ASX Announcement
22 July 2024

Discovery of High-Grade Tin mineralisation at Itinga Project along with anomalous Lithium, Rubidium, Niobium & Manganese

HIGHLIGHTS

- Reconnaissance exploration within Itinga project area completed in June/July confirms **high grade tin mineralisation within multiple coarse Cassiterite (tin oxide) bearing pegmatites with strike extent up to 750m and up to 200m wide**.
- Peak assay results of **7.4% Sn** (74,000ppm Sn with **2,859ppm Tantalum**) with further strong supporting results including:
  - PECBT054: **>1% Sn** (>10,000ppm) – maximum detection limit reached which have been sent for expedited re-analysis with an upper limit of detection of >10%
  - PECBT053: **0.7% Sn** (6,960ppm)
  - PECBT052: **0.67% Sn** (6,672ppm)
  - PECBT080: **0.63% Sn** (6,265ppm)
- Tin has a well-established association with a number of prolific lithium bearing pegmatites and was a key associated mineral at each of the Greenbushes, Pilgangoora, Wogdina and Tabba Tabba lithium projects.
- Tin has been one of the world's best performing metals in 2024, advancing >30% to over US$33,000 per tonne,[1] with MIT researchers having ranked tin as the most critical tech metal on earth[2].
- Exploration program also confirms numerous fertile pegmatites with anomalous mineralisation at the Itinga project with over a 2,000-ha area of prospective ground in both the Jequitinhonha Valley and Brazil's renowned Lithium Valley precinct.
- Multiple anomalous lithium results returned, with assays up to **2,027ppm Li_2O and 3,012ppm Rb_2O** found in weathered outcrops.
- Anomalous Manganese sample **>10% Mn** (>10,000ppm, which was the maximum detection limit of the test reached which have been sent for expedited re-analysis with an upper limit of detection of 100%).
- Anomalous Titanium **14.5% TiO_2** (87,199ppm Ti) and 1,096ppm Niobium samples also confirmed.
- Follow-up work planned in the short term to expand the extent of exploration coverage, further develop initial findings, refine targets, and prepare for drill testing.

[1] *LME.com - https://www.lme.com/en/metals/non-ferrous/lme-tin#Price+graphs*
[2] *https://www.riotinto.com/-/media/Content/Documents/Invest/Presentations/2018/RT-Lithium-Battery-Metals-Conference-2018-slides.pdf?rev=04bf1cc6a2044a20b9aa9266ec636a14*

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Perpetual Resources Ltd ("Perpetual" or "the Company) (ASX: PEC) is pleased to announce that its maiden systematic exploration program at the recently acquired Itinga project area (refer ASX announcement on 3rd April 2024), located in the prolific "Lithium Valley" region of Minas Gerais, Brazil, has been completed and has confirmed high grade tin mineralisation across **multiple coarse Cassiterite (tin oxide) bearing pegmatites**.

