LARGE SCALE RARE EARTHS, IOCG and BASE METALS TARGETS CONFIRMED AT NORTH BARKLY BY GEOCHEMICAL SURVEY RESULTS

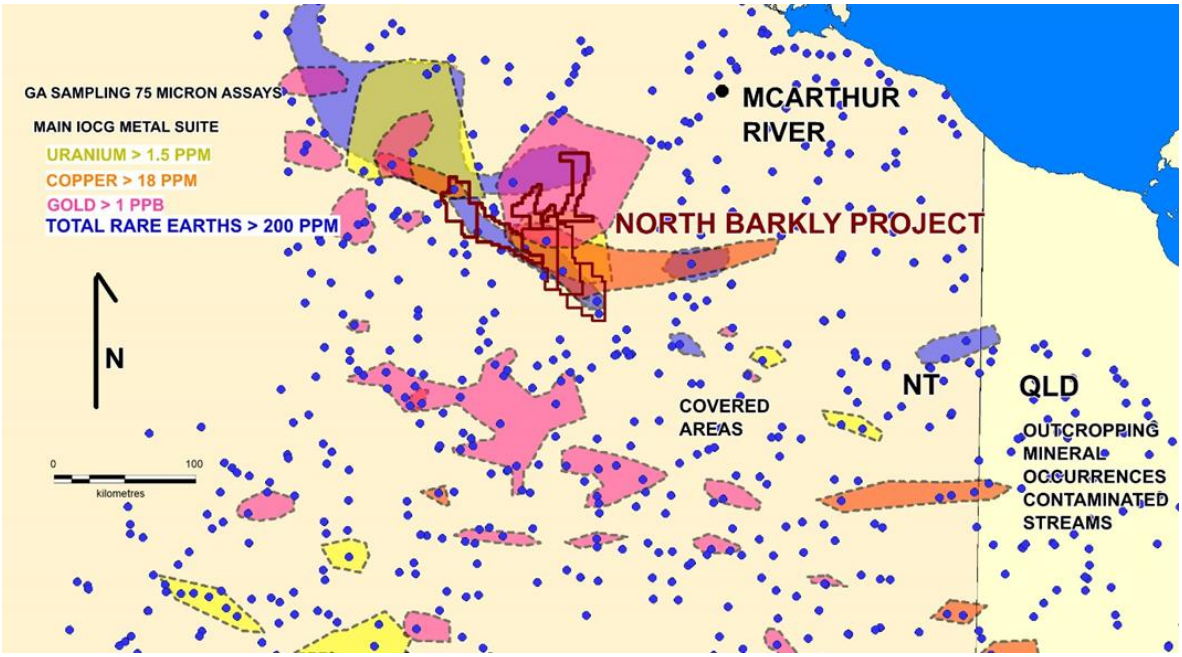
HIGHLIGHTS

- Results from an additional 198 surface geochemical samples have now outlined compelling targets for first pass drilling in August this year.
- The results from the 198-sample programme have been plotted and contoured in the Figures below to display the strike and extent of the highest values of the various metals / elements.
- Extensive rare earth (REE) targets have been outlined. Highlights include a 20km trend of REE > 300ppm. Of note, results show a 23% ratio of NdPr is present. These are the most critical elements needed for the energy transition and the world's decarbonisation goals.
- IOCG and base metal suite anomalies are both recognisable at the MD1A target where there is a historic 88m intersection of copper-lead-zinc mineralised black shale in core, previously drilled by BHP (see ASX Announcement 2 Feb 2022).
- Extensive new base metal target "8095" generated to the north of MD1A. The geological setting is a direct analogue to the giant McArthur River Mine to the east.
- Application has been made to amend the present approved MMP to investigate these additional new targets.

Green Critical Minerals Pty Ltd ("GCM" or "the Company") is pleased to announce results from its latest surface geochemical campaign at the North Barkly Project in the Northern territory. The North Barkly Project (Figure 1) covers the strongest multielement geochemical anomaly recorded by Geoscience Australia over the covered portions of the Barkly region and is prospective for giant sediment hosted base metal deposits & IOCG mineralisation.

Following the rain interrupted positive 67-sample survey in late 2022 (ASX Announcement 3 January 2023), GCM completed an additional 198 samples in June this year. These samples were collected using helicopter/vehicle access and were processed by ALS Laboratories in Perth. The 198 sample programme has greatly increased definition to the regional anomaly and has outlined targets for first pass drilling.

Location and IOCG Suite Regional Anomalies in Cover (Geoscience Australia)



IOCG Targets:

The IOCG suite anomalies were selected based on gold anomalies above 1 ppb that were accompanied by peaks in copper silver bismuth molybdenum and tellurium. The largest and strongest target remains around the MD1A gravity and magnetic highs. A new east west IOCG association appears at 8095000n (8095 Target on the Figures) and appears to be coincident with a strong base metal association zone (Figure 4).

