ASX Announcement
21 August 2024

Raptor high-grade REE discovery expands with exceptional grades now confirmed across two tenement areas

HIGHLIGHTS

- Results received from an additional seven drill holes at the Raptor REE Project show continuity with high grades of up to **6,327ppm TREO.**
- Results confirm that high-grade mineralisation is now evident across two (2) Raptor Project licenses (*Pina Colada and Portao Verde prospects*), significantly expanding the potential scale and footprint within the Tier-1 Caldeira high-grade ionic REE region.
- Significantly higher-value Neodymium-Praseodymium (Nd+Pr) rare earths continue to be elevated, with individual drill holes showing up to **35% Nd+Pr ratios**.
- New standout drill intercepts from first pass shallow drill results:
  - **RPT0018: 5m @ 5,591ppm TREO (35% Nd+Pr) ending in 5,533ppm TREO (33% Nd+Pr).**
  - **RPT0019: 3m @ 3,569ppm TREO (27% Nd+Pr) from 6m, ending in 3,846ppm TREO (31% Nd+Pr).**
- Including previously standout from surface - *ASX Ann. 14th August 2024*
  - **RPT0012: 12m @ 4,601ppm TREO (23% Nd+Pr) ending in 2,914ppm TREO (24% Nd+Pr).**
  - **RPT0011: 7m @ 4,240ppm TREO (23% Nd+Pr) ending in 2,722ppm TREO (21% Nd+Pr).**
  - **RPT0010: 10m @ 2,546ppm TREO (21% Nd+Pr) ending in 1,834ppm TREO (22% Nd+Pr).**
- Consistent with previous findings, all drill holes intersected mineralisation from shallow depths (1m or less) and end in mineralisation, suggesting strong potential for depth continuity.
- Results add to Perpetual's view that the Raptor REE Project has potential to host a significant Caldeira-style clay-hosted REE discovery.
- Grades compare favourably to proximal and similar style ionic clay REE projects, noting Meteoric Resources (ASX:MEI) JORC Mineral Resource Estimate of **545 million tonnes @ 2,561ppm[1].**
- The results from the remaining eight drill holes comprising the maiden drill program are expected by mid-September with planning for a follow up program at the Raptor Project to commence shortly.

Perpetual Resources Ltd ("**Perpetual**" or "**the Company**") (ASX: PEC) is pleased to report that high-grade TREO mineralisation has been confirmed across an additional tenement area, following results from seven more first pass shallow drill holes at its Raptor REE Project in Minas Gerais, Brazil. These latest assays continue to demonstrate exceptional high-grade Total Rare Earth Oxides (TREO) intersections, with individual results exceeding 4,500 ppm TREO and peak grades reaching up to 6,300 ppm. Importantly, all intersections maintain a significant weighting towards the higher-value Nd+Pr (Neodymium-Praseodymium) oxides, which account for up to 35% of the total TREO assemblage across multiple project areas.

[1] *For additional information, please refer to Meteoric Resources (ASX:MEI) ASX Announcement dated 14th May 2024, titled "150% Increase in Soberbo Mining Licence Mineral Resource".*

Perpetual Resources Ltd
T: 08 6256 5390
E: info@perpetualresources.co
W: perpetualresources.co
ACN: 154 516 533
Principal & Registered Office:
Suite 2, 68 Hay Street, Subiaco, Western Australia 6008

These latest results from tenements 830.310/1979 (Portão Verde Prospect) and 830.361/1986 (Pina Colada Prospect) confirm the continuity of existing high-grade REE mineralisation at Portão Verde while also identifying a new mineralisation frontier at the Pina Colada Prospect – with notable intersections up to **5 meters @ 5,591 ppm TREO with a 35% Nd+Pr ratio**. The Pina Colada and Portão Verde prospects are approximately 2.7 km apart, further enhancing the scale and growth potential of the Raptor Project (please refer to Figure 3 for the relative locations of the Raptor Project tenements.)

