PALMARES DELIVERS UP TO 1.69% TREO GRADES (REVISED)

Magnum Mining & Exploration Limited (ASX: **MGU**, **Magnum**, or the **Company**) has completed the technical due diligence on its recently acquired Palmares Rare Earth Element (**REE**) Project and Azimuth REE Project (AZ125 Lineament) in Brazil[1] (***Figure 1***), both acquired from Palmares Estudos Geologicos LTDA. The results reported in this announcement cover only one of eighteen tenements (871332/2020) from the Palmares REE Project. This release replaces that made to the ASX on 4 December 2024, in order to provide additional detail with regards to the project in JORC Table 1.

HIGHLIGHTS

- **Trench samples** at Feirinha Prospect returned **Total Rare Earth Oxides (TREO) up to 1.69% (16,884ppm)**, with **Total Heavy Rare Earth Oxides (THREO) at 2,633ppm**
- **Rock samples** showed up to **1.31% TREO (13,082ppm),** with **THREO at 2,227ppm**
- **THREO contains** high levels of **Terbium (Tb) and Dysprosium (Dy)**, both currently **dominated by Chinese supply**
- Pegmatite swarms identified as REE mineralisation sources
- Anomalous **Cerium (Ce) (up to 6,507ppm)** suggests the mineralisation **is similar to ionic clay deposits**
- Ground geophysical surveys have outlined drilling targets
- **Shallow drilling planned** to investigate surface geochemistry
- **Metallurgical tests planned** to evaluate REE recoveries
- **Less than 0.1%** of the Palmares REE Project **area has been explored**

[1] ASX:MGU "Magnum Secures Major Rare Earths Landholding in Brazil", 21 November, 2024

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Magnum will control 100% of 18 granted claims that make up the Palmares REE Project located in Bahia state (***Figure 1***). These leases cover approximately 348km^2 in an otherwise very tightly held area (***Figure 2***).

Exploration has focussed on the Feirinha Prospect tenement 871332/2020 (***Figure 3***) where geological mapping has identified an area of extensive pegmatite dyke swarms (example in ***Figure 4***). Surface geochemical rock sampling returned up to 13,082ppm (**1.31%**) Total Rare Earth Oxides (TREO) and averaging 1,827ppm (***Figure 3*** and ***Table 1***).

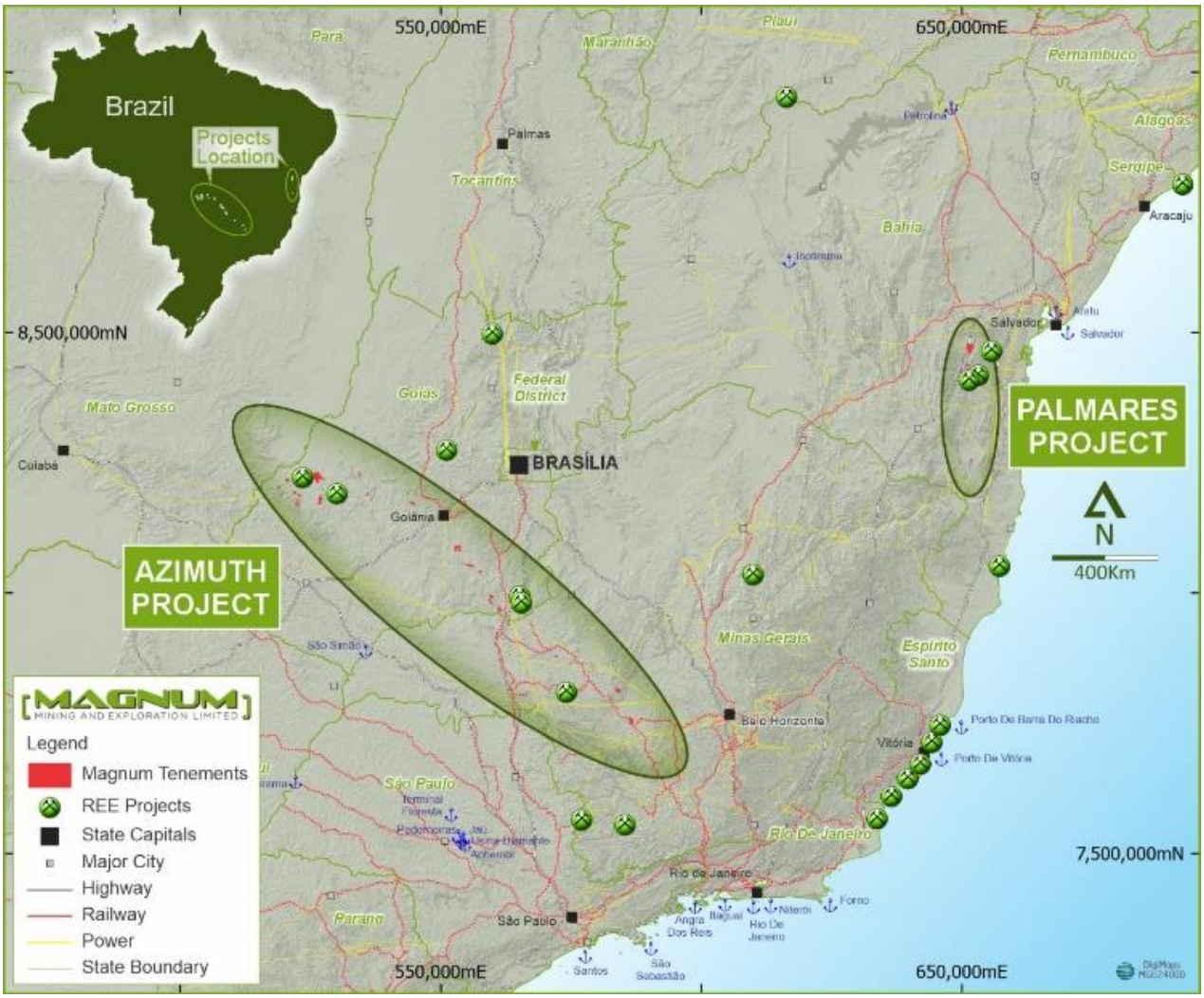

Figure 1 *The Azimuth and Palmares REE Projects are located across the states of Bahia, Minas Gerais and Goias states in south-central Brazil.*

Follow-up trenching totalled 16 trenches for a total of 329.6m. Trenches were up to 2.9m deep and averaged 2m. The trenches targeted pegmatite dykes that were mapped at surface.

Trench assays up to 16,884ppm (**1.69%**) TREO from trench TR-01 and averaging 1,166ppm TREO (***Figure 3*** and ***Table 2***).

The assay results show particular anomalism in Terbium (Tb), with up to 47ppm Tb_4O_7, and Dysprosium (Dy), with up to 285ppm Dy_2O_3. **Tb and Dy are critical heavy rare earths**.

"*Currently, no one can make a high-operating-temperature NdFeB magnet without Chinese controlled inputs of separated Tb and Dy – and there are no substitutes for these elements. This is a major distinction. Standard NdFeB magnets, without Tb or Dy, cannot be used in high-temperature applications such as EV critical components (drive motors and braking systems), wind, or weapons systems*"[2].

The typical levels of Tb and Dy in REE deposits (ex-China) are about 5ppm and 24ppm, respectively[3], making the Feirinha levels exceptionally high.

Significantly, the area returned high Cerium of up to **6,507ppm**. These levels are often associated with, and diagnostic of, mineralised ionic clay deposits, a style characteristic of the area[4].

[2] "China's rare earth subsidies and structural advantages", prepared for the USA Government, Baulk, G., et al., 2 May, 2023
[3] ASX:ABX "CEO Presentation - IMARC Sydney – Amended", 7 November, 2024
[4] ASX:EQN "Ultra-High Grade REE in Clay of 10,110ppm TREO at Surface at Mata da Cord", 30 July, 2024.

