EXCEPTIONAL GRADES FROM EMA INFILL DRILLING

Highlights

- 82 new holes received from the 270-hole Mineral Resource infill drilling program
- Results show excellent grades and thicknesses with strongly elevated NdPr grades directly above the fresh bedrock contact supporting the proposed ISR (in-situ recovery) mining approach
- The strong grades and continuity add to de-risking process of the project
- Approximately 49% of all assays have now been returned with results to be included in an interim updated Ema Mineral Resource Estimate (MRE) that underpins the scoping study
- Drilling results received to date will now allow production and plant feed scheduling for the scoping study
- Results will enable the pre-planning and in-situ field trials required as part of a feasibility study scheduled for 2025
- ~95% of the drilling program is now complete, with completion expected by end of November
- Scoping study is progressing well with final report scheduled for release in Q1 2025
- Environmental baseline assessment continues to progress on site

Some of the significant results (>500ppm TREO) include:

- 10m@**1,103ppm TREO** from 10m (EMA-TR-236), ending in **1,817ppm** TREO
- 9.7m@**1,081ppm TREO** from 2m (EMA-TR-229), ending in **1,398ppm** TREO
- 10m@**1,086ppm TREO** from 8m (EMA-TR-258), ending in **1,765ppm** TREO
- 9.6m@**1,149ppm TREO** from 5m (EMA-TR-245), ending in **837ppm** TREO
- 9.8m@**1,107ppm TREO** from 3m (EMA-TR-238), ending in **771ppm** TREO

Brazilian Critical Minerals Limited (**ASX: BCM**) ("**BCM**" or the "**Company**") is pleased to announce the assay results for the second batch of 82 infill auger holes drilled for rare earth elements (REEs) at Ema in the Apuí region of Brazil (Figure 1) aiming to increase the confidence level of the MRE over the central portion of the Ema Mineral Resource limits.

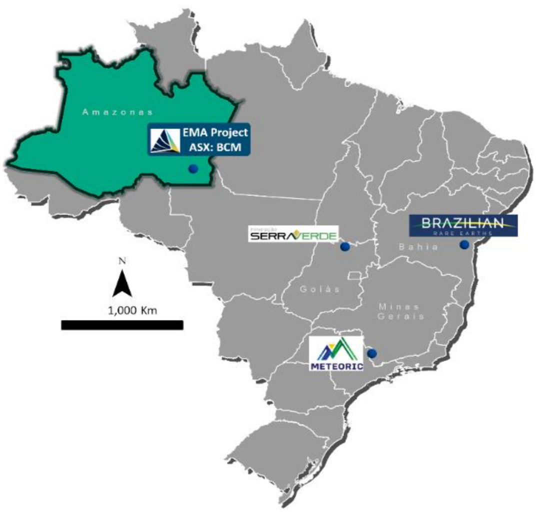

Figure 1. Location of the Ema Project, Brazil.

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 large proportion of the world's production of rare earths is mined and processed annually.

A total of 132 holes (49%) of the 270-hole drilling program have now returned assay results. Results generally returned thick mineralised intercepts with the highest grades of NdPr being found directly above the fresh rock interface.

Drilling was designed on a 400m x 400m grid spacing within the high priority (red dashed line area Figure 2) which comprises approximately 24% of the previously announced inferred **1.02Bt**[1] MRE area.

Results indicate a strong increase in magnetic rare earths (MREO's) grade towards the base of the weathering profile in the sap rock portion of the profile with intervals generally 5-10m thick considered ideal for in-situ leaching purposes.

The significant increase in the proportion of valuable heavy rare earth elements (HREEs) to over 31% of the MREO composition at the end of the holes underscores the economic potential of the lower saprolite zone. This enhancement not only indicates a promising resource but also suggests that further exploration in these areas could be highly beneficial towards developing a low cost in-situ leach operation.

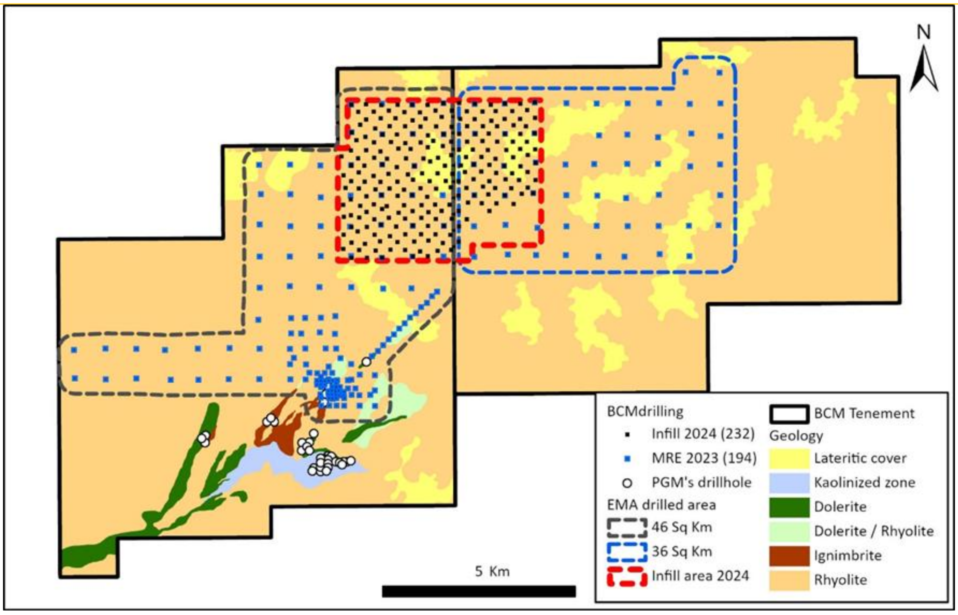

Figure 2 - Ema REE project – Mineral Resource covering 82 km2 with auger holes on 800m spacing and infill auger holes on 400m centres over 20 sq km.

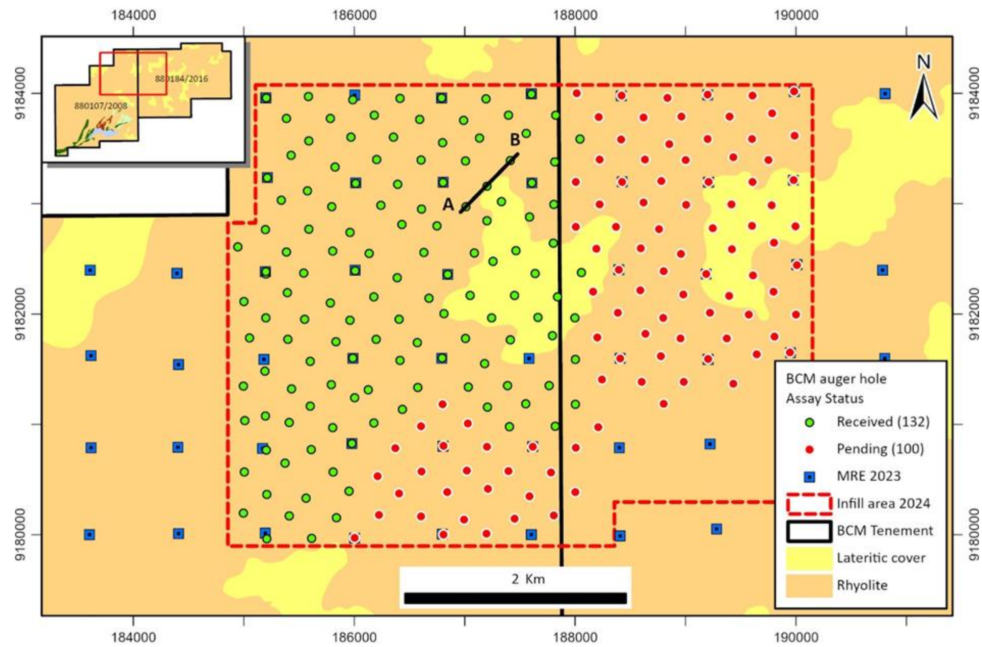

Figure 3 – Location map of the auger infill holes with assay results received to date with cross section A-B.

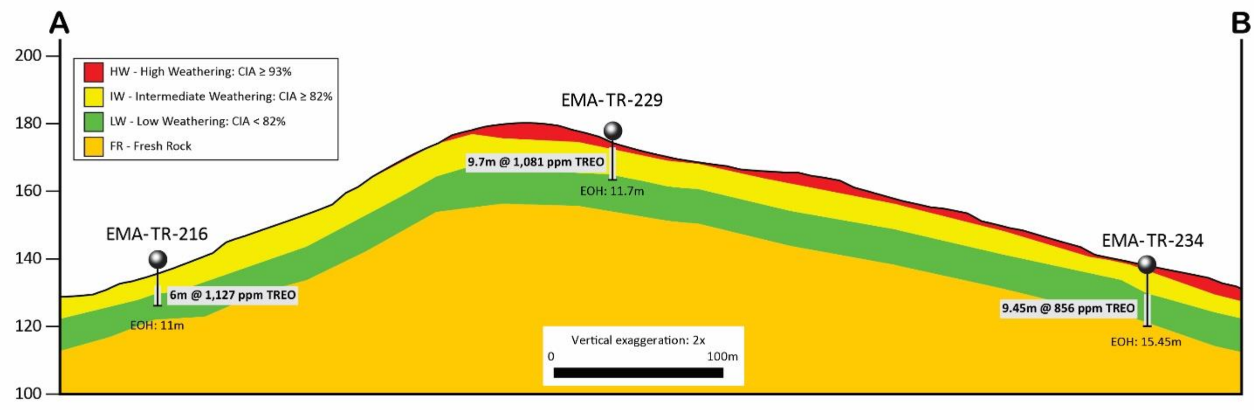

Figure 1 - Cross section A-B from EMA-216 to 234

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 volcanic rocks in southwest China and Myanmar, the world´s largest known ionic clay region, where approximately ~30% of the world's rare earth production have been mined and processed during 2024 alone.