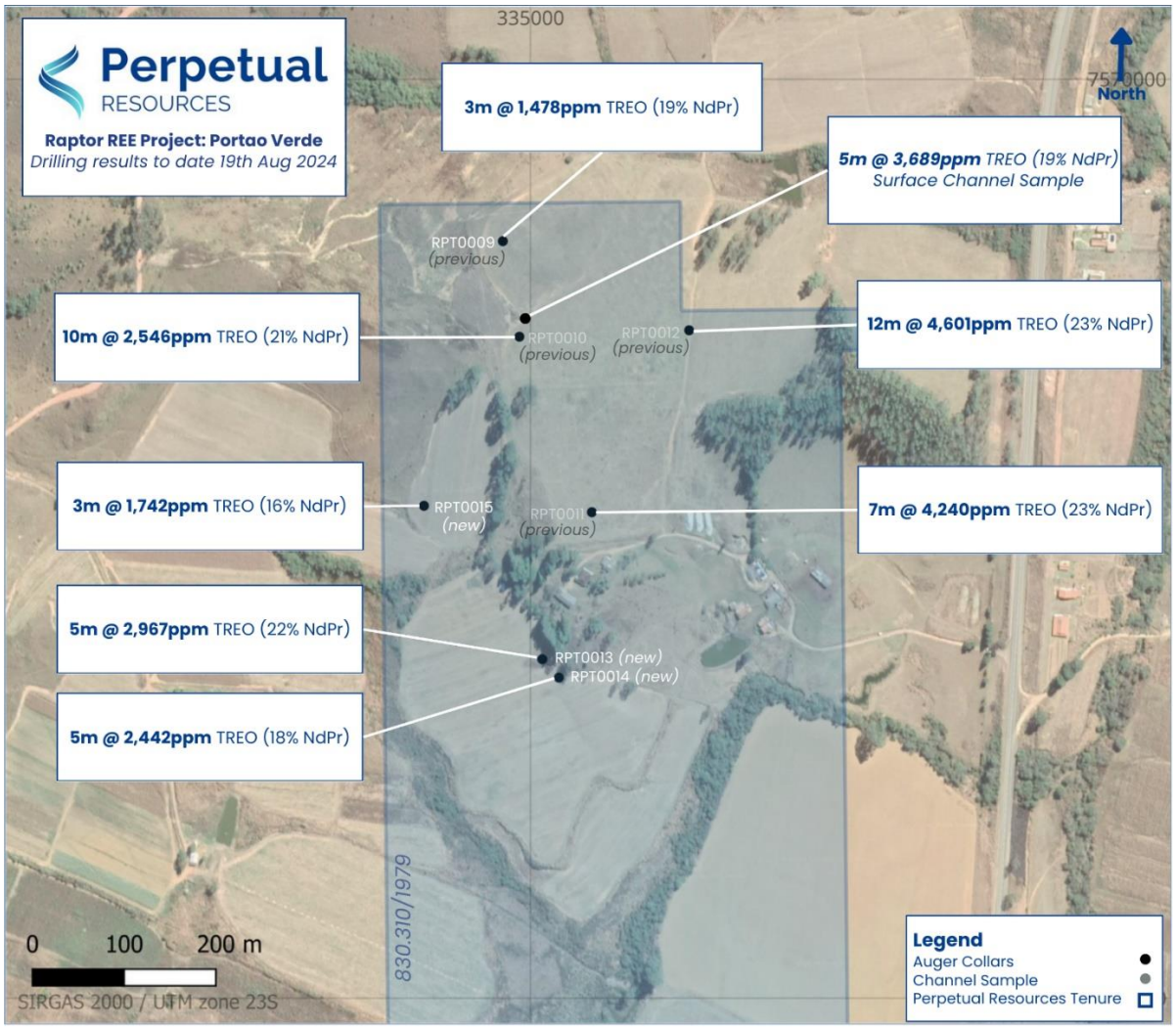

Figure 1: All drill and surface results located on the Portao Verde Prospect (license 830.361/1979).

Notably, all reported drill results show mineralisation commencing within 1m of surface and continuing to the end of hole, indicating the potential for mineralisation to extend at depth. Similar to previously reported results[2], deeper drilling was limited by the handheld auger's ability to penetrate beyond certain depths due to varying ground conditions. Perpetual is currently assessing the deployment of a more powerful drill rig for future programs.