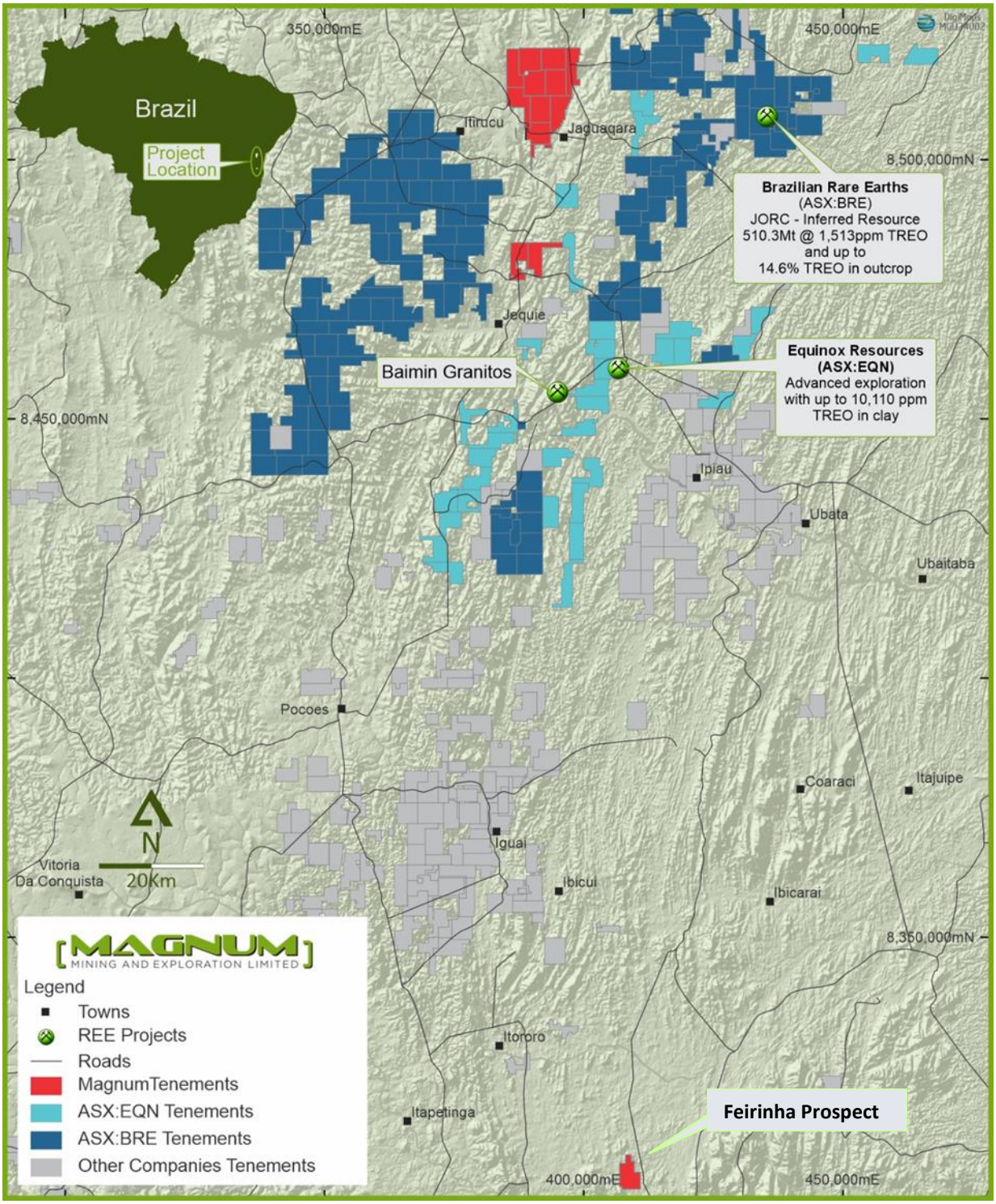

Figure 2 *The Palmares REE Project covers part of the Jequié Belt of metamorphosed intrusives in Bahia State, a highly mineralised belt that is an emerging REE province. The Feirinha Prospect is highlighted.*

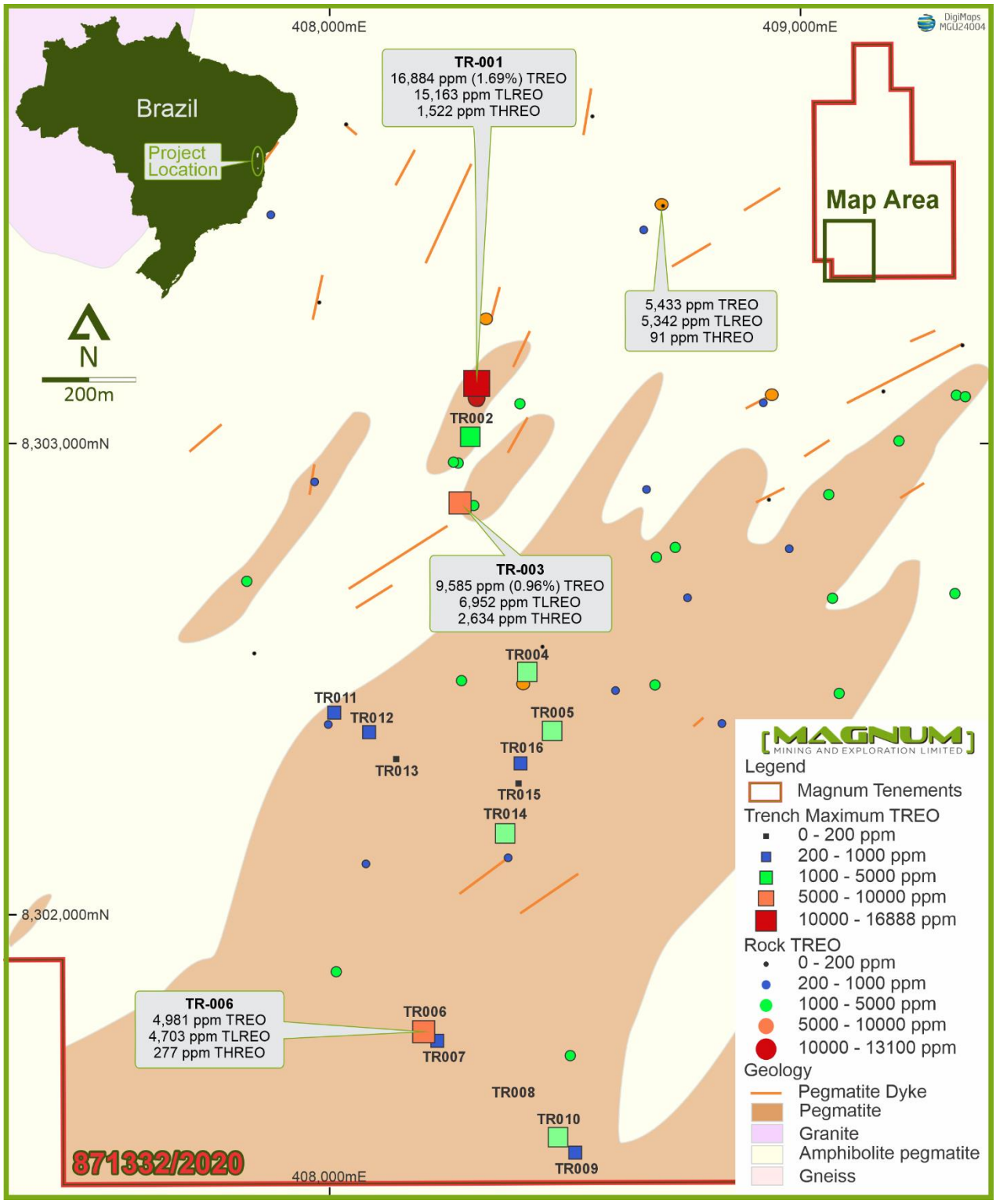

Figure 3 *Feirinha Prospect Total Rare Earth Oxide assays from rock sampling and maximum values from trenches.*

Figure 4 *Exposed pegmatite dyke in trench TR-01, Feirinha Prospect. This is one dyke of a swarm of similar dykes mapped on the prospect.*