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-metre centres is enabling a more detailed assessment of the mineralisation which will 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 Oxide (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-229, 216 and 234 (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 has been intersected.

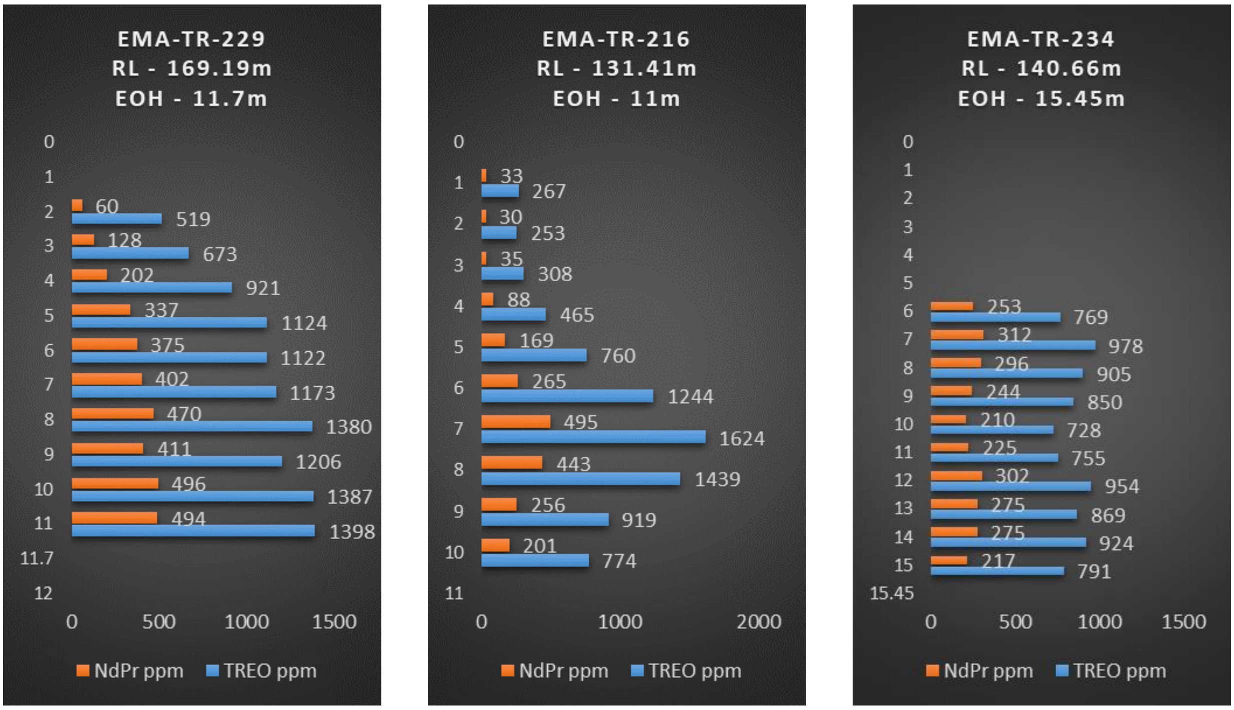

Figure 5 – Drill-hole profiles showing typical enrichment zone with high NdPr grades close to the fresh rock interface.

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 (nearing completion) and ongoing metallurgical assessment. The key work fronts ongoing until the end of December include;

1. Mineral Resource Infill Drilling

- Complete 270-hole infill drilling program, currently ~95% complete
- Collection of density data from deeper horizons to improve the accuracy of the MRE, now completed
- Drill targeting strategic locations that promise to yield significant insights into the mineralisation for starter ISR assessment is complete

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 is now complete
- Completion of 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 is ongoing

- 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

- Updated MRE based on the newly acquired density and assay data has commenced. Stage 1 MRE update will include all assays received to date to underpin the scoping study. Stage 2 MRE update will include all assays from the 270 hole program targeting completion in Q1 2025.

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.

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

Competent Person Statement

The information in this announcement 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.

References

[1] Brazilian Critical Minerals (ASX:BCM) ASX Announcement "Massive Maiden Mineral Resource Estimate for Ema Project" 22.04.24

[2] Brazilian Critical Minerals (ASX:BCM) ASX Announcement "World Leading Recoveries Confirmed at Ema Project" 07.05.24

The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of mineral resource estimate, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Refer to ASX announcement dated 22 April 2024.

Appendices

Appendix 1 – Auger hole intersections at a 500ppm TREO cut-off grade

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-175	7	4	807	24	21	198	17
EMA-TR-181	2	4	720	24	19	166	14
EMA-TR-184	4	2	543	13	20	58	12
EMA-TR-184	7	4	960	28	21	264	20
EMA-TR-187	2	5	618	7	14	33	9
EMA-TR-188	4	6	1,315	30	26	367	31
EMA-TR-189	8	9	847	28	21	226	18
EMA-TR-190	8	6	669	26	21	161	14
EMA-TR-205	1	7	677	14	27	85	19
EMA-TR-211	12	2	596	21	17	114	10
EMA-TR-212	0	2	572	16	33	72	20
EMA-TR-212	5	5	1,000	22	22	208	21
EMA-TR-213	0	8	561	18	25	89	14
EMA-TR-214	5	9.8	517	18	18	87	9
EMA-TR-215	5	6	666	24	15	155	9
EMA-TR-216	5	6	1,127	29	23	305	26
EMA-TR-217	6	7	790	26	24	189	19
EMA-TR-218	1	5.8	566	21	20	108	11
EMA-TR-220	6	2	554	25	24	125	13
EMA-TR-221	8	5	758	27	21	191	15
EMA-TR-222	10	10	662	18	17	97	11
EMA-TR-223	1	5	592	15	28	68	18
EMA-TR-224	4	10	701	21	18	133	12
EMA-TR-225	9	2	533	22	18	105	10
EMA-TR-226	1	7	714	12	16	76	12
EMA-TR-227	8	6	691	31	18	200	12
EMA-TR-229	2	10	1,081	30	17	333	18
EMA-TR-231	5	2	560	18	22	89	13
EMA-TR-231	8	5	609	24	21	134	12
EMA-TR-232	4	3	636	29	27	168	17
EMA-TR-234	6	9	856	32	17	263	13
EMA-TR-235	9	9	860	27	22	219	18
EMA-TR-236	10	10	1,103	27	20	284	23
EMA-TR-237	10	3	677	29	29	177	20
EMA-TR-238	3	10	1,107	28	29	292	34
EMA-TR-239	12	10	900	22	18	184	17
EMA-TR-240	6	5	787	22	18	176	14
EMA-TR-241	3	10	635	21	19	122	12
EMA-TR-242	6	5	739	24	20	165	15
EMA-TR-243	6	8	836	20	16	150	13
EMA-TR-244	6	2	842	16	14	121	12
EMA-TR-245	5	10	1,149	34	20	373	22
EMA-TR-246	9	3	953	17	14	156	13
EMA-TR-247	6	2	1,153	15	15	138	16

[1] MREO (Magnetic Rare Earth Oxide) = $Tb_4O_7 + Dy_2O_3 + Nd_2O_3 + Pr_6O_{11}$

[2] HREO (Heavy Rare Earth Oxide) = $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$

Auger hole	From (m)	Interval (m)	TREO (ppm)	% MREO[1]	% HREO[2]	NdPr (ppm)	DyTb (ppm)
EMA-TR-248	10	6	1,009	23	17	220	17
EMA-TR-249	8	9	639	26	22	153	15
EMA-TR-250	8	5	808	22	20	165	17
EMA-TR-251	6	3	925	20	16	170	15
EMA-TR-252	2	6	885	16	14	126	13
EMA-TR-253	7	9	989	30	18	286	18
EMA-TR-254	14	10	893	21	18	191	18
EMA-TR-255	1	6	750	30	16	219	11
EMA-TR-258	8	10	1,086	30	15	314	17
EMA-TR-260	15	5	698	19	20	124	14
EMA-TR-261	6	2	721	29	21	195	16
EMA-TR-262	8	10	1,084	20	16	218	18
EMA-TR-263	7	4	966	24	18	222	17
EMA-TR-264	7	4	716	12	14	75	11
EMA-TR-265	6	2	564	10	16	48	10
EMA-TR-265	11	3	714	24	20	155	15
EMA-TR-266	5	4	800	19	16	139	13
EMA-TR-267	2	4	634	22	20	126	13
EMA-TR-268	6	8	660	21	20	130	13
EMA-TR-269	6	5	723	13	17	87	13
EMA-TR-270	3	2	612	15	15	77	9
EMA-TR-271	12	8	625	20	15	117	10
EMA-TR-272	5	10	806	22	21	163	18
EMA-TR-273	8	10	1,137	32	29	332	32
EMA-TR-274	7	2	645	12	11	70	7
EMA-TR-275	3	2	606	15	18	79	12
EMA-TR-277	9	5	656	25	21	154	14
EMA-TR-278	5	10	850	23	19	197	16
EMA-TR-279	6	10	661	28	21	170	15
EMA-TR-280	3	3	593	13	16	69	10
EMA-TR-281	8	3	722	18	123	12	17
EMA-TR-282	7	3	927	22	20	208	18
EMA-TR-283	6	3	734	20	17	142	14
EMA-TR-284	6	2	594	21	24	112	14
EMA-TR-284	12	4	701	26	22	174	15
EMA-TR-285	6	5	670	22	18	137	12
EMA-TR-290	5	8	959	32	22	296	21
EMA-TR-291	2	5	767	22	17	163	13
EMA-TR-292	2	4	582	19	22	97	13