[2] *Refer Perpetual's ASX Announcement 14th August 2024*

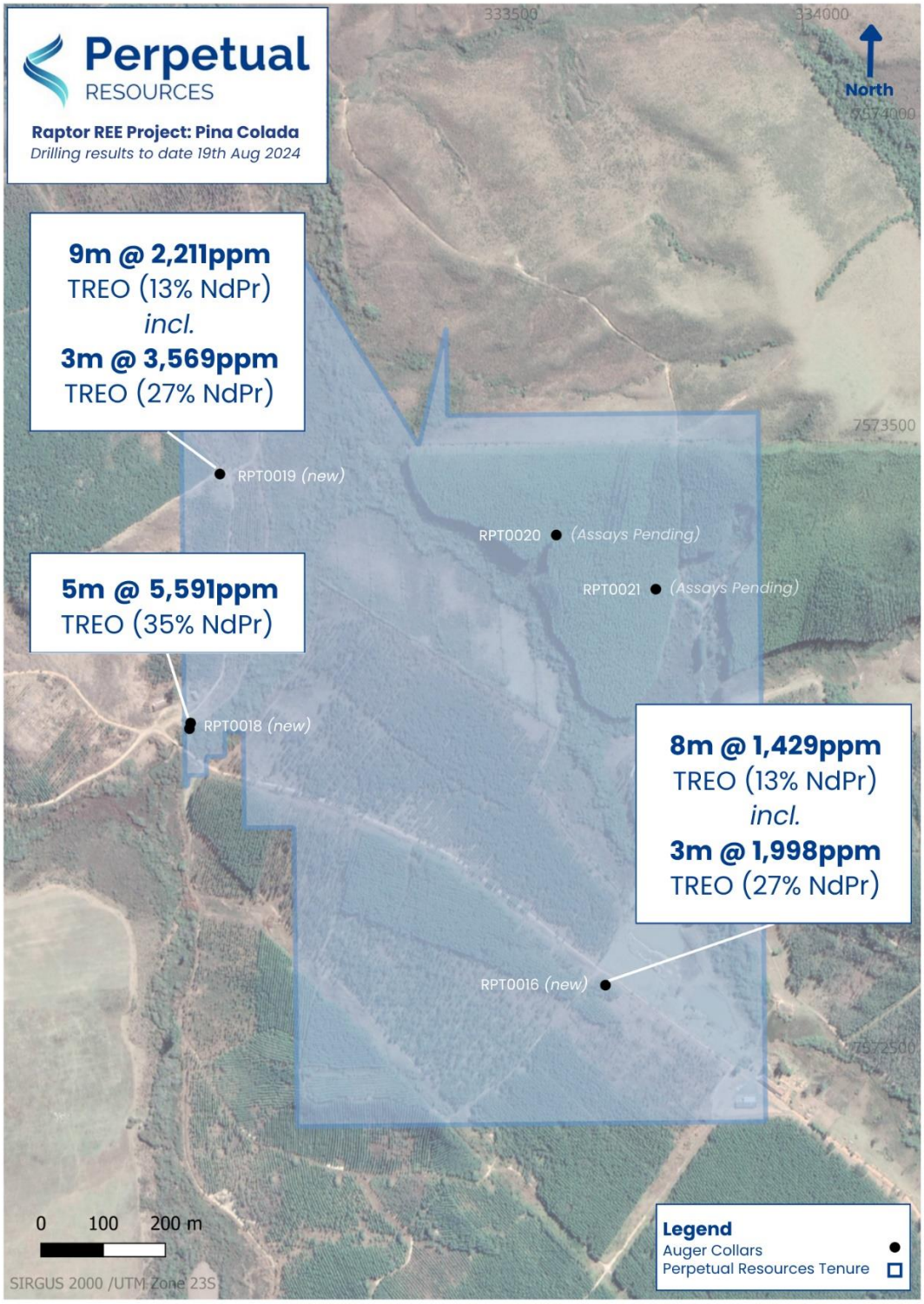

Figure 2: All drill results located on the Pina Colada Prospect (license 830.310/1986).

These outstanding results further underscore the strong prospectivity of the Raptor Project, confirming the presence of high-grade, clay-hosted rare earth elements (REE) and the potential for Ionic-Adsorption Clay (IAC) style mineralisation across an expanding area within Perpetual's project areas. As part of the initial campaign's completion, PEC will look to undertake metallurgical testing to confirm the Ionic Adsorption Clay (IAC) REE-style mineralisation.

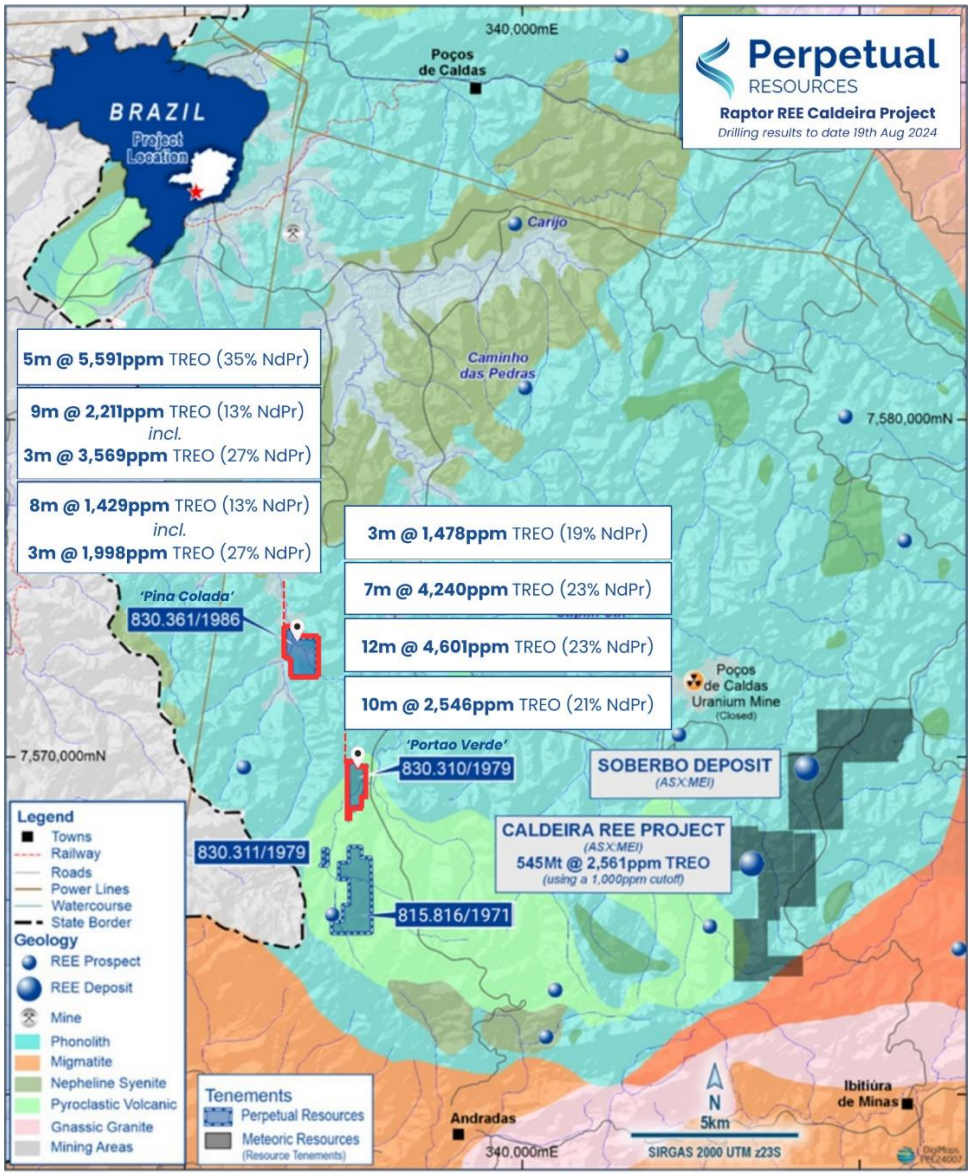

Figure 3 – Regional map showing latest results and location of PEC's Raptor Caldeira tenements, within the Alkaline Complex of Poços de Caldas, Minas Gerais as at 21 August 2024[3]. Full results in Appendix 1.