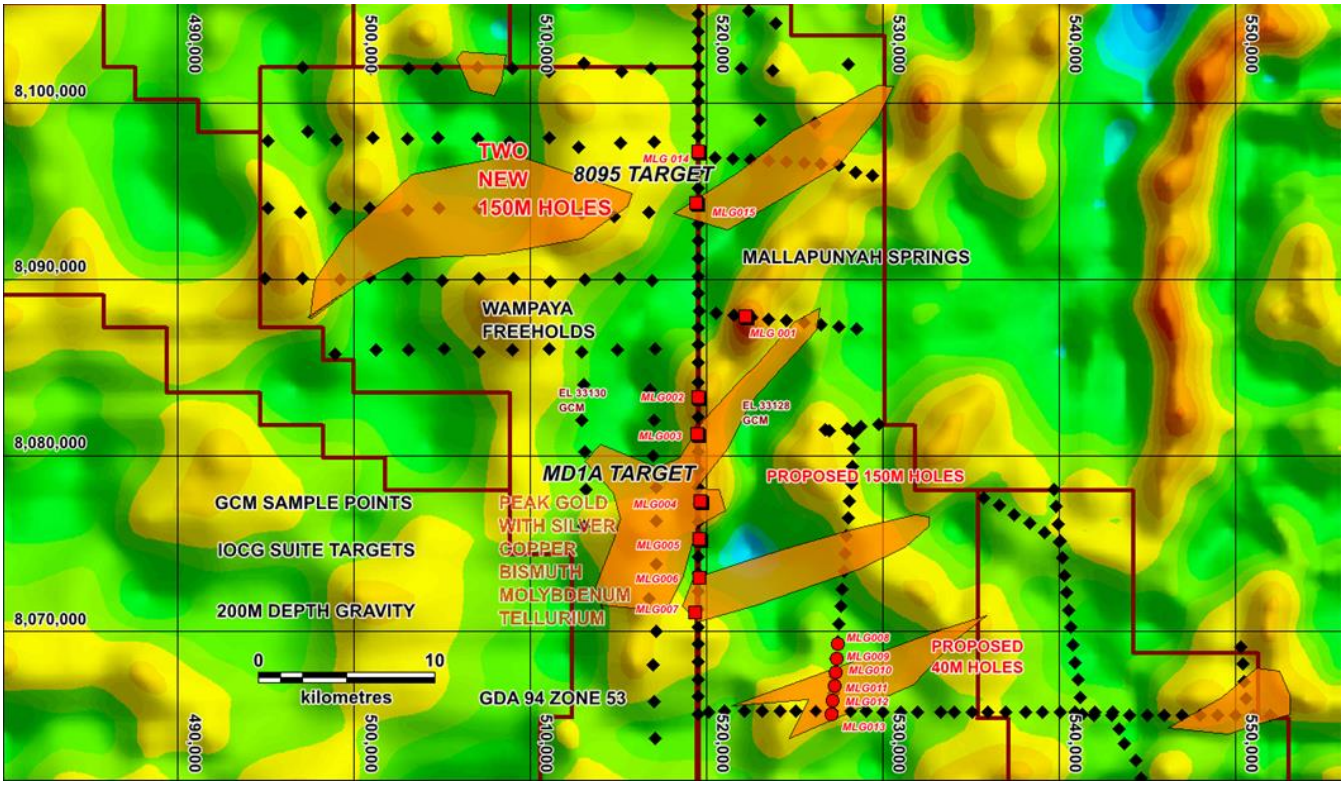


Figure 2 IOCG suite targets and amended drilling on 200m depth slice gravity.