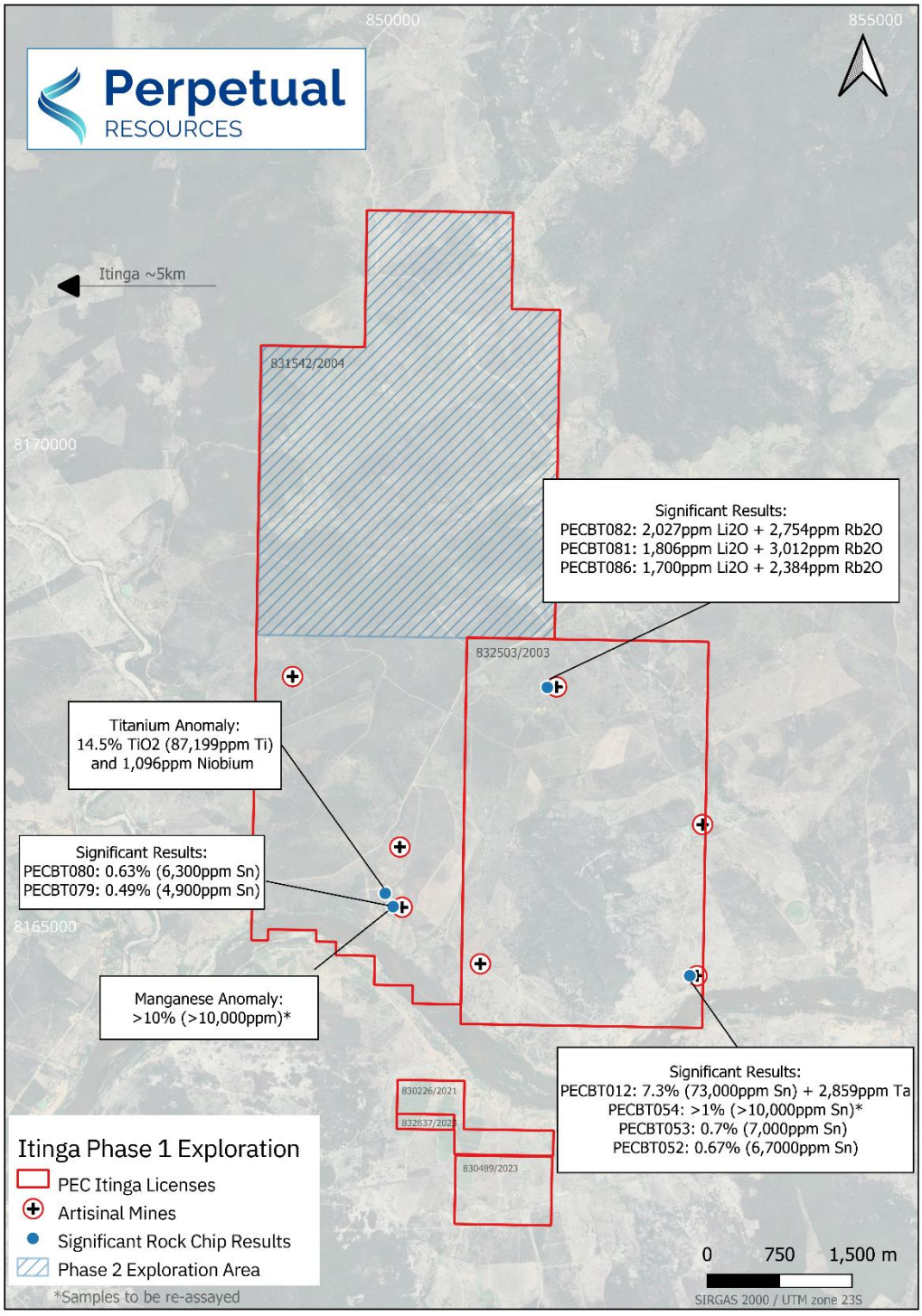

Figure 1: Significant results from Perpetual's phase one exploration program on Itinga licenses 831542/2004 & 832503/2003 for full results refer to Appendix A.

Perpetual Exploration Manager, Allan Stephens commented on the results:

"The results from our first systematic reconnaissance program at the newly acquired Itinga licenses has provided compelling evidence of tin mineralisation in a prolific historical and contemporary producing tin region.

Our results have also confirmed highly anomalous Lithium, Rubidium, Niobium and Manganese, in addition to a host of significantly anomalous pathfinder elements which further highlight the potential of the fertile pegmatites in tenement area.

With only ~50% of the 2,000-hectare tenure covered in this most recent reconnaissance program, we are already seeing the opportunity presented and believe that this foundational evidence builds a strong case for subsequent project evaluation.

We look forward to executing a follow-on exploration program shortly, aiming to expand significantly on the scale of existing mineralisation"

Figure 2: 'Pink Quartz' Garimpo (artisanal mine) located within Itinga license 831542/2004, refer rock descriptions in Appendix B..

Overview of Reconnaissance Program

Perpetual's first-pass reconnaissance fieldwork at its newly acquired Itinga licenses (refer to ASX Announcement dated 3rd April 2024) in Minas Gerais, Brazil, has successfully concluded, surpassing internal expectations with multiple pegmatites confirming high grade mineralisation and confirming promising geochemical fertility.

Over the course of a 5-week period in June and July, Perpetual's exploration team executed a range of high-impact field work, with a total of 76 rock chip samples collected across licenses 831542/2004 and 832503/2003, yielding 27 samples indicating high-grade tin and significant lithium and rubidium, along with notable anomalies in manganese, titanium, tantalum and niobium.

PEC's strategic focus included identifying 'garimpos' (artisanal mines), ground-truthing previously identified hyperspectral targets, and investigating geomorphological anomalies and surface cutbacks to expose outcrops. This marks the first modern exploration effort in the area, presenting a compelling opportunity for a greenfield discovery.

The Itinga Pegmatite Field and broadly Brazil's Lithium Valley belt presents a highly fertile geological environment for LCT (Lithium-Caesium-Tantalum) and Rare-Earth pegmatites in one of the most exciting and rapidly developing mineral exploration jurisdictions in Brazil. The coexistence of mineralisation of tin, lithium, and other rare earth elements is characteristic of the region and the greater Eastern Brazilian Pegmatite Province.