Perpetual's recently appointed REE specialist, Mr. Karl Weber, commented:

"With results from all but eight holes of the maiden drill program now in, we're seeing a growing high-grade rare earth discovery at our Raptor Project in Minas Gerais, Brazil. Mineralisation extends across multiple tenement areas, with further results still pending. Notably, all holes intersected mineralisation from just below surface to the end of hole, indicating strong potential at depth.

The Nd+Pr oxide content in higher-grade (>2000ppm TREO) zones consistently exceeds 20%, reinforcing the case for further drilling to test for extensions of the mineralisation."

[3] For additional information, please refer to Meteoric Resources (ASX:MEI) ASX Announcement dated 14th May 2024, titled "150% Increase in Soberbo Mining Licence Mineral Resource".

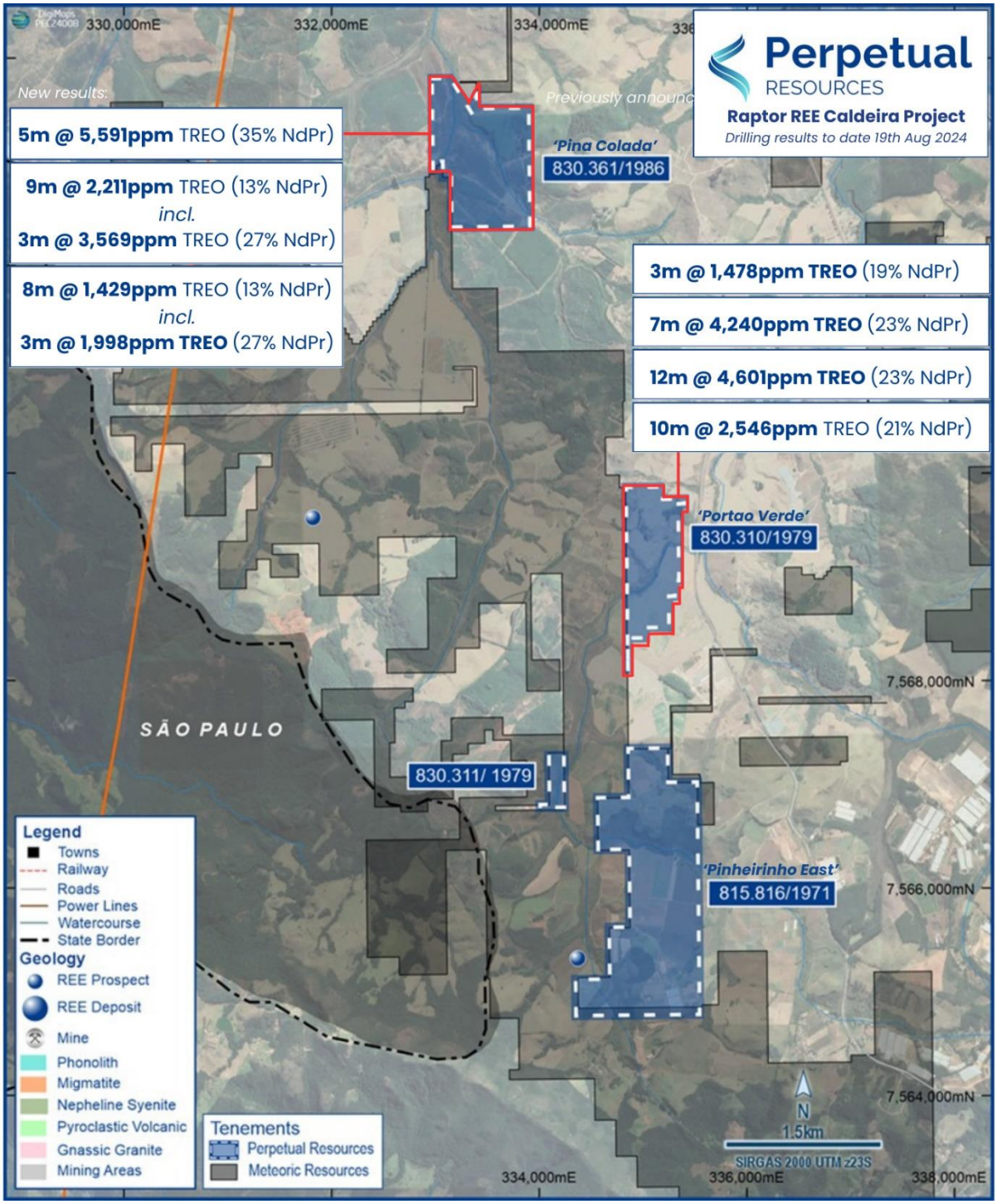

Figure 4 – Map showing recent drilling results from license 830.310/1979 & 830.361/1986 and location of Perpetual's Raptor Caldeira tenements, located within the Alkaline Complex of Poços de Caldas, Minas Gerais.

The saprolitic mineralisation encountered, hosted by weathered alkaline rocks, is characteristic of Caldeira-style Ionic Clay REE mineralization. This was a key factor in Perpetual's decision to acquire this highly prospective project area. The weathered host rocks identified so far include breccias and intrusive rocks from the Poços de Caldas Intrusive Complex.

Next Steps

1. **Assay Returns and Data Review:**

   Upon receipt of the final assays, a comprehensive data review will be undertaken across the overall Raptor Project, which will guide the strategy for the upcoming Phase 2 exploration program. Due to the stronger than expected results achieved in the Phase 1 campaign, is expected that the Phase 2 program will be more comprehensive and enable a further advancement of the project, than initially expected.

2. **Infill and Extension Drilling Program:**

   Design and implement targeted drilling to confirm mineralisation continuity across all Raptor Project tenement areas, consolidate high-grade zones, and expand into underexplored areas.