Appendix 2 – Total REE oxide distribution down-hole

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-175	1	2	350	23	5	9	9	
EMA-TR-175	2	3	358	24	5	9	9	
EMA-TR-175	3	4	325	28	6	9	10	
EMA-TR-175	4	5	339	25	6	12	9	
EMA-TR-175	5	6	408	21	7	20	9	
EMA-TR-175	6	7	428	19	10	32	9	
EMA-TR-175	7	8	563	18	14	69	10	
EMA-TR-175	8	9	688	22	23	141	15	807
EMA-TR-175	9	10	781	21	28	206	16	
EMA-TR-175	10	10.8	1,328	23	35	433	28	
EMA-TR-181	0.5	1	248	31	13	22	9	
EMA-TR-181	1	2	400	22	10	30	10	
EMA-TR-181	2	3	546	18	17	84	11	
EMA-TR-181	3	4	582	19	24	128	11	
EMA-TR-181	4	5	834	17	26	201	14	**720**
EMA-TR-181	5	6	786	18	26	193	15	
EMA-TR-181	6	6.5	983	23	31	279	23	
EMA-TR-184	2	3	318	31	9	19	11	
EMA-TR-184	3	4	448	24	8	26	12	
EMA-TR-184	4	5	568	19	11	48	13	**543**
EMA-TR-184	5	6	518	21	16	69	12	
EMA-TR-184	6	7	415	24	19	66	11	
EMA-TR-184	7	8	522	20	21	100	12	
EMA-TR-184	8	9	641	22	26	151	15	
EMA-TR-184	9	10	994	21	32	302	21	**960**
EMA-TR-184	10	11	1,533	21	31	441	30	
EMA-TR-184	11	11.4	1,338	23	33	413	29	
EMA-TR-187	0.5	1	210	39	12	16	9	
EMA-TR-187	1	2	463	17	5	14	9	
EMA-TR-187	2	3	531	14	5	18	9	
EMA-TR-187	3	4	587	14	6	26	9	
EMA-TR-187	4	5	504	17	7	24	10	**618**
EMA-TR-187	5	6	792	11	5	29	9	
EMA-TR-187	6	7	677	14	12	69	10	
EMA-TR-189	7	8	499	19	20	89	10	
EMA-TR-189	8	9	673	15	18	111	10	
EMA-TR-189	9	10	641	18	24	142	12	
EMA-TR-189	10	11	601	20	26	145	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-189	11	12	679	16	28	181	10	
EMA-TR-189	12	13	763	17	33	239	12	847
EMA-TR-189	13	14	900	18	33	283	15	
EMA-TR-189	14	15	1,620	24	34	514	36	
EMA-TR-189	15	16	972	28	28	247	27	
EMA-TR-189	16	17	772	35	26	170	27	
EMA-TR-190	5	6	368	24	9	23	9	
EMA-TR-190	6	7	485	16	12	50	8	
EMA-TR-190	7	8	487	21	19	82	10	
EMA-TR-190	8	9	579	19	19	101	11	
EMA-TR-190	9	10	627	19	24	141	12	
EMA-TR-190	10	11	678	20	27	172	13	
EMA-TR-190	11	12	779	21	29	209	15	
EMA-TR-190	12	13	758	22	28	198	16	669
EMA-TR-190	13	14	633	23	27	155	15	
EMA-TR-190	14	14.4	567	23	26	134	13	
EMA-TR-205	0.5	1	486	33	13	46	18	
EMA-TR-205	1	2	672	27	12	60	20	
EMA-TR-205	2	3	612	30	12	55	21	
EMA-TR-205	3	4	628	27	11	51	19	
EMA-TR-205	4	5	563	29	11	44	18	
EMA-TR-205	5	6	554	28	11	43	17	677
EMA-TR-205	6	7	584	28	16	77	17	
EMA-TR-205	7	8	914	21	22	178	20	
EMA-TR-205	8	8.5	1,148	20	26	277	23	
EMA-TR-211	4	5	287	27	6	10	9	
EMA-TR-211	5	6	186	34	7	6	7	
EMA-TR-211	6	7	479	13	3	8	7	
EMA-TR-211	7	8	317	24	6	11	8	
EMA-TR-211	8	9	1,131	7	3	23	9	1131
EMA-TR-211	9	10	397	23	10	31	10	
EMA-TR-211	10	11	475	21	16	63	11	
EMA-TR-211	11	12	414	21	18	64	9	
EMA-TR-211	12	13	643	16	20	118	11	596
EMA-TR-211	13	14	549	18	22	111	10	
EMA-TR-212	0.5	1	517	36	17	67	20	572
EMA-TR-212	1	2	600	32	16	75	21	
EMA-TR-212	2	3	458	43	16	52	21	
EMA-TR-212	3	4	489	53	14	40	28	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-212	4	5	452	52	14	38	25	
EMA-TR-212	5	6	632	33	13	61	22	**1000**
EMA-TR-212	6	7	760	24	21	142	19	
EMA-TR-212	7	8	1,324	16	23	278	21	
EMA-TR-212	8	9	1,000	15	26	245	14	
EMA-TR-212	9	10	1,286	24	27	313	30	
EMA-TR-213	0.5	1	519	33	18	74	18	**561**
EMA-TR-213	1	2	533	32	16	69	18	
EMA-TR-213	2	3	610	26	17	86	17	
EMA-TR-213	3	4	637	23	19	106	16	
EMA-TR-213	4	5	559	23	17	82	13	
EMA-TR-213	5	6	586	21	16	84	12	
EMA-TR-213	6	7	558	22	21	103	13	
EMA-TR-213	7	8	510	23	21	98	11	
EMA-TR-213	8	8.8	505	26	21	93	12	
EMA-TR-214	5	6,0	457	18	9	30	9	**517**
EMA-TR-214	6	7,0	554	14	10	49	8	
EMA-TR-214	7	8,0	474	19	19	80	9	
EMA-TR-214	8	9,0	433	21	18	71	9	
EMA-TR-214	9	10,0	543	16	16	77	9	
EMA-TR-214	10	11,0	533	18	19	91	10	
EMA-TR-214	11	12,0	518	18	21	98	9	
EMA-TR-214	12	13,0	500	19	23	107	9	
EMA-TR-214	13	14,0	483	20	22	99	9	
EMA-TR-214	14	14.8	678	19	27	173	12	
EMA-TR-215	1	2	260	31	12	22	8	
EMA-TR-215	2	3	247	28	11	19	7	
EMA-TR-215	3	4	278	24	12	27	7	
EMA-TR-215	4	5	396	21	15	49	9	
EMA-TR-215	5	6	544	15	13	64	9	666
EMA-TR-215	6	7	543	17	21	104	10	
EMA-TR-215	7	8	604	15	23	132	9	
EMA-TR-215	8	9	748	14	27	195	10	
EMA-TR-215	9	10	770	14	30	220	9	
EMA-TR-215	10	10.8	827	14	30	236	10	
EMA-TR-216	1	2	267	30	16	33	9	
EMA-TR-216	2	3	253	31	15	30	8	
EMA-TR-216	3	4	308	26	14	35	8	
EMA-TR-216	4	5	465	23	21	88	10	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-216	5	6	760	21	24	169	16	1127
EMA-TR-216	6	7	1,244	18	23	265	21	
EMA-TR-216	7	8	1,624	23	33	495	37	
EMA-TR-216	8	9	1,439	26	33	443	36	
EMA-TR-216	9	10	919	26	30	256	23	
EMA-TR-216	10	11	774	26	29	201	20	
EMA-TR-217	3	4	407	23	13	42	10	
EMA-TR-217	4	5	405	22	15	50	9	
EMA-TR-217	5	6	460	22	18	73	11	
EMA-TR-217	6	7	591	20	19	99	12	790
EMA-TR-217	7	8	791	21	23	164	17	
EMA-TR-217	8	9	829	23	28	209	19	
EMA-TR-217	9	10	778	23	27	196	18	
EMA-TR-217	10	11	895	25	29	239	21	
EMA-TR-217	11	12	893	27	29	235	23	
EMA-TR-217	12	12.9	744	28	27	181	20	
EMA-TR-218	0,5	1	461	18	9	31	9	
EMA-TR-218	1	2	593	18	14	70	11	566
EMA-TR-218	2	3	495	21	19	82	10	
EMA-TR-218	3	4	557	20	19	97	11	
EMA-TR-218	4	5	523	20	25	120	11	
EMA-TR-218	5	5.8	662	19	28	174	12	
EMA-TR-219	0,5	1	254	28	17	36	7	
EMA-TR-219	1	2	304	26	16	39	8	
EMA-TR-219	2	3	462	24	12	44	12	
EMA-TR-219	3	4	356	35	15	38	13	
EMA-TR-219	4	5	161	29	16	21	5	
EMA-TR-219	5	6	220	28	16	29	6	
EMA-TR-219	6	7	371	27	17	52	11	
EMA-TR-219	7	8	453	23	19	77	10	
EMA-TR-220	0.5	1	411	35	16	52	15	
EMA-TR-220	1	2	301	36	18	42	11	
EMA-TR-220	2	3	300	33	21	53	10	
EMA-TR-220	3	4	333	28	24	71	10	
EMA-TR-220	4	5	479	24	27	117	11	
EMA-TR-220	5	6	494	25	26	114	12	
EMA-TR-220	6	7	509	25	25	114	12	554
EMA-TR-220	7	8	599	23	25	136	13	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-221	4	5	389	24	7	19	10	
EMA-TR-221	5	6	418	20	6	15	9	
EMA-TR-221	6	7	629	14	4	14	10	629
EMA-TR-221	7	8	289	29	14	30	9	
EMA-TR-221	8	9	547	18	18	86	10	
EMA-TR-221	9	10	879	17	26	213	14	
EMA-TR-221	10	11	897	20	30	252	17	758
EMA-TR-221	11	12	750	23	30	210	16	
EMA-TR-221	12	13	717	26	30	194	18	
EMA-TR-221	13	14	482	25	25	109	12	
EMA-TR-222	10	11	1,063	8	3	22	9	
EMA-TR-222	11	12	687	15	9	47	12	
EMA-TR-222	12	13	798	16	16	111	14	
EMA-TR-222	13	14	521	22	18	84	12	
EMA-TR-222	14	15	612	16	16	89	10	662
EMA-TR-222	15	16	543	18	20	99	10	
EMA-TR-222	16	17	549	20	21	104	11	
EMA-TR-222	17	18	573	20	24	127	11	
EMA-TR-222	18	19	552	19	26	134	10	
EMA-TR-222	19	19.5	780	22	30	215	16	
EMA-TR-223	1	2	509	31	14	53	17	
EMA-TR-223	2	3	639	27	15	77	19	
EMA-TR-223	3	4	646	26	16	87	18	592
EMA-TR-223	4	5	566	28	14	62	17	
EMA-TR-223	5	6	599	29	14	63	19	
EMA-TR-223	6	7	428	37	13	39	17	
EMA-TR-223	7	8	456	34	11	32	17	
EMA-TR-223	8	9	479	33	14	48	17	
EMA-TR-223	9	10	575	28	17	82	17	619
EMA-TR-223	10	10.4	744	23	22	145	18	
EMA-TR-224	4	5	543	21	17	78	11	
EMA-TR-224	5	6	838	15	15	110	12	
EMA-TR-224	6	7	940	13	16	137	12	
EMA-TR-224	7	8	792	16	23	172	12	
EMA-TR-224	8	9	609	20	23	131	12	
EMA-TR-224	9	10	718	19	25	163	13	
EMA-TR-224	10	11	619	20	24	137	12	701
EMA-TR-224	11	12	667	19	23	140	12	
EMA-TR-224	12	13	635	20	23	134	12	
EMA-TR-224	13	13.6	619	20	23	129	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-225	2	3	365	32	18	53	13	
EMA-TR-225	3	4	467	35	18	64	17	
EMA-TR-225	4	5	441	32	18	64	15	
EMA-TR-225	5	6	313	39	17	41	13	
EMA-TR-225	6	7	279	36	18	38	11	
EMA-TR-225	7	8	323	26	19	51	9	
EMA-TR-225	8	9	456	18	21	85	9	
EMA-TR-225	9	10	523	17	21	101	9	
EMA-TR-225	10	11	547	18	22	110	11	533
EMA-TR-225	11	11.3	519	18	22	104	9	
EMA-TR-226	0,5	1	409	24	10	28	11	
EMA-TR-226	1	2	561	18	8	33	11	
EMA-TR-226	2	3	663	18	9	49	13	
EMA-TR-226	3	4	948	11	7	56	11	
EMA-TR-226	4	5	746	14	13	83	12	714
EMA-TR-226	5	6	631	19	16	87	13	
EMA-TR-226	6	7	733	15	17	116	11	
EMA-TR-226	7	8	716	16	17	111	12	
EMA-TR-227	5	6	455	21	20	79	10	
EMA-TR-227	6	7	460	18	20	83	9	
EMA-TR-227	7	8	474	19	23	98	9	
EMA-TR-227	8	9	659	17	27	169	11	
EMA-TR-227	9	10	649	16	30	183	10	
EMA-TR-227	10	11	633	18	31	185	10	
EMA-TR-227	11	12	673	19	31	197	13	
EMA-TR-227	12	13	765	20	32	233	14	691
EMA-TR-227	13	14	751	20	32	227	14	
EMA-TR-227	14	14.4	736	18	32	221	13	
EMA-TR-228	0.5	1	209	31	9	11	7	
EMA-TR-228	1	2	268	22	6	10	6	
EMA-TR-228	2	3	321	21	7	17	7	
EMA-TR-228	3	4	294	24	12	26	8	
EMA-TR-228	4	5	290	26	12	27	8	
EMA-TR-228	5	6	471	19	10	37	10	
EMA-TR-228	6	7	447	19	18	71	9	
EMA-TR-228	7	8	592	18	23	123	11	592
EMA-TR-229	2	3	519	15	13	60	8	1,081
EMA-TR-229	3	4	673	15	21	128	11	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-229	4	5	921	12	23	202	11	
EMA-TR-229	5	6	1,124	15	31	337	16	
EMA-TR-229	6	7	1,122	18	35	375	19	
EMA-TR-229	7	8	1,173	18	36	402	21	
EMA-TR-229	8	9	1,380	17	36	470	23	
EMA-TR-229	9	10	1,206	18	36	411	21	
EMA-TR-229	10	11	1,387	21	38	496	27	
EMA-TR-229	11	11.7	1,398	23	37	494	30	
EMA-TR-230	0,5	1	369	35	17	49	14	
EMA-TR-230	1	2	358	35	17	48	14	
EMA-TR-230	2	3	329	29	18	49	10	
EMA-TR-230	3	4	304	23	17	43	8	
EMA-TR-230	4	5	348	32	17	46	12	
EMA-TR-230	5	6	326	34	17	42	12	
EMA-TR-230	6	7	378	28	18	57	11	
EMA-TR-230	7	8	370	18	20	67	7	
EMA-TR-230	8	9	402	21	22	80	9	
EMA-TR-231	4	5	473	25	16	64	12	
EMA-TR-231	5	6	579	21	18	93	13	560
EMA-TR-231	6	7	542	22	18	85	12	
EMA-TR-231	7	8	490	24	20	84	12	
EMA-TR-231	8	9	605	20	23	128	12	609
EMA-TR-231	9	10	608	21	23	129	12	
EMA-TR-231	10	11	635	20	24	142	12	
EMA-TR-231	11	12	648	21	24	144	13	
EMA-TR-231	12	13	549	21	25	126	11	
EMA-TR-231	13	13.5	496	23	25	111	11	
EMA-TR-232	0.5	1	363	33	19	57	13	
EMA-TR-232	1	2	368	34	19	57	13	
EMA-TR-232	2	3	356	33	19	56	13	
EMA-TR-232	3	4	482	26	24	104	13	
EMA-TR-232	4	5	664	23	30	182	15	636
EMA-TR-232	5	6	660	28	29	172	18	
EMA-TR-232	6	6.8	571	30	28	146	17	
EMA-TR-233	0.5	1	346	37	17	46	13	
EMA-TR-233	1	2	385	37	17	50	15	
EMA-TR-233	2	3	391	35	17	51	15	
EMA-TR-233	3	4	354	37	16	42	14	
EMA-TR-233	4	5	334	35	17	45	12	

