ASX Announcement
Released 8th October 2024

INITIAL RESULTS FROM EMA INFILL DRILLING CONFIRM RESOURCE

Highlights

- First assays from 45 holes received from the 270 hole Mineral Resource infill drilling program
- Results show grades and thicknesses that are consistent with earlier drilling programs, validating the reliability of the resource model
- Persistent high NdPr grades were observed in the lower horizon (10-20m below surface), indicating a robust zone of mineralisation that could enhance the project's economic viability.
- Several exceptional high-grade intercepts were identified, warranting further investigation to define priority zones for In Situ Recovery (ISR) extraction methods. These high-grade zones have the potential to significantly impact resource extraction strategies.
- 70% of the drilling program is now completed, with completion by end of November
- Scoping Study is progressing well with final report scheduled for completion mid-December 2024
- ANSTO metallurgical testing progressing well
- Environmental baseline assessment has commenced on site

Significant results:

- 9.3m@**1,347ppm TREO** from 4m (EMA-TR-196), including 5m@**1,570ppm** TREO ending in **891ppm** TREO
- 6m@**1,103ppm TREO** from 8m (EMA-TR-182), including 3m@**1,531ppm** TREO ending in **1,767ppm** TREO
- 8m@**1,026ppm TREO** from 2m (EMA-TR-192), including 3m@**1,452ppm** TREO ending in **1,418ppm** TREO
- 9m@**931ppm TREO** from 1m (EMA-TR-172), including 5m@**1,181ppm** TREO ending in **1,193ppm** TREO
- 9m@**725ppm TREO** from 3m (EMa-TR-186), including 1m@**1,180ppm** TREO ending in **1,180ppm** TREO

Brazilian Critical Minerals Limited (**ASX: BCM**) ("**BCM**" or the "**Company**") is pleased to announce the assay results for the first batch of 45 infill auger holes drilled for rare earth elements (REEs) at Ema in the Apuí region of Brazil (Figure 1) aimed at defining an indicated Mineral Resource Estimate over the central portion of the Ema resource limits.

Figure 1. Location of the Ema Project, Brazil.

A total of 270 holes are designed to be drilled on a 400m x 400m spacing within the high priority (red dashed line area (Figure 2) which comprises approximately 24% of the previously drilled Mineral Resource Estimation MRE area. Drilling commenced on the western portion of this area (Figures 2 and 3) with initial assays received for 45 holes on the western margin of the infill-drilled area (Figure 3).

Assays returned over 500 ppm Total Rare Earth Oxides (TREO) across multiple holes, generally over widths of 5-10 meters, confirming the consistency of mineralization across broad areas (see Appendices 2 and 3).

Results indicate a strong increase in grade towards the base of the weathering profile, with notable concentrations of magnet rare earth oxides (MREO's) located deeper within the profile.

Some holes encountered water at the bottom, preventing the obtaining of samples through the high-grade zone and intercepting the fresh rock interface. These holes will be revisited and deepened, prior to the onset of the wet season when the water table is expected to be at its lowest.

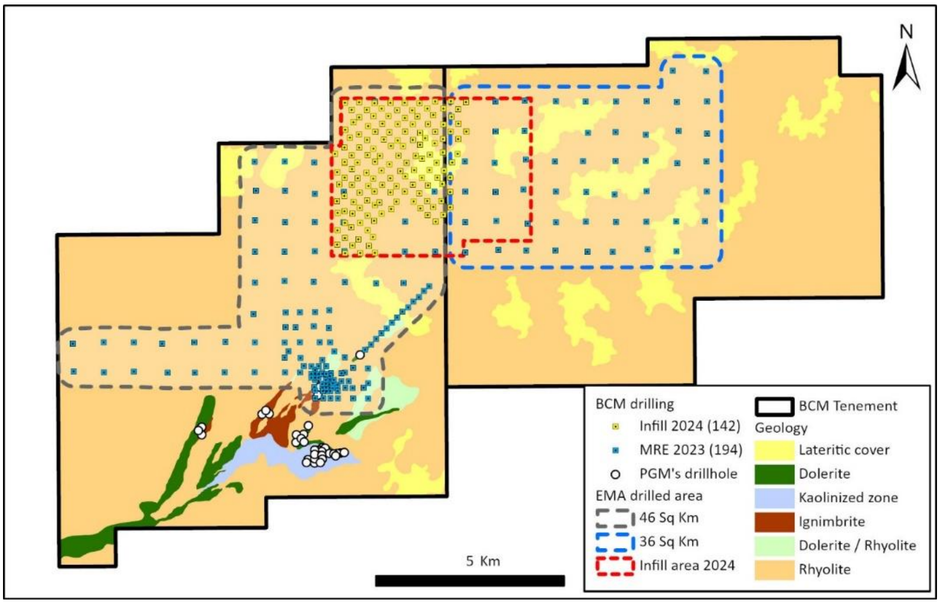

Figure 2 - Ema REE project – Mineral Resource covering 82 km² with auger holes on 800m spacing and infill auger holes on 400m centres over 82 sq km.

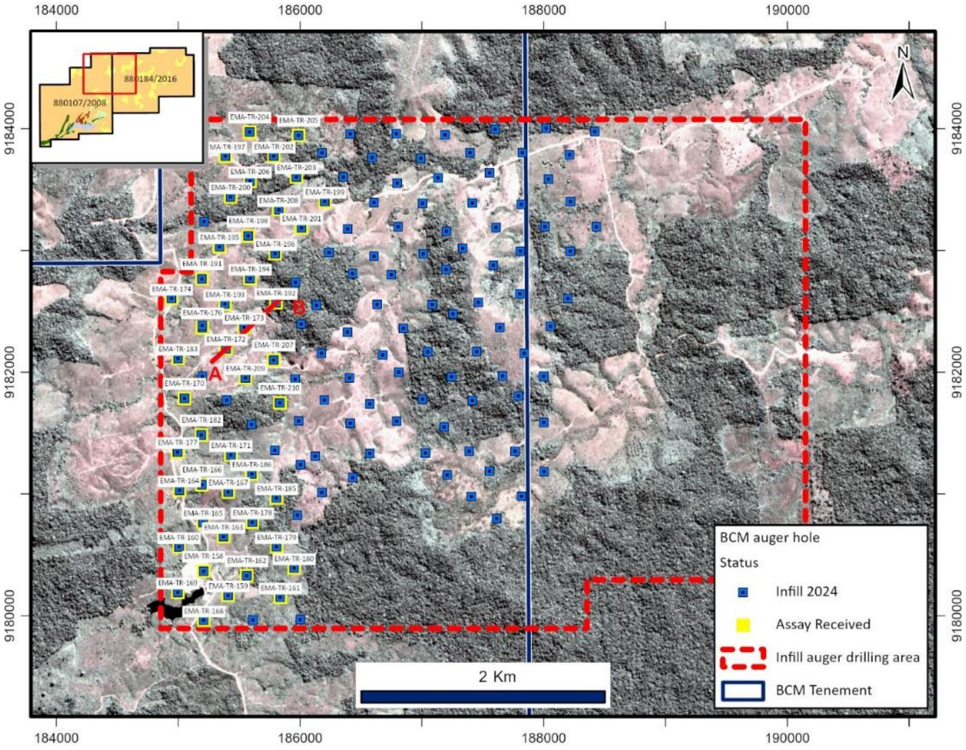

Figure 3 – Location map of the auger infill holes with assay results received to date.