3. **Pathway to Resource Definition:**

   Perpetual will look to leverage the already received and planned Phase 2 drill results to rapidly advance towards a JORC-compliant resource.

Background to Raptor REE Project

The Raptor Tenements are located in close proximity to, and within the same geological formation as, Meteoric Resources' (ASX:MEI) Tier 1 Caldeira ionic clay REE project, which boasts a JORC Mineral Resource Estimate of 545 million tonnes at 2,561 ppm TREO, including 24.1% MREO. This deposit is considered one of the world's highest-grade ionic adsorption clay REE deposits.

Geologically, the tenements are situated within the Cretaceous (80 Ma) Alkaline Complex of Poços de Caldas, which spans approximately 800 km² and is the largest alkaline complex in Brazil. The project area hosts a variety of minerals, including Rare Earth Elements (REE). The complex is composed of nepheline syenite and other alkaline intrusive rocks, with primary REE mineralization associated with intrusive formed during crustal-scale magmatic events.

Intense weathering has led to the development of extensive clay regolith above the alkaline intrusive. Historical mining activities have primarily targeted clay for various uses. Notably, mineralization in nearby projects has been identified through shallow sampling, with drill depths exceeding 8 meters, indicating shallow subsurface systems.

- ENDS -

This announcement has been approved for release by the Board of Perpetual.

KEY CONTACT
Julian Babarczy
Executive Chairman
E info@perpetualresources.co

Results Summary[4]

Hole ID	Sample ID	m From	m To	TREO	Nd+Pr oxide	Dy^2O^3	Tb^4O^7	Nd+Pr	MREO	Hole Intercept
				ppm	*ppm*	*ppm*	*ppm*	*%*	*ppm*	TREO ppm
RPT0013	T0088	0	1	3,926	677	20	4	17	701	**5m @ 2,967 ppm** TREO (22% NdPr)
RPT0013	T0089	1	2	3,020	729	21	4	24	754	
RPT0013	T0090	2	3	3,438	842	39	7	24	888	
RPT0013	T0091	3	4	3,360	755	41	7	22	803	
RPT0013	T0092	4	4.6	1,102	243	16	3	22	262	
RPT0014	T0093B	0	1	1,646	291	17	3	18	311	**5m @ 2,442 ppm** TREO (18% NdPr)
RPT0014	T0094	1	2	1,666	326	17	3	20	346	
RPT0014	T0095	2	3	3,174	768	38	7	24	813	
RPT0014	T0096	3	4	4,257	350	15	2	8	368	
RPT0014	T0097	4	5	1,472	321	16	3	22	340	
RPT0015	T0099	1	2	1,494	197	13	2	13	212	**3m @ 1,742 ppm** TREO (16% NdPr)
RPT0015	T0100	2	3	1,609	255	16	2	16	273	
RPT0015	T0101	3	4	2,124	414	23	4	19	441	
RPT0016	T0104	0	1	800	67	9	1	8	78	**8m @ 1,429 ppm** TREO (15% NdPr) Incl. **Inc 3m @ 1,998 ppm** TREO (22% NdPr)
RPT0016	T0105	1	2	1,067	78	6	1	7	85	
RPT0016	T0106	2	3	1,270	112	4	1	9	117	
RPT0016	T0107	3	4	1,380	135	5	1	10	140	
RPT0016	T0108	4	5	924	177	5	1	19	183	
RPT0016	T0109	5	6	1,154	249	11	2	22	262	
RPT0016	T0110	6	7	2,127	395	15	3	19	413	
RPT0016	T0111	7	8	2,714	701	23	5	26	728	
RPT0018	T0114	0	1	5,764	2,172	42	9	38	2,223	**5m @ 5,591 ppm** TREO (35% NdPr)
RPT0018	T0115	1	2	6,371	2,186	49	11	34	2,245	
RPT0018	T0116	2	3	4,790	1,632	41	9	34	1,682	
RPT0018	T0117	3	4	5,498	1,868	52	11	34	1,931	
RPT0018	T0118	4	5	5,534	1,835	58	12	33	1,905	
RPT0019	T0120	0	1	1,318	55	12	2	4	69	**9m @ 2,211ppm TREO** (13% NdPr) Incl. **Inc 3m @ 3,569 ppm** TREO (27% NdPr)
RPT0019	T0121	1	2	1,834	201	16	3	11	219	
RPT0019	T0122	2	3	1,456	59	12	2	4	72	
RPT0019	T0123	3	4	1,426	54	10	1	4	65	
RPT0019	T0124	4	5	1,644	63	10	2	4	75	
RPT0019	T0125	5	6	1,522	129	13	2	8	144	

Figure 5 – Table of drill results

[4] *Conversion factors used stated in JORC table.*

About Perpetual Resources

Perpetual Resources Limited (Perpetual) is an ASX listed company pursuing exploration and development of critical minerals essential to the fulfillment of global new energy requirements.

Perpetual is active in exploring for lithium, rare earth elements (REE) and other critical minerals in the Minas Gerais region of Brazil, where it has secured approximately 12,500 hectares of highly prospective lithium and REE exploration permits. The lithium (spodumene) bearing region has become known as Brazil's "Lithium Valley". In addition
Perpetual also operates the Beharra Silica Sand development project, which is located 300km north of Perth and is 96km south of the port town of Geraldton in Western Australia.
Perpetual continues to review complementary acquisition opportunities to augment its growing portfolio of exploration and development projects consistent with its critical minerals focus.