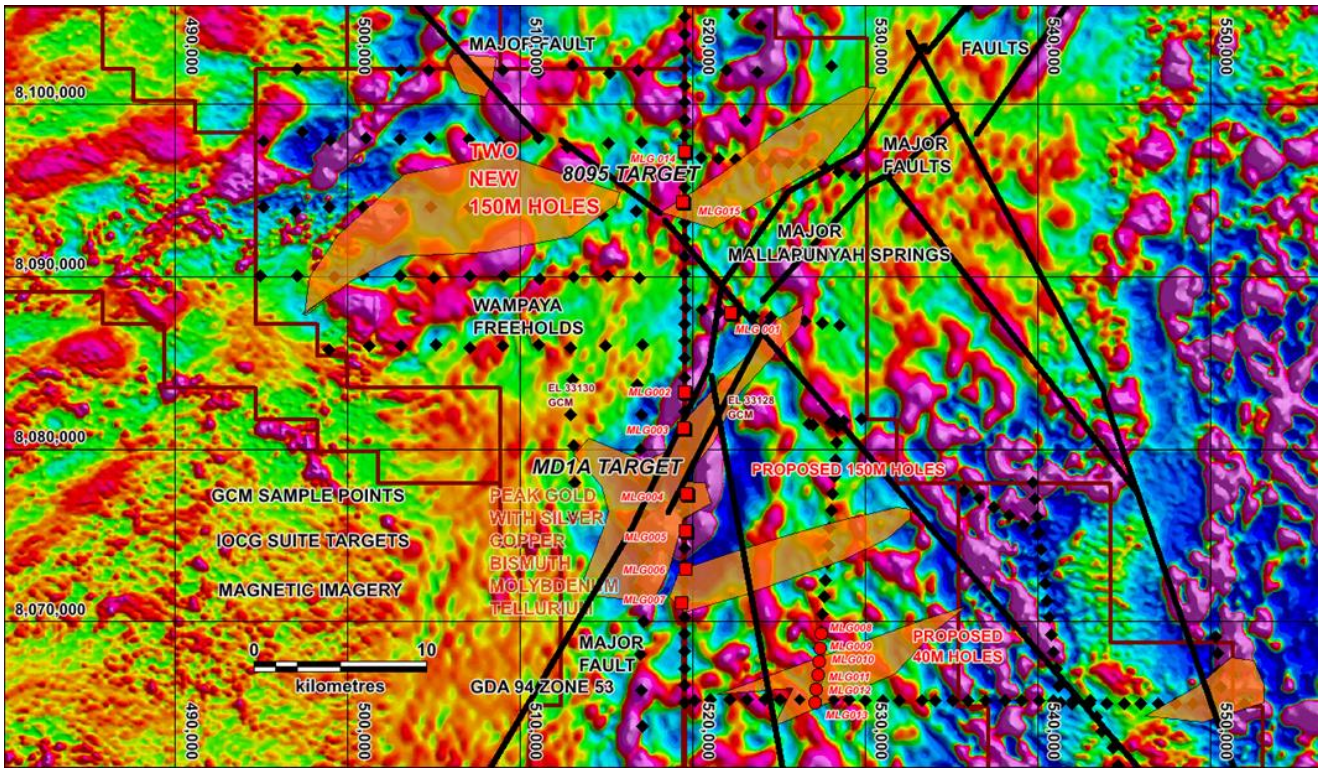


Figure 3 IOCG suite targets and amended drilling on magnetic imagery (interpreted faults shown).

Base Metal Targets:

The base metal suite chosen includes the peaks in lead zinc copper silver and antimony (antimony is indicative of the silver mineral tetrahedrite). The strongest values lie to the north of the original MD1A target, around 8095000N, where two additional holes have been added to the GCM drilling proposed for August 2023.

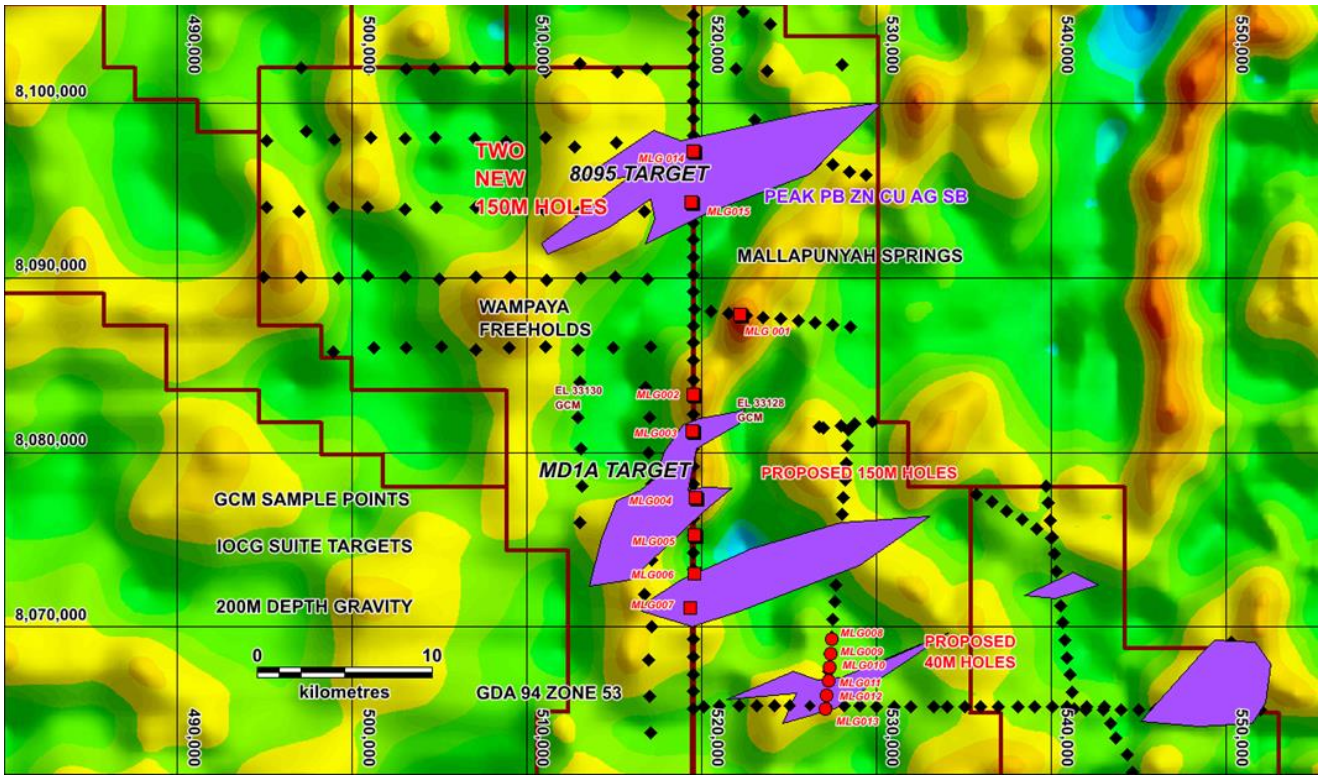


Figure 4 Base Metal Suite Anomalous zones and amended Drilling Plan on a 200m gravity slice.

