
- **RI-20-005 (Richard zone)**: 5.268 wt% TREO and 0.014 wt% Ga_2O_3 over 1.10 m core length starting at 9.80 m down hole

depth, including 10.322 wt% TREO and 0.024 wt% Ga_2O_3 over a 0.40 m core length starting at 10.15 m down hole depth

- **HN-20-001 (Hinge zone)**: three separate uranium intersections between 265.5 and 308.05 m drill hole depth could indicate potential for uranium mineralization on the Property that is unrelated to the System (0.046 wt% U_3O_8 over 0.10 m core length, 0.016 wt% U_3O_8 over 0.15 m core length and 0.028 wt% U_3O_8 over 0.30 m core length)

Mr. James Sykes, Vice-President, Exploration and Development, comments: “We are very happy with the assay results of the Program as they’ve confirmed our visual assessments of the drill core. The Richard zone drill holes (RI-20-004 and RI-20-005) have confirmed that high-grade mineralization with grades consistently over 8 wt% TREO have been intersected over 145 m strike length along the WRCB zone (Wilson, Richard, Charles and Bell zones combined). The WRCB zone outcrops at surface and starts as shallow as 10 m beneath the surface, representing an easily accessible high-grade monazite asset. The assay results have also proven that REE mineralization occurs within multiple sub-parallel trends of the System over 875 m strike length and down to 340 m vertical depth; both parameters currently defined by our drilling limits. These parameters prove the System is large and extensive, and is expected to grow with more exploration and diamond drilling efforts.”

HINGE ZONE URANIUM

Drill hole HN-20-001 intersected three separate uranium occurrences; (a) 0.046 wt% U_3O_8 over 0.1 m at 265.5 m drill hole depth, (b) 0.046 wt% U_3O_8 over 0.1 m at 265.5 m drill hole depth, and (c) 0.046 wt% U_3O_8 over 0.1 m at 265.5 m drill hole depth. The uraniferous intersections occur within centimeter-long fractures within metapelitic gneiss, similar to the lithological

rock host for many basement-hosted uranium deposits within the Athabasca Basin area, northern Saskatchewan. Mr. Sykes comments: “These intersections are important because they could indicate new potential for uranium mineralization on the Property that is unrelated to the REE System. The Hinge zone area requires further exploration for continuation of both the REE system and these new uranium occurrences.”

DR. DAVID LONDON

The Company also wishes to announce that they have engaged the services of Dr. David London, a world-renowned pegmatite expert and authority, to help better understand the System. Identifying key components of the System, such as origins, mineralogical vectors, and structural influences, will provide for better exploration targeting for any additional high-grade REE zones that might exist on the Property. Dr. London is working closely with Dr. Irvine R. Annesley (advisor and consultant to Appia) and Mr. Sykes.

2021 EXPLORATION PLANS

The Company is planning to be very active advancing the Property in 2021. Prior to the anticipated start of the Alces Lake summer exploration program, the Company plans to start metallurgical bench-scale testing at the Saskatchewan Research Council (“SRC”) facilities using rock samples from the WRCB zone to test physical separation of monazite from the host rocks, to separate and produce isolated uranium oxide (U_3O_8), to produce a mixed REE-carbonate, and to eventually produce Nd and Pr oxides. A microprobe study is currently underway at SRC to determine the mineralogical host for the high-grade gallium observed within the Alces Lake results. The Company believes the host is monazite, and if so, gallium oxide extraction will also be investigated at SRC during the uranium and RE oxide extraction

processes.

The suite of airborne and ground geophysical survey data acquired on the property since 2011 are being re-analyzed and re-interpreted by three independent contractors and consultants. Each re-analysis is using different data sets, such as magnetic, electromagnetic ("**EM**"), gravity and audiomagnetotelluric ("**AMT**") geophysical results. The objective of the re-analyses is to constrain and model the geophysical data sets to the current geological model defined by diamond drilling and surface mapping in an attempt to better target high-grade mineralization.

Planned field activities for the Alces Lake property during the summer 2021, include i) an airborne magnetic, EM and radiometric geophysical survey over the entire Property, ii) additional ground radiometric surveying and geological mapping, iii) additional ground AMT surveying within the main geological hinge area that hosts the high-grade occurrences discovered to date, and iv) an aggressive diamond drilling program (at least 5,000 m) to explore the property regionally for additional sub-surface high-grade REO occurrences.