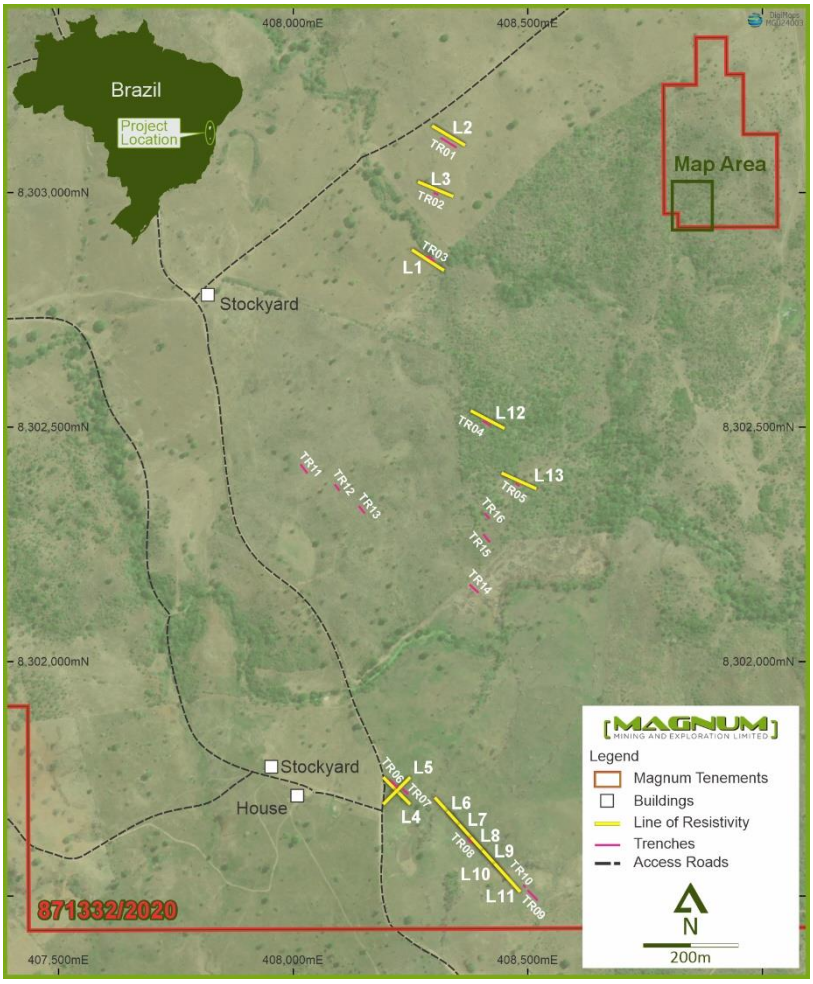

Figure 5 *Feirinha Prospect resistivity survey coverage and trench locations.*

GEOPHYSICAL SURVEYS - RESISTIVITY SURVEY MAPS OUT PEGMATITES

To assist in drill hole targeting, the Feirinha Prospect area has been covered by a ground magnetic and trial resistivity surveys. The ground magnetic survey, completed in 2022, was done on a 100 x 25m station spacing basis and is considered too low resolution to be of any benefit without additional geological control.

The resistivity survey consisted of 13 lines of dipole-dipole data (***Figure 5***). Dipole length was 5m, making the survey high resolution. The survey was designed to test and map out pegmatite dykes and was done with reference to the ground magnetic survey.

The resistivity survey was successful in identifying the pegmatite dykes as resistive highs. Ancillary information, including fault and mafic dyke locations, was also gained from the data (***Figure 6***). This information will be used to locate drill hole collars.

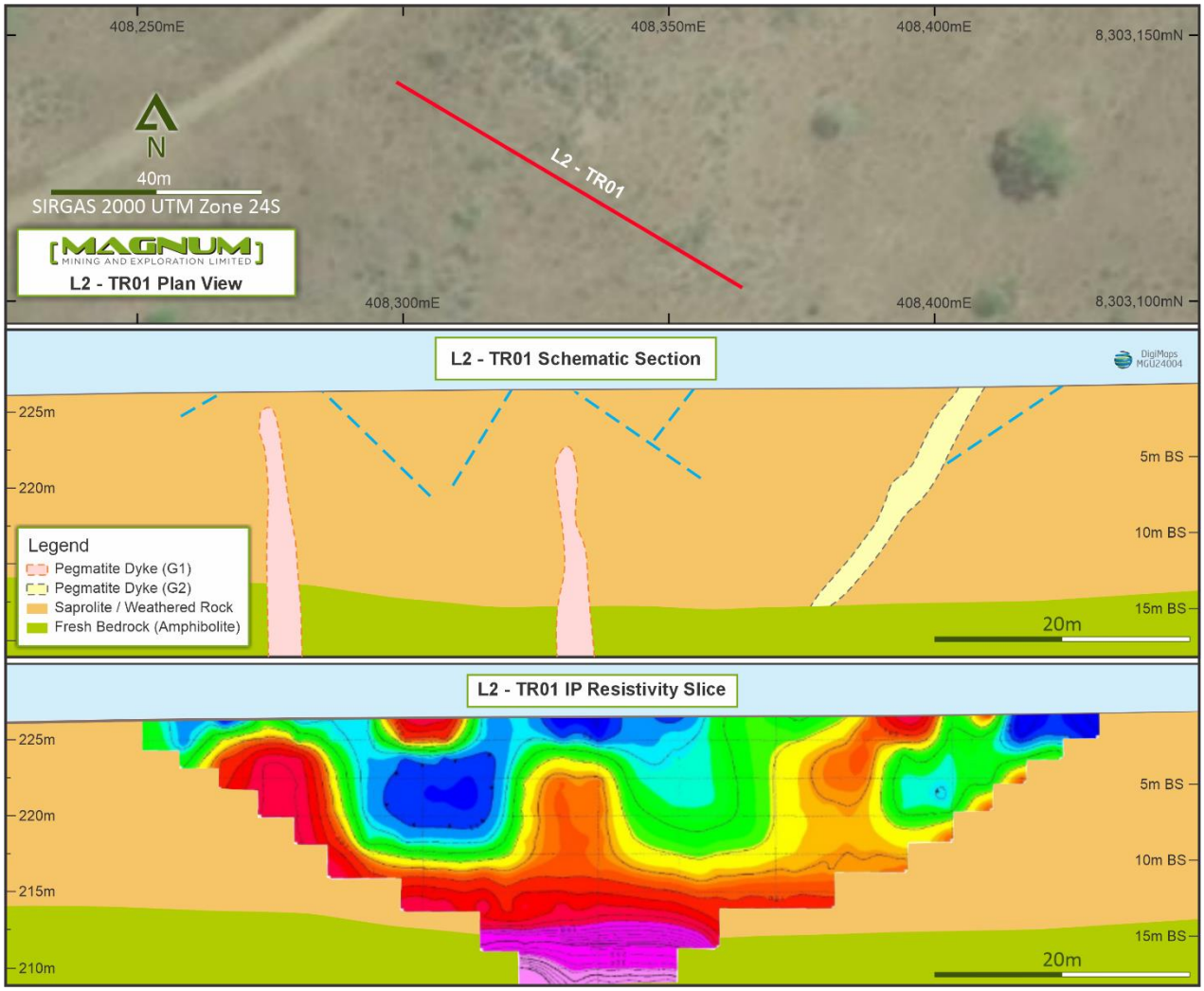

Figure 6 *Resistivity survey maps out three clear resistive anomalies, indicating the presence of pegmatite dykes. Note the low resistivity surface layer which maps out overburden clays and saprolite (weathered rock) compared to the more resistive fresh rock at depth. "Cool" colours represent low resistivities, "hot" colours represent high resistivities.*

NEXT STEPS

Metallurgical test work will be undertaken to assess the recovery of REE from the samples tested. Drilling of anomalous zones is being planned, as well as regional surface geochemical sampling of the rest of the Palmares REE Project ground.