IOCG/ Base Metals Targeting

The metal associations indicate that both IOCG and base metal suites exist and appear to be zoned. The peak IOCG and base metal suite values lie on the faulted edge of the Beetaloo sub basin, where the younger McArthur Basin sedimentary rocks are in contact with older volcanic and sedimentary rocks. This is the prime setting for the largest mineral deposits in this province (Figure 5). Examples are McArthur River, Mount Isa, and Walford Creek.

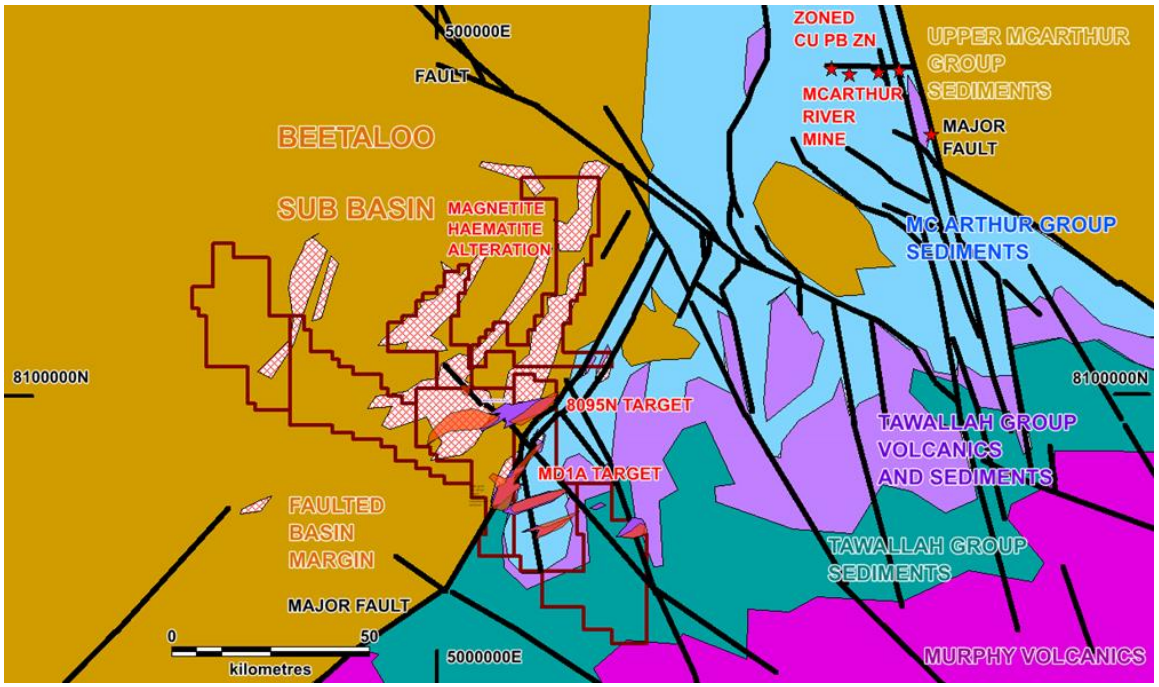


Figure 5 Interpreted Proterozoic (basement) Geology and GCM Targets.