This district predominantly consists of pegmatites derived from G4 Suite granites, which are rich in fluids and incompatible chemical elements. These conditions produce the pegmatites found in the Araçuaí and Itinga regions, which are enriched in critical minerals essential to the global energy transition.

Figure 3: Surface excavation on Itinga license 831542/2004.

Tin

Initial reconnaissance has identified multiple cassiterite-bearing pegmatites within licenses 831542/2004 and 832503/2003, with **tin concentrations reaching up to 7.4% Sn** (with associated 2,859ppm Tantalum & 1,096ppm Niobium). The survey uncovered several historical artisanal workings that targeted cassiterite, aquamarine, semi-precious gemstones, and columbite (tantalum-niobium). The pegmatites exhibited coarse cassiterite, with mineral specimens up to 3 cm in size, and are predominantly found within the S-type Monzogranite Campo Queimado, with intermittent unconformity with the Macaúbas schist in the eastern portions. K/Rb ratios down to 32.8 indicate highly evolved geochemical signatures of prospective rare earth pegmatites.

Sample ID	K_ppm	Cs_ppm	Li_ppm	Nb_ppm	Rb_ppm	Ta_ppm	W_ppm	Sn_ppm	Sn_%	K/Rb
PECBT012	34,224	67.2	120	**1,096**	348	**2,859**	ND	73,040	**7.3%**	98.3
PECBT054	24,320	99.6	149	205	344	**419**	ND	10,000	**>1%**	70.7
PECBT053	32,774	94.3	141	155	369	297	ND	6,960	**0.70%**	88.8
PECBT052	45,995	104.9	101	133	443	287	ND	6,672	**0.67%**	103.8
PECBT080	60,890	**535.4**	112	**469**	**1,852**	**459**	190	6,265	**0.63%**	32.9
PECBT079	63,187	**692.2**	129	361	**1,872**	**405**	174	4,932	**0.49%**	33.8
PECBT043	40,305	438.3	84	278	**1,227**	**403**	191	3,237	**0.32%**	32.8
PECBT078	20,864	159.6	48	129	562	187	ND	2,116	**0.21%**	37.1
PECBT003	37,033	326.5	75	195	**1,130**	198	ND	2,101	**0.21%**	32.8
PECBT034	22,236	166.5	44	313	578	290	148	1,700	**0.17%**	38.5
PECBT095	61,996	456.9	127	200	**1,798**	112	107	1,209	**0.12%**	34.5
PECBT094	35,702	215.8	88	233	**1,060**	148	129	1,157	**0.12%**	33.7

Table 1. Significant Tin results with >1,000ppm Sn cut-off, for full results refer to Appendix A.

Identified mineralised pegmatites exhibit complex zonation and mineralogy, typical broad pure quartz nucleus, feldspar-phyric (>30 cm) dominated intermediate zones rich with micas, and wall/border zones categorized with densely populated 2-3 cm black tourmalines. The artisanal workings within the license typically target the miarolitic cavities ('pockets') near the nucleus of these pegmatites, which are major sources of gemstones, rare elements, and cassiterite.

Early mapping and interpretation indicate scalability for cassiterite-bearing pegmatites, with strikes extending up to ~750 meters and trending N-S to NE-SW within a ~200-meter-wide corridor. These pegmatites generally have a sub-vertical orientation. Perpetual believes additional occurrences are likely within its licensed areas.