Table 1 *Assays from surface rock samples. Values are in ppm. Refer to JORC (Table 1) for factors used to convert to oxide values.*

			Light REE						Heavy REE											
Sample No.	East	North	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	LREO	HREO	TREO
PAL-RC-083	409328	8302682	640	1156	126	402	60	8	38	5	30	5	15	2	15	2	130	2799	294	3093
PAL-RC-084	408312	8303097	1887	4722	498	1772	345	52	272	41	225	41	118	17	104	13	1003	10855	2227	13082
PAL-RC-085	408404	8303085	504	1427	171	681	162	27	131	19	103	18	47	6	35	5	338	3475	848	4323
PAL-RC-089	408939	8303104	1668	2721	286	864	93	4	50	4	15	2	4	0	2	0	54	6597	158	6756
PAL-RC-090	409350	8303100	99	473	25	92	26	6	35	8	68	16	59	10	72	10	487	843	936	1780
PAL-RC-092	408705	8303508	1341	2257	223	676	63	2	31	3	8	1	2	0	1	0	29	5342	91	5433
PAL-RC-109	407840	8302555	23	42	5	15	2	1	2	0	1	0	1	0	0	0	5	102	11	114
PAL-RC-110	408708	8303505	19	19	2	4	1	1	0	0	0	0	0	0	0	0	2	53	4	57
PAL-RC-111	408667	8303454	68	126	12	37	4	1	2	0	1	0	0	0	0	0	6	289	13	303
PAL-RC-112	408667	8303454	38	48	6	19	3	1	2	0	1	0	1	0	1	0	6	134	13	147
PAL-RC-270	408833	8302406	57	104	10	38	14	3	16	4	27	6	21	3	19	3	157	263	312	575
PAL-RC-281	407997	8302404	24	89	6	24	5	0	4	1	4	1	3	1	4	1	21	173	47	221
PAL-RC-288	408607	8302476	113	224	23	70	10	2	8	2	13	3	13	2	18	3	97	517	195	712
PAL-RC-339	408316	8303090	321	865	80	303	60	10	56	10	69	15	52	8	60	8	430	1919	866	2785
PAL-RC-342	408921	8303087	50	100	10	35	6	0	5	1	4	1	2	0	2	0	19	237	40	277
PAL-RC-347	408976	8302777	191	376	24	71	10	2	9	2	11	2	8	1	12	2	54	789	122	911
PAL-RC-449	408280	8302497	203	505	47	169	26	2	16	2	12	2	5	1	4	1	240	1113	354	1467
PAL-RC-451	408411	8302490	1470	2630	243	733	78	10	44	6	35	7	19	3	20	3	173	6047	376	6423
PAL-RC-460	408691	8302488	630	1228	115	381	55	8	41	7	43	8	23	3	21	3	211	2829	440	3269
PAL-RC-464	409082	8302470	440	602	50	147	17	2	12	2	10	2	6	1	7	1	42	1474	100	1574
PAL-RC-517	407824	8302708	179	573	57	214	42	4	30	6	47	12	48	8	63	10	359	1250	712	1962
PAL-RC-533	409060	8302892	294	760	51	157	21	2	12	2	13	3	9	2	12	2	69	1505	149	1654
PAL-RC-534	408933	8302881	6	12	1	5	1	0	1	0	1	0	1	0	1	0	8	30	16	46
PAL-RC-539	408673	8302903	25	49	7	31	8	3	8	1	8	2	4	1	4	1	38	143	80	223
PAL-RC-541	408306	8302869	606	1209	122	437	78	13	66	11	71	14	44	6	42	6	397	2884	803	3687
PAL-RC-546	407968	8302919	88	83	16	70	15	4	17	3	15	3	9	1	8	1	99	324	190	514
PAL-RC-547	407968	8302919	3	7	1	2	1	0	1	0	2	0	2	0	2	0	8	15	18	33
PAL-RC-557	409344	8303209	10	16	2	7	1	0	1	0	1	0	1	0	1	0	6	41	13	54
PAL-RC-563	409331	8303103	209	752	61	217	34	5	26	5	40	10	37	6	51	8	273	1496	557	2053
PAL-RC-565	409176	8303111	18	31	5	22	6	2	7	1	8	2	5	1	5	1	45	98	89	187
PAL-RC-604	407978	8303300	34	59	6	17	2	1	2	0	1	0	1	0	1	0	7	138	14	153
PAL-RC-632	407875	8303486	48	97	10	33	6	0	5	1	4	1	2	0	3	0	20	227	42	270
PAL-RC-665	408035	8303678	15	28	4	18	5	2	6	1	7	1	4	1	4	1	37	84	75	160
PAL-RC-669	408558	8303695	4	5	1	2	1	0	1	0	1	0	0	0	0	0	3	15	7	22
PAL-RC-740	-	-	22	53	7	26	8	1	9	1	10	2	6	1	6	1	62	136	120	257
PAL-RC-742	408332	8303265	928	2090	221	795	147	24	117	17	122	24	75	12	82	10	720	4920	1441	6361
PAL-RC-744	408263	8302961	203	660	36	118	19	3	17	3	27	6	23	4	28	4	201	1217	383	1600
PAL-RC-745	408273	8302959	283	719	52	176	27	4	22	4	32	7	24	4	28	4	228	1476	432	1908
PAL-RC-747	408734	8302780	308	636	44	133	14	2	8	1	7	1	5	1	8	1	35	1331	81	1412
PAL-RC-749	408077	8302108	49	110	13	47	5	1	3	0	2	0	1	0	1	0	7	264	16	280
PAL-RC-752	408511	8301701	535	667	49	133	10	1	5	0	2	0	1	0	4	1	9	1634	29	1663
PAL-RC-756	408014	8301879	481	697	56	165	16	2	9	1	6	1	4	1	7	1	32	1659	75	1734
PAL-RC-759	408452	8302569	13	18	3	15	4	1	4	1	5	1	3	0	3	0	28	63	56	119
PAL-RC-290	408694	8302759	137	418	59	245	49	8	35	5	43	10	32	5	37	5	258	1070	526	1596
PAL-RC-492	409209	8303006	161	565	39	137	29	5	29	6	44	10	32	5	35	5	327	1096	605	1701
PAL-RC-500	409068	8302672	531	1016	112	406	77	10	62	9	65	12	34	5	34	4	338	2518	689	3207
PAL-RC-507	408760	8302673	64	328	14	49	10	2	9	2	11	2	7	1	10	2	57	546	122	668
PAL-RC-712	408379	8302121	192	376	25	75	10	2	8	1	8	1	4	1	4	0	38	795	78	873

Table 2 *Assays from trench samples. Values are in ppm. Refer to JORC (Table 1) for factors used to convert to oxide values.*