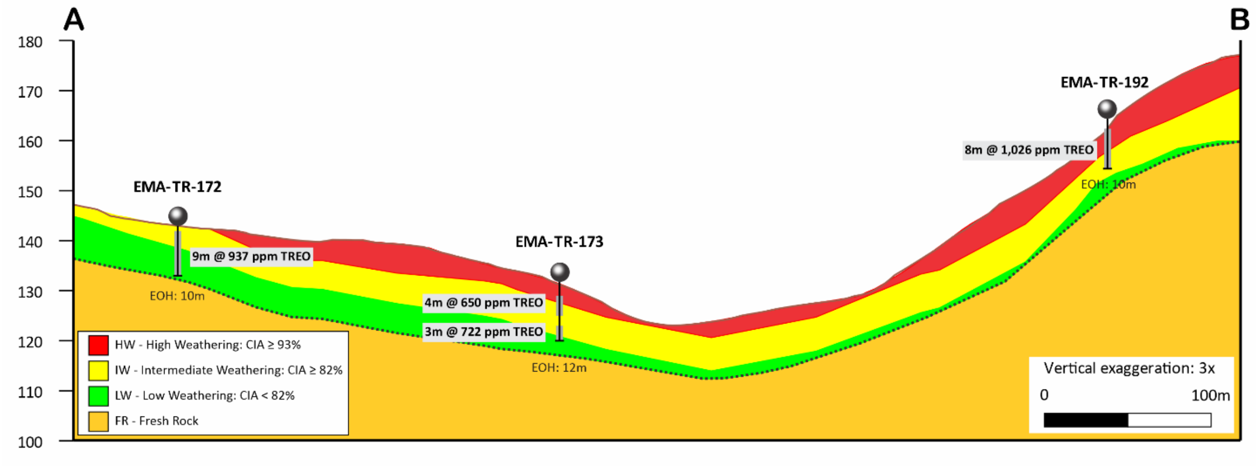

Figure 4 – Cross section from EMA-172 to 192

Ema REE project

The EMA ionic REE project is unique amongst Brazilian REE projects in that it shares almost identical characteristics with the ionic REE deposits developed over felsic volcanic rocks in southwest China, the world´s largest known ionic clay region, where a substantial portion of the world's TREO raw material production is being mined.

Exploration drilling is conducted with hand-held auger drills, which offer the advantage of low-cost, rapid deployment and mobility. One key constraint of auger drilling is the depth limitation, with the deepest holes, generally containing the highest-grade results, drilled to ~20m. In addition, most of the exploration to date has been conducted on widely spaced (800m) centres, with infill drilling to 400m centres in the central resource area.

Infill drilling at 400-meter centres is enabling a more detailed assessment of the mineralisation which could lead to an increase in the confidence level of the Mineral Resource Estimate. This transition to closer spacing has led to the identification of some exceptional intercepts, suggesting the presence of high-grade pods within the mineralized zones. These findings will be crucial for the next phase of exploration as the team works to define these high-grade areas for potential In Situ Recovery (ISR).

Despite the variability in collar elevations of the drilled holes, the typical enrichment of Neodymium (Nd) and Praseodymium (Pr) is consistently encountered at a similar depth within the lower saprolite zone, located just above the fresh rock. The enriched zone generally measures around 10 meters in thickness indicating a continuous mineralised horizon. This widespread occurrence strongly suggests the presence of continuous high-grade zones across the project area.

The Total Rare Earth Oxides (TREO) grade exhibits a marked increase with depth, ranging from approximately 500 ppm near the top of the enriched zone to values reaching up to 1,880 ppm at greater depths. Importantly, the proportion of valuable heavy rare earth elements (HREEs) increases to over 31% at the end of the holes, highlighting the economic potential of the lower saprolite zones.

Holes EMA-TR-182, 192 and 196 (Figure 5) are examples of the lower enrichment zone with the presence of high NdPr grades at the base of drilling in the lowest weathering zone. It is anticipated that this enrichment will be present in all holes in which the low weathering horizon is intersected.

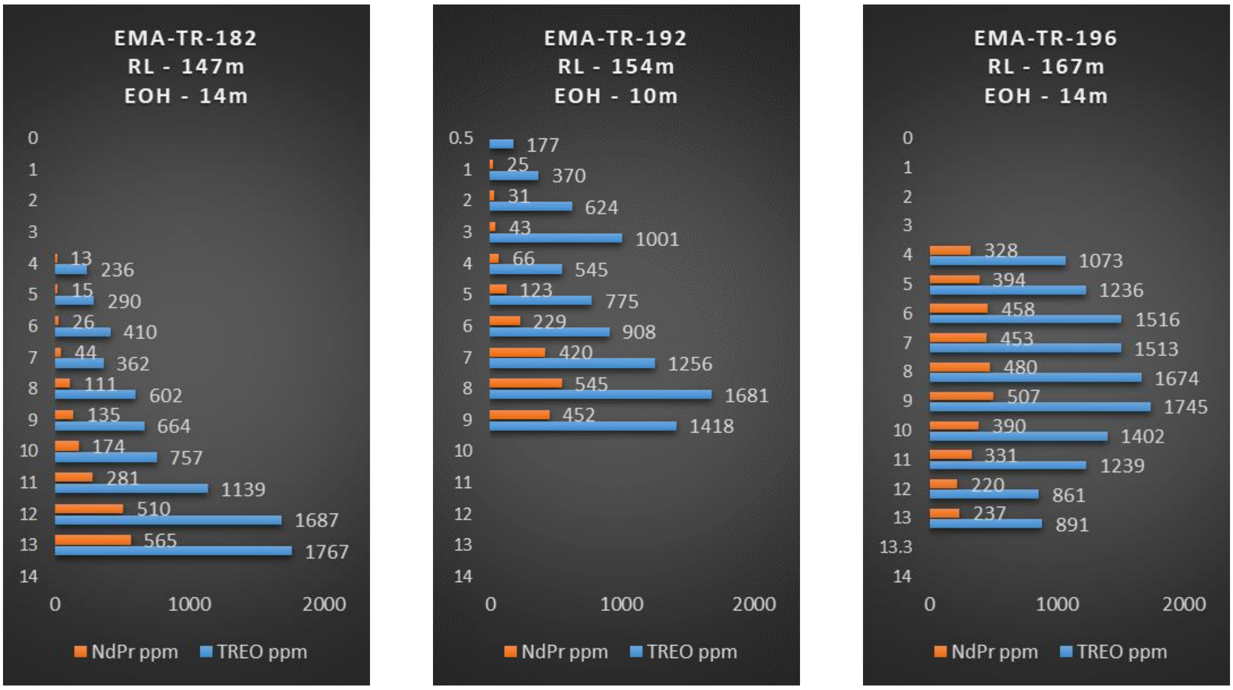

Figure 5 – Drill-hole profiles showing typical enrichment zone with high NdPr grades close to the fresh rock interface.

Current Work Program at Ema till December 2024

The Ema project is currently focused on enhancing our understanding of the mineral resource through an extensive infill drilling program (currently 70% complete) and ongoing metallurgical assessment. The key work fronts ongoing till the end of December include;

1. Mineral Resource Infill Drilling

- Complete 270-hole infill drilling program
- Collection of additional density data from deeper horizons to improve the accuracy of the MRE.
- Drill targeting strategic locations that promise to yield significant insights into the mineralisation for starter ISR assessment.

2. Processing and Metallurgical Testing

- ANSTO metallurgical testing and assessment though steps of impurity removal, rare earths precipitation and MREC (mixed rare earth carbonate) final product production to validate process flow sheet.
- Complete magnesium sulfate leaching assays to extract additional data from all infill drilling holes which will under pin and support both the MRE update and scoping study.

- Conduct a comprehensive suite of metallurgical tests on a representative master sample to determine processing characteristics from the current infill program.

3. Mineral Resource Estimate update

- Prepare for the updated Mineral Resource Estimate based on the newly acquired density and assay data.

4. Completion of Scoping Study

- Complete Scoping Study utilising metallurgical testing and mineral resource estimation to inform the economic viability of the project.

This announcement has been authorised for release by the Board of Directors.

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About Brazilian Critical Minerals Ltd

Brazilian Critical Minerals Limited (BCM) is a mineral exploration company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, in the Apuí region, where BCM has discovered a world class Ionic Adsorbed Clay (IAC) Rare Earth Elements deposit. The Ema IAC project is contained within the 781 km² of exploration tenements within the Colider Group.

BCM has defined an inferred MRE of 1.02Bt of REE's with metallurgical recoveries averaging 68% MREO some of the highest for these types of deposits anywhere in the world.

The Company is currently converting this MRE from Inferred into the Indicated category with an extensive drill program which will inform the scoping study and economic analysis due for completion in late 2024.

Competent Person Statement

The information in this announcement relates to previously reported exploration results for the Ema/Ema East Project released by the Company to ASX on 22 May 2023, 17 July 2023, 19 July 2023, 31 July 2023, 13 Sep 2023, 19 Oct 2023, 06 Dec 2023, 06 Feb 2024, 22 Feb 2024, 13 Mar 2024 and 02 Apr 2024. The Company confirms that is not aware of any new information or data that materially affects the information included in the above-mentioned releases. Mr. de Castro is a member of the Australasian Institute of Mining and Metallurgy and consents to the inclusion of the information in this announcement.