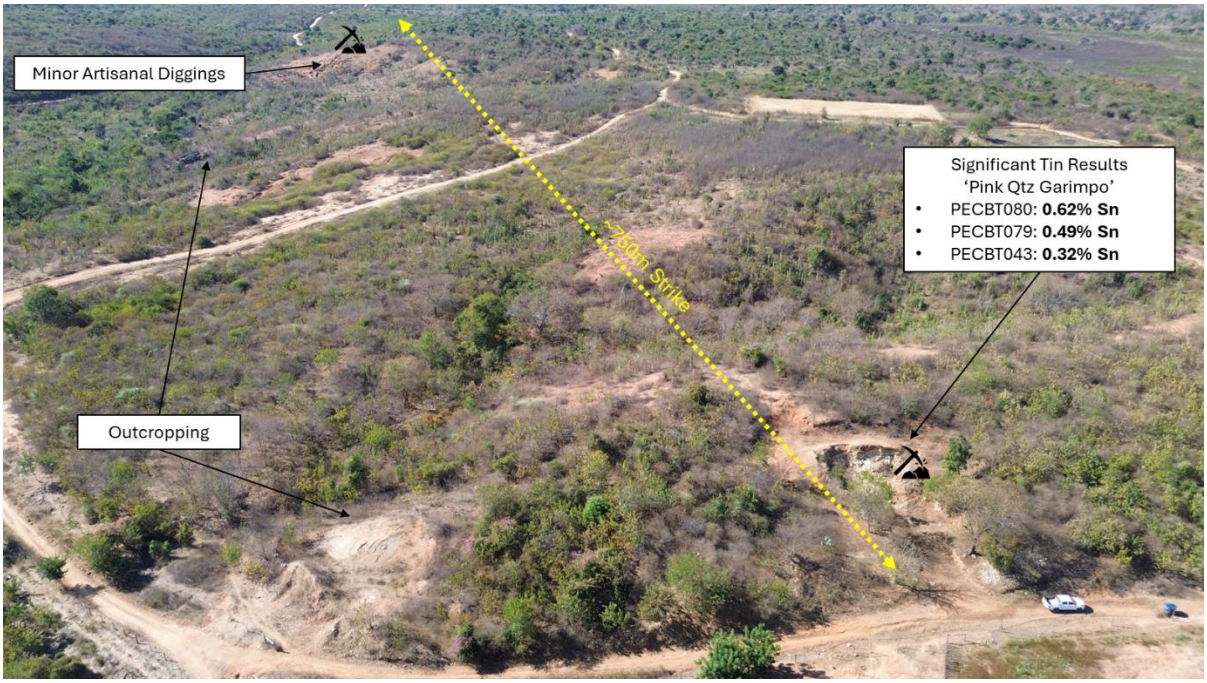

Figure 4: Interpreted pegmatite corridor at 'Pink Quartz Garimpo' on Itinga license 831542/2004.

Figure 5 & 6: Cassiterite (Left) and coarse pegmatite (Right) at 831542/2004, refer rock descriptions in Appendix B.

Tin Market Opportunity

During the 1980s, Brazil was a significant global tin producer and explorer (22% of world production in 1989[3]), but the industry declined with falling tin prices. Renewed interest in tin as a critical mineral has recently emerged, driven by its importance in new technologies. A 2018 study commissioned by Rio Tinto and conducted by MIT indicated that tin is the most likely critical mineral to be impacted by technological advancements. MIT researchers have ranked tin as the most critical tech metal on Earth[4].

This acceptance of tin as a growth commodity has led to a >30% increase in the tin price since the beginning of 2024, with an expectation of potential additional price increases due to increased demand.

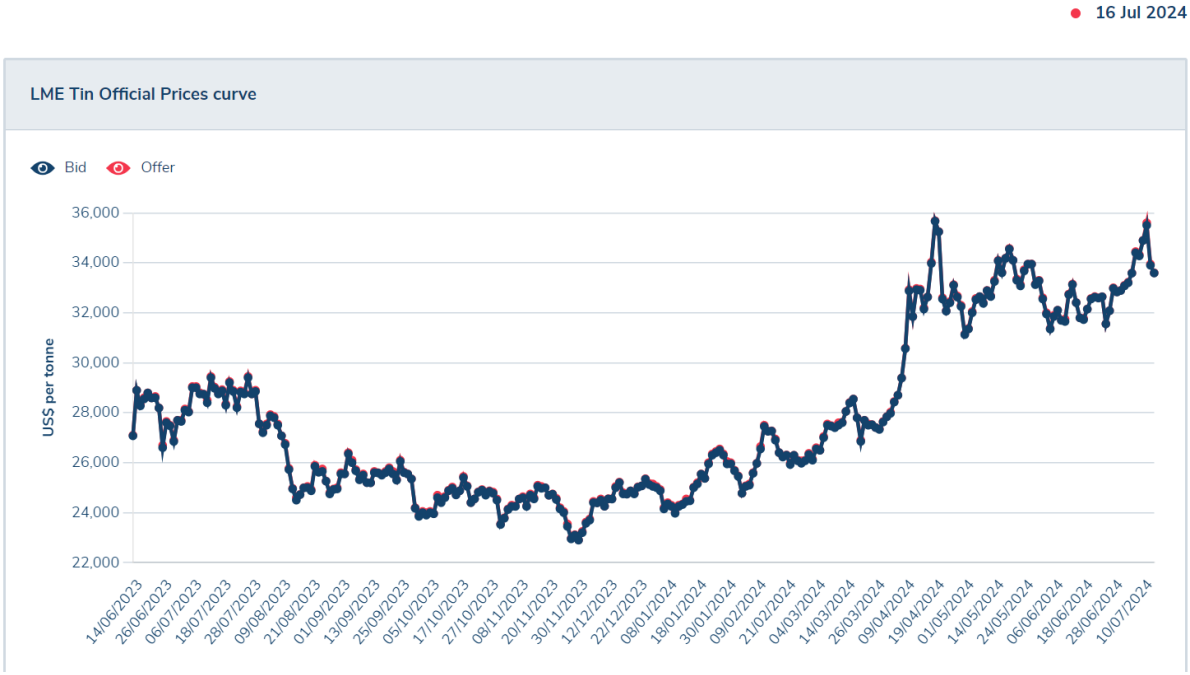

Figure 7: Tin 12-month Chart (source: LME.com)