						Light REE						Heavy REE										
Trench	From	To	Sample No.	East	North	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Y	LREO	HREO	TREO
PPA-TR001	0	40	PAL-TR-002	408314	8303120	1170.2	2745.8	266.7	928.1	135.4	18.7	91.2	14.0	82.8	17.1	52.2	8.5	59.9	9.1	454.0	6161.9	960.4	7122.3
PPA-TR001	55	100	PAL-TR-006	408314	8303120	61.3	124.9	13.3	43.3	7.1	0.6	4.8	0.6	2.8	0.5	1.4	0.2	1.1	0.2	12.5	293.2	29.2	322.3
PPA-TR001	85	100	PAL-TR-003	408314	8303120	1721.7	4036.4	416.7	1505.4	247.6	36.1	171.4	24.0	124.5	22.5	60.6	9.1	60.2	8.9	546.4	9319.5	1245.9	10565.4
PPA-TR001	85	100	PAL-TR-004	408314	8303120	2866.1	6507.1	677.3	2441.7	405.8	58.8	277.1	35.7	174.7	28.7	69.3	8.7	52.5	7.4	606.9	15162.5	1521.9	16684.4
PPA-TR001	100	135	PAL-TR-001	408314	8303120	914.0	1971.6	218.1	799.3	154.2	24.2	122.1	19.0	109.4	21.6	66.4	10.6	75.0	11.0	576.7	4775.6	1231.2	6006.8
PPA-TR001	145	205	PAL-TR-005	408314	8303120	123.2	254.0	25.9	84.4	12.2	0.6	7.4	1.0	4.5	0.8	2.0	0.3	1.9	0.2	20.9	585.6	47.4	632.9
PPA-TR002	115	170	PAL-TR-007	408300	8303007	304.9	691.7	72.0	261.5	47.0	7.2	36.3	6.3	42.0	9.9	34.8	6.3	44.7	7.0	286.4	1619.9	578.2	2198.1
PPA-TR003	75	120	PAL-TR-014	408280	8302867	1234.9	2820.7	328.5	1241.8	273.6	42.4	239.7	41.3	247.8	49.1	139.9	20.5	122.4	15.2	1282.9	6951.5	2633.5	9584.9
PPA-TR003	90	115	PAL-TR-015	408280	8302867	31.6	25.6	6.1	21.1	4.0	0.9	4.0	0.5	3.5	0.7	2.2	0.3	1.8	0.2	30.7	104.5	54.2	158.7
PPA-TR003	100	210	PAL-TR-008	408280	8302867	62.8	97.3	9.1	29.0	3.5	1.6	2.5	0.3	2.0	0.4	0.9	0.2	0.9	0.1	10.0	238.1	20.9	259.0
PPA-TR003	100	170	PAL-TR-009	408280	8302867	199.6	341.2	35.1	113.3	14.4	1.3	8.6	1.0	4.4	0.7	2.0	0.3	1.5	0.2	21.5	825.2	48.6	873.8
PPA-TR003	120	200	PAL-TR-011	408280	8302867	70.4	102.5	13.4	47.6	7.7	1.4	5.9	0.8	4.3	0.8	2.3	0.3	1.7	0.2	24.1	284.3	49.2	333.5
PPA-TR003	140	210	PAL-TR-010	408280	8302867	64.9	132.1	13.6	45.3	6.8	1.0	4.7	0.6	3.3	0.6	1.6	0.2	1.6	0.2	17.4	308.6	36.8	345.4
PPA-TR003	160	200	PAL-TR-012	408280	8302867	29.7	48.9	7.1	26.9	5.4	1.3	4.7	0.6	3.6	0.7	1.6	0.2	1.3	0.2	16.6	139.6	35.7	175.3
PPA-TR003	160	190	PAL-TR-013	408280	8302867	406.2	865.7	100.2	368.7	72.5	12.2	61.4	9.6	60.3	12.1	33.6	5.0	33.5	5.2	364.2	2135.9	715.5	2851.3
PPA-TR004	85	115	PAL-TR-016	408421	8302509	41.8	88.9	9.8	34.7	6.4	1.6	5.6	0.8	4.9	0.9	2.7	0.4	2.4	0.3	23.7	214.3	50.7	265.0
PPA-TR004	90	115	PAL-TR-017	408421	8302509	111.2	285.8	23.8	80.4	11.8	1.7	8.7	1.1	5.6	1.1	2.8	0.4	3.1	0.4	30.2	602.4	65.0	667.4
PPA-TR004	140	160	PAL-TR-018	408421	8302509	84.6	46.9	13.9	48.6	9.4	2.3	11.0	1.8	10.9	2.4	7.0	1.0	6.1	0.8	78.2	240.6	146.4	387.0
PPA-TR004	160	200	PAL-TR-019	408421	8302509	911.8	1631.1	167.8	562.3	91.0	13.7	67.5	10.6	61.7	11.6	32.5	4.9	32.8	4.5	311.3	3953.4	654.6	4608.0
PPA-TR005	40	55	PAL-TR-020	408473	8302385	748.4	1144.2	123.6	413.0	63.2	9.8	47.1	7.1	41.4	7.7	21.1	3.0	19.2	2.9	187.9	2928.9	410.0	3338.9
PPA-TR005	105	120	PAL-TR-021	408473	8302385	549.4	725.3	66.2	195.2	22.0	3.1	13.5	1.8	9.9	1.9	5.1	0.8	6.2	1.0	56.5	1828.2	118.0	1946.1
PPA-TR005	115	130	PAL-TR-023	408473	8302385	31.6	50.7	6.3	20.6	3.4	0.5	3.2	0.5	3.1	0.6	1.8	0.3	1.9	0.2	18.6	132.4	36.9	169.3
PPA-TR005	135	145	PAL-TR-022	408473	8302385	1174.6	1585.5	137.2	396.9	38.0	4.3	19.0	2.6	13.0	2.4	6.9	1.2	10.0	2.0	59.9	3907.2	141.5	4048.8
PPA-TR005	140	150	PAL-TR-024	408473	8302385	583.2	755.1	64.8	187.6	19.6	2.4	11.4	1.6	8.7	1.6	5.2	1.0	8.3	1.7	46.1	1888.5	103.7	1992.2
PPA-TR005	180	200	PAL-TR-026	408473	8302385	563.0	858.4	77.9	239.4	31.1	4.3	19.4	3.2	17.3	3.4	10.0	1.6	12.9	2.2	89.2	2077.2	193.4	2270.6
PPA-TR005	200	220	PAL-TR-025	408473	8302385	697.2	1013.3	87.6	266.2	29.6	4.0	17.6	2.5	13.1	2.5	7.1	1.2	8.5	1.4	70.4	2456.6	151.2	2607.8
PPA-TR006	135	185	PAL-TR-027	408201	8301749	44.1	80.7	9.4	30.4	5.1	1.2	4.6	0.7	4.1	0.9	2.6	0.4	2.4	0.4	25.1	200.0	50.4	250.4
PPA-TR006	140	190	PAL-TR-032	408201	8301749	165.8	185.8	34.9	122.3	22.0	5.6	20.4	3.0	17.0	3.5	10.0	1.4	9.5	1.3	81.1	627.5	178.7	806.2
PPA-TR006	140	190	PAL-TR-035	408201	8301749	78.6	176.1	17.2	56.6	9.2	2.1	6.9	1.0	5.5	1.1	3.3	0.5	3.4	0.5	25.5	397.7	57.8	455.5
PPA-TR006	140	190	PAL-TR-038	408201	8301749	214.9	226.3	46.1	154.5	29.1	8.0	29.8	4.7	27.8	6.0	17.1	2.5	16.6	2.3	159.0	794.3	324.4	1118.7
PPA-TR006	150	200	PAL-TR-030	408201	8301749	120.4	77.7	22.8	82.8	15.7	4.0	16.9	3.0	18.4	4.0	13.2	1.9	12.1	1.9	114.3	378.3	227.0	605.4
PPA-TR006	165	220	PAL-TR-040	408201	8301749	1253.6	1850.6	216.4	621.8	65.6	9.3	43.5	5.6	25.3	4.7	13.1	1.7	10.5	1.5	122.5	4703.2	277.3	4980.5
PPA-TR006	185	235	PAL-TR-028	408201	8301749	81.3	87.7	14.3	45.8	7.0	1.9	6.5	1.0	5.3	1.1	3.2	0.5	2.6	0.4	32.2	278.5	64.4	342.9