Brazil Projects

Australian Projects

Competent Person Statement

The information summarised in this document relating to Exploration projects and results is based on information provided by Mr Karl Weber, a professional geologist with over 25 years' experience in minerals geology including senior management, consulting, exploration, resource estimation, and development. Mr Weber completed a Bachelor of Science with Honours at Curtin University in 1994; is a member of the Australasian Institute of Mining and Metallurgy (Member No. 306422) and thus holds the relevant qualifications as Competent Person as defined in the JORC Code. Mr Weber is contracting to Perpetual Resources. Mr Weber has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Weber consents to the inclusion of this information in the form and context in which it appears.

Forward-looking statements

This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

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Appendix 1

Table 1. Full Suite REE Assay Results

Hole_ID	Depth (m)		Sample	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
RPT0013	0	1	T0088	1034.6	1509	149.5	425.6	42.8	9.88	25.7	3.14	17.53	3.32	9.68	1.3	8.2	1.03	99.82
RPT0013	1	2	T0089	1172.3	532.8	162.88	456.4	46.3	11.43	29.4	3.43	18.34	3.36	9.55	1.24	7.4	0.96	110.41
RPT0013	2	3	T0090	1395.3	365.1	188.15	526.6	62.7	16.34	48.42	6.27	34.14	6.38	17.32	2.21	12.2	1.55	230.5
RPT0013	3	4	T0091	1245.2	517.5	169.1	472.2	57.4	15.95	47.5	6.34	35.46	6.68	18.06	2.31	13.1	1.72	238.7
RPT0013	4	4.6	T0092	373.5	185	53.73	152.6	19.6	5.52	16.44	2.36	14.27	2.79	7.72	1.04	6.1	0.75	91.71
RPT0014	0	1	T0093B	437.3	526	63.69	183.7	23	6.17	17.12	2.51	15.07	3.12	9	1.25	7.4	0.99	99.87
RPT0014	1	2	T0094	485.6	470	72.14	204.5	24.5	6.17	17.86	2.4	14.93	3.02	8.71	1.22	7.4	0.94	94.37
RPT0014	2	3	T0095	1279.4	345.8	170.75	481.8	55.3	15.21	44.77	5.88	32.84	6.17	16.69	2.07	11.9	1.57	219.22
RPT0014	3	4	T0096	526.3	2653.5	78.01	219.5	23.5	5.9	15.29	2.03	13	2.5	7.47	1.07	6.6	0.88	72.13
RPT0014	4	5	T0097	480.5	323.4	70.91	201.5	23.5	6.47	18.06	2.49	14.31	2.72	7.91	1.06	6.3	0.85	88.32
RPT0015	1	2	T0099	283.2	685.9	43.57	123.5	14.8	3.95	10.17	1.73	11.33	2.5	7.8	1.14	7.6	0.99	71.24
RPT0015	2	3	T0100	340.6	652	56.51	160.2	19.5	5	13.2	2.04	13.72	2.82	9.1	1.33	8.7	1.11	80.89
RPT0015	3	4	T0101	581.6	628.4	89.87	261.8	31.5	8.23	22.96	3.24	20.18	4.08	12.49	1.83	11.9	1.53	122.56
RPT0016	0	1	T0104	121.3	417.9	15.01	42.3	7	2.28	6.42	1.17	8.01	1.68	5.28	0.75	5.1	0.69	44.61
RPT0016	1	2	T0105	149.8	635.1	18.26	47.9	6.1	1.73	4.73	0.81	5.19	1.1	3.42	0.55	3.4	0.44	30
RPT0016	2	3	T0106	185.1	757.6	25.41	69.9	8	1.94	4.76	0.64	3.51	0.68	2.25	0.29	2.1	0.28	19.74
RPT0016	3	4	T0107	206.3	807.2	30.19	84.4	9.6	2.42	6.18	0.73	3.98	0.79	2.2	0.29	1.9	0.27	19.32
RPT0016	4	5	T0108	238.2	347.8	39.36	111.3	12.2	2.89	6.29	0.73	3.96	0.69	1.94	0.28	1.7	0.24	18.81
RPT0016	5	6	T0109	329.3	329.5	54.84	156.7	18.9	4.67	11.66	1.64	9.6	1.78	5.01	0.77	4.7	0.6	50.65
RPT0016	6	7	T0110	521.5	791.7	86.71	248.6	29.1	7.22	17.64	2.33	13.45	2.61	7.39	1.05	6.6	0.87	72.09
RPT0016	7	8	T0111	703.5	766.4	148.79	446.6	54.3	12.88	31.11	3.9	19.83	3.44	9.39	1.25	7.9	1	96.68
RPT0017	0	1	T0112	692.6	654.4	137.88	430.5	49.1	11.17	25.82	3.28	17.62	3.19	8.53	1.12	7.3	0.93	80.36
RPT0017	1	1.9	T0113	471.4	653.9	95.67	304.5	36.4	8.2	18.77	2.38	13.09	2.34	6.41	0.9	5.3	0.72	59.33
RPT0018	0	1	T0114	1928.2	642.9	457.6	1388.2	154.9	33.29	72.2	7.78	36.61	5.82	14.49	1.84	11.4	1.46	145.52
RPT0018	1	2	T0115	2000.1	1009.1	455.43	1402.4	165.1	37.44	84.36	9.15	42.42	6.78	16.38	2.01	12.1	1.58	174.53
RPT0018	2	3	T0116	1630.2	597.1	336.04	1050.9	126.9	29.55	69.33	7.49	36.02	5.7	13.82	1.66	10.1	1.32	156.31
RPT0018	3	4	T0117	1962.9	544	386.06	1201.5	145.9	34.92	87.48	9.41	44.93	7.39	17.62	2.16	12.5	1.61	213.18
RPT0018	4	5	T0118	2009.6	508.9	380.32	1179.2	146.5	36.31	94.68	10.47	50.55	8.05	19.52	2.29	13.1	1.67	238.97