ALCES LAKE SUMMARY

Since detailed exploration began at Alces Lake in 2017, a total of seventy-four (74) REE and uranium bearing surface zones and occurrences over 45km of the System have been discovered on the Property. To date, less than 1% of the Property has been explored with diamond drilling. The Property is also located in Saskatchewan, the same provincial jurisdiction that has planned to develop a "first-of-its-kind" rare earth processing facility in Canada, which is scheduled to become operational by 2022.

The Property encompasses some of the highest-grade total and critical rare earth elements ("**CREE**") mineralization in the world. CREE is defined here as those rare earth elements 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)). The Alces Lake project area is 17,577 hectares (43,434 acres) in size, and is 100% owned by Appia. The project is located close to an old mining camp with existing support services, such as transportation (i.e., 15 km from the nearest trail), energy infrastructure (hydroelectric power), a 1,200 m airstrip that receives daily scheduled services, and access to heavy equipment.

Drill core lithogeochemical assay results were provided by Saskatchewan Research Council's Geoanalytical Laboratory, an ISO/IEC 17025:2005 (CAN-P-4E) certified laboratory in Saskatoon, SK, for multi-element and REE analysis.

Due to an unrecognized nugget effect of mineralization, SRC had re-analyzed the samples from drill hole HN-20-001 three separate times, including scanning electron microscope analysis.

All lithogeochemical results reported herein have passed rigorous 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.

About Appia

Appia is a Canadian publicly-traded company in the uranium and rare earth element sectors. The Company is currently focusing on delineating high-grade critical rare earth elements ("REE") and uranium on the Alces Lake property, as well as prospecting for high-grade uranium in the prolific Athabasca Basin on its Loranger, North Wollaston, and Eastside properties. The Company holds the surface rights to exploration for 57,048 hectares

(140,968 acres) in Saskatchewan.

The Company also has a 100% interest (subject to a 1% Uranium Production Payment Royalty and a 1% Net Smelter Return Royalty on any precious or base metals payable, provided that the price of uranium is greater than US$130 per pound) in 12,545 hectares (31,000 acres), with rare earth element and uranium deposits over five mineralized zones in the Elliot Lake Camp, Ontario. The Camp historically produced over 300 million pounds of U_3O_8 and is the only Canadian camp that has had significant rare earth element (yttrium) production. The deposits are largely unconstrained along strike and down dip.

Appia's technical team is directed by James Sykes, who has had direct and indirect involvement with over 550 million lbs. U_3O_8 being discovered in five deposits in the Athabasca Basin.

Appia has 90.9 million common shares outstanding, 106.7 million shares fully diluted.

For more information, visit the Appia's website at www.appiaenergy.ca.