Tin's extensive use in solders makes it essential to the technology revolution, and its applications are expanding, particularly in emerging lithium-ion batteries. Brazil's potential as a major low-cost tin global producer is being realized once again. This presents a significant opportunity to develop Brazil's tin resources, particularly given its economic coexistence of lithium-bearing pegmatites and the ongoing exploration focus in Brazil's Lithium Valley.

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[3] *Larsson, R., & Söderholm, P. (1996). International tin agreements & the rise of Brazilian tin mining industry. Minerals & Energy - Raw Materials Report, 12(2), 12–16. https://doi.org/10.1080/14041049609409433*

[4] *https://www.riotinto.com/-/media/Content/Documents/Invest/Presentations/2018/RT-Lithium-Battery-Metals-Conference-2018-slides.pdf?rev=04bf1cc6a2044a20b9aa9266ec636a14*

Lithium & Rubidium

Initial reconnaissance has revealed significant anomalies, with surface lithium concentrations reaching up to 2,027 ppm Li_2O and rubidium up to 3,012 ppm Rb_2O. K/Rb ratios as low as 15.1 indicate highly evolved geochemical signatures of prospective LCT-Pegmatites. These findings are associated with weathered (partial/total kaolinization) pegmatite within the Campo Queimado Monzogranite & Leucogranite Campestre of license 832503/2003.

Sample ID	K_ppm	Cs_ppm	Rb_ppm	Rb_2O_ppm	Sn_ppm	Ta_ppm	Li_ppm	Li_2O_ppm	K/Rb
PECBT081	37967	618	2,518	**2,754**	306	57	940	**2,027**	15.1
PECBT082	49712	749	2,754	**3,012**	334	77	838	**1,807**	18.1
PECBT086	48301	543	2,180	**2,384**	574	83	760	**1,639**	22.2
PECBT084	37307	741	2,281	**2,495**	268	50	661	**1,425**	16.4
PECBT088	31106	455	1,392	**1,522**	186	34	605	**1,304**	22.3
PECBT090	50145	246	1,342	**1,468**	546	38	582	**1,255**	37.4
PECBT085	43365	243	992	**1,085**	96	18	560	**1,207**	43.7
PECBT070	38163	178	1,162	**1,271**	179	35	503	**1,084**	32.8

Table 2. Significant Lithium results with >1,000ppm Li2O cut-off[5], for full results refer to Appendix A.

Figure 8: 'Gem Pit' area on Itinga license 832503/2003, refer rock descriptions in Appendix B.

[5] *Multiplied by the standard oxide conversion factor of 2.153 for Lithium & 1.0936 for Rubidium.*

The elevated lithium and rubidium concentrations are primarily due to the presence of zinnwaldite, a lithium-rich mica, identified in a cluster of artisanal workings in the northern section of the license. These localized areas show significant weathering and oxidation, resulting in soft and brittle residual pegmatite. Due to the high mobility of lithium in oxidized and leached environments, lithium content tends to be lower at the surface and subsurface.

Regionally, Zinnwaldite commonly occupies the marginal zones in fertile pegmatites and is found throughout the Itinga pegmatite field. Proximal lithium projects, such as the Urubu Pegmatite (part of Sigma Lithium Corp's Grota do Cirilo Projects), contain zinnwaldite along with other high-grade lithium-bearing minerals[6]. Perpetual's strategy is to conduct further work on this target to understand the subsurface opportunity.

Anomalisms: Manganese & Titanium

Initial reconnaissance has also revealed manganese enrichment (>10%) that warrants follow-up testing to assess its economic potential and contextual significance. Manganese enrichment is said to correlate positively with pegmatites containing highly evolved mineral assemblages, such as spodumene, lepidolite, spessartite, manganese and tantalum-enriched columbite group minerals, pollucite, and elbaite tourmaline.[7].