PPA-TR006	190	240	PAL-TR-033	408201	8301749	114.3	95.1	18.6	66.9	12.0	2.8	14.1	2.2	13.5	2.9	8.6	1.2	7.8	1.3	86.4	362.4	168.8	531.2
PPA-TR006	190	240	PAL-TR-036	408201	8301749	65.1	139.7	12.3	41.8	7.0	1.8	7.1	1.1	6.0	1.4	4.1	0.6	3.8	0.5	31.3	313.3	68.0	381.3
PPA-TR006	190	235	PAL-TR-039	408201	8301749	98.6	86.9	18.2	62.0	10.9	2.9	11.3	1.8	10.2	2.1	6.0	0.9	5.8	0.9	48.3	327.0	105.9	432.9
PPA-TR006	200	278	PAL-TR-031	408201	8301749	53.0	62.4	9.6	35.0	7.3	1.4	8.9	1.4	8.7	2.0	5.9	0.8	5.2	0.8	60.8	197.5	115.9	313.3
PPA-TR006	235	267	PAL-TR-029	408201	8301749	179.9	287.9	29.7	90.9	9.8	1.2	8.1	1.0	6.0	1.3	4.3	0.6	3.5	0.6	40.6	701.8	80.8	782.5
PPA-TR006	240	290	PAL-TR-034	408201	8301749	49.4	49.8	8.5	31.6	6.3	1.6	8.5	1.4	8.5	2.0	6.1	0.9	5.2	0.8	69.5	172.2	126.5	298.7
PPA-TR006	240	300	PAL-TR-037	408201	8301749	67.5	86.4	12.0	41.9	7.5	1.8	7.8	1.2	7.2	1.5	4.7	0.7	4.2	0.6	37.0	254.1	78.9	332.9
PPA-TR007	70	120	PAL-TR-041	408232	8301730	67.3	82.7	15.0	55.6	11.3	2.7	12.6	2.1	11.4	2.4	7.0	0.9	5.8	0.8	65.0	274.4	132.0	406.3
PPA-TR007	70	120	PAL-TR-045	408232	8301730	48.7	46.6	10.1	37.0	8.2	2.1	8.9	1.5	8.5	1.8	5.1	0.7	4.2	0.6	49.2	178.6	98.4	277.0
PPA-TR007	70	120	PAL-TR-048	408232	8301730	94.9	77.6	17.1	62.8	11.7	3.3	13.3	2.1	11.6	2.4	6.8	1.0	5.6	0.8	70.5	312.8	139.5	452.3
PPA-TR007	80	110	PAL-TR-044	408232	8301730	35.6	119.9	13.3	36.2	8.3	1.3	10.3	2.2	14.8	3.3	9.4	1.4	7.8	1.0	117.9	251.1	207.2	458.3
PPA-TR007	110	160	PAL-TR-051	408232	8301730	40.4	101.3	11.7	45.3	11.2	2.0	11.6	2.0	12.0	2.5	7.0	0.9	5.2	0.8	68.1	247.9	134.3	382.2
PPA-TR007	120	170	PAL-TR-042	408232	8301730	32.0	46.9	6.9	25.1	5.4	1.2	5.7	1.0	5.8	1.2	3.5	0.5	2.9	0.4	31.5	137.5	64.0	201.5
PPA-TR007	120	170	PAL-TR-046	408232	8301730	37.2	70.0	10.6	44.9	11.7	2.8	13.3	2.2	13.0	2.6	7.4	1.0	6.0	0.8	70.8	207.2	142.9	350.1
PPA-TR007	120	170	PAL-TR-049	408232	8301730	14.6	27.0	3.2	12.5	3.1	1.0	3.4	0.6	3.5	0.8	2.2	0.3	1.9	0.3	20.9	71.8	41.4	113.3
PPA-TR007	160	210	PAL-TR-052	408232	8301730	16.1	27.0	4.1	16.8	4.2	1.2	4.9	0.9	5.0	1.1	3.3	0.5	2.9	0.4	30.1	81.1	60.0	141.1
PPA-TR007	170	220	PAL-TR-043	408232	8301730	19.8	39.5	5.7	22.6	5.4	1.3	6.4	1.0	6.3	1.3	3.7	0.5	3.0	0.4	36.2	110.2	72.0	182.2
PPA-TR007	170	210	PAL-TR-047	408232	8301730	34.9	83.8	10.4	40.4	10.1	2.2	9.6	1.7	9.0	1.7	4.6	0.6	4.0	0.5	42.8	212.6	90.6	303.2
PPA-TR007	170	210	PAL-TR-050	408232	8301730	17.7	33.3	4.4	17.4	4.2	1.2	4.6	0.7	4.5	1.0	2.7	0.4	2.5	0.3	25.3	91.5	51.1	142.6
PPA-TR009	105	185	PAL-TR-056	408522	8301493	44.5	115.0	10.5	39.8	7.5	1.9	5.9	0.8	4.3	0.9	2.7	0.4	2.9	0.4	24.3	256.5	51.7	308.3
PPA-TR009	110	145	PAL-TR-059	408522	8301493	49.8	107.6	12.4	44.9	8.2	2.4	7.1	1.0	5.5	1.3	4.2	0.7	4.7	0.7	34.5	263.6	72.7	336.4
PPA-TR009	120	170	PAL-TR-053	408522	8301493	43.6	86.7	9.2	29.9	4.8	1.0	3.3	0.4	1.9	0.4	1.0	0.2	0.9	0.1	9.2	205.1	21.1	226.3
PPA-TR009	120	170	PAL-TR-055	408522	8301493	44.3	85.8	9.2	33.1	6.1	1.7	5.5	0.8	4.2	0.9	2.6	0.4	2.5	0.4	23.1	210.9	49.0	260.0
PPA-TR009	120	210	PAL-TR-057	408522	8301493	22.3	48.8	5.0	18.8	3.6	1.2	3.3	0.5	2.7	0.5	1.6	0.2	1.5	0.2	14.0	116.7	29.9	146.6
PPA-TR009	120	180	PAL-TR-060	408522	8301493	56.8	130.8	12.9	46.0	8.2	2.1	6.7	1.0	5.1	1.1	3.2	0.5	3.1	0.5	24.4	300.4	55.1	355.6
PPA-TR009	130	170	PAL-TR-054	408522	8301493	71.1	199.0	17.1	60.7	10.7	3.0	8.9	1.1	6.3	1.2	3.6	0.5	3.2	0.5	31.4	423.1	68.9	492.0
PPA-TR009	130	175	PAL-TR-058	408522	8301493	40.6	78.8	8.8	29.3	5.1	1.5	4.4	0.6	3.3	0.7	2.1	0.4	2.3	0.4	18.3	191.9	39.4	231.4
PPA-TR009	140	180	PAL-TR-061	408522	8301493	46.7	99.5	9.7	30.9	4.9	0.7	3.6	0.4	1.9	0.3	0.9	0.1	0.7	0.1	7.7	225.3	18.8	244.1
PPA-TR010	140	190	PAL-TR-062	408487	8301526	261.1	534.9	51.1	162.1	23.4	2.6	15.8	2.0	9.3	1.5	4.3	0.6	3.9	0.5	37.8	1211.8	91.5	1303.3
PPA-TR010	180	230	PAL-TR-064	408487	8301526	164.6	176.4	31.3	111.0	17.8	4.2	15.0	2.0	11.0	2.3	6.6	0.9	5.7	1.0	64.4	591.2	132.7	723.9
PPA-TR010	190	270	PAL-TR-063	408487	8301526	194.1	343.9	36.4	118.4	17.6	1.9	12.5	1.6	7.5	1.4	4.0	0.6	3.6	0.6	40.8	833.8	88.3	922.1
PPA-TR010	230	280	PAL-TR-065	408487	8301526	91.8	75.7	16.0	60.3	10.5	2.7	11.8	1.7	9.9	2.3	6.9	0.9	6.0	1.1	77.1	300.7	144.3	445.0
PPA-TR011	35	100	PAL-TR-066	408014	8302424	29.5	48.4	5.7	19.7	3.4	0.8	2.5	0.3	1.9	0.4	1.0	0.2	0.9	0.1	9.3	125.8	20.2	146.0
PPA-TR011	45	80	PAL-TR-069	408014	8302424	25.2	45.2	6.0	21.8	4.4	1.1	3.6	0.6	3.2	0.7	2.0	0.3	2.1	0.3	15.6	121.4	34.5	155.9
PPA-TR011	140	165	PAL-TR-068	408014	8302424	21.0	34.5	5.1	18.3	4.1	1.0	3.2	0.5	2.8	0.6	1.8	0.3	1.6	0.2	15.0	98.3	31.7	130.0
PPA-TR011	260	280	PAL-TR-067	408014	8302424	34.9	95.6	11.1	46.6	11.3	2.7	9.5	1.6	9.5	2.0	6.3	1.0	6.4	0.9	44.0	236.6	98.3	334.8
PPA-TR012	40	120	PAL-TR-070	408087	8302382	136.6	232.1	20.5	61.2	5.8	0.8	2.9	0.3	1.2	0.2	0.5	0.1	0.4	0.1	5.1	535.1	13.0	548.1