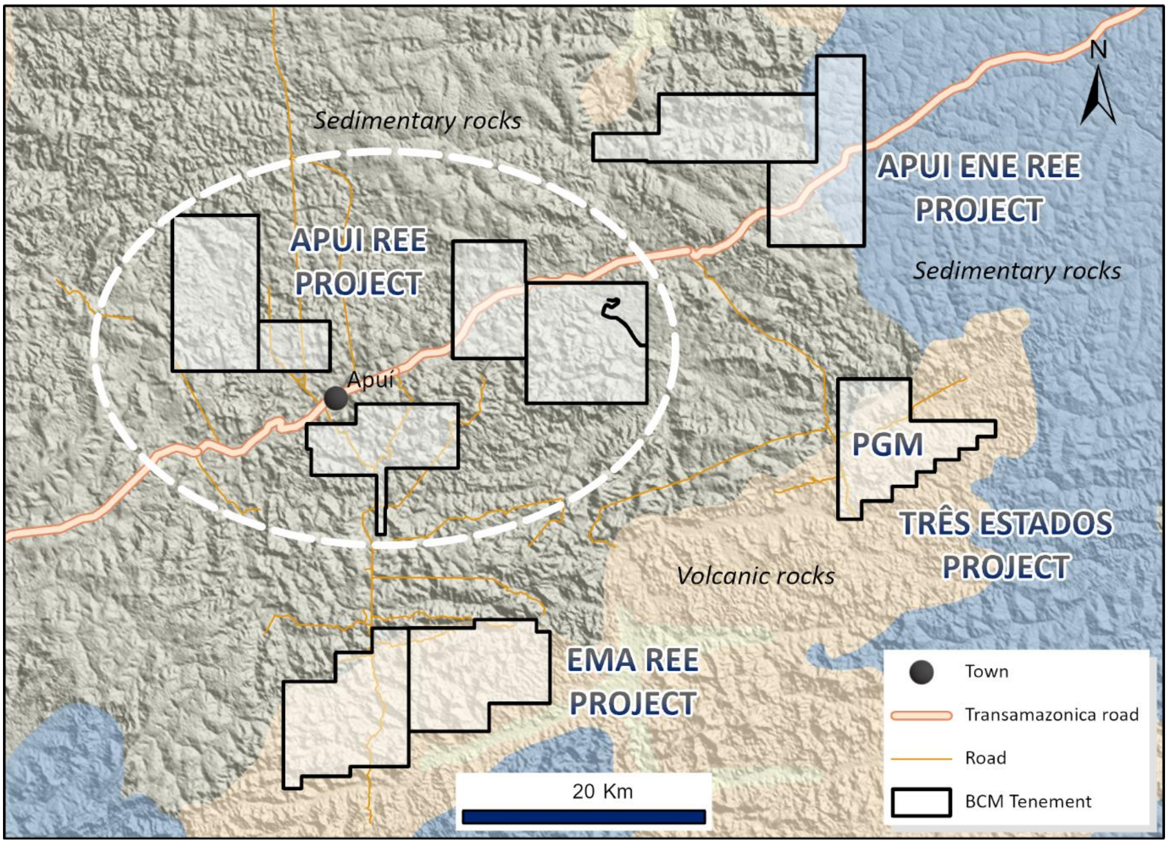
The information in this report that relates to exploration results is based on information compiled by Mr. Antonio de Castro, BSc (Hons), MAusIMM, CREA, who acts as BCM´s Senior Consulting Geologist through the consultancy firm, ADC Geologia Ltda. Mr. de Castro has sufficient experience which is relevant to the type of deposit under consideration and to the reporting of exploration results and analytical and metallurgical test work to qualify as a competent person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Castro consents to the report being issued in the form and context in which it appears.

Ema REE Project 2024 Mineral Resource Estimate – by cut-off grade

JORC Category	cut-off (ppm) TREO	Tonnes (Mt)	TREO (ppm)	NdPr (ppm)	DyTb (ppm)	MREO (ppm)	MREO:TREO (%)
Inferred	**0**	**1,340**	**694**	**163**	**15**	**178**	**26**
Inferred	**500**	**1,017**	**793**	**199**	**17**	**216**	**27**
Inferred	**600**	**863**	**836**	**218**	**18**	**236**	**28**
Inferred	**700**	**685**	**885**	**237**	**20**	**257**	**29**
Inferred	**800**	**494**	**936**	**259**	**21**	**280**	**30**
Inferred	**900**	**331**	**977**	**278**	**22**	**300**	**31**

Appendices

Appendix 1 – BCM´s rare earth projects



Appendix 2 – Auger hole intersections at a 500ppm TREO cut-off grade

Auger hole	From (m)	Interval (m)	TREO (ppm)	% HREO[1]	% MREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-158	9	3	649	20	24	147	13
EMA-TR-159	9	10	749	21	24	170	15
EMA-TR-160	4	3	596	16	8	37	10
EMA-TR-160	10	4	652	18	17	101	12
EMA-TR-161	4	1.25	722	17	18	123	12
EMA-TR-162	6	6.5	617	21	22	126	13
EMA-TR-163	5	1	566	7	2	8	5
EMA-TR-163	7	1	575	13	6	27	8
EMA-TR-163	9	6	628	16	21	124	10
EMA-TR-164	2	10	714	16	21	147	12
EMA-TR-165	9	1	600	16	25	141	10

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[1] HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3

[2] MREO (Magnetic Rare Earth Oxide) = Tb4O7 + Dy2O3 + Nd2O3 + Pr6O11

EMA-TR-165	11	4	846	22	30	239	18
EMA-TR-166	1	5.4	761	14	18	135	11
EMA-TR-167	4	6	816	20	31	241	15
EMA-TR-168	10	10	770	22	27	196	17
EMA-TR-169	10	9	636	14	18	105	9
EMA-TR-170	2	1	559	15	17	87	9
EMA-TR-170	4	2	643	20	26	155	12
EMA-TR-171	1	5	682	15	11	64	11
EMA-TR-172	1	9	937	17	23	221	16
EMA-TR-173	3	4	650	13	14	77	9
EMA-TR-173	9	3	722	19	26	170	14
EMA-TR-174	6	1	621	14	15	84	8
EMA-TR-174	8	1	516	18	22	103	8
EMA-TR-174	10	2	577	17	23	121	9
EMA-TR-176	1	1	623	12	4	19	8
EMA-TR-176	3	7	640	17	20	119	12
EMA-TR-177	6	7	707	17	24	171	12
EMA-TR-178	9	1	505	20	15	65	11
EMA-TR-178	11	7	968	20	29	274	19
EMA-TR-179	4	3	539	17	21	104	10
EMA-TR-179	9	5	558	19	22	111	11
EMA-TR-180	5	2	587	12	2	6	8
EMA-TR-180	10	2.7	550	18	17	86	10
EMA-TR-182	8	6	1,103	18	27	296	20
EMA-TR-183	3	6.2	673	15	23	147	10
EMA-TR-185	5	1	506	19	23	105	10
EMA-TR-186	3	1	595	14	5	20	9
EMA-TR-186	5	7	777	20	26	196	16
EMA-TR-191	7	7	626	19	22	129	12
EMA-TR-192	2	8	1026	19	22	239	21
EMA-TR-193	6	5	623	19	21	116	12
EMA-TR-194	6	1	606	18	26	148	11
EMA-TR-194	8	8	566	20	25	130	11
EMA-TR-195	6	5	593	16	22	120	10
EMA-TR-196	4	9.3	1,347	34	32	391	47
EMA-TR-197	2	10.5	710	24	18	113	17
EMA-TR-198	7	8.5	646	19	22	129	13
EMA-TR-199	7	1	520	18	10	39	10
EMA-TR-199	11	2	580	20	21	108	12
EMA-TR-200	3	2	541	22	18	84	13
EMA-TR-200	6	6.5	589	21	24	130	12
EMA-TR-201	3	1	532	16	8	33	10
EMA-TR-201	6	7	801	17	23	185	14
EMA-TR-202	0	4	606	30	14	67	20
EMA-TR-202	6	4	919	19	15	127	19
EMA-TR-203	0	8.2	652	22	26	156	14
EMA-TR-204	0	6	645	26	12	61	19
EMA-TR-206	2	9.2	862	19	22	165	16
EMA-TR-207	4	1	607	16	13	70	10
EMA-TR-208	6	5.45	856	21	25	199	18
EMA-TR-209	3	3	663	15	20	126	10
EMA-TR-210	6	9.45	780	21	29	215	16