Follow up will also be conducted on the anomalous Titanium Sample 14.5% TiO_2 (87,199ppm Ti). High values are suggested to be from Ilmenite (titanium mineralisation) found with sub outcrops close to tin-bearing pegmatites and a common accessory mineral in granitic pegmatites. Follow-up testing to assess its economic potential and contextual significance.

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

– ENDS –

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[6] *https://rruff.info/rruff_1.0/uploads/AM96_1455.pdf*
[7] *https://www.searchanddiscovery.com/documents/2011/80160camp/ndx_camp.pdf*

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

COMPLIANCE STATEMENTS

Reporting visual estimates of mineralisation

Visual assessments of mineral abundance should never be viewed as a stand-in for laboratory analyses, especially when concentrations or grades are of primary economic importance. Visual estimates may also fail to provide any insight into impurities or detrimental physical properties that are pertinent to valuations.

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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Competent Person Statement

The information in this report related to Geological Data and Exploration Results is based on data compiled by Mr. Allan Harvey Stephens. Mr. Stephens is an Exploration Manager at Perpetual Resources Limited and is a member of both the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). He possesses sound experience that is relevant to the style of mineralisation and type of deposit under consideration, as well as the activities he is currently undertaking. Mr. Stephens qualifies as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves.' He provides his consent for the inclusion of the matters based on his information, as well as information presented to him, in the format and context in which they appear within this report.

Appendix A – Assay Results

Significant values[8] highlighted in green. Coordinates provided in SIRGUS 2000 /UTM 23S, Sampling Methods described in Appendix C: JORC Code, 2012 Edition - Table 1.

Sample ID	NAT_North	NAT_East	Cs_ppm	Li_ppm	Mn_ppm	Nb_ppm	Rb_ppm	Sn_ppm	Ta_ppm	Ti_pct	W_ppm
PECBT001	8164883	850518	185	41	133	153	485	472	82	0.0	ND
PECBT002	8164883	850518	229	41	124	110	473	601	107	0.0	ND
PECBT003	8164883	850518	327	75	180	195	1,130	2,101	198	0.1	ND
PECBT004	8166204	853165	18	37	ND	ND	298	20	ND	ND	ND
PECBT005	8166902	852669	90	95	157	88	793	144	20	0.1	ND
PECBT006	8166443	852763	52	192	186	16	617	36	ND	0.1	ND
PECBT007	8166297	852693	24	249	289	40	404	34	ND	0.1	ND
PECBT008	8166204	853165	17	45	170	21	160	23	ND	0.1	ND
PECBT009	8166826	848262	165	16	128	54	669	359	28	0.0	ND
PECBT010	8166183	849034	50	ND	228	16	290	129	31	0.0	ND
PECBT012	8164459.6	853145.5	67	120	262	1,096	348	73,040	2,859	0.1	ND
PECBT014	8166899	852650	21	30	ND	26	480	324	21	0.0	ND
PECBT015	8166204	853165	34	51	ND	ND	440	32	ND	0.0	ND
PECBT016	8166204	853165	15	44	109	14	310	35	ND	0.0	ND
PECBT017	8166370	848015	81	388	274	93	602	377	20	0.1	ND
PECBT018	8166183	849034	17	150	713	12	756	48	ND	ND	ND
PECBT019	8166183	849034	87	280	134	117	1,486	321	56	0.1	ND
PECBT020	8166183	849034	10	164	981	46	245	43	18	0.1	ND
PECBT021	8166183	849034	20	172	303	36	415	51	13	0.0	ND
PECBT022	8166183	849034	22	85	192	ND	359	33	ND	0.0	ND
PECBT023	8167213	851520	29	207	124	72	691	73	13	0.0	ND
PECBT026	8163224	850443	37	134	424	ND	461	13	ND	ND	ND
PECBT027	8167578	848924	57	44	122	ND	265	23	ND	0.1	ND
PECBT028	8167578	848924	40	67	167	ND	1,434	19	ND	ND	ND
PECBT029	8164883	850518	28	31	124,880	506	104	63	76	0.4	101
PECBT030	8166047.5	853171.9	39	184	284	75	752	53	ND	0.1	ND
PECBT031	8164883	850518	139	44	559	46	336	570	51	0.0	ND
PECBT032	8164883	850518	101	41	227	173	333	664	110	0.1	ND
PECBT033	8166204	853165	1	43	6,722	ND	7	12	ND	0.3	ND
PECBT034	8164883	850518	167	44	146	313	578	1,700	290	0.1	148
PECBT035	8164883	850518	246	64	336	140	819	593	107	0.1	ND
PECBT036	8164883	850518	23	ND	ND	37	105	64	17	0.0	ND
PECBT037	8164883	850518	132	32	2,284	183	1,249	540	148	0.0	101
PECBT038	8165395	849743	1	17	5,093	1,081	5	34	486	8.7	ND
PECBT039	8164883	850518	167	58	513	160	593	905	134	0.2	ND
PECBT040	8164883	850518	178	51	274	176	571	938	171	0.1	ND
PECBT041	8164883	850518	154	49	773	70	462	345	75	0.1	ND
PECBT042	8164883	850518	94	68	366	123	786	305	39	0.1	ND
PECBT043	8164883	850518	438	84	612	278	1,227	3,237	403	0.1	191
PECBT044	8164883	850518	158	45	198	128	737	861	158	0.1	ND
PECBT045	8166183	849034	14	124	537	16	665	30	ND	ND	ND
PECBT046	8166183	849034	15	152	850	18	695	38	13	0.0	ND
PECBT047	8167213	851520	447	482	204	51	1,506	272	36	0.1	ND