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 guarantees 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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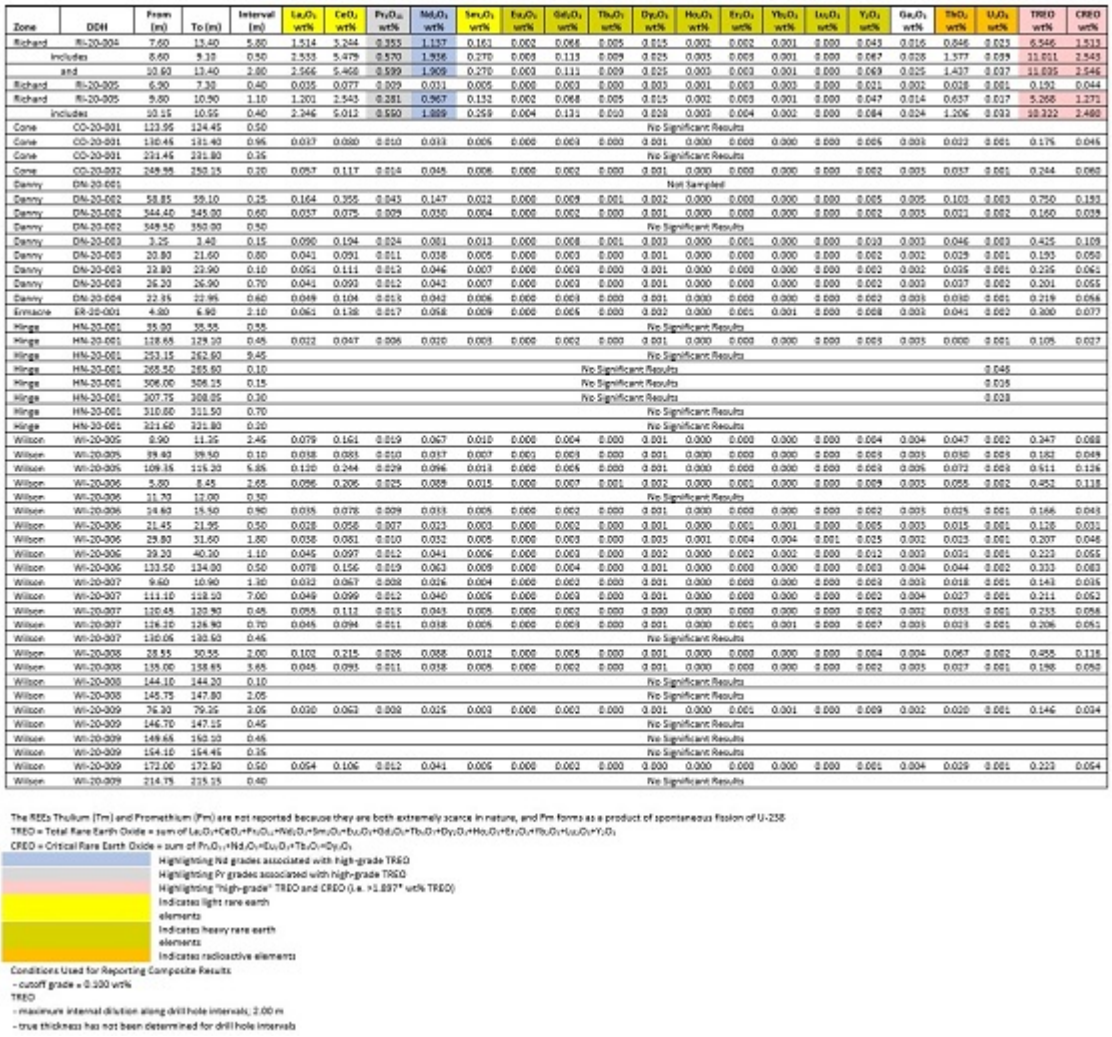
Table 1 – Alces Lake property; Summer 2020 diamond drilling lithogeochemical assay results