Hole_ID	Depth (m)		Sample	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
RPT0019	0	1	T0120	85.3	882.7	11.77	35.1	7.7	2.37	7.1	1.43	10.43	2.27	6.99	1.1	7	0.94	58.87
RPT0019	1	2	T0121	214	1033.5	41.29	129.3	20.5	5.75	14.52	2.24	13.57	2.53	7.65	1.04	6.8	0.89	66.45
RPT0019	2	3	T0122	95.8	994	12.58	37.5	7.2	2.59	7.06	1.49	10.13	2.16	6.42	0.94	6.4	0.88	54.08
RPT0019	3	4	T0123	84.5	995.4	11.52	34	6.6	2.09	6.24	1.21	8.82	1.89	5.93	0.82	5.6	0.74	48.05
RPT0019	4	5	T0124	104.8	1148.3	13.95	39.5	7.5	2.36	6.4	1.28	8.96	1.9	6.03	0.89	5.8	0.78	50.95
RPT0019	5	6	T0125	172.4	893.8	27.6	81.6	12.2	3.72	9.85	1.76	11.6	2.35	7.16	1.03	6.4	0.81	62
RPT0019	6	7	T0126	598.6	912.7	110.91	346	43.2	10.48	25.35	3.37	18.55	3.34	9.39	1.26	8	1.05	90.48
RPT0019	7	8	T0127	1359.8	798.6	258.85	826.6	97.5	22.86	56.07	6.42	33.3	5.72	15	1.91	12.1	1.56	154.94
RPT0019	8	9	T0128	1204.1	640.5	241.47	781.8	97.2	22.43	54.92	6.29	32.56	5.54	14.63	1.87	11.3	1.57	152.91

Table 2. Hole Collars

Coordinates Presented in SIRGUS 2000 23S

Hole_ID	MGA_East	MGA_North	RL	Max_depth	Lease_ID	Prospect
RPT0013	335013	7569369	1310	4.6	830.310/1979	Portao Verde
RPT0014	335031	7569349	1319	5	830.310/1979	Portao Verde
RPT0015	334884	7569536	1319	6	830.310/1979	Portao Verde
RPT0016	333652	7572600	1304	8	830.361/1986	Pina Colada
RPT0017	332983	7573012	1287	1.9	830.361/1986	Pina Colada
RPT0018	332985	7573021	1287	5	830.361/1986	Pina Colada
RPT0019	333032	7573421	1290	9	830.361/1986	Pina Colada

JORC CODE, 2012 Edition Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Samples reported here are collected from mechanised auger drilling, locally known as Trado, a geochemical sampling method and a standard method for mineral exploration in weathered terrains. The samples collected are representative of the material being drilled by the auger. • Drill samples samples are collected as 1m intervals, or less where an obvious geological change occurs. Intervals are measured by the operators, the whole sample from the interval is homogenised and then quartered and one portion is collected as the representative sample for assay from the sample interval. • Samples are not collected for the top 50cm where vegetation dominates the sample. Samples are not collected in water saturated ground. • Surface Samples collected as rock chip samples are representative of the material seen in shallow excavations (less than 2m deep) or at surface. Continuous channels sampling used where outcrops were accessible. Channel samples are collected as 1m intervals, or less where an obvious geological change occurs. Intervals are measured by the operators. • The representative samples collected for assay averaged 1.5kg in weight. The assay samples are then prepared for assay, crushed to 75% passing 3mm, then a 250g split is pulverised to >95% passing 150# (~0.105mm) with 50g split for final assay.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Auger drilling was completed using a mechanised handheld auger, resulting in a 5-inch (12.5cm) diameter hole. • The drilling is an open hole method, meaning there is a significant chance of some contamination from the surface and other parts of the auger hole. Holes are vertical and not oriented. At 12m depth orientation is not required.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Samples were geologically logged in the field during drilling. • Sample recovery was recorded and was good. The auger drilling provides a close to 100% sample recovery, there is no known relationship to sample recovery and the assay result.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• Samples were geologically logged in the field during drilling. They do not support a Mineral Resource Estimation, mining studies or metallurgical studies.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Sub sampling by quartering of the original drill sample is best practice for this type of sample and provides a suitable sample weight. • The damp nature of the clay material means "splitting" via riffle or rotary method is not possible. The manual quartering is appropriate for the nature of the samples. • Duplicate were used at a 10% rate, REE standard were not available at the time of drilling. Laboratory provided blanks and standards have not shown any issues with QAQC. Where results are considered questionable due to REE content and ratios, without triggering QAQC protocols the samples are checked by another laboratory and not reported until check samples are returned. • Sample size is appropriate for the material being sampled.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• The assay technique used by SGS Geosol Laboratory was IMS95A for 48 elements, is a complete digest using the Lithium Borate Fusion technique. This is a standard industry practice for REE assay. • The laboratory uses Certified Reference Material (CRM), repeats and blanks to ensure QAQC requirements are met. • Where results are considered questionable due to REE content and ratios the samples are checked by another laboratory and not