BRAZILIAN CRITICAL MINERALS

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-233	5	6	318	38	17	40	13	
EMA-TR-233	6	7	233	33	17	32	8	
EMA-TR-233	7	8	437	21	21	82	10	
EMA-TR-233	8	9	483	21	22	94	10	
EMA-TR-233	9	10	511	19	22	103	9	511
EMA-TR-234	6	7	769	15	34	253	10	856
EMA-TR-234	7	8	978	16	33	312	13	
EMA-TR-234	8	9	905	14	34	296	11	
EMA-TR-234	9	10	850	16	30	244	12	
EMA-TR-234	10	11	728	14	30	210	9	
EMA-TR-234	11	12	755	16	31	225	11	
EMA-TR-234	12	13	954	16	33	302	14	
EMA-TR-234	13	14	869	19	33	275	15	
EMA-TR-234	14	15	924	21	32	275	17	
EMA-TR-234	15	15.5	791	20	29	217	14	
EMA-TR-235	9	10	506	21	21	98	10	860
EMA-TR-235	10	11	551	21	23	116	11	
EMA-TR-235	11	12	602	19	24	132	11	
EMA-TR-235	12	13	789	17	23	170	13	
EMA-TR-235	13	14	881	16	25	206	14	
EMA-TR-235	14	15	1,168	20	31	344	22	
EMA-TR-235	15	16	1,080	24	32	321	24	
EMA-TR-235	16	17	1,207	27	31	343	31	
EMA-TR-235	17	18	977	29	28	251	27	
EMA-TR-235	18	18,2	761	28	27	188	20	
EMA-TR-236	10	11	735	17	23	158	12	**1,103**
EMA-TR-236	11	12	756	17	24	167	12	
EMA-TR-236	12	13	949	17	23	204	15	
EMA-TR-236	13	14	868	18	25	207	14	
EMA-TR-236	14	15	1,071	19	27	273	19	
EMA-TR-236	15	16	1,184	17	22	247	18	
EMA-TR-236	16	17	1,137	20	29	306	22	
EMA-TR-236	17	18	1,074	21	32	316	23	
EMA-TR-236	18	19	1,438	25	33	439	36	
EMA-TR-236	19	20	1,817	31	32	523	55	
EMA-TR-237	10	11	821	29	31	230	24	677
EMA-TR-237	11	12	694	30	29	183	21	
EMA-TR-237	12	13	515	28	26	118	16	
EMA-TR-237	13	14	445	26	24	95	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-237	14	15	408	25	23	85	10	
EMA-TR-237	15	16	495	24	24	109	12	
EMA-TR-237	16	17	447	24	24	96	11	
EMA-TR-237	17	18	446	25	23	92	12	
EMA-TR-237	18	19	450	22	24	96	10	
EMA-TR-237	19	19.4	512	23	25	118	11	**512**
EMA-TR-238	3	4	538	18	18	84	10	**1,107**
EMA-TR-238	4	5	739	20	26	176	15	
EMA-TR-238	5	6	1,301	26	33	395	35	
EMA-TR-238	6	7	1,578	30	32	459	48	
EMA-TR-238	7	8	1,332	31	30	360	42	
EMA-TR-238	8	9	1,260	34	31	348	44	
EMA-TR-238	9	10	1,505	35	30	397	55	
EMA-TR-238	10	11	1,043	36	29	262	38	
EMA-TR-238	11	12	918	33	28	224	31	
EMA-TR-238	12	12.8	771	29	27	185	24	
EMA-TR-239	12	13	981	12	12	105	12	900
EMA-TR-239	13	14	1,105	15	22	224	19	
EMA-TR-239	14	15	731	17	20	130	13	
EMA-TR-239	15	16	701	19	18	114	14	
EMA-TR-239	16	17	692	22	19	119	15	
EMA-TR-239	17	18	712	19	19	124	14	
EMA-TR-239	18	19	756	18	21	141	14	
EMA-TR-239	19	20	878	20	23	187	17	
EMA-TR-239	20	21	1,175	20	29	312	24	
EMA-TR-239	21	22	1,274	22	32	384	28	
EMA-TR-240	2	3	484	18	5	12	10	
EMA-TR-240	3	4	460	20	6	18	10	
EMA-TR-240	4	5	472	22	9	32	12	
EMA-TR-240	5	6	483	20	8	30	11	
EMA-TR-240	6	7	654	18	12	63	13	787
EMA-TR-240	7	8	544	18	10	47	10	
EMA-TR-240	8	9	671	18	21	130	13	
EMA-TR-240	9	10	875	16	31	256	14	
EMA-TR-240	10	11	1,123	19	33	349	19	
EMA-TR-240	11	11.2	1,134	20	33	356	22	
EMA-TR-241	3	4	541	21	10	40	12	
EMA-TR-241	4	5	609	19	16	83	12	
EMA-TR-241	5	6	631	19	17	97	12	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-241	6	7	613	18	15	82	12	635
EMA-TR-241	7	8	601	20	20	108	12	
EMA-TR-241	8	9	649	16	25	152	10	
EMA-TR-241	9	10	698	18	26	165	13	
EMA-TR-241	10	11	653	18	27	168	11	
EMA-TR-241	11	12	678	19	27	170	13	
EMA-TR-241	12	12,6	697	20	27	171	14	
EMA-TR-242	4	5	561	16	9	42	10	
EMA-TR-242	5	6	499	18	13	55	10	
EMA-TR-242	6	7	631	15	15	87	10	561
EMA-TR-242	7	8	739	17	24	161	13	
EMA-TR-242	8	9	799	20	28	208	16	
EMA-TR-242	9	10	825	22	27	208	18	
EMA-TR-242	10	11	699	25	25	160	18	
EMA-TR-242	11	12	499	22	22	99	12	
EMA-TR-242	12	13	503	22	21	95	11	503
EMA-TR-242	13	14	426	23	21	78	11	
EMA-TR-243	5	6	329	31	13	32	11	
EMA-TR-243	6	7	941	11	11	91	11	836
EMA-TR-243	7	8	1,233	8	15	180	11	
EMA-TR-243	8	9	851	14	12	89	13	
EMA-TR-243	9	10	664	17	16	91	13	
EMA-TR-243	10	11	552	19	20	102	11	
EMA-TR-243	11	12	571	20	21	105	12	
EMA-TR-243	12	13	910	17	29	245	16	
EMA-TR-243	13	14	942	18	29	253	17	
EMA-TR-243	14	14.4	901	21	31	259	19	
EMA-TR-244	0,5	1	171	54	18	20	11	
EMA-TR-244	1	2	174	56	17	18	11	
EMA-TR-244	2	3	182	53	16	18	11	
EMA-TR-244	3	4	204	50	15	19	12	
EMA-TR-244	4	5	294	30	15	34	10	
EMA-TR-244	5	6	317	28	18	47	10	
EMA-TR-244	6	7	817	14	12	86	12	842
EMA-TR-244	7	8	866	14	19	156	12	
EMA-TR-245	5	6	723	17	37	255	11	**1,149**
EMA-TR-245	6	7	1,183	17	37	420	18	
EMA-TR-245	7	8	1,360	18	39	507	22	
EMA-TR-245	8	9	1,174	19	36	405	21	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-245	9	10	1,047	21	34	336	20	
EMA-TR-245	10	11	1,631	18	32	497	29	
EMA-TR-245	11	12	1,208	21	33	374	26	
EMA-TR-245	12	13	1,151	22	33	351	27	
EMA-TR-245	13	14	1,049	24	31	301	26	
EMA-TR-245	14	14.6	837	24	30	228	21	
EMA-TR-246	2	3	280	24	10	19	9	
EMA-TR-246	3	4	251	34	7	8	10	
EMA-TR-246	4	5	432	23	8	24	11	
EMA-TR-246	5	6	354	30	8	18	12	
EMA-TR-246	6	7	480	20	7	21	11	
EMA-TR-246	7	8	430	20	9	31	9	
EMA-TR-246	8	9	483	18	13	52	9	
EMA-TR-246	9	10	669	14	16	94	9	
EMA-TR-246	10	11	652	16	16	93	10	953
EMA-TR-246	11	11.8	1,683	12	20	312	20	
EMA-TR-247	0,5	1	194	52	18	24	11	
EMA-TR-247	1	2	194	42	19	27	9	
EMA-TR-247	2	3	159	48	18	19	9	
EMA-TR-247	3	4	180	50	18	22	10	
EMA-TR-247	4	5	161	52	18	19	9	
EMA-TR-247	5	6	225	44	17	27	11	
EMA-TR-247	6	7	641	20	18	103	13	**1,153**
EMA-TR-247	7	7.9	1,755	10	11	180	19	
EMA-TR-248	6	7	461	22	21	86	11	
EMA-TR-248	7	8	562	18	21	109	11	562
EMA-TR-248	8	9	405	23	12	37	11	
EMA-TR-248	9	10	349	24	9	23	9	
EMA-TR-248	10	11	705	15	16	99	10	
EMA-TR-248	11	12	948	15	21	184	14	
EMA-TR-248	12	13	1,197	19	27	298	20	**1,009**
EMA-TR-248	13	14	1,284	17	26	312	21	
EMA-TR-248	14	15	1,101	17	24	248	18	
EMA-TR-248	15	16	819	19	24	177	15	
EMA-TR-249	7	8	484	20	19	82	11	
EMA-TR-249	8	9	517	19	22	103	11	
EMA-TR-249	9	10	574	19	24	124	12	639
EMA-TR-249	10	11	550	18	26	131	10	
EMA-TR-249	11	12	614	18	28	160	11	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-249	12	13	693	21	29	186	15	
EMA-TR-249	13	14	811	24	29	218	19	
EMA-TR-249	14	15	754	28	28	191	21	
EMA-TR-249	15	16	689	29	25	155	20	
EMA-TR-249	16	17	548	25	23	112	14	
EMA-TR-250	3	4	112	68	15	9	8	
EMA-TR-250	4	5	120	56	17	12	7	
EMA-TR-250	5	6	154	50	17	18	9	
EMA-TR-250	6	7	212	36	18	30	8	
EMA-TR-250	7	8	417	20	17	62	9	
EMA-TR-250	8	9	741	14	14	91	10	
EMA-TR-250	9	10	767	17	21	145	13	
EMA-TR-250	10	11	837	22	24	186	18	808
EMA-TR-250	11	12	889	25	27	217	22	
EMA-TR-250	12	12.7	805	26	27	193	21	
EMA-TR-251	0,5	1	137	47	18	17	7	
EMA-TR-251	1	2	165	46	16	17	8	
EMA-TR-251	2	3	237	34	16	28	9	
EMA-TR-251	3	4	278	27	18	43	8	
EMA-TR-251	4	5	309	28	19	50	9	
EMA-TR-251	5	6	422	21	21	78	9	
EMA-TR-251	6	7	840	16	20	155	14	
EMA-TR-251	7	8	819	17	21	155	14	925
EMA-TR-251	8	9	1,115	14	20	201	17	
EMA-TR-252	0.5	1	242	31	11	18	8	
EMA-TR-252	1	2	472	18	10	40	9	
EMA-TR-252	2	3	924	10	9	70	11	
EMA-TR-252	3	4	977	10	9	79	11	
EMA-TR-252	4	5	814	12	13	95	10	
EMA-TR-252	5	6	725	16	19	128	12	885
EMA-TR-252	6	7	935	17	23	196	16	
EMA-TR-252	7	8	981	22	28	250	22	
EMA-TR-253	7	8	642	17	23	137	11	
EMA-TR-253	8	9	662	17	27	169	11	
EMA-TR-253	9	10	833	16	32	250	13	
EMA-TR-253	10	11	972	16	33	306	15	
EMA-TR-253	11	12	1,037	15	34	341	14	
EMA-TR-253	12	13	1,085	17	34	356	18	
EMA-TR-253	13	14	1,348	15	29	366	20	989