Zone	DDH	From (m)	To (m)	Interval (m)	La_2O_3 wt%	CeO_2 wt%	Pr_6O_{11} wt%	Nd_2O_3 wt%	Sm_2O_3 wt%	Eu_2O_3 wt%	Gd_2O_3 wt%	Tb_4O_7 wt%	Dy_2O_3 wt%	Ho_2O_3 wt%	Er_2O_3 wt%	Tm_2O_3 wt%	Yb_2O_3 wt%	Lu_2O_3 wt%	Y_2O_3 wt%	Ga_2O_3 wt%	ThO_2 wt%	U_3O_8 wt%	TREO wt%	CREO wt%
Richard	RI-20-004	7.60	13.40	5.80	1.514	3.244	0.355	1.137	0.161	0.002	0.068	0.005	0.015	0.002	0.002	0.001	0.000	0.043	0.016	0.046	0.025	6.546	1.513
Includes		8.60	9.10	0.50	2.533	5.479	0.570	1.956	0.270	0.003	0.113	0.009	0.025	0.005	0.003	0.001	0.000	0.067	0.028	1.577	0.059	11.011	2.545
and		10.60	13.40	2.80	2.566	5.460	0.599	1.909	0.270	0.003	0.111	0.009	0.025	0.003	0.003	0.001	0.000	0.069	0.025	1.437	0.037	11.035	2.546
Richard	RI-20-005	6.90	7.30	0.40	0.035	0.077	0.009	0.031	0.005	0.000	0.003	0.000	0.003	0.001	0.003	0.003	0.000	0.021	0.002	0.018	0.001	0.192	0.044
Richard	RI-20-005	9.60	10.90	1.10	1.201	2.543	0.281	0.967	0.132	0.002	0.068	0.005	0.015	0.002	0.003	0.001	0.000	0.047	0.014	0.637	0.017	5.268	1.271
Includes		10.15	10.55	0.40	2.246	5.012	0.550	1.889	0.259	0.004	0.131	0.010	0.028	0.002	0.004	0.002	0.000	0.084	0.024	1.206	0.033	10.322	2.480
Cone	CO-20-001	123.95	124.45	0.50	No Significant Results																			
Cone	CO-20-001	130.46	131.40	0.96	0.037	0.080	0.010	0.033	0.006	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.006	0.003	0.022	0.001	0.176	0.046
Cone	CO-20-001	231.46	231.80	0.35	No Significant Results																			
Cone	CO-20-002	249.95	250.15	0.20	0.057	0.117	0.014	0.045	0.008	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.005	0.057	0.001	0.244	0.060
Danny	DN-20-001	Not Sampled																						
Danny	DN-20-002	58.85	59.10	0.25	0.164	0.355	0.043	0.147	0.012	0.000	0.009	0.001	0.002	0.000	0.000	0.000	0.000	0.005	0.005	0.103	0.003	0.750	0.193
Danny	DN-20-002	344.40	345.00	0.60	0.037	0.075	0.009	0.030	0.004	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.003	0.021	0.002	0.160	0.039
Danny	DN-20-002	349.50	350.00	0.50	No Significant Results																			
Danny	DN-20-003	3.25	3.40	0.15	0.090	0.194	0.024	0.081	0.013	0.000	0.008	0.001	0.003	0.000	0.001	0.000	0.000	0.010	0.003	0.046	0.003	0.425	0.109
Danny	DN-20-003	20.80	21.60	0.80	0.041	0.091	0.011	0.038	0.005	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.002	0.029	0.001	0.193	0.050
Danny	DN-20-003	22.80	23.90	0.10	0.051	0.111	0.013	0.046	0.007	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.002	0.036	0.001	0.236	0.061
Danny	DN-20-003	26.20	26.90	0.70	0.041	0.093	0.012	0.042	0.007	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.003	0.037	0.002	0.201	0.055
Danny	DN-20-004	22.85	22.95	0.60	0.049	0.104	0.013	0.043	0.006	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.003	0.030	0.001	0.219	0.056
Ermacora	ER-20-001	4.80	6.90	2.10	0.061	0.138	0.017	0.058	0.009	0.000	0.006	0.000	0.002	0.000	0.001	0.001	0.000	0.008	0.003	0.041	0.002	0.300	0.077
Hinge	HN-20-001	35.00	35.55	0.55	No Significant Results																			
Hinge	HN-20-001	128.65	129.10	0.45	0.022	0.047	0.006	0.020	0.003	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.003	0.003	0.000	0.001	0.105	0.027
Hinge	HN-20-001	253.15	262.60	9.45	No Significant Results																			
Hinge	HN-20-001	265.50	265.60	0.10	No Significant Results																0.045			
Hinge	HN-20-001	306.00	306.15	0.15	No Significant Results																0.026			
Hinge	HN-20-001	307.75	308.05	0.30	No Significant Results																0.028			
Hinge	HN-20-001	310.60	311.50	0.70	No Significant Results																			
Hinge	HN-20-001	321.60	321.80	0.20	No Significant Results																			
Wilson	WI-20-005	8.90	11.35	2.45	0.079	0.161	0.019	0.067	0.010	0.000	0.004	0.000	0.001	0.000	0.000	0.000	0.000	0.004	0.004	0.047	0.002	0.347	0.088
Wilson	WI-20-005	39.40	39.50	0.10	0.038	0.081	0.010	0.037	0.007	0.001	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.003	0.003	0.030	0.003	0.182	0.049
Wilson	WI-20-005	109.35	115.20	5.85	0.120	0.244	0.029	0.096	0.013	0.000	0.006	0.000	0.001	0.000	0.000	0.000	0.000	0.003	0.005	0.072	0.003	0.611	0.126
Wilson	WI-20-006	5.80	8.45	2.65	0.096	0.206	0.025	0.089	0.015	0.000	0.007	0.001	0.002	0.000	0.001	0.000	0.000	0.009	0.005	0.058	0.002	0.452	0.118
Wilson	WI-20-006	11.70	12.00	0.30	No Significant Results																			
Wilson	WI-20-006	14.80	15.90	0.90	0.035	0.078	0.009	0.033	0.005	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.003	0.015	0.001	0.166	0.043
Wilson	WI-20-006	21.45	21.95	0.50	0.028	0.058	0.007	0.023	0.003	0.000	0.002	0.000	0.001	0.000	0.001	0.001	0.000	0.005	0.003	0.015	0.001	0.128	0.031
Wilson	WI-20-006	29.80	31.60	1.80	0.038	0.081	0.010	0.032	0.005	0.000	0.003	0.000	0.003	0.001	0.004	0.004	0.001	0.025	0.002	0.023	0.001	0.207	0.046
Wilson	WI-20-006	39.20	40.30	1.10	0.045	0.097	0.012	0.041	0.006	0.000	0.003	0.000	0.002	0.000	0.002	0.002	0.000	0.012	0.003	0.031	0.001	0.223	0.055
Wilson	WI-20-006	133.50	134.00	0.50	0.078	0.156	0.019	0.063	0.009	0.000	0.004	0.000	0.001	0.000	0.000	0.000	0.000	0.003	0.004	0.044	0.002	0.333	0.083
Wilson	WI-20-007	9.60	10.90	1.30	0.032	0.067	0.008	0.026	0.004	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.003	0.003	0.018	0.001	0.143	0.036
Wilson	WI-20-007	111.10	118.10	7.00	0.049	0.099	0.012	0.040	0.005	0.000	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.004	0.027	0.001	0.211	0.052
Wilson	WI-20-007	120.45	120.90	0.45	0.055	0.112	0.013	0.043	0.005	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.033	0.001	0.233	0.058
Wilson	WI-20-007	126.20	126.90	0.70	0.046	0.094	0.011	0.038	0.005	0.000	0.003	0.000	0.001	0.000	0.001	0.001	0.000	0.007	0.003	0.023	0.001	0.206	0.051
Wilson	WI-20-007	130.06	130.60	0.46	No Significant Results																			
Wilson	WI-20-008	28.55	30.55	2.00	0.102	0.215	0.026	0.088	0.012	0.000	0.005	0.000	0.001	0.000	0.000	0.000	0.000	0.004	0.004	0.067	0.002	0.455	0.116
Wilson	WI-20-008	155.00	158.65	3.65	0.045	0.095	0.011	0.038	0.005	0.000	0.002	0.000	0.001	0.000	0.000	0.000	0.000	0.002	0.003	0.027	0.001	0.198	0.050
Wilson	WI-20-008	144.10	144.20	0.10	No Significant Results																			
Wilson	WI-20-008	145.75	147.80	2.05	No Significant Results																			
Wilson	WI-20-009	76.30	79.25	2.05	0.020	0.043	0.008	0.025	0.003	0.000	0.003	0.000	0.001	0.000	0.001	0.001	0.000	0.009	0.002	0.020	0.001	0.146	0.034
Wilson	WI-20-009	146.70	147.15	0.45	No Significant Results																			
Wilson	WI-20-009	149.65	150.10	0.45	No Significant Results																			
Wilson	WI-20-009	164.10	164.45	0.35	No Significant Results																			
Wilson	WI-20-009	172.00	172.50	0.50	0.054	0.106	0.012	0.041	0.006	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.004	0.029	0.001	0.223	0.054
Wilson	WI-20-009	214.75	215.15	0.40	No Significant Results																			