Appendix 3 – Total REE oxide distribution down-hole

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-158	3	4	363	24	9	23	10	
EMA-TR-158	4	5	360	20	5	11	8	
EMA-TR-158	5	6	389	19	4	9	8	
EMA-TR-158	6	7	400	21	8	22	10	
EMA-TR-158	7	8	439	19	5	15	10	
EMA-TR-158	8	9	403	19	7	20	9	
EMA-TR-158	9	10	523	19	19	86	12	649
EMA-TR-158	10	11	693	19	26	166	13	
EMA-TR-158	11	12	731	22	28	191	15	
EMA-TR-159	9	10	631	19	16	88	12.0	749
EMA-TR-159	10	11	638	17	21	123	10.9	
EMA-TR-159	11	12	863	18	25	199	14.8	
EMA-TR-159	12	13	896	20	26	221	16.7	
EMA-TR-159	13	14	849	21	27	211	16.9	
EMA-TR-159	14	15	799	22	27	196	17.0	
EMA-TR-159	15	16	776	22	26	188	16.3	
EMA-TR-159	16	17	712	23	26	167	15.6	
EMA-TR-159	17	18	694	22	25	159	15.3	
EMA-TR-159	18	19	635	23	25	144	14.4	
EMA-TR-160	4	5	523	18	7	28	10.6	596
EMA-TR-160	6	6	725	11	8	50	9.1	
EMA-TR-160	7	7	541	18	8	34	10.9	
EMA-TR-160	8	8	442	19	8	25	9.6	
EMA-TR-160	8	9	420	20	8	24	9.7	
EMA-TR-160	9	10	478	18	9	34	10.4	
EMA-TR-160	10	11	523	16	8	35	9.7	652
EMA-TR-160	11	12	669	17	15	88	12.3	
EMA-TR-160	12	13	696	17	19	117	12.2	
EMA-TR-160	13	14	719	21	25	164	14.5	
EMA-TR-161	0.5	1	222	40	15	24	10	
EMA-TR-161	1	2	279	32	15	33	10	
EMA-TR-161	2	3	438	21	12	44	10	
EMA-TR-161	3	4	472	20	17	68	11	
EMA-TR-161	4	5	620	17	17	95	11	722
EMA-TR-161	5	5.25	1128	15	22	237	16	

EMA-TR-162	3	4	117	51	18	15	6.3	
EMA-TR-162	4	5	147	54	14	12	8.6	
EMA-TR-162	5	6	265	30	10	19	8.6	
EMA-TR-162	6	7	554	18	10	47	10.6	617
EMA-TR-162	7	8	585	18	20	105	10.9	
EMA-TR-162	8	9	605	17	20	111	10.5	
EMA-TR-162	9	10	737	21	28	195	15.1	
EMA-TR-162	10	11	694	24	28	177	16.1	
EMA-TR-162	11	12	574	25	25	130	14.8	
EMA-TR-162	12	12.5	529	24	24	114	13.0	
EMA-TR-163	5	6	566	7	2	8	5	566
EMA-TR-163	6	7	450	9	3	9	4	
EMA-TR-163	7	8	575	13	6	27	8	575
EMA-TR-163	8	9	461	15	7	27	8	
EMA-TR-163	9	10	587	14	12	64	9	628
EMA-TR-163	10	11	616	13	17	95	9	
EMA-TR-163	11	12	603	15	22	125	9	
EMA-TR-163	12	13	630	16	24	142	10	
EMA-TR-163	13	14	660	17	25	150	11	
EMA-TR-163	14	15	669	19	27	167	13	
EMA-TR-164	2	3	552	14	15	75	8.4	714
EMA-TR-164	3	4	922	9	21	185	9.4	
EMA-TR-164	4	5	641	15	19	112	10.3	
EMA-TR-164	5	6	651	16	19	115	11.5	
EMA-TR-164	6	7	580	14	14	70	9.2	
EMA-TR-164	7	8	629	12	14	77	8.1	
EMA-TR-164	8	9	688	15	18	116	10.1	
EMA-TR-164	9	10	774	18	28	203	13.6	
EMA-TR-164	10	11	873	21	32	263	16.9	
EMA-TR-164	11	12	826	24	32	249	18.9	
EMA-TR-165	5	6	404	18	5	13	8	
EMA-TR-165	6	7	413	20	8	23	9	
EMA-TR-165	7	8	352	20	9	23	8	
EMA-TR-165	8	9	413	18	11	37	8	
EMA-TR-165	9	10	600	16	25	141	10	600
EMA-TR-165	10	11	485	18	19	83	9	
EMA-TR-165	11	12	796	18	30	226	14	846
EMA-TR-165	12	13	986	21	31	290	20	
EMA-TR-165	13	14	888	24	31	251	20	
EMA-TR-165	14	15	715	25	29	188	17	
EMA-TR-166	0.5	1	311	23	11	28	8	

EMA-TR-166	1	2	670	13	11	65	9	761
EMA-TR-166	2	3	726	13	12	77	10	
EMA-TR-166	3	4	738	13	17	115	10	
EMA-TR-166	4	5	687	14	17	106	10	
EMA-TR-166	5	6	1046	17	30	301	17	
EMA-TR-166	6	6.4	609	19	28	157	12	
EMA-TR-167	4	5	569	21	27	142	12	816
EMA-TR-167	5	6	642	18	29	175	12	
EMA-TR-167	6	7	899	16	33	287	14	
EMA-TR-167	7	8	1104	17	34	358	17	
EMA-TR-167	8	9	1060	22	32	323	22	
EMA-TR-167	9	10	625	25	28	162	16	
EMA-TR-167	10	11	399	23	23	84	9	
EMA-TR-167	11	12	393	23	23	82	9	
EMA-TR-167	12	13	385	22	23	80	9	
EMA-TR-167	13	14	397	23	23	81	9	
EMA-TR-168	2	3	295	21	5	9	7	
EMA-TR-168	3	4	308	19	5	9	6	
EMA-TR-168	4	5	343	23	9	22	9	
EMA-TR-168	5	6	147	44	11	9	7	
EMA-TR-168	6	7	362	22	7	17	9	
EMA-TR-168	7	8	394	21	7	20	9	
EMA-TR-168	8	9	460	18	8	26	10	
EMA-TR-168	9	10	351	25	15	44	10	
EMA-TR-168	10	11	506	19	18	81	10	770
EMA-TR-168	11	12	627	18	26	149	11	
EMA-TR-168	12	13	697	19	28	183	13	
EMA-TR-168	13	14	829	20	29	226	16	
EMA-TR-168	14	15	949	21	31	275	19	
EMA-TR-168	15	16	986	23	30	272	21	
EMA-TR-168	16	17	890	24	29	236	22	
EMA-TR-168	17	18	891	26	28	230	23	
EMA-TR-168	18	19	615	27	25	135	16	
EMA-TR-168	19	19.8	689	25	27	167	17	
EMA-TR-169	9	10	483	14	12	48	7.4	
EMA-TR-169	10	11	807	11	14	108	9.3	636
EMA-TR-169	11	12	666	14	15	91	10.4	
EMA-TR-169	12	13	601	14	17	96	9.3	
EMA-TR-169	13	14	708	11	16	103	8.0	
EMA-TR-169	14	15	587	13	17	90	7.8	
EMA-TR-169	15	16	539	16	21	103	8.6	
EMA-TR-169	16	17	554	14	17	89	7.7	