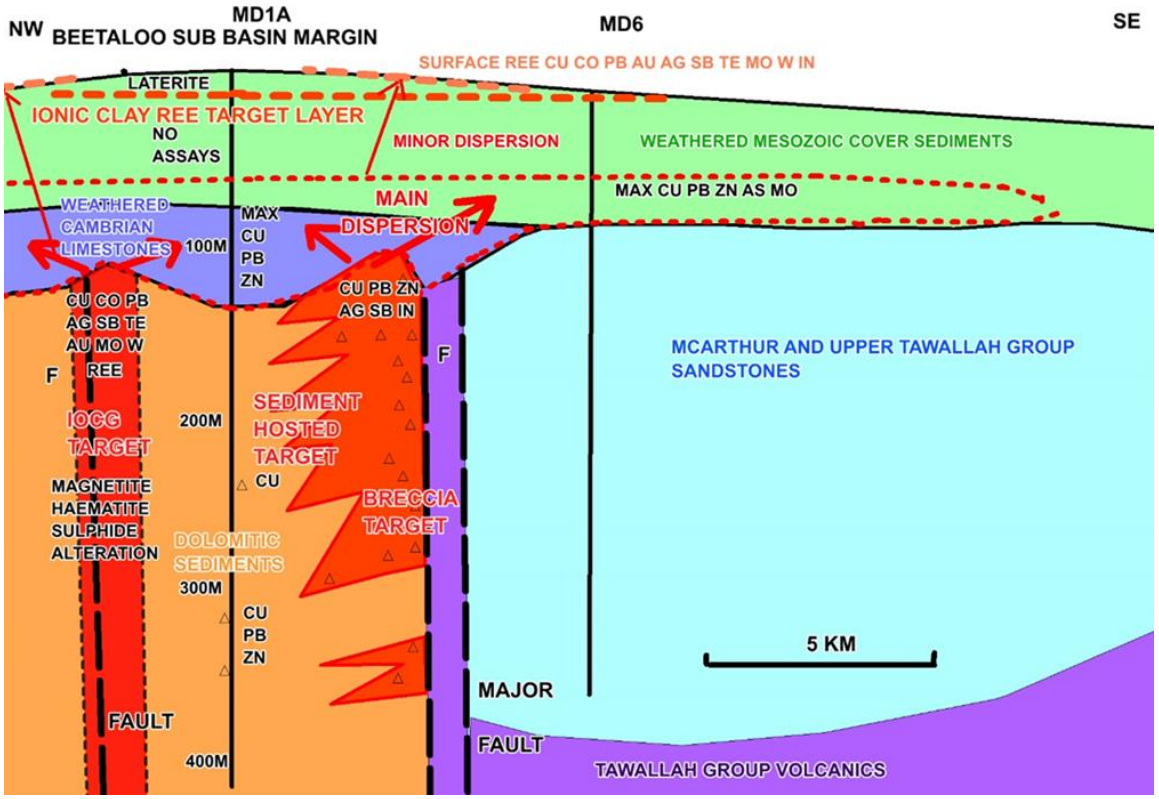


Figure 6 Interpretative Cross Section of North Barkly MD1A Target.

Rare Earths Targets

The rare earth (REE) potential has been greatly enhanced by these latest results, with the strongest values to date coincident with the strongest lead zinc and silver at 8095000N. The ENE orientations of the anomalies and claypans may be caused by the fracture systems in the Mesozoic cover, and it is thought that a rare earths enrichment blanket likely persists under the entire laterite plateau.

Highlights include a 20km trend of REE > 300ppm. Of note, results show a 23% ratio of NdPr is present. These are the most critical elements needed for the energy transition and the world's decarbonisation goals.

The rare earths and metals are notably more concentrated in claypans rather than the slightly more elevated laterites. The association of highly soluble elements such as silver and zinc support the interpretation that these anomalies are not alluvial but are derived from underlying mineralisation.

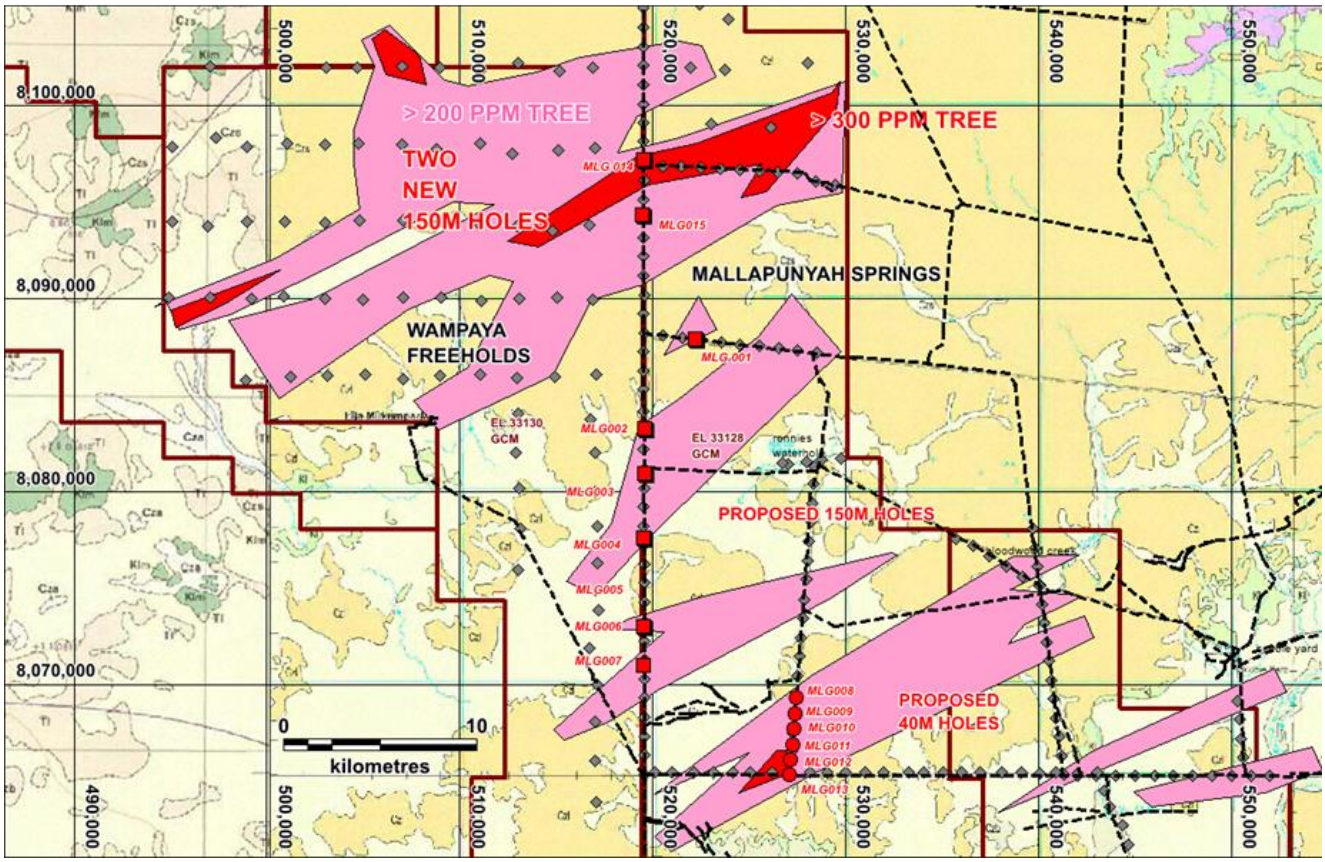


Figure 7 Rare Earths Targets on Published Surface Geology (yellow is laterite).