PPA-TR012	40	90	PAL-TR-071	408087	8302382	64.8	116.2	10.1	31.4	4.1	1.1	2.9	0.4	2.3	0.4	1.4	0.2	1.3	0.2	11.3	266.5	24.8	291.3
PPA-TR012	90	140	PAL-TR-072	408087	8302382	25.7	48.4	4.3	14.2	2.5	1.2	2.3	0.3	1.9	0.4	1.1	0.2	1.0	0.2	10.3	112.7	21.5	134.2
PPA-TR012	140	190	PAL-TR-073	408087	8302382	39.3	96.3	6.8	21.5	2.8	0.9	2.1	0.3	1.5	0.3	0.9	0.2	1.0	0.2	7.9	196.1	17.4	213.6
PPA-TR012	190	240	PAL-TR-074	408087	8302382	62.1	140.5	11.0	33.7	3.4	0.8	2.2	0.3	1.3	0.3	0.8	0.1	0.7	0.1	5.8	294.5	13.8	308.3
PPA-TR012	240	290	PAL-TR-075	408087	8302382	49.2	84.2	7.5	22.5	2.7	0.8	1.7	0.2	1.1	0.2	0.7	0.1	0.6	0.1	5.9	195.3	13.1	208.4
PPA-TR012	290	340	PAL-TR-076	408087	8302382	26.7	48.1	3.4	10.3	1.3	0.9	0.8	0.1	0.8	0.2	0.5	0.1	0.4	0.1	3.8	106.1	8.2	114.3
PPA-TR013	80	170	PAL-TR-077	408144	8302326	21.9	35.1	4.0	13.8	2.6	0.8	2.5	0.4	2.0	0.5	1.5	0.2	1.4	0.2	14.6	91.5	28.5	120.0
PPA-TR014	50	130	PAL-TR-078	408375	8302168	77.3	196.1	13.1	41.0	5.9	1.2	4.2	0.6	3.1	0.6	2.0	0.3	2.1	0.3	17.0	391.7	36.8	428.6
PPA-TR014	50	100	PAL-TR-079	408375	8302168	19.7	44.1	3.9	12.6	2.4	0.8	2.3	0.4	3.1	0.7	2.1	0.3	2.0	0.3	22.1	97.7	40.8	138.4
PPA-TR014	95	190	PAL-TR-080	408375	8302168	97.3	197.3	20.5	67.6	9.4	1.6	6.4	0.8	4.2	0.7	2.0	0.2	1.4	0.2	21.2	460.9	45.2	506.0
PPA-TR014	95	185	PAL-TR-082	408375	8302168	85.7	181.1	16.8	51.8	8.6	1.5	5.7	0.7	3.1	0.6	1.6	0.2	1.2	0.2	16.6	404.3	36.4	440.7
PPA-TR014	100	175	PAL-TR-084	408375	8302168	103.0	215.2	22.2	71.9	11.0	1.7	6.3	0.8	3.6	0.6	1.5	0.2	1.2	0.2	16.2	497.5	37.1	534.5
PPA-TR014	100	140	PAL-TR-094	408375	8302168	149.1	260.3	24.4	76.5	8.0	0.7	4.6	0.6	2.5	0.5	1.3	0.2	1.3	0.2	13.9	607.7	30.4	638.1
PPA-TR014	110	210	PAL-TR-085	408375	8302168	99.3	196.2	21.0	73.4	11.7	1.9	8.6	1.1	5.4	1.1	3.1	0.5	2.8	0.4	34.0	472.3	69.4	541.7
PPA-TR014	110	215	PAL-TR-086	408375	8302168	94.9	191.1	20.7	71.4	11.4	1.9	7.7	1.0	4.8	0.9	2.4	0.3	1.9	0.3	27.2	458.1	56.7	514.8
PPA-TR014	125	210	PAL-TR-092	408375	8302168	179.4	324.6	32.5	100.1	10.3	1.0	6.3	0.7	3.8	0.7	1.9	0.3	1.8	0.3	17.7	758.6	40.5	799.1
PPA-TR014	130	175	PAL-TR-093	408375	8302168	62.5	121.9	11.3	34.6	5.2	0.8	3.1	0.4	2.1	0.4	1.2	0.2	1.1	0.2	11.0	276.6	23.9	300.5
PPA-TR014	135	195	PAL-TR-088	408375	8302168	16.8	39.1	3.8	12.2	2.6	0.6	2.2	0.4	2.3	0.4	1.3	0.2	1.2	0.2	10.8	87.9	23.1	110.9
PPA-TR014	135	190	PAL-TR-090	408375	8302168	22.7	49.4	5.4	19.0	4.1	1.0	3.1	0.5	2.7	0.6	1.5	0.2	1.5	0.2	14.1	118.9	29.7	148.6
PPA-TR014	145	215	PAL-TR-089	408375	8302168	21.7	55.5	5.1	19.3	3.7	0.9	3.1	0.5	2.8	0.5	1.6	0.2	1.3	0.2	12.4	124.3	27.5	151.8
PPA-TR014	150	175	PAL-TR-087	408375	8302168	21.2	41.7	3.8	12.8	2.1	0.6	2.0	0.3	1.9	0.4	1.2	0.2	1.2	0.2	11.5	96.2	22.9	119.1
PPA-TR014	155	205	PAL-TR-091	408375	8302168	20.2	49.2	4.3	15.3	2.9	0.8	2.8	0.4	2.6	0.5	1.6	0.2	1.4	0.2	13.1	108.5	27.8	136.3
PPA-TR014	215	260	PAL-TR-081	408375	8302168	77.9	160.8	16.1	59.1	9.6	1.7	7.3	0.9	4.8	0.9	2.7	0.4	2.3	0.4	27.5	380.6	57.7	438.3
PPA-TR014	230	255	PAL-TR-083	408375	8302168	216.7	406.1	41.9	140.7	18.4	1.9	11.9	1.2	6.1	1.1	3.1	0.4	3.0	0.5	34.7	966.4	75.5	1041.9
PPA-TR015	50	90	PAL-TR-096	408403	8302276	29.0	63.3	6.1	22.5	5.5	1.3	3.5	0.4	1.7	0.3	0.8	0.1	0.7	0.1	7.0	149.4	17.5	166.9
PPA-TR016	20	80	PAL-TR-099	408407	8302319	14.2	26.3	2.4	7.9	1.2	0.2	0.9	0.1	0.6	0.1	0.3	0.1	0.2	0.1	2.4	61.1	5.8	66.8
PPA-TR016	50	80	PAL-TR-098	408407	8302319	41.4	133.6	9.4	32.3	5.3	1.3	3.8	0.5	2.9	0.6	1.6	0.3	1.7	0.3	13.0	261.3	29.8	291.2
PPA-TR016	50	65	PAL-TR-100	408407	8302319	169.9	294.1	38.1	124.9	18.3	2.7	13.5	1.6	8.6	1.7	5.1	0.7	4.4	0.7	46.8	758.3	101.1	859.5
PPA-TR016	50	80	PAL-TR-101	408407	8302319	39.2	115.3	9.4	34.0	7.1	1.5	6.3	1.0	6.3	1.3	3.9	0.6	3.9	0.5	32.8	241.7	68.8	310.5
PPA-TR016	55	100	PAL-TR-097	408407	8302319	29.2	50.5	4.8	15.6	2.4	1.3	1.8	0.2	1.2	0.3	0.7	0.1	0.6	0.1	6.2	121.4	13.5	134.9