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-253	14	15	1,160	20	32	344	23	
EMA-TR-253	15	16	1,069	27	31	298	29	
EMA-TR-253	16	16	1,201	31	29	312	37	
EMA-TR-254	14	15	596	18	15	78	11	893
EMA-TR-254	15	16	620	16	17	96	10	
EMA-TR-254	16	17	605	16	16	85	10	
EMA-TR-254	17	18	587	17	18	95	10	
EMA-TR-254	18	19	611	17	19	104	10	
EMA-TR-254	19	20	857	12	14	107	10	
EMA-TR-254	20	21	883	14	21	176	12	
EMA-TR-254	21	22	1,161	20	29	314	22	
EMA-TR-254	22	23	1,757	27	32	525	46	
EMA-TR-254	23	23.5	1,613	30	33	480	48	
EMA-TR-255	0,5	1	332	15	11	33	5	
EMA-TR-255	1	2	513	19	19	88	11	750
EMA-TR-255	2	3	562	19	25	128	11	
EMA-TR-255	3	4	817	15	30	235	12	
EMA-TR-255	4	5	920	14	35	313	12	
EMA-TR-255	5	6	994	15	35	338	13	
EMA-TR-255	6	7	666	16	33	212	10	
EMA-TR-256	6	7	154	47	12	11	8	
EMA-TR-256	7	8	197	40	12	15	9	
EMA-TR-256	8	9	276	29	13	26	9	
EMA-TR-256	9	10	173	43	13	14	8	
EMA-TR-256	10	11	179	38	13	15	8	
EMA-TR-256	11	12	307	26	12	29	9	
EMA-TR-256	12	13	244	28	13	24	7	
EMA-TR-256	13	14	438	20	13	46	9	
EMA-TR-256	14	15	874	12	8	58	13	947
EMA-TR-256	15	15.5	1,094	11	8	74	14	
EMA-TR-257	1	2	146	52	14	12	8	
EMA-TR-257	2	3	136	59	13	9	9	
EMA-TR-257	3	4	128	62	13	8	9	
EMA-TR-257	4	5	124	65	14	8	9	
EMA-TR-257	5	6	148	64	11	6	11	
EMA-TR-257	6	7	155	52	12	9	9	
EMA-TR-257	7	8	364	31	19	56	12	
EMA-TR-257	8	9	311	29	19	49	10	
EMA-TR-257	9	10	371	27	19	58	11	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-257	10	11	366	25	20	62	10	
EMA-TR-258	8	9	689	13	23	151	9	
EMA-TR-258	9	10	831	10	16	126	9	
EMA-TR-258	10	11	778	14	30	221	11	
EMA-TR-258	11	12	863	13	30	252	11	
EMA-TR-258	12	13	926	14	33	291	11	
EMA-TR-258	13	14	1,160	14	35	394	14	
EMA-TR-258	14	15	1,157	12	31	342	13	1,086
EMA-TR-258	15	16	1,043	16	35	351	15	
EMA-TR-258	16	17	1,643	19	30	465	28	
EMA-TR-258	17	18	1,765	28	33	544	46	
EMA-TR-259	6	7	190	38	14	19	8	
EMA-TR-259	7	8	165	45	14	15	8	
EMA-TR-259	8	9	138	49	13	11	8	
EMA-TR-259	9	10	330	20	9	22	8	
EMA-TR-259	10	11	313	23	10	24	8	
EMA-TR-259	11	12	685	11	4	22	9	685
EMA-TR-259	12	13	299	24	15	36	8	
EMA-TR-259	13	14	381	24	12	34	10	
EMA-TR-259	14	15	443	18	15	58	8	
EMA-TR-259	15	16	508	16	13	58	9	508
EMA-TR-260	11	12	702	17	8	41	14	702
EMA-TR-260	12	13	354	34	14	37	13	
EMA-TR-260	13	14	422	23	14	49	11	
EMA-TR-260	14	15	478	21	14	56	11	
EMA-TR-260	15	16	518	20	16	74	11	
EMA-TR-260	16	17	513	21	19	83	12	
EMA-TR-260	17	18	561	21	19	96	13	698
EMA-TR-260	18	19	832	15	15	110	13	
EMA-TR-260	19	20	923	21	26	219	21	
EMA-TR-260	20	20.4	1,104	19	24	238	22	
EMA-TR-261	0.5	1	328	26	13	33	9	
EMA-TR-261	1	2	376	20	13	40	8	
EMA-TR-261	2	3	492	17	12	49	9	
EMA-TR-261	3	4	464	19	18	72	10	
EMA-TR-261	4	5	412	22	20	73	9	
EMA-TR-261	5	6	499	21	22	99	11	
EMA-TR-261	6	7	672	19	29	182	14	721
EMA-TR-261	7	8	770	23	29	208	18	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-262	8	9	506	18	11	46	10	
EMA-TR-262	9	10	574	16	13	65	9	
EMA-TR-262	10	11	961	10	10	85	10	
EMA-TR-262	11	12	903	8	8	69	8	
EMA-TR-262	12	13	1,387	8	9	114	12	
EMA-TR-262	13	14	1,493	17	24	336	24	1,084
EMA-TR-262	14	15	1,523	22	32	454	32	
EMA-TR-262	15	16	1,231	23	32	362	27	
EMA-TR-262	16	17	1,205	21	31	352	24	
EMA-TR-262	17	18	1,061	21	30	298	21	
EMA-TR-263	1	2	115	67	17	10	9	
EMA-TR-263	2	3	122	65	16	11	9	
EMA-TR-263	3	4	126	65	16	11	9	
EMA-TR-263	4	5	158	55	18	18	10	
EMA-TR-263	5	6	224	41	18	32	10	
EMA-TR-263	6	7	371	26	17	54	10	
EMA-TR-263	7	8	738	17	20	135	12	
EMA-TR-263	8	9	959	16	21	188	15	966
EMA-TR-263	9	10	999	19	27	250	19	
EMA-TR-263	10	11	1,168	22	29	317	24	
EMA-TR-264	1	2	123	72	14	8	10	
EMA-TR-264	2	3	117	75	14	6	10	
EMA-TR-264	3	4	124	68	14	8	9	
EMA-TR-264	4	5	131	60	15	10	9	
EMA-TR-264	5	6	148	57	13	10	10	
EMA-TR-264	6	7	207	43	15	21	10	
EMA-TR-264	7	8	541	16	9	38	10	
EMA-TR-264	8	9	702	13	10	63	10	**716**
EMA-TR-264	9	10	630	16	15	85	11	
EMA-TR-264	10	11	989	12	13	113	12	
EMA-TR-265	4	5	725	11	3	17	9	725
EMA-TR-265	5	6	411	22	9	25	10	
EMA-TR-265	6	7	545	16	10	42	10	564
EMA-TR-265	7	8	582	16	11	55	10	
EMA-TR-265	8	9	413	23	12	39	10	
EMA-TR-265	9	10	357	26	12	33	10	
EMA-TR-265	10	11	464	24	20	83	12	
EMA-TR-265	11	12	564	22	21	104	13	714
EMA-TR-265	12	13	790	19	23	168	16	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-265	13	14	787	20	27	192	16	
EMA-TR-266	0.5	1	86	58	17	9	5	
EMA-TR-266	1	2	78	65	15	6	6	
EMA-TR-266	2	3	123	56	15	11	7	
EMA-TR-266	3	4	226	34	19	34	8	
EMA-TR-266	4	5	431	21	21	81	9	
EMA-TR-266	5	6	649	18	20	119	11	800
EMA-TR-266	6	7	945	13	15	130	12	
EMA-TR-266	7	8	835	16	20	156	14	
EMA-TR-266	8	9	757	18	22	156	14	
EMA-TR-267	0,5	1	70	61	17	7	5	
EMA-TR-267	1	2	147	44	18	20	7	
EMA-TR-267	2	3	536	21	20	98	11	634
EMA-TR-267	3	4	743	18	21	141	13	
EMA-TR-267	4	5	733	20	23	156	14	
EMA-TR-267	5	6	522	23	23	109	12	
EMA-TR-267	6	7	486	24	23	102	12	
EMA-TR-267	7	7.9	469	24	23	96	11	
EMA-TR-268	4	5	532	18	7	27	11	532
EMA-TR-268	5	6	417	24	12	38	12	
EMA-TR-268	6	7	533	19	10	44	11	660
EMA-TR-268	7	8	638	16	11	57	11	
EMA-TR-268	8	9	662	17	18	104	12	
EMA-TR-268	9	10	808	19	26	194	15	
EMA-TR-268	10	11	796	21	29	215	16	
EMA-TR-268	11	12	695	23	29	187	16	
EMA-TR-268	12	13	582	24	24	127	14	
EMA-TR-268	13	14	511	21	22	102	11	
EMA-TR-269	2	3	428	26	11	35	13	
EMA-TR-269	3	4	486	16	9	36	8	
EMA-TR-269	4	5	451	34	10	27	17	
EMA-TR-269	5	6	323	28	12	28	10	
EMA-TR-269	6	7	648	26	10	45	19	723
EMA-TR-269	7	8	521	17	10	44	9	
EMA-TR-269	8	9	747	12	15	102	9	
EMA-TR-269	9	10	815	15	15	108	12	
EMA-TR-269	10	11	884	15	17	138	13	