EMA-TR-169	17	18	537	16	22	109	8.9	
EMA-TR-169	18	19	721	18	24	159	12.3	
EMA-TR-170	0.5	1	311	21	11	25	7.3	
EMA-TR-170	1	2	414	18	12	43	7.9	
EMA-TR-170	2	3	559	15	17	87	8.6	559
EMA-TR-170	3	4	463	17	17	69	8.0	
EMA-TR-170	4	5	583	20	26	139	11.2	643
EMA-TR-170	5	6	703	20	26	171	13.6	
EMA-TR-171	0.5	1	316	23	11	28	8.1	
EMA-TR-171	1	2	515	17	12	52	9.3	682
EMA-TR-171	2	3	617	19	13	70	13.1	
EMA-TR-171	3	4	659	15	12	66	10.7	
EMA-TR-171	4	5	887	10	7	51	9.3	
EMA-TR-171	5	6	731	13	12	80	10.5	
EMA-TR-172	0.5	1	424	19	7	20	9.2	
EMA-TR-172	1	2	759	11	4	18	9.1	937
EMA-TR-172	2	3	502	17	10	42	9.2	
EMA-TR-172	3	4	595	17	18	96	10.8	
EMA-TR-172	4	5	670	17	21	129	11.0	
EMA-TR-172	5	6	1167	13	23	253	15.6	
EMA-TR-172	6	7	1106	15	27	287	16.3	
EMA-TR-172	7	8	882	19	31	258	16.3	
EMA-TR-172	8	9	1558	21	36	531	31.7	
EMA-TR-172	9	10	1193	22	34	375	24.7	
EMA-TR-173	2	3	426	17	10	36	7.9	
EMA-TR-173	3	4	871	9	8	61	8.7	650
EMA-TR-173	4	5	608	14	15	79	9.5	
EMA-TR-173	5	6	593	14	16	82	9.7	
EMA-TR-173	6	7	528	16	18	86	9.8	
EMA-TR-173	7	8	460	17	20	85	8.4	
EMA-TR-173	8	9	448	19	22	91	8.8	
EMA-TR-173	9	10	736	15	21	143	12.3	722
EMA-TR-173	10	11	726	20	28	185	14.9	
EMA-TR-173	11	12	704	23	28	182	16.0	
EMA-TR-174	2	3	158	35	18	22	5.9	
EMA-TR-174	3	4	309	20	19	52	6.9	
EMA-TR-174	4	5	283	22	16	39	6.2	
EMA-TR-174	5	6	390	16	18	63	6.0	
EMA-TR-174	6	7	621	14	15	84	8.0	621
EMA-TR-174	7	8	465	19	22	94	8.3	

EMA-TR-174	8	9	516	18	22	103	8.5	516
EMA-TR-174	9	10	423	21	26	102	8.0	
EMA-TR-174	10	11	527	19	24	116	9.2	577
EMA-TR-174	11	12	627	15	22	126	8.8	
EMA-TR-176	0.5	1	309	26	11	26	9	
EMA-TR-176	1	2	623	12	4	19	8	623
EMA-TR-176	2	3	448	19	9	29	9	
EMA-TR-176	3	4	668	15	15	91	11	640
EMA-TR-176	4	5	585	16	14	73	11	
EMA-TR-176	5	6	561	17	17	88	10	
EMA-TR-176	6	7	575	17	18	94	11	
EMA-TR-176	7	8	664	16	19	117	11	
EMA-TR-176	8	9	712	18	28	182	13	
EMA-TR-176	9	10	714	21	29	189	15	
EMA-TR-177	3	4	306	25	12	29	8.6	
EMA-TR-177	4	5	317	25	15	39	8.8	
EMA-TR-177	5	6	317	24	15	37	8.4	
EMA-TR-177	6	7	580	17	19	103	10.4	707
EMA-TR-177	7	8	534	19	20	97	10.8	
EMA-TR-177	8	9	582	16	20	104	9.8	
EMA-TR-177	9	10	512	17	20	93	8.7	
EMA-TR-177	10	11	839	14	28	224	13.0	
EMA-TR-177	11	12	793	18	30	223	14.0	
EMA-TR-177	12	13	1108	20	34	353	20.7	
EMA-TR-178	8	9	484	19	12	49	10	
EMA-TR-178	9	10	505	20	15	65	11	505
EMA-TR-178	10	11	471	23	22	93	11	
EMA-TR-178	11	12	532	19	23	110	10	968
EMA-TR-178	12	13	654	18	24	144	12	
EMA-TR-178	13	14	766	19	28	198	14	
EMA-TR-178	14	15	1069	18	32	328	17	
EMA-TR-178	15	16	1143	20	33	360	21	
EMA-TR-178	16	17	1608	23	34	506	34	
EMA-TR-178	17	18	1006	25	30	276	25	
EMA-TR-179	4	5	551	19	23	113	11.4	539
EMA-TR-179	5	6	552	16	23	120	9.6	
EMA-TR-179	6	7	514	17	18	81	9.3	
EMA-TR-179	7	8	459	19	22	92	9.8	
EMA-TR-179	8	9	484	19	20	84	10.1	
EMA-TR-179	9	10	505	20	19	83	11.1	558
EMA-TR-179	10	11	545	19	20	97	11.1	

EMA-TR-179	11	12	567	18	22	111	10.9	
EMA-TR-179	12	13	553	17	21	106	9.6	
EMA-TR-179	13	14	622	19	27	158	12.2	
EMA-TR-180	3	4	137	55	16	14	8	
EMA-TR-180	4	5	195	37	7	6	8	
EMA-TR-180	5	6	629	11	2	6	8	587
EMA-TR-180	6	7	545	13	3	6	8	
EMA-TR-180	7	8	307	29	8	15	10	
EMA-TR-180	8	9	344	28	12	29	11	
EMA-TR-180	9	10	429	25	15	53	11	
EMA-TR-180	10	11	546	18	15	71	10	550
EMA-TR-180	11	12	533	17	17	82	10	
EMA-TR-180	12	12.7	579	19	21	113	11	
EMA-TR-182	4	5	236	31	8	13	8	
EMA-TR-182	5	6	290	28	8	15	9	
EMA-TR-182	6	7	410	22	9	26	10	
EMA-TR-182	7	8	362	23	15	44	9	
EMA-TR-182	8	9	602	19	20	111	12	1,103
EMA-TR-182	9	10	664	17	22	135	12	
EMA-TR-182	10	11	757	17	25	174	13	
EMA-TR-182	11	12	1139	16	26	281	17	
EMA-TR-182	12	13	1687	18	32	510	29	
EMA-TR-182	13	14	1767	21	34	565	35	
EMA-TR-183	0.5	1	188	34	12	15	7	
EMA-TR-183	1	2	463	15	6	22	8	
EMA-TR-183	2	3	460	20	12	44	10	
EMA-TR-183	3	4	581	16	15	80	9	673
EMA-TR-183	4	5	712	14	16	103	10	
EMA-TR-183	5	6	672	15	24	148	9	
EMA-TR-183	6	7	666	14	27	174	9	
EMA-TR-183	7	8	604	16	27	156	9	
EMA-TR-183	8	9	763	16	28	202	11	
EMA-TR-183	9	9.2	858	18	31	252	14	
EMA-TR-185	0.5	1	318	22	9	20	7.9	
EMA-TR-185	1	2	395	16	8	24	7.1	
EMA-TR-185	2	3	323	20	15	42	6.8	
EMA-TR-185	3	4	400	20	18	61	9.0	
EMA-TR-185	4	5	400	16	19	67	7.0	
EMA-TR-185	5	6	506	19	23	105	10.1	506
EMA-TR-186	2	3	402	24	5	11	10.6	