Figure 7 *Typical landscapes in the Feirinha Prospect area. Access to the ground is relatively easy with a network of local roads and tracks.*

COMPETENT PERSON'S STATEMENT

The information relating to exploration results in this announcement is based on, and fairly represents information and supporting documentation compiled by Mr Marcus Flis, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full time employee of Rountree Pty Ltd. Rountree Pty Ltd is an independent geological consultancy. Mr Flis 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 Exploration Results, Mineral Resources and Ore Reserves." Mr Flis consents to the inclusion of the matters outlined in this announcement the form and context in which they appear.

FORWARD LOOKING STATEMENTS

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

Neither the Company, nor any other person, gives any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. Except as required by law, and only to the extent so required, none of the Company, its subsidiaries or its or their directors, officers, employees, advisors or agents or any other person shall in any way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

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SECTION 1 – SAMPLING TECHNIQUES AND DATA

CRITERIA	COMMENTARY
Sampling techniques	• 114 selected rock samples were collected by the field geologist within the claim 871332/2020. The samples weight ranges from 0.5 to 1.50Kg rock. The sample location selection and sampling were undertaken by geologist Lucas Costa and Sara Silva. The location coordinates were recorded by handheld GPS. • 100 samples from 14 trenches were collected from selected pegmatite intervals. The trench head location was recorded by handheld GPS, the azimuth using a compass and the interval from the trench head point measured using a graduated measuring tape. • **Ground magnetic survey:** Line direction: east-west, a compromise on the area's variable geological strike Line spacing: 100m Station spacing: 25m Sensor height: 2m Data collection mode: ground based – walking mode Instrument: GSM-19, 0.01nT resolution Data processing: data has been corrected for diurnal drift using a base station and corrected for the IGRF. This corrected Total Magnetic Intensity data was processed to produce RTP, and first vertical and horizontal derivatives. Data Location: GPS to SIRGAS 2000, UTM Zone 24S projection Surveyor: GeoSantos, an independent Brazilian based contractor Survey date: Oct, 2022 The data was reviewed by the Competent Person • **Resistivity survey** Line direction: NW-SE, one NE-SW Line spacing: n/a, lines were not done on a grid Configuration: dipole-dipole Dipole 'a' spacing: 5m Line length: 75m Instrument: 16-channel TH-500 resistivity meter Power source: 12V battery Data location: GPS to SIRGAS 2000, UTM Zone 24S projection Surveyor: GeoSantos, an independent Brazilian based contractor Survey date: 6 – 14 Sept, 2022 The data was reviewed by the Competent Person
Drilling techniques	• Not applicable – no drilling undertaken.
Drill sample recovery	• Not applicable – no drilling undertaken.
Logging	• Sample lithology was identified in the field by the field geologist. • Location co-ordinates were recorded by hand held GPS.
Sub- sampling techniques and sample preparation	• Sample analysis was done by SGS Geosol Labaratorios Ltda, Brazil. • Samples were dried at 105°C (Code DRY105). • Sample was crushed to 75% passing 3mm and homogenised. • A Jones riffle splitter was used to extract a 250 to 300g subsample. • The aliquot was then pulverized in a steel mill to 95% passing 150 mesh (89µm) (Code PRP102_E).

CRITERIA	COMMENTARY
	• Geochemical analysis was by fusion with lithium metaborate and ICP–MS analysis for rare earth elements (Code IMS95R) and multi-acid digestion followed by ICP-MS scan for other elements (Code ICM40B). • REE assays are reported as elemental values. Where Total Rare Earth Oxides are discussed, the conversion from elemental values to oxide equivalents used the following factors.

La	1.1728
Ce	1.1713
Pr	1.1703
Nd	1.1664
Sm	1.1596
Eu	1.1579
Gd	1.1526
Tb	1.1510
Dy	1.1477
Ho	1.1455
Er	1.1435
Tm	1.1421
Yb	1.1387
Lu	1.1371
Y	1.2699

Quality of assay data and laboratory tests	• Blanks and standards are used during assaying.
Verification of sampling and assaying	• No duplicate samples have been collected. • No referee assays have been done.
Location of data points	• Handheld GPS was used to determine sample locations with an accuracy of approximately ±5m. • The UTM SIRGAS2000 zone 24S grid projection is used. • Original Handheld GPS co-ords are maintained in the database. • This is considered appropriate at this early stage of exploration.
Data spacing and distribution	• Data spacing for geochemical samples are varied and dependent on outcrop distribution. • Geochemical data spacing is sufficient for this early stage of exploration. • Data spacing and distribution for the geophysical surveys is discussed above.
Orientation of data in relation to geological structure	• Rock grab sampling: these are collected at points where sufficient and geologically interesting outcrops are encountered. There is no data direction. • Ground Magnetic survey: survey lines are east-west for ease of GPS navigation. Structures in the area are north-east to north-north-east. • Resistivity survey: lines were oriented north-west, perpendicular to the mapped pegamatite dykes. • Trenching was done perpendicular to the mapped pegmatite dykes.
Sample security	• All samples to be transported to the lab under the control of the field geologist. • Samples are taken from the field and transported back shad to be organised in batches for transport to the lab. • All samples submitted to the lab are packed in plastic bags (in batches) and sent to the lab where it is processed as reported above.

CRITERIA	COMMENTARY
	• The transport of samples from the Site to GGS-Geosol laboratory in Vespasiano was undertaken by a contractor.
Audits or reviews	• No audits have been done.

SECTION 2 – REPORTING OF EXPLORATION RESULTS

Criteria listed in the preceding section also apply to this section

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	• The Palmares REE Project is 100% owned and controlled by Magnum Mining and Exploration Ltd, an Australian ASX listed public company. • The project consists of 18 granted mineral exploration permits covering ~348km^2 on the Jequié Belt, Bahia State, Brazil. • All permits are in good standing. • The permits are registered at Agencia Nacional de Mineracao (ANM). • Permits held in the Palmares REE Project are:
Exploration done by other parties	• The area remains poorly explored with no recorded historic exploration. • Servico Geologico do Brasil (Geological Survey of Brazil) has undertaken regional geological field mapping and regional airborne geophysical surveying.

TENEMENT	HA	COUNTY STATE	STATUS
871332/2020	1933.3	PALMARES-BA	GRANTED
870199/2024	1984.2	Itaquara / BA	GRANTED
870198/2024	1966.36	Itaquara / BA	GRANTED
870200/2024	1966.44	Itaquara / BA	GRANTED
870201/2024	1981.75	Itaquara / BA	GRANTED
870202/2024	1966.43	Jaguaquara / BA	GRANTED
870203/2024	1960.3	Jaguaquara / BA	GRANTED
870204/2024	1961.76	Jaguaquara / BA	GRANTED
870205/2024	1922.23	Jaguaquara / BA	GRANTED
870206/2024	1970.37	Jaguaquara / BA	GRANTED
870207/2024	1947.71	Jaguaquara / BA	GRANTED
870208/2024	1970.21	Jaguaquara / BA	GRANTED
870211/2024	1929.87	Jaguaquara / BA	GRANTED
870210/2024	1930.7	Jaguaquara / BA	GRANTED
870209/2024	1894.25	Jaguaquara / BA	GRANTED
870212/2024	1551	Jaguaquara / BA	GRANTED
870213/2024	1984.35	JEQUIÉ / BA	GRANTED
870214/2024	1962.61	JEQUIÉ / BA	GRANTED

CRITERIA	COMMENTARY
Geology	• The Palmares REE Project is located in the Jequié Complex, a terrain of the north-eastern São Francisco Craton. This craton includes the Volta do Rio Plutonic Suite of high-K ferroan ("A-type") granitoids, subordinate mafic to intermediate rocks; and thorium rich monazitic leucogranites with associated REE. The region is affected by intense NE-SW regional shearing which may be associated with a REE enriched hydrothermal system. • The style of mineralisation being explored for is an REE enriched lateritic zone at surface. This may grade into an REE-bearing hard rock source. • The mineralisation is classified as Ionic Adsorption Clay (IAC) and regolith hosted deposits of monazite mineral grains, and primary in-situ REE-Nb-Sc mineralisation.
Drill hole information	• Not applicable – no drilling undertaken.
Data aggregation methods	• Data aggregation has been done to calculated Total Rare Earth Oxides (TREO), Total Light Rare Earth Oxides (LTREO, La, Ce, Pr, Nd, Sm, and Eu) and Total Heavy Rare Earth Oxides (HTREO, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu). This was done by applying the oxide factors to the elemental assays (factors shown above) and then adding those results to form the totals. The TREO comprises the addition of the LTREO and the HTREO.
Relation between mineralisation widths and intercept lengths	• Not applicable – no drilling undertaken.
Diagrams	• See diagrams included in this announcement.
Balanced reporting	• All results are reported in this release.
Other substantive exploration data	• Drilling, geological mapping, geophysical surveying, and metallurgical testing exist and have been reported in previous announcements.
Further work	• Drilling of anomalous zones is being planned. • Desorption test work will be undertaken to assess the recovery of REE from the samples tested and from the programmed drilling samples. • Regional surface geochemical sampling of the rest of the Palmares REE Project ground will be done.