Next Steps

An amended plan of work (MMP) has been submitted to the Northern Territory government. This amendment to the currently approved MMP incorporates an additional two 150m deep drillholes over the peak values around the 8095 target.

The planned drilling will provide information regarding potential for the rare earths and alumina in the laterite profile, as well as for gold silver and base metals in the basement rocks, generally at about 100m depth.

Pending contactor availability, the drilling is expected to commence in early August.

Competent Person Statement

The information in this release that relates to exploration results is based on information compiled by Mr Neil Wilkins M.Sc. Exploration and Mining Geology, who is a Member of The Australian Institute of Geoscientists. Mr Wilkins is employed by Ascry Pty Ltd, which provides consultancy services to GCM. Mr Wilkins has previously worked in the North Barkly Project area and has more than five years' experience which is relevant to the styles of mineralisation and types of deposit mentioned in this report and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (the JORC Code). This public report is issued with the prior written consent of the Competent Person as to the form and context in which it appears. Mr Wilkins holds shares in Green Critical Minerals Limited.

Authorisation

The provision of this announcement to ASX has been authorised by the Board of Green Critical Minerals.

GCM confirms that it is not aware of any new information or data that materially affects the exploration results contained in this announcement.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves, or potential growth of Green Critical Minerals Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

Appendix 1 Sample Locations and Metal Analyses

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb
9701	552008	8065265	0.0008	0.036	0.26	17.85	0.83	15.05	15.1	0.017	0.114
9702	551013	8065262	0.001	0.017	0.22	15.4	0.51	9.54	10.7	0.014	0.106
9703	550625	8066216	0.0008	0.024	0.241	16.15	0.88	11.3	11.1	0.016	0.104
9704	550527	8067196	0.0026	0.023	0.222	14	0.31	14.55	11.3	0.015	0.118
9705	550431	8068181	0.0005	0.033	0.1535	11.1	0.4	7.39	22.8	0.008	0.045
9706	550326	8069158	0.0007	0.031	0.1955	14.75	0.53	9.55	21.1	0.011	0.081
9707	550013	8065264	0.0006	0.034	0.333	18.7	1.18	21.1	14.7	0.026	0.164
9708	549014	8065271	0.0006	0.024	0.334	16.45	1.2	20.7	11.4	0.027	0.166
9709	548014	8065271	0.0004	0.038	0.201	14.3	0.61	11.45	10.6	0.012	0.093
9710	547008	8065269	0.0005	0.032	0.218	15.3	0.61	10.7	14.7	0.012	0.083
9711	546004	8065279	0.0007	0.031	0.209	15	0.7	10.75	9.6	0.013	0.103
9712	545009	8065282	0.0005	0.026	0.204	14.5	0.66	10.75	13.2	0.013	0.093
9713	544009	8065282	0.0007	0.019	0.217	13.35	0.61	10.45	8.5	0.008	0.071
9714	543006	8065287	0.0003	0.015	0.1455	8.42	0.36	6.76	11	0.012	0.06
9715	542011	8065287	0.0005	0.016	0.1715	12.05	0.45	10.2	9.8	0.011	0.083
9716	541328	8065309	0.0007	0.017	0.214	14.05	0.62	10.35	8.1	0.008	0.074
9717	541197	8066299	0.0006	0.017	0.18	12.2	0.41	8.82	10.4	0.01	0.065
9718	541065	8067279	0.0004	0.011	0.124	7.45	0.26	6.84	4.1	0.005	0.037
9719	540935	8068259	0.0009	0.017	0.245	16.8	0.56	11.2	6.7	0.007	0.069