EMA-TR-186	3	4	595	14	5	20	9.0	595
EMA-TR-186	4	5	489	22	18	74	12.1	
EMA-TR-186	5	6	564	18	15	71	11.2	777
EMA-TR-186	6	7	553	21	17	80	13.2	
EMA-TR-186	7	8	657	17	22	132	12.0	
EMA-TR-186	8	9	823	17	32	246	13.6	
EMA-TR-186	9	10	868	19	33	272	16.0	
EMA-TR-186	10	11	868	22	31	253	18.1	
EMA-TR-186	11	12	1108	28	31	316	29.1	
EMA-TR-191	7	8	555	19	21	102	12	626
EMA-TR-191	8	9	588	19	21	109	12	
EMA-TR-191	9	10	647	15	19	110	11	
EMA-TR-191	10	11	587	18	22	119	11	
EMA-TR-191	11	12	664	19	24	148	13	
EMA-TR-191	12	13	660	20	25	151	13	
EMA-TR-191	13	14	680	21	26	161	14	
EMA-TR-192	0.5	1	177	39	15	19	8	
EMA-TR-192	1	2	370	19	9	25	8	
EMA-TR-192	2	3	624	13	6	31	8	1,026
EMA-TR-192	3	4	1001	8	5	43	9	
EMA-TR-192	4	5	545	16	14	66	9	
EMA-TR-192	5	6	775	15	17	123	12	
EMA-TR-192	6	7	908	18	27	229	16	
EMA-TR-192	7	8	1256	26	36	420	31	
EMA-TR-192	8	9	1681	28	35	545	45	
EMA-TR-192	9	10	1418	28	35	452	39	
EMA-TR-193	1	2	217	35	20	35	8	
EMA-TR-193	2	3	187	42	19	27	8	
EMA-TR-193	3	4	274	32	22	50	9	
EMA-TR-193	4	5	269	31	22	50	9	
EMA-TR-193	5	6	361	22	13	38	9	
EMA-TR-193	6	7	569	18	14	66	11	623
EMA-TR-193	7	8	641	17	18	106	12	
EMA-TR-193	8	9	592	19	22	121	12	
EMA-TR-193	9	10	691	18	22	137	12	
EMA-TR-193	10	11	624	25	27	151	16	
EMA-TR-194	6	7	606	18	26	148	11	
EMA-TR-194	7	8	428	24	28	108	10	
EMA-TR-194	8	9	642	15	24	147	9	566
EMA-TR-194	9	10	577	21	27	143	12	
EMA-TR-194	10	11	565	19	25	129	11	

EMA-TR-194	11	12	553	21	25	128	11	
EMA-TR-194	12	13	546	20	24	121	10	
EMA-TR-194	13	14	523	20	25	118	11	
EMA-TR-194	14	15	513	21	25	116	11	
EMA-TR-194	15	16	607	24	25	138	14	
EMA-TR-195	1	2	233	30	14	25	8	
EMA-TR-195	2	3	245	26	13	27	7	
EMA-TR-195	3	4	222	32	15	25	8	
EMA-TR-195	4	5	219	32	15	26	7	
EMA-TR-195	5	6	309	25	16	41	8	
EMA-TR-195	6	7	532	17	19	89	10	593
EMA-TR-195	7	8	593	14	19	106	9	
EMA-TR-195	8	9	558	15	22	113	9	
EMA-TR-195	9	10	620	16	24	139	10	
EMA-TR-195	10	11	661	18	25	156	11	
EMA-TR-196	4	5	1073	26	33	328	27	1,347
EMA-TR-196	5	6	1236	30	35	394	37	
EMA-TR-196	6	7	1516	32	33	458	49	
EMA-TR-196	7	8	1513	34	33	453	52	
EMA-TR-196	8	9	1674	35	32	480	58	
EMA-TR-196	9	10	1745	38	33	507	67	
EMA-TR-196	10	11	1402	39	32	390	56	
EMA-TR-196	11	12	1239	38	31	331	48	
EMA-TR-196	12	13	861	36	29	220	31	
EMA-TR-196	13	13.3	891	33	30	237	30	
EMA-TR-197	2	3	632	30	14	67	20	710
EMA-TR-197	3	4	713	26	15	86	20	
EMA-TR-197	4	5	650	24	15	81	17	
EMA-TR-197	5	6	698	20	15	89	15	
EMA-TR-197	6	7	667	23	16	91	16	
EMA-TR-197	7	8	652	21	19	110	14	
EMA-TR-197	8	9	698	23	19	117	17	
EMA-TR-197	9	10	748	22	20	133	17	
EMA-TR-197	10	11	927	22	25	216	20	
EMA-TR-197	11	11.5	717	26	25	158	17	
EMA-TR-198	6	7	432	19	17	65	9	
EMA-TR-198	7	8	506	19	19	88	10	646
EMA-TR-198	8	9	582	20	22	113	13	
EMA-TR-198	9	10	693	17	18	113	13	
EMA-TR-198	10	11	598	19	21	117	12	
EMA-TR-198	11	12	676	18	24	153	12	

EMA-TR-198	12	13	889	17	24	196	15	
EMA-TR-198	13	14	691	21	23	147	15	
EMA-TR-198	14	15	585	22	22	117	13	
EMA-TR-198	15	15.5	542	22	22	107	13	
EMA-TR-199	3	4	150	58	13	10	9	
EMA-TR-199	4	5	150	57	12	8	9	
EMA-TR-199	5	6	183	45	15	18	9	
EMA-TR-199	6	7	259	33	15	29	9	
EMA-TR-199	7	8	520	18	10	39	10	520
EMA-TR-199	8	9	455	21	16	64	10	
EMA-TR-199	9	10	493	20	19	83	11	
EMA-TR-199	10	11	494	26	19	79	14	
EMA-TR-199	11	12	555	20	20	101	12	580
EMA-TR-199	12	13	605	20	21	115	13	
EMA-TR-200	3	4	566	23	19	94	15	541
EMA-TR-200	4	5	516	20	17	75	11	
EMA-TR-200	5	6	449	22	16	59	11	
EMA-TR-200	6	7	512	20	18	80	11	589
EMA-TR-200	7	8	581	17	17	89	10	
EMA-TR-200	8	9	536	19	22	108	10	
EMA-TR-200	9	10	638	20	25	146	12	
EMA-TR-200	10	11	600	21	29	161	11	
EMA-TR-200	11	12	677	25	29	183	15	
EMA-TR-200	12	12.5	570	27	29	154	14	
EMA-TR-201	3	4	532	16	8	33	10	532
EMA-TR-201	4	5	450	19	9	31	9	
EMA-TR-201	5	6	468	19	16	66	10	
EMA-TR-201	6	7	875	10	9	73	9	801
EMA-TR-201	7	8	500	17	19	85	8	
EMA-TR-201	8	9	575	16	21	110	9	
EMA-TR-201	9	10	662	15	21	131	10	
EMA-TR-201	10	11	642	17	25	149	10	
EMA-TR-201	11	12	726	19	27	185	13	
EMA-TR-201	12	13	1626	24	37	566	41	
EMA-TR-202	0.5	1	542	33	15	62	20	606
EMA-TR-202	1	2	563	33	15	65	21	
EMA-TR-202	2	3	733	26	15	86	21	
EMA-TR-202	3	4	553	31	13	54	19	
EMA-TR-202	4	5	489	33	10	33	18	
EMA-TR-202	5	6	477	32	12	38	17	
EMA-TR-202	6	7	653	22	9	42	16	919

EMA-TR-202	7	8	892	19	13	99	18	
EMA-TR-202	8	9	991	19	23	205	20	
EMA-TR-202	9	10	1139	17	16	161	21	
EMA-TR-203	0.5	1	541	24	16	74	14	652
EMA-TR-203	1	2	621	21	21	116	13	
EMA-TR-203	2	3	684	18	25	156	12	
EMA-TR-203	3	4	710	20	28	186	14	
EMA-TR-203	4	5	741	22	28	196	15	
EMA-TR-203	5	6	689	24	29	182	16	
EMA-TR-203	6	7	616	23	28	160	14	
EMA-TR-203	7	8	565	22	26	135	12	
EMA-TR-203	8	8.2	605	22	27	151	13	
EMA-TR-204	0.5	1	532	33	14	52	20	645
EMA-TR-204	1	2	553	31	10	36	20	
EMA-TR-204	2	3	567	30	11	44	19	
EMA-TR-204	3	4	663	24	13	66	18	
EMA-TR-204	4	5	673	25	15	81	19	
EMA-TR-204	5	6	805	20	10	63	18	
EMA-TR-204	6	6.65	675	25	16	89	19	
EMA-TR-206	2	3	1081	13	7	57	15	862
EMA-TR-206	3	4	732	21	13	79	16	
EMA-TR-206	4	5	1186	17	13	137	22	
EMA-TR-206	5	6	644	22	21	119	14	
EMA-TR-206	6	7	702	20	27	179	14	
EMA-TR-206	7	8	774	20	28	200	15	
EMA-TR-206	8	9	803	19	28	214	14	
EMA-TR-206	9	10	958	19	27	243	17	
EMA-TR-206	10	11	822	23	30	227	17	
EMA-TR-206	11	11.2	1132	22	30	316	22	
EMA-TR-207	0.5	1	251	35	11	18	10	
EMA-TR-207	1	2	476	20	11	40	11	
EMA-TR-207	2	3	409	20	9	29	10	
EMA-TR-207	3	4	493	20	13	52	11	
EMA-TR-207	4	5	607	16	13	70	10	607
EMA-TR-208	2	3	238	29	12	20	8	
EMA-TR-208	3	4	350	20	7	17	8	
EMA-TR-208	4	5	404	17	7	22	8	
EMA-TR-208	5	6	457	14	9	33	7	
EMA-TR-208	6	7	688	13	14	89	9	856
EMA-TR-208	7	8	776	15	23	163	13	