EMA-TR-269	11	11.3	730	25	13	79	19	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-270	0.5	1	202	33	12	17	7	
EMA-TR-270	1	2	320	22	8	18	8	
EMA-TR-270	2	3	327	23	10	24	8	
EMA-TR-270	3	4	712	13	10	64	10	612
EMA-TR-270	4	5	511	17	20	91	9	
EMA-TR-270	5	6	423	21	21	79	9	
EMA-TR-270	6	7	445	22	22	89	10	
EMA-TR-270	7	8	449	22	21	86	10	
EMA-TR-270	8	9	408	22	22	79	9	
EMA-TR-270	9	9	415	22	20	75	9	
EMA-TR-271	10	11	432	18	11	40	8	
EMA-TR-271	11	12	457	17	17	68	8	
EMA-TR-271	12	13	607	13	14	76	8	625
EMA-TR-271	13	14	531	16	19	90	9	
EMA-TR-271	14	15	599	14	18	99	9	
EMA-TR-271	15	16	623	15	19	107	10	
EMA-TR-271	16	17	629	15	20	115	10	
EMA-TR-271	17	18	614	17	25	141	10	
EMA-TR-271	18	19	739	15	23	159	11	
EMA-TR-271	19	19.6	681	18	27	175	12	
EMA-TR-272	5	6	692	12	10	63	9	806
EMA-TR-272	6	7	926	10	8	65	9	
EMA-TR-272	7	8	603	16	16	84	10	
EMA-TR-272	8	9	562	19	18	89	12	
EMA-TR-272	9	10	645	20	23	135	14	
EMA-TR-272	10	11	705	22	26	165	16	
EMA-TR-272	11	12	821	26	28	206	24	
EMA-TR-272	12	13	947	27	30	258	25	
EMA-TR-272	13	14	1,100	28	29	293	30	
EMA-TR-272	14	15	1,054	30	29	272	32	
EMA-TR-273	8	9	1,309	20	34	416	24	**1,137**
EMA-TR-273	9	10	1,080	21	34	348	22	
EMA-TR-273	10	11	1,516	18	30	426	28	
EMA-TR-273	11	12	1,201	25	34	380	30	
EMA-TR-273	12	13	1,275	30	34	391	39	
EMA-TR-273	13	14	1,167	34	32	338	41	
EMA-TR-273	14	15	1,174	36	32	330	42	
EMA-TR-273	15	16	922	35	30	248	33	
EMA-TR-273	16	17	859	36	29	217	32	
EMA-TR-273	17	17.7	750	33	28	183	25	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-274	0.5	1	161	46	15	16	8	
EMA-TR-274	1	2	170	41	14	16	7	
EMA-TR-274	2	3	156	42	13	14	7	
EMA-TR-274	3	4	165	38	14	17	7	
EMA-TR-274	4	5	193	31	15	22	6	
EMA-TR-274	5	6	167	40	14	16	7	
EMA-TR-274	6	7	194	31	13	19	6	
EMA-TR-274	7	8	673	10	10	57	6	645
EMA-TR-274	8	9	617	12	15	83	7	
EMA-TR-275	0,5	1	198	39	13	17	9	
EMA-TR-275	1	2	175	45	15	19	9	
EMA-TR-275	2	3	395	22	13	40	9	
EMA-TR-275	3	4	597	18	13	63	12	606
EMA-TR-275	4	5	636	18	17	95	13	
EMA-TR-275	5	5.3	534	20	17	79	12	
EMA-TR-276	0,5	1	294	24	9	19	8	
EMA-TR-276	1	2	327	19	8	19	7	
EMA-TR-276	2	3	453	16	7	24	8	
EMA-TR-276	3	4	483	14	6	23	8	
EMA-TR-276	4	5	451	15	9	33	8	
EMA-TR-276	5	6	360	19	10	30	7	
EMA-TR-276	6	7	482	15	12	50	8	
EMA-TR-276	7	7.5	539	17	15	72	10	539
EMA-TR-277	4	5	284	30	10	19	9	
EMA-TR-277	5	6	330	28	14	35	11	
EMA-TR-277	6	7	356	28	16	46	11	
EMA-TR-277	7	8	340	25	15	40	10	
EMA-TR-277	8	9	459	21	20	79	11	
EMA-TR-277	9	10	525	20	21	98	12	656
EMA-TR-277	10	11	614	18	21	119	11	
EMA-TR-277	11	12	618	21	26	146	13	
EMA-TR-277	12	13	707	22	28	183	15	
EMA-TR-277	13	14	814	25	30	224	19	
EMA-TR-278	5	6	876	12	17	141	12	850
EMA-TR-278	6	7	751	15	14	93	13	
EMA-TR-278	7	8	601	14	12	64	10	
EMA-TR-278	8	9	516	18	18	82	10	
EMA-TR-278	9	10	607	16	19	106	10	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-278	10	11	1,161	15	28	312	17	
EMA-TR-278	11	12	1,327	20	34	430	25	
EMA-TR-278	12	13	1,002	23	32	297	23	
EMA-TR-278	13	14	1,013	27	31	289	27	
EMA-TR-278	14	15	641	27	27	159	17	
EMA-TR-279	6	7	513	18	22	105	9	
EMA-TR-279	7	8	535	19	24	119	11	
EMA-TR-279	8	9	590	18	26	146	11	
EMA-TR-279	9	10	602	18	27	153	11	
EMA-TR-279	10	11	654	17	28	172	11	
EMA-TR-279	11	12	684	18	29	185	12	661
EMA-TR-279	12	13	718	19	30	201	14	
EMA-TR-279	13	14	766	24	31	216	18	
EMA-TR-279	14	15	765	28	30	205	22	
EMA-TR-279	15	16	783	35	29	200	27	
EMA-TR-280	0,5	1	249	30	12	20	8	
EMA-TR-280	1	2	290	27	11	24	9	
EMA-TR-280	2	3	357	20	11	30	8	
EMA-TR-280	3	4	555	15	9	42	9	
EMA-TR-280	4	5	663	14	14	80	10	692
EMA-TR-280	5	6	560	18	17	83	10	
EMA-TR-281	0.5	1	287	43	17	36	13	
EMA-TR-281	1	2	322	41	17	41	14	
EMA-TR-281	2	3	201	28	12	18	6	
EMA-TR-281	3	4	215	20	12	21	5	
EMA-TR-281	4	5	297	28	13	31	9	
EMA-TR-281	5	6	503	18	16	72	9	
EMA-TR-281	6	7	875	15	17	139	13	722
EMA-TR-281	7	8	789	19	22	155	15	
EMA-TR-282	0.5	1	202	36	11	15	8	
EMA-TR-282	1	2	512	16	6	20	9	512
EMA-TR-282	2	3	414	21	9	28	10	
EMA-TR-282	3	4	495	20	12	47	11	
EMA-TR-282	4	5	679	16	13	80	11	
EMA-TR-282	5	6	685	21	22	138	15	927
EMA-TR-282	6	7	1,418	22	31	408	29	
EMA-TR-283	0.5	1	194	40	16	23	8	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-283	1	2	478	18	10	38	9	
EMA-TR-283	2	3	443	21	13	50	10	
EMA-TR-283	3	4	673	15	14	82	11	734
EMA-TR-283	4	5	880	21	31	255	19	
EMA-TR-283	5	6	648	16	16	90	11	
EMA-TR-284	0.5	1	486	26	17	68	13	
EMA-TR-284	1	2	452	30	18	68	14	
EMA-TR-284	2	3	514	25	19	84	13	514
EMA-TR-284	3	4	481	25	19	76	13	
EMA-TR-284	4	5	566	24	20	98	14	594
EMA-TR-284	5	6	621	23	23	126	14	
EMA-TR-284	6	7	497	23	22	99	12	
EMA-TR-284	7	8	497	21	23	103	11	
EMA-TR-284	8	9	601	21	22	117	13	701
EMA-TR-284	9	10	553	23	25	124	13	
EMA-TR-284	10	11	900	22	30	253	18	
EMA-TR-284	11	12	750	24	29	203	17	
EMA-TR-285	5	6	334	25	8	19	9	
EMA-TR-285	6	7	668	12	9	51	8	670
EMA-TR-285	7	8	623	15	16	92	10	
EMA-TR-285	8	9	700	20	24	153	14	
EMA-TR-285	9	10	679	22	30	187	14	
EMA-TR-285	10	11	681	22	32	201	15	
EMA-TR-290	4	5	497	21	20	88	11	
EMA-TR-290	5	6	509	21	22	100	12	959
EMA-TR-290	6	7	600	18	25	139	10	
EMA-TR-290	7	8	629	17	29	173	10	
EMA-TR-290	8	9	894	16	35	300	13	
EMA-TR-290	9	10	1,107	18	38	408	18	
EMA-TR-290	10	11	1,277	23	38	455	26	
EMA-TR-290	11	12	1,378	28	35	450	36	
EMA-TR-290	12	13	1,270	33	32	365	40	
EMA-TR-290	13	13.4	976	36	28	238	34	
EMA-TR-291	0.5	1	211	35	16	25	8	
EMA-TR-291	1	2	439	17	10	35	8	
EMA-TR-291	2	3	510	17	11	49	10	767
EMA-TR-291	3	4	797	14	14	97	12	
EMA-TR-291	4	5	753	14	17	114	11	