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb
9720	540805	8069239	0.001	0.021	0.24	15.45	0.61	10.7	6.6	0.007	0.065
9721	540675	8070238	0.0004	0.013	0.175	12.45	0.44	12.4	6.6	0.006	0.062
9722	540551	8071213	0.0003	0.007	0.0976	6.16	0.23	5.8	3.3	0.003	0.029
9723	540431	8072208	0.0005	0.024	0.268	19.7	0.76	18.4	8.7	0.015	0.132
9724	540306	8073185	0.0008	0.023	0.249	14.95	0.69	13.05	6.5	0.015	0.102
9725	540183	8074176	0.0006	0.021	0.239	17.7	0.71	16.55	8.3	0.016	0.126
9726	540066	8075164	0.0004	0.024	0.249	17.6	0.62	12.95	9.5	0.013	0.094
9727	539949	8076107	0.0007	0.021	0.231	17	0.41	9.95	6.7	0.005	0.067
9728	539824	8077099	0.0005	0.02	0.209	12.6	0.31	9.08	6	0.006	0.053
9729	539710	8078089	0.0005	0.013	0.197	12.2	0.31	7.91	7.3	0.007	0.06
9730	497034	8102006	0.0006	0.011	0.0833	6.92	0.1	10.05	8.1	0.004	0.029
9731	500959	8101974	0.0003	0.013	0.2	8.68	0.39	9.45	7	0.013	0.074
9732	503095	8101980	0.0003	0.008	0.147	7.81	0.43	9.95	4	0.011	0.068
9733	504671	8101964	0.0005	0.009	0.17	11.35	0.29	8.87	5.4	0.005	0.05
9734	506985	8102022	0.0011	0.017	0.255	14.35	0.43	11.95	7	0.008	0.069
9735	508954	8101981	0.0004	0.007	0.1255	5.76	0.25	6.9	2.7	0.006	0.05
9736	511058	8101805	0.0002	0.005	0.1085	4.82	0.2	5.72	2.8	0.005	0.033
9737	513011	8102240	0.0002	0.011	0.203	13.9	0.38	10.55	7.3	0.01	0.08
9738	515186	8101798	0.0005	0.009	0.204	13.9	0.65	15.95	8.8	0.013	0.093
9739	516866	8101978	0.0007	0.015	0.265	17	0.84	20.5	8.3	0.023	0.148
9740	521957	8101971	0.0005	0.016	0.243	16.95	0.54	15.7	7.9	0.015	0.104
9741	523746	8101854	0.0002	0.009	0.1325	9.27	0.26	7.77	3.5	0.006	0.042
9742	528034	8102214	0.0002	0.006	0.134	8.57	0.33	9.91	4.2	0.006	0.061
9743	517013	8097808	0.0005	0.015	0.227	16.4	1.16	22.7	6.4	0.019	0.149
9744	515128	8097706	0.0006	0.016	0.231	13.2	0.38	9.68	9.4	0.008	0.075
9745	512743	8097516	0.0009	0.023	0.188	12.8	0.25	9.48	8.1	0.007	0.06
9746	511063	8098054	0.0007	0.014	0.1855	10.8	0.19	7.55	4.4	0.005	0.039
9747	508777	8097762	0.001	0.028	0.219	16.1	0.4	11.6	9	0.011	0.085
9748	507002	8097955	0.0004	0.015	0.24	18.5	0.54	16.2	14.2	0.019	0.125
9749	504758	8098053	0.0003	0.011	0.1785	11.95	0.32	9	4.5	0.008	0.045
9750	503003	8097969	0.0002	0.006	0.1625	8.4	0.42	8.47	4.6	0.009	0.08
9751	501062	8098050	0.0002	0.009	0.1385	8.73	0.27	7.13	4.1	0.005	0.045
9752	516699	8093792	0.0005	0.021	0.227	18.5	0.88	16.05	9.6	0.019	0.111
9753	514782	8093541	0.0009	0.026	0.275	24.6	0.84	20.5	9.4	0.016	0.121
9754	512934	8093751	0.0008	0.023	0.231	15.6	0.36	10.05	8.1	0.009	0.069
9755	510944	8093919	0.0013	0.03	0.237	20.8	0.91	17.05	7.1	0.018	0.125
9756	508993	8093984	0.0011	0.016	0.225	16.9	0.8	13.15	9	0.016	0.115
9757	507072	8094028	0.001	0.022	0.229	17.8	0.89	14.7	8	0.013	0.105
9758	504798	8094024	0.0008	0.018	0.219	19.35	0.47	11.45	6.3	0.006	0.053
9759	503001	8093939	0.0004	0.021	0.238	19	0.51	12.45	10.2	0.014	0.091
9760	500899	8094014	0.0002	0.008	0.1335	9.47	0.23	7.09	6.6	0.004	0.028
9761	498939	8094016	0.0005	0.007	0.156	5.75	0.29	6	3.4	0.006	0.04
9762	496927	8093780	0.0008	0.007	0.1915	11.85	0.39	10.2	4.8	0.004	0.043
9763	495099	8094013	0.0003	0.005	0.1395	7.74	0.33	8.49	4.4	0.006	0.049
9764	495087	8097850	0.0004	0.016	0.222	12.55	0.28	9.14	6.1	0.006	0.057