EMA-TR-208	8	9	943	21	27	237	20	
EMA-TR-208	9	10	875	24	28	229	20	
EMA-TR-208	10	11	861	26	29	226	22	
EMA-TR-208	11	11.45	1166	33	29	306	35	
EMA-TR-209	0.5	1	580	14	10	48	9	
EMA-TR-209	1	2	473	15	9	36	7	
EMA-TR-209	2	3	450	17	14	53	8	
EMA-TR-209	3	4	563	14	13	64	8	663
EMA-TR-209	4	5	712	13	16	103	9	
EMA-TR-209	5	6	715	19	31	209	14	
EMA-TR-210	6	7	513	17	25	117	9	780
EMA-TR-210	7	8	676	15	29	184	10	
EMA-TR-210	8	9	823	15	30	239	11	
EMA-TR-210	9	10	875	19	32	269	15	
EMA-TR-210	10	11	896	20	31	264	17	
EMA-TR-210	11	12	883	22	30	250	19	
EMA-TR-210	12	13	897	24	30	251	20	
EMA-TR-210	13	14	846	26	29	225	22	
EMA-TR-210	14	15	700	27	27	171	18	
EMA-TR-210	15	15.45	573	27	26	134	16	

Many drillholes did not intersect the complete weathering profile, with some holes stopping in the pedolith or saprolite domains due to the depth limitations of the auger drilling, particularly below the water table, and difficulties in penetrating semi-compact rocks. Holes stopped in the intermediate and high weathering zones will be deepened in the peak of the dry season when the water table has receded.

Appendix 4: Auger drill-hole locations

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-158	185209.13	9180365.92	142.16	12	0	-90	880.107/2008
EMA-TR-159	185409.75	9180168.54	140.42	19	0	-90	880.107/2008
EMA-TR-160	185006.8	9180566.19	147.63	14	0	-90	880.107/2008
EMA-TR-161	185838.72	9180152.62	135.11	5.25	0	-90	880.107/2008
EMA-TR-162	185562.19	9180329.27	134.18	12.5	0	-90	880.107/2008
EMA-TR-163	185372.01	9180649.99	142.32	15	0	-90	880.107/2008
EMA-TR-164	185009.36	9181032.91	150.64	12	0	-90	880.107/2008

EMA-TR-165	185204.58	9180766.47	155.31	15	0	-90	880.107/2008
EMA-TR-166	185195.7	9181075.78	182.33	6.4	0	-90	880.107/2008
EMA-TR-167	185410.68	9181016.95	186.24	14	0	-90	880.107/2008
EMA-TR-168	185210.68	9179963.31	148.56	19.8	0	-90	880.107/2008
EMA-TR-169	184997.34	9180193.56	148.74	19	0	-90	880.107/2008
EMA-TR-170	185051.52	9181785	158.25	6	0	-90	880.107/2008
EMA-TR-171	185432.52	9181322.03	150.42	6	0	-90	880.107/2008
EMA-TR-172	185392.43	9182194.24	146.81	10	0	-90	880.107/2008
EMA-TR-173	185542.26	9182369.43	139.76	12	0	-90	880.107/2008
EMA-TR-174	184945.07	9182606.71	134.91	12	0	-90	880.107/2008
EMA-TR-176	185198.22	9182364.65	143.01	10	0	-90	880.107/2008
EMA-TR-177	184994.63	9181345.74	143.02	13	0	-90	880.107/2008
EMA-TR-178	185608.47	9180769.43	155.33	18	0	-90	880.107/2008
EMA-TR-179	185808.22	9180567.72	163.53	14	0	-90	880.107/2008
EMA-TR-180	185951.16	9180392.86	140.36	12.7	0	-90	880.107/2008
EMA-TR-182	185190.22	9181484.46	147.58	14	0	-90	880.107/2008
EMA-TR-183	184998.61	9182114.38	149.21	9.2	0	-90	880.107/2008
EMA-TR-185	185806.26	9180968.08	191.7	6	0	-90	880.107/2008
EMA-TR-186	185603.74	9181164.91	158.82	12	0	-90	880.107/2008
EMA-TR-191	185195.78	9182766.67	137.06	14	0	-90	880.107/2008
EMA-TR-192	185802.95	9182571.69	154.04	10	0	-90	880.107/2008
EMA-TR-193	185384.47	9182560.47	137.25	11	0	-90	880.107/2008
EMA-TR-194	185589.86	9182768.85	153.65	16	0	-90	880.107/2008
EMA-TR-195	185339.92	9183030.53	132.63	11	0	-90	880.107/2008
EMA-TR-196	185796.76	9182974.47	167.01	14	0	-90	880.107/2008
EMA-TR-197	185386.78	9183772.91	146.68	11.5	0	-90	880.107/2008
EMA-TR-198	185575.36	9183118.48	136.69	15.5	0	-90	880.107/2008
EMA-TR-199	186203.19	9183401.46	126.25	13	0	-90	880.107/2008
EMA-TR-200	185429.97	9183439.3	133.63	12.5	0	-90	880.107/2008
EMA-TR-201	186012.16	9183185.88	137.7	13	0	-90	880.107/2008

EMA-TR-202	185785.53	9183774.25	142.49	11.3	0	-90	880.107/2008
EMA-TR-203	185970.22	9183603.57	132.72	8.2	0	-90	880.107/2008
EMA-TR-204	185586.03	9183971.01	142.35	6.65	0	-90	880.107/2008
EMA-TR-206	185589.46	9183568.9	133.67	11.2	0	-90	880.107/2008
EMA-TR-207	185783.83	9182100.897	147.234	5	0	-90	880.107/2008
EMA-TR-208	185826.478	9183334.491	128.028	11.45	0	-90	880.107/2008
EMA-TR-209	185550.807	9181954.608	175.659	6	0	-90	880.107/2008
EMA-TR-210	185833.969	9181746.372	152.213	15.5	0	-90	880.107/2008

Appendix 5

The following Table and Sections are provided to ensure compliance with JORC Code (2012 Edition).

JORC (2012) Table 1 – Section 1: Sampling Techniques and Data for auger hole drilling

Item	JORC code explanation	Comments
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 representativity 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	• Exploration results are based on auger drilling conducted by BCM´s exploration team. • The data presented is based on the assay of soils and saprolite by auger drilling at 1m sample intervals. • Sampling was supervised by a GE21 geologist or a GE21 field assistant. • Every 1-metre sample was collected in a big plastic bag in the field and transported to the exploration shed to be dried in the muffle. prior to homogenisation. • Samples were homogenised and subsequently riffle split with about 1 kg sent to SGS for analysis and a similar amount stored. • 1 certified blank sample. 1 certified reference material (standard) samples and 1 field duplicate sample were inserted into the sample sequence for each 25 samples.

Item	JORC code explanation	Comments
	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.	
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 by a hand held-mechanical auger with a 3" auger bit. The drilling is an open hole. meaning there is a significant chance of contamination from surface and other parts of the auger hole. Holes are vertical and not oriented.
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	- No recoveries are recorded. - The operator observes the volume of each metre and notes any discrepancy. - No relationship is believed to exist between recovery and grade.