[8] *Significant Values; Cs >500ppm, Li >480ppm, Mn >100,000ppm, Nb <1,000, Rb >1,000, Sn >1,000, Ta >400 and Ti >1%*

Sample ID	NAT_North	NAT_East	Cs_ppm	Li_ppm	Mn_ppm	Nb_ppm	Rb_ppm	Sn_ppm	Ta_ppm	Ti_pct	W_ppm
PECBT048	8167213	851520	119	286	154	25	806	56	16	0.1	ND
PECBT049	8167213	851520	44	242	153	64	623	54	14	0.0	ND
PECBT050	8167213	851520	89	188	111	25	362	67	24	0.0	ND
PECBT051	8167213	851520	273	280	123	25	665	107	31	0.0	ND
PECBT052	8164462.9	853170	105	101	124	133	443	6,672	287	0.1	ND
PECBT053	8164462.9	853170	94	141	234	155	369	6,960	297	0.1	ND
PECBT054	8164462.9	853170	100	149	218	205	344	10,000	419	0.1	ND
PECBT055	8164462.9	853170	127	204	323	40	588	124	19	0.1	ND
PECBT069	8164462.9	853170	157	172	398	24	527	117	16	0.1	ND
PECBT070	8167213	851520	178	503	199	81	1,162	179	35	0.1	ND
PECBT071	8167213	851520	12	173	193	ND	530	11	ND	0.1	ND
PECBT072	8166001	851912	12	412	284	14	562	19	ND	0.2	ND
PECBT076	8165860	851955	103	374	197	83	928	119	53	0.1	ND
PECBT077	8165604	851983	11	187	355	ND	483	11	ND	0.1	ND
PECBT078	8164883	850518	160	48	175	129	562	2,116	187	0.0	ND
PECBT079	8164883	850518	692	129	339	361	1,872	4,932	405	0.2	174
PECBT080	8164883	850518	535	112	375	469	1,852	6,265	459	0.2	190
PECBT081	8167213	851520	618	940	285	125	2,518	306	57	0.1	ND
PECBT082	8167213	851520	749	838	257	123	2,754	334	77	0.1	ND
PECBT083	8167213	851520	310	262	127	50	923	292	309	0.0	ND
PECBT084	8167213	851520	741	661	244	53	2,281	268	50	0.1	ND
PECBT085	8167213	851520	243	560	247	42	992	96	18	0.0	ND
PECBT086	8167213	851520	543	760	278	142	2,180	574	83	0.1	ND
PECBT087	8167213	851520	317	281	121	50	1,473	277	101	0.1	ND
PECBT088	8167213	851520	455	605	205	100	1,392	186	34	0.1	ND
PECBT089	8167213	851520	225	481	183	68	935	192	38	0.1	ND
PECBT090	8167213	851520	246	582	212	97	1,342	546	38	0.1	ND
PECBT091	8167213	851520	205	429	179	64	1,100	287	67	0.1	ND
PECBT092	8167213	851520	114	241	111	26	559	100	15	0.0	ND
PECBT093	8166047.5	853171.9	31	64	184	48	470	42	10	0.0	ND
PECBT094	8164883	850518	216	88	218	233	1,060	1,157	148	0.1	129
PECBT095	8164883	850518	457	127	259	200	1,798	1,209	112	0.1	107
PECBT096	8164883	850518	116	66	127	60	662	219	20	0.1	ND