The REEs Thulium (Tm) and Promethium (Pm) are not reported because they are both extremely scarce in nature, and Pm forms as a product of spontaneous fission of U-238

TREO = Total Rare Earth Oxide = sum of La_2O_3+CeO_2+Pr_6O_{11}+Nd_2O_3+Sm_2O_3+Eu_2O_3+Gd_2O_3+Tb_4O_7+Dy_2O_3+Ho_2O_3+Er_2O_3+Tm_2O_3+Yb_2O_3+Lu_2O_3+Y_2O_3

CREO = Critical Rare Earth Oxide = sum of Pr_6O_{11}+Nd_2O_3+Eu_2O_3+Tb_4O_7+Dy_2O_3

Highlighting Nd grades associated with high-grade TREO

Highlighting Pr grades associated with high-grade TREO

Highlighting "high-grade" TREO and CREO (i.e. >1.897* wt% TREO)

Indicates light rare earth elements

Indicates heavy rare earth elements

Indicates radioactive elements

Conditions Used for Reporting Composite Results

- cutoff grade = 0.100 wt%

TREO

- maximum internal dilution along drill hole intervals; 2.00 m

- true thickness has not been determined for drill hole intervals

To view an enhanced version of Table 1, please visit: https://orders.newsfilecorp.com/files/5416/72658_appia_image1.jpg

*Note: >1.897 wt% TREO represents >75th percentile for global REO deposit grades of advanced stage-projects (excluding Gakara, Steenkampskraal and Mount Weld CLD deposits). The global REO deposit information was derived from publicly available information as of January 31, 2018, from individual company websites, SEDAR technical report filings, and the Technology Metals Research Advanced Rare Earth Projects Index (http://www.techmetalsresearch.com/metrics-indices/tmr-advanced-rare-earth-projects-index/)

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