HoleID	From	To	TREO (ppm)	% HREO	% MREO	NdPr (ppm)	DyTb (ppm)	Average (ppm)
EMA-TR-291	5	6	718	17	27	184	12	
EMA-TR-291	6	7	967	21	34	310	19	
EMA-TR-291	7	7.45	967	23	33	297	20	
EMA-TR-292	0.5	1	392	29	14	43	11	
EMA-TR-292	1	2	409	29	16	51	12	
EMA-TR-292	2	3	512	25	17	77	12	
EMA-TR-292	3	4	725	18	15	95	13	582
EMA-TR-292	4	5	545	24	21	99	13	
EMA-TR-292	5	6	546	21	24	119	12	
EMA-TR-292	6	6.55	456	18	28	119	8	
EMA-TR-293	0.5	1	418	39	17	53	17	
EMA-TR-293	1	2	310	49	16	34	15	
EMA-TR-293	2	3	330	43	16	37	15	
EMA-TR-293	3	4	323	46	15	34	16	
EMA-TR-293	4	5	311	46	16	35	15	
EMA-TR-293	5	6	291	41	17	38	12	
EMA-TR-293	6	7	450	33	18	66	15	
EMA-TR-293	7	8	555	26	21	102	15	555
EMA-TR-293	8	9	407	27	19	67	11	
EMA-TR-293	9	10	283	27	20	50	7	

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-175	185963.201	9181940.96	132.303	10.75	0	-90	880.107/2008
EMA-TR-181	185199.69	9181965.99	185.84	6.5	0	-90	880.107/2008
EMA-TR-184	185600.8	9181571.24	185.27	11.4	0	-90	880.107/2008
EMA-TR-187	185600.8	9181571.24	185.27	7.0	0	-90	880.107/2008
EMA-TR-188	185793.98	9181358.94	163.04	10.0	0	-90	880.107/2008
EMA-TR-189	186005.74	9181240.66	155.52	17.0	0	-90	880.107/2008
EMA-TR-190	186179.35	9181012.69	154.98	14.4	0	-90	880.107/2008
EMA-TR-205	185988.09	9183943.8	136.82	8.5	0	-90	880.107/2008
EMA-TR-211	186199.768	9181771.069	139.696	15.2	0	-90	880.107/2008
EMA-TR-212	186181.23	9183801.97	128.31	10.0	0	-90	880.107/2008
EMA-TR-213	186357.671	9183601.224	123.422	8.8	0	-90	880.107/2008
EMA-TR-214	186392.446	9183175.146	135.857	14.8	0	-90	880.107/2008
EMA-TR-215	186607.77	9183393.17	126.792	10.8	0	-90	880.107/2008
EMA-TR-216	187006.748	9182971.77	131.418	11.0	0	-90	880.107/2008
EMA-TR-217	186603.472	9182953.66	131.334	12.9	0	-90	880.107/2008
EMA-TR-218	187198.455	9182846.39	137.858	5.8	0	-90	880.107/2008
EMA-TR-219	187826.638	9183801.967	120.001	8.0	0	-90	880.107/2008
EMA-TR-220	187604.482	9183996.829	121.839	8.0	0	-90	880.107/2008
EMA-TR-221	185988.338	9181599.906	140.164	14.0	0	-90	880.107/2008
EMA-TR-222	186414.174	9181582.69	142.404	19.5	0	-90	880.107/2008
EMA-TR-223	186413.678	9183956.013	141.614	10.4	0	-90	880.107/2008
EMA-TR-224	186593.415	9183756.503	132.367	13.6	0	-90	880.107/2008
EMA-TR-225	186800.246	9183551.783	123.1	11.3	0	-90	880.107/2008
EMA-TR-226	187817.599	9183379.009	128.499	8.0	0	-90	880.107/2008
EMA-TR-227	187560.239	9183634.735	123.532	14.4	0	-90	880.107/2008
EMA-TR-228	187008.862	9183387.366	122.964	8.0	0	-90	880.107/2008
EMA-TR-229	187202.719	9183156.834	169.192	11.7	0	-90	880.107/2008