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</td><td>reported until check samples are returned.
• Check samples are undertaken by ALS Laboratories in Brazil, using the equivalent method ME-MS81D for trace and whole rock element analysis.</td></tr>
<tr><td>Verification of sampling and assaying</td><td>• The verification of significant intersections by either independent or alternative company personnel.
• The use of twinned holes.
• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
• Discuss any adjustment to assay data.</td><td>• Significant results reported here are confirmed from data supplied to PEC staff and consultant geologists.
• No Twin holes.
• Primary data is imported via a modern database administration process with security and QA QC protocols applied.
• No adjustments are made.
• Adjustments to the data were made to transform the elemental values into the oxide values.
• The conversion factors used are included in the table below.
<table><tr><th>Element</th><th>Oxide</th><th>Factor</th></tr><tr><td>Ce</td><td>Ce02</td><td>1.1713</td></tr><tr><td>La</td><td>La203</td><td>1.1728</td></tr><tr><td>Sm</td><td>Sm203</td><td>1.1596</td></tr><tr><td>Nd</td><td>Nd203</td><td>1.1664</td></tr><tr><td>Pr</td><td>Pr6011</td><td>1.2082</td></tr><tr><td>Dy</td><td>Dy203</td><td>1.1477</td></tr><tr><td>Eu</td><td>Eu203</td><td>1.1579</td></tr><tr><td>Tb</td><td>Tb407</td><td>1.1762</td></tr><tr><td>Gd</td><td>Gd203</td><td>1.1526</td></tr><tr><td>Ho</td><td>Ho203</td><td>1.1455</td></tr><tr><td>Er</td><td>Er203</td><td>1.1435</td></tr><tr><td>Tm</td><td>Tm203</td><td>1.1421</td></tr><tr><td>Yb</td><td>Yb203</td><td>1.1387</td></tr><tr><td>Lu</td><td>Lu203</td><td>1.1371</td></tr><tr><td>Y</td><td>Y203</td><td>1.2699</td></tr></table>• Weighted averages of samples >500ppm TREO were used to calculate significant intercepts.</td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
• Specification of the grid system used.
• Quality and adequacy of topographic control.</td><td>• A handheld GPS was used to collect location data for the surface samples and auger drilling. This is accurate to within 5m and is considered sufficient for exploration sampling.
• SIRGAS2000 UTM 23S has been used in Project maps, with Lat/Long used in the country scale maps.
• Quality and adequacy of the topographic</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		control suits the reconnaissance nature of the exploration activities.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Drill holes and channel samples are reconnaissance and therefore widely spaced, making use of existing tracks and clearing where possible. • Data spacing is sufficient to establish grade and geological continuity, given the saprolite clay horizon that hosts the IAC REE mineralisation is generally sub horizontal, however more data is required before a Mineral Resource is applied. • No compositing has been applied.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Drilling is vertical and the targeted clay horizons, hosting the REE mineralisation, are close to horizontal hence unbiased sampling is inferred. • Unknown at this stage if orientation introduces any bias or not in relation to possible structure..
Sample security	• The measures taken to ensure sample security.	• Samples were collected, stored and transported by company representatives hence all activities are considered secure.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• PEC have reviewed the sampling techniques and data collected by the Brazilian company undertaking the work, there have been no issues recognised to date. Exploration and data management has been to a very high standard. • Brazilian geologists at Future Mining (Brazilian incorporated company) have managed the exploration activities to date, adhering to industry standards for the drilling, sampling, data collection and data administration.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	• The following Tenement comprise the Raptor Project, - 815.816/1971 - 830.310/1979 - 830.361/1986 - 830.311/1979 • Perpetual Resources Ltd has an exclusive option to acquire 100% of the above mineral rights relating to rare earth elements, niobium and scandium. The tenements are held by Brazilian company, Mineracao Serra Do Sao Domingos Ltda. • No material impediments are known in relation to the tenements.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Previous exploration data is not known for the project. Bauxite mining has occurred on a portion of 815.816/1971. Clay mining (for ceramics) within alluvial areas has occurred on 830.361/1986.
Geology	• Deposit type, geological setting and style of mineralisation.	• The REE mineralisation reported is of ionic absorption clay (IAC) nature. The style of the REE mineralisation can be assumed due to known mineralisation in the region, metallurgical testwork will be required to confirm the IAC nature of the REE mineralisation.
Drill hole information	• A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• All results and material information is Included in the report as a Collar table, all holes are vertical.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such	• Significant intercepts were calculated using values > 500ppm TREO only in consecutive intervals of saprolite samples originally sampled meter by meter. No upper cuts were used. • Weighted averages were calculated for all intercepts.

Criteria	JORC Code explanation	Commentary
	aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• The mineralisation reported is related to weathered alkaline intrusive and volcanic rocks. The saprolitic clay resulting from the weathering profile is assumed to be close to horizontal (perpendicular to drilling) or following the natural surface (a low angle to drilling), however geological structures may cause as yet unknown irregularities and controls. • Down hole lengths are reported, and true width is not known, it is expected to be close to the down hole length.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Appropriate maps are included in the report. The wide spaced reconnaissance and shallow nature of the drilling precluded the usefulness of sections at this stage.
Balanced Reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All REE results have been reported and summarised as TREO results, including Nd+Pr oxide results.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• No other data is considered relevant at this stage.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• PEC will undertake exploration field work to follow up the results reported here and to investigate lateral extensions and depth extension to existing REE anomalies. • Auger and Aircore drilling is considered appropriate next stage exploration in areas considered highly prospective. • A selection of samples returning positive results will also be tested metallurgically for their IAC potential. Petrological / mineralogical analysis will also be undertaken to confirm the hosting clay and REE mineralogy. • Detailed ground geophysics, mapping and surface sampling will continue as required applied in the next phase of exploration.

Section 3 Estimation and Reporting of Mineral Resources

Not applicable

Section 4 Estimation and Reporting of Ore Reserves

Not applicable