Appendix B – Rock Type Descriptions

Table 1 –Sample Descriptions and Locations

Figure	Easting	Northing	Lithology	Commentary
2	8164459.6	853145.5	Outcropping Pegmatite surrounded by weathered oxidised soils.	Drone/Aerial view of Pink Quart Garimpo Location
5	8164459.6	853145.5	Cassiterite Nuggets (100%)	Tuca's Garimpo
6	8164459.6	853145.5	Miarolitic Pegmatite Clast – Fspar (60%), Mica (30%), Qtz (5%), Opaque minerals unknown (~5%)	Tuca's Garimpo
8	851520	8167213	Weathered (partial/total kaolinization) pegmatite. Disturbed surface due to material being used for road base.	Gem Pit Garimpo Location

Appendix C: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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 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.*	• The rock chip samples, weighing around 2-5 kilograms each, were taken randomly from exposed outcrops and weathered areas in the field. It's important to note that these samples do not accurately reflect the potential mineral grade at greater depths. • The type of mineralisation being sought after is associated with pegmatite intrusions that host rare earth pegmatites, and the likely sources are specific S-type Granites and Leucogranites
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).*	• No Drilling Completed
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*	• No Drilling Completed

Criteria	JORC Code explanation	Commentary
	sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
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.*	• All samples were logged sufficiently for geological interpretation.
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.*	• No Drilling Completed • All samples <u>are to be</u> fully crushed, and either a split or the entire sample was pulverized to create a representative composite rock chip sample, depending on the laboratory's procedure. • The samples, with an average size of 2-5 kilograms, were collected for lithium presence confirmation rather than the assessment of grade in potentially non-representative and weathered samples.
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.* • *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.*	• Samples were assayed via ICM90A (fusion by sodium peroxide and finished with ICP-MS/ICP-OES) for 56 elements suites at SGS Geosol Laboratories located in Belo Horizonte, Brazil. No standards duplicates or blanks accompany these initial samples that will not be used other than to indicate potentially interesting lithium contents of the variably weathered samples. • Checks of the analytical values of CRM's used by the laboratory against the CRM specification sheets were made to assess whether analyses were within acceptable limits.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *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.*	• No verification will be undertaken for these initial samples that will not be used in any resource estimate. The samples are to determine the levels of Li and other valuable elements in grab samples
Location of data points	• *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.*	• All sample locations were measured using a handheld Garmin GPS using WGS84 and UTM coordinates - Coordinates provided in SIRGUS 2000 /UTM 23S • The accuracy is considered sufficient for a first pass sampling program.
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.*	• No Drilling Conducted • No Sample 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.*	• No Drilling Conducted
Sample security	• *The measures taken to ensure sample security.*	• Samples have been securely packed in polyweave backs and sealed with cable ties to mitigate contaminants or un-approved handling. • Samples were couriered to Belo Horizonte through a commercial courier and transported by PEC Personnel
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No reviews or audit completed to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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 licence to operate in the area.*	• PEC own's 100% exploration rights to 11 tenements located in Minas Gerais, Brazil, through its wholly owned subsidiary Perpetual Resources Do Brasil LTDA. • Itinga Project: 830489/2023, 830490/2023, 830226/2021, 832837/2023, 832503/2003 & 831542/2004 • Padre Paraiso: 830491/2023 & 830492/2023 • Ponte Nova: 832017/2023, 832018/2023 & 832019/2023
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No prior formal exploration is known on any of the tenements however there has been some informal exploration and production by artisanal miners in and adjacent to Itinga, Ponte Nova & Padre Paraiso Projects.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geological features of the areas consist of granite & sedimentary rocks from the Neoproterozoic era within the Araçuaí Orogen. These rocks have been intruded by fertile pegmatites rich in lithium, which have formed through the separation of magmatic fluids from peraluminous S-type granitoids and leucogranites associated with the Araçuaí Orogen.

Drill hole Information	• *A summary of all information material to the understanding 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*
		• No drilling activities are being reported.
		• The general location of visual occurrences photographed have been provided, in Appendix B, Table 1.
		• The co-ordinates of the rock chip samples have been provided with the relevant assay information in Appendix A.

Criteria	JORC Code explanation	Commentary
	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 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.*	• No analytical results are being reported. • No aggregation methods applied.
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 (eg 'down hole length, true width not known').*	• No drilling activities are being reported.
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.*	• Maps and images are included within body of text.
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 relevant and material exploration data for the target areas discussed, has been reported or referenced.
Other substantive	• *Other exploration data, if meaningful and material, should be*	• All relevant and material exploration data for the target areas discussed, has been

Criteria	JORC Code explanation	Commentary
exploration data	*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.*	reported or referenced. • The general location of visual occurrences photographed have been provided, in Appendix B, Table 1.
Further work	• *The nature and scale of planned further work (eg 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.*	• Follow up work to be conducted in short term to understand develop more occurrences and potential scalability.