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-230	187395.692	9183802.649	119.781	9.0	0	-90	880.107/2008
EMA-TR-231	187190.936	9183949.802	128.143	13.5	0	-90	880.107/2008
EMA-TR-232	186988.433	9183762.659	118.046	6.8	0	-90	880.107/2008
EMA-TR-233	187133.489	9183593.773	121.359	10.0	0	-90	880.107/2008
EMA-TR-234	187416.877	9183391.541	140.665	15.5	0	-90	880.107/2008
EMA-TR-235	187810.296	9182991.468	136.838	18.2	0	-90	880.107/2008
EMA-TR-236	187334.692	9183017.275	200.505	20.0	0	-90	880.107/2008
EMA-TR-237	187587.369	9182876.641	180.457	19.4	0	-90	880.107/2008
EMA-TR-238	187804.88	9182643.32	180.49	12.8	0	-90	880.107/2008
EMA-TR-239	188058.098	9182374.561	218.613	22.0	0	-90	880.107/2008
EMA-TR-240	186127.054	9181310.477	148.779	11.2	0	-90	880.107/2008
EMA-TR-241	186573.768	9181335.29	153.089	12.7	0	-90	880.107/2008
EMA-TR-242	186433.153	9181136.754	149.077	14.0	0	-90	880.107/2008
EMA-TR-243	187406.58	9180979.573	150.352	14.4	0	-90	880.107/2008
EMA-TR-244	187207.473	9181156.903	145.766	8.0	0	-90	880.107/2008
EMA-TR-245	187035.659	9181340.241	148.969	14.6	0	-90	880.107/2008
EMA-TR-246	186793.956	9181599.538	132.573	11.8	0	-90	880.107/2008
EMA-TR-247	186573.819	9181740.135	128.704	7.9	0	-90	880.107/2008
EMA-TR-248	186406.033	9181953.743	132.643	16.0	0	-90	880.107/2008
EMA-TR-249	186175.617	9182155.174	141.018	17.0	0	-90	880.107/2008
EMA-TR-250	187387.536	9181350.889	143.628	12.7	0	-90	880.107/2008
EMA-TR-251	186753.823	9182801.451	123.371	9.0	0	-90	880.107/2008
EMA-TR-252	187086.908	9182552.349	160.12	7.5	0	-90	880.107/2008
EMA-TR-253	186009.096	9182395.43	187.065	16.5	0	-90	880.107/2008
EMA-TR-254	187464.492	9182572.178	223.797	23.5	0	-90	880.107/2008
EMA-TR-255	187252.18	9182479.586	190.334	6.7	0	-90	880.107/2008
EMA-TR-256	187452.439	9182164.555	230.621	15.5	0	-90	880.107/2008
EMA-TR-257	187662.884	9181970.388	217.421	11.0	0	-90	880.107/2008
EMA-TR-258	187800.73	9181800.064	199.062	18.0	0	-90	880.107/2008

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-259	187839.271	9182153.727	230.788	16.0	0	-90	880.107/2008
EMA-TR-260	187636.832	9182367.797	232.129	20.4	0	-90	880.107/2008
EMA-TR-261	187999.369	9181966.53	185.131	8.0	0	-90	880.107/2008
EMA-TR-262	188000.976	9181586.781	154.981	18.0	0	-90	880.107/2008
EMA-TR-263	185979.857	9180824.966	168.189	11.0	0	-90	880.107/2008
EMA-TR-264	188003.479	9181183.422	142.147	11.0	0	-90	880.107/2008
EMA-TR-265	187583.838	9181598.217	155.119	14.0	0	-90	880.107/2008
EMA-TR-266	187818.075	9180982.224	139.244	8.7	0	-90	880.107/2008
EMA-TR-267	187554.869	9181187.751	137.309	7.9	0	-90	880.107/2008
EMA-TR-268	187181.986	9181551.153	147.178	13.7	0	-90	880.107/2008
EMA-TR-269	187006.301	9181777.722	147.511	11.3	0	-90	880.107/2008
EMA-TR-270	186811.98	9182002.432	160.452	9.5	0	-90	880.107/2008
EMA-TR-271	186678.666	9182141.084	137.946	19.6	0	-90	880.107/2008
EMA-TR-272	186390.734	9182327.845	134.531	15.0	0	-90	880.107/2008
EMA-TR-273	185962.407	9182738.359	191.077	17.7	0	-90	880.107/2008
EMA-TR-274	187766.382	9181350.624	141.521	9.0	0	-90	880.107/2008
EMA-TR-275	187415.109	9181765.934	139.678	5.3	0	-90	880.107/2008
EMA-TR-276	187244.987	9181963.025	194.747	7.5	0	-90	880.107/2008
EMA-TR-277	186632.496	9182556.919	130.039	14.0	0	-90	880.107/2008
EMA-TR-278	187049.656	9182169.472	174.328	15.0	0	-90	880.107/2008
EMA-TR-279	186431.805	9182810.502	142.836	16	0	-90	880.107/2008
EMA-TR-280	186846.4	9182361.734	134.465	11.8	0	-90	880.107/2008
EMA-TR-281	186805.98	9183193.349	121.361	8	0	-90	880.107/2008
EMA-TR-282	187611.388	9183186.301	157.332	7	0	-90	880.107/2008
EMA-TR-283	186239.263	9182983.733	145.206	6	0	-90	880.107/2008
EMA-TR-284	186792.747	9183957.272	128.144	12	0	-90	880.107/2008
EMA-TR-285	188042.329	9183584.811	122.443	11	0	-90	880.107/2008
EMA-TR-286	188014.034	9183999.769	114.625	6	0	-90	880.107/2008
EMA-TR-287	188212.88	9183784.536	123.77	13	0	-90	880.107/2008

Hole ID	East	North	RL (m)	Depth (m)	Azimuth	Dip	Tenement
EMA-TR-288	188222.421	9183401.018	131.766	15.6	0	-90	880.107/2008
EMA-TR-289	188427.362	9183197.386	125.94	8.5	0	-90	880.107/2008
EMA-TR-290	186135.126	9182549.336	159.275	13.4	0	-90	880.107/2008
EMA-TR-291	185198.163	9182382.915	141.577	7.45	0	-90	880.107/2008
EMA-TR-292	185213.634	9183236.563	138.478	6.55	0	-90	880.107/2008
EMA-TR-293	185200.86	9183960.47	141.626	10	0	-90	880.107/2008
EMA-TR-294	187615.065	9180797.351	148.216	11	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 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.	• 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.
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 of fine/coarse material.	• 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.
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.	• 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.

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td>Whether logging is qualitative or quantitative in nature. Core (or costean. channel. etc) photography.
The total length and percentage of the relevant intersections logged.</td><td>Qualitative logging with systematic photography of the stored box.
The entire auger hole is logged.</td></tr>
<tr><td>Sub-Sampling Techniques and Sampling Procedures</td><td>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.
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>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.</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></td></tr>
</table>

<table>
<tr><th>Item</th><th>JORC code explanation</th><th>Comments</th></tr>
<tr><td></td><td></td><td>

The SGS laboratory used for the RRE assays is ISO 9001 and 14001 and 17025 accredited.
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.

</td></tr>
<tr><td>Verification of Sampling and Assaying</td><td>

The verification of significant intersections by either independent or alternative company personnel.
The use of twinned holes.
Documentation of primary data. data entry procedures. data verification. data storage (physical and electronic) protocols.
Discuss any adjustment to assay data.

</td><td>

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><td>Element ppm</td><td>Conversion Factor</td><td>Oxide Form</td></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>
</table>
</td></tr>
</table>

Item	JORC code explanation	Comments

Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.2082	Pr_6O_{11}
Sm	1.1596	Sm_2O_3
Tb	1.1762	Tb_4O_7
Tm	1.1421	Tm_2O_3
Y	1.2699	Y_2O_3
Yb	1.1387	Yb_2O_3

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:

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

LREO (Light Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3

HREO (Heavy Rare Earth Oxide) = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3

CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3

(From U.S. Department of Energy. Critical Material Strategy. December 2011)

MREO (Magnetic Rare Earth Oxide) = Nd_2O_3 + Pr_6O_{11} + Tb_4O_7 + Dy_2O_3

NdPr = Nd_2O_3 + Pr_6O_{11}

DyTb = Dy_2O_3 + Tb_4O_7

In elemental from the classifications are:

TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y

HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Tb+Lu+Y

CREE: Nd+Eu+Tb+Dy+Y

LREE: La+Ce+Pr+Nd

Item	JORC code explanation	Comments
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.	• 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.

Item	JORC code explanation	Comments
Orientation of Data in relation to Geological Structure	• Whether sample compositing has been applied. • 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 sample composition was applied. • 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.
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
	  ◦ 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.
		• Auger locations and diagrams are presented in this announcement.
		• Details are tabulated in the announcement.

Criteria	JORC code explanation	Commentary
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 should be a clear statement to this effect (eg 'down hole length. true width not known').	• 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.
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.

Criteria	JORC code explanation	Commentary
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 co-ordination • SS in progress under Ausenco coordination