Item	JORC code explanation	Comments
	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 holes were logged by GE21 geologist. detailing the colour. weathering. alteration. texture and any geological observations. Care is taken to identify transported cover from in-situ saprolite/clay zones and the moisture content. Logging was done to a level that would support a Mineral Resource Estimate. • Qualitative logging with systematic photography of the stored box. • The entire auger hole is logged.
Sub-Sampling Techniques and Sampling Procedures	• 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 representativity of samples.	• Auger sampling procedure is completed in the exploration shed in Apui. • The entire one metre sample is bagged on site. in a big plastic bag which is transported to the exploration shed. where it is dried at 70-90C prior to homogenisation. then quartered to about 1kg to go to SGS and another 1kg to store on site. • Sample preparation for the auger samples was conducted at SGS Vespasiano (greater Belo Horizonte) comprising oven drying at 100C. crushing of entire sample to 75% < 3mm followed by rotary splitting and pulverisation of 250 to 300 grams at 95% minus 150# • The <3mm rejects and the 250-300 grams pulverised sample were returned to BCM for storage. • Only the last 10 metres of each hole were sent to assay. the samples above will be send if required.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>Quality of Assay Data and Laboratory Tests</td><td>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</td><td>1 blank sample. 1 certified reference material (standard) sample and 1 field duplicate sample were inserted by BBX into each 25-sample sequence.
Standard laboratory QA/QC procedures were followed. including inclusion of standard. duplicate and blank samples.
The assay results of the standards fall within acceptable tolerance limits and no material bias is evident.
The assay technique used for REE was Lithium Metaborate Fusion ICP-MS (SGS code ICP95A and IMS95A). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:
<table>
<tr><td>Ba</td><td>Ce</td><td>Cr</td><td>Cs</td><td>Dy</td><td>Er</td><td>Eu</td><td>Ga</td></tr>
<tr><td>Gd</td><td>Hf</td><td>Ho</td><td>La</td><td>Lu</td><td>Nb</td><td>Nd</td><td>Pr</td></tr>
<tr><td>Rb</td><td>Sm</td><td>Sn</td><td>Sr</td><td>Ta</td><td>Tb</td><td>Th</td><td>Tm</td></tr>
<tr><td>U</td><td>V</td><td>W</td><td>Y</td><td>Yb</td><td>Zr</td><td>Zn</td><td>Co</td></tr>
<tr><td>Cu</td><td>Ni</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
The sample preparation and assay techniques used are industry standard and provide total analysis.
The ICP95A reports the major elements oxides used to calculate the Chemical Index of Alteration (CIA) at % levels included:
<table>
<tr><td>Al2O3</td><td>CaO</td><td>Cr2O3</td><td>F2O3</td></tr>
<tr><td>K2O</td><td>MgO</td><td>MnO</td><td>Na2O</td></tr>
<tr><td>P2O5</td><td>SiO2</td><td>TiO2</td><td></td></tr>
</table>
The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited.</td></tr>
</table>

Item	JORC code explanation	Comments
		• Analytical standard for REE ITAK-713 and 714 were used as CRM material in the batches sent to SGS. • The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • The blanks used contain some REE. with critical elements Ce. Nd. Dy and Y present in small quantities. • Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. Variability between duplicate results is considered acceptable and no sampling bias is evident. • Laboratory inserted standards. blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.
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.	• Apart from the routine QA/QC procedures by the Company and the laboratory. there was no other independent or alternative verification of sampling and assaying procedures. • Analytical results for REE were supplied digitally. directly from the SGS laboratory in Vespasiano to the BCMs Exploration Manager in Rio de Janeiro. • No twinned holes were used. • Geological data was logged onto paper and transferred to Excel spreadsheets at end of the day and then transferred into the drill hole database. Microsoft Access is used for database storage and management and incorporates numerous data validation and data integrity checks. All assay data is imported directly into the Microsoft Access database. • No adjustments were made to the data. • All REE assay data received from the laboratory in element form is unadjusted for data entry. • Conversion of elements analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors. (Source:https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors).

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Element ppm</th><th>Conversion Factor</th><th>Oxide Form</th></tr>
<tr><td>Ce</td><td>1.2284</td><td>CeO2</td></tr>
<tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td></tr>
<tr><td>Er</td><td>1.1435</td><td>Er2O3</td></tr>
<tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td></tr>
<tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td></tr>
<tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td></tr>
<tr><td>La</td><td>1.1728</td><td>La2O3</td></tr>
<tr><td>Lu</td><td>1.1371</td><td>Lu2O3</td></tr>
<tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td></tr>
<tr><td>Pr</td><td>1.2082</td><td>Pr6O11</td></tr>
<tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td></tr>
<tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td></tr>
<tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td></tr>
<tr><td>Y</td><td>1.2699</td><td>Y2O3</td></tr>
<tr><td>Yb</td><td>1.1387</td><td>Yb2O3</td></tr>
</table>
<p>Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:</p>
<p>TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p>
<p>LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3</p>
<p>HREO (Heavy Rare Earth Oxide) = Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3</p>
<p>CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3</p>
<p>(From U.S. Department of Energy. Critical Material Strategy. December 2011)</p>
<p>MREO (Magnetic Rare Earth Oxide) = Nd2O3 + Pr6O11 + Tb4O7 + Dy2O3</p>
<p>NdPr = Nd2O3 + Pr6O11</p>
<p>DyTb = Dy2O3 + Tb4O7</p>
<p>In elemental from the classifications are:</p>
<p>TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p>
<p>HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y</p>
</td></tr>
</table>

Item	JORC code explanation	Comments
		CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
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.	• The UTM WGS84 zone 21S grid datum is used for current reporting. The drill holes collar coordinates for the holes reported are currently controlled by hand-held GPS.
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.	• Auger holes were over 200m to 400m apart. designed for testing iREE mineralization over the mapped felsic volcanics. • The data spacing and distribution is sufficient to establish the level of REE elements present in the target area and its continuity along the regolith profile appropriate for a Mineral Resource. • No sample composition was 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.	• The location and depth of the sampling is appropriate for the deposit type. • Relevant REE values are compatible with the exploration model for ionic REEs. • No relationship between mineralisation and drilling orientation is known at this stage.

Item	JORC code explanation	Comments
	• 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.	
Sample security	• The measures taken to ensure sample security.	• The auger samples in sealed plastic bags were sent directly to SGS by bus and then airfreight. The Company has no reason to believe that sample security poses a material risk to the integrity of the assay data.
Audit or Reviews	• The results of any audits or reviews of sampling techniques and data.	• The sampling techniques and data have been reviewed by the Competent Person and are found to be of industry standard.

JORC (2012) Table 1 - 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 licence to operate in the area.	• The EMA and EMA EAST leases are 100% owned by BCM with no issues in respect to native title interests. historical sites. wilderness or national park and environmental settings. • The company is not aware of any impediment to obtain a licence to operate in the area.
Exploration done by Other Parties	• Acknowledgment and appraisal of exploration by other parties.	• No exploration by other parties has been conducted in the region.
Geology	• Deposit type. geological setting and style of mineralisation.	• The REE mineralisation at EMA is contained within the tropical lateritic weathering profile developed on top of felsic rocks. rhyolites as per the Chinese deposits. • The REE mineralisation is concentrated in the weathered profile where it has dissolved from the primary mineral. such as monazite and xenotime. then adsorbed on to the neo-forming fine particles of aluminosilicate clays (e.g. kaolinite. illite. smectite). • This adsorbed iREE is the target for extraction and production of REO.
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	• Auger locations and diagrams are presented in this announcement. • Details are tabulated in the announcement.

Criteria	JORC code explanation	Commentary
	- 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.	
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.	- Weighted averages were calculated for all intercepts. - 500ppm TREO cut-off grade was applied to define the relevant intersections. - No metal equivalent values reported.
Relationship between mineralization widths and intercepted 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	- Significant values of REE were reported for the auger samples. - Mineralisation orientation is not known at this stage. although assumed to be flat. - The downhole depths are reported. true widths are not known at this stage.

Criteria	JORC code explanation	Commentary
	should be a clear statement to this effect (eg 'down hole length. true width not known').	
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 tables of the soil auger holes location and target location are inserted.
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.	• Relevant REE mineralisation with grades higher than 500ppm TREO in auger holes was reported with confirmation of IAC (Ionic Adsorbed Clay) type mineralisation obtained in almost all the auger holes from phase 1. in this same geological setting.
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 significant exploration data has been acquired by the Company.
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.	• Specific Densities collection at Intermediate and Low weathered horizons for the upcoming MRE. • Additional metallurgical test work with magnesium sulphate leach. • Permeability test works under WSP coordination • SS in progress under Ausenco coordination

Criteria	JORC code explanation	Commentary