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb
9765	497369	8098365	0.0009	0.008	0.208	10.7	0.52	9.55	5.1	0.012	0.094
9766	498952	8097885	0.0007	0.017	0.244	14.7	0.65	16	7.2	0.016	0.122
9767	494906	8090063	0.0007	0.02	0.1915	15.3	0.68	12.15	4.8	0.009	0.066
9768	497041	8090066	0.0009	0.022	0.1865	13.55	0.37	11.1	4.8	0.004	0.044
9769	499190	8090010	0.0012	0.027	0.1985	18.55	0.41	14.95	5.2	0.004	0.052
9770	500867	8090128	0.0008	0.024	0.169	11.95	0.3	9.36	4.3	0.005	0.035
9771	503003	8090029	0.0009	0.014	0.219	16.9	0.34	11.8	6.3	0.005	0.048
9772	504976	8089940	0.0005	0.016	0.223	20.3	0.46	16.6	6.7	0.011	0.072
9773	507068	8090068	0.0006	0.014	0.251	17.8	0.76	17.45	12.8	0.016	0.09
9774	509060	8090030	0.0007	0.018	0.163	11.95	0.38	18.95	13.7	0.012	0.052
9775	511122	8089886	0.0004	0.006	0.1585	9.1	0.36	9.01	4.7	0.006	0.048
9776	513087	8089982	0.0006	0.012	0.212	13.15	0.39	12.05	6	0.008	0.058
9777	515054	8090048	0.0003	0.011	0.145	9.86	0.28	8.35	7.2	0.004	0.038
9778	516921	8089914	<0.0002	0.014	0.12	7.97	0.25	7.41	3	0.005	0.045
9779	523909	8104496	0.0005	0.018	0.191	14.05	0.26	20.8	11.4	0.009	0.057
9780	522407	8105247	0.0003	0.014	0.253	15.95	0.54	16.6	12.4	0.015	0.129
9781	523755	8101859	0.0004	0.011	0.1575	9.26	0.3	7.82	3	0.009	0.049
9782	526160	8098892	0.0011	0.061	0.259	20.4	0.94	19.5	7.2	0.022	0.149
9783	523017	8099067	0.0005	0.012	0.203	14.4	0.52	13.8	7.2	0.013	0.079
9784	517086	8086041	0.0005	0.008	0.155	8.44	0.34	8.71	3.5	0.006	0.05
9785	514933	8085974	0.0002	0.007	0.108	5.91	0.27	5.34	3.8	0.006	0.045
9786	512935	8085869	0.0002	0.013	0.1865	13.8	0.46	14.1	6.9	0.009	0.08
9787	511038	8086053	0.0004	0.012	0.176	13.35	0.26	8.71	3.9	0.005	0.04
9788	509000	8086015	0.0002	0.012	0.132	7.21	0.24	6.44	3.2	0.004	0.034
9789	507055	8085848	0.0003	0.011	0.205	13.15	0.4	11.15	7.5	0.01	0.064
9790	505080	8086082	0.0003	0.009	0.202	11.4	0.51	11.8	5.8	0.014	0.084
9791	503109	8086017	0.0007	0.011	0.186	9.58	0.4	9.86	4.4	0.007	0.055
9792	501227	8085965	0.0002	0.008	0.1355	9.36	0.2	7.68	3.4	0.005	0.032
9793	498921	8085752	0.0006	0.019	0.258	20.2	0.59	14.35	6.8	0.009	0.1
9794	513020	8084033	0.0005	0.013	0.1435	6.06	0.44	10.4	2.8	0.011	0.066
9795	512921	8082012	0.0008	0.021	0.216	15.25	0.52	14.95	12.6	0.014	0.102
9796	513077	8080198	0.0011	0.009	0.1445	8.09	0.37	5.25	5.4	0.006	0.044
9797	513127	8078076	0.0003	0.013	0.142	9.94	0.32	7.55	5.3	0.007	0.048
9798	513028	8075955	0.0009	0.029	0.255	16	0.64	12.2	5.6	0.011	0.093
9799	517086	8063924	0.0009	0.013	0.196	10.35	0.42	10.45	4.9	0.007	0.047
9800	517006	8066057	0.0009	0.013	0.252	13.1	0.57	11.5	6.5	0.008	0.061
9801	516990	8068096	0.0005	0.022	0.199	16.25	0.49	17.25	6.1	0.008	0.061
9802	517114	8070009	0.0004	0.014	0.237	12.7	0.22	9.8	16.9	0.014	0.057
9803	516702	8071890	0.0013	0.015	0.242	17.45	0.88	12.85	5.6	0.018	0.129
9804	517164	8073836	0.0016	0.023	0.212	18.25	0.6	11.4	7.1	0.013	0.101
9805	517163	8076270	0.0011	0.03	0.248	19.6	0.74	16.9	11	0.016	0.114
9806	517155	8078190	0.0011	0.02	0.309	16.85	0.88	15.9	6.7	0.022	0.178
9807	516992	8079983	0.0006	0.007	0.1265	5.25	0.25	5.89	2.7	0.004	0.032
9808	516802	8083755	0.0006	0.015	0.202	13.4	0.38	10.75	4.9	0.009	0.072
9809	517014	8082007	0.0004	0.008	0.1385	6.82	0.25	6.87	4.2	0.004	0.027

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb
9810	540047	8075098	0.0005	0.135	0.247	17.1	0.62	13.6	13.2	0.018	0.122
9811	539176	8075609	0.0003	0.019	0.1945	16.4	0.56	14.5	6.2	0.011	0.088
9812	538335	8076136	0.0005	0.015	0.172	12.05	0.47	11.95	5.1	0.009	0.077
9813	537467	8076637	0.0004	0.007	0.139	6.02	0.39	6.56	5.1	0.008	0.065
9814	536641	8077185	0.0004	0.006	0.143	5.98	0.36	7.54	4.1	0.008	0.056
9815	535715	8077568	0.0005	0.019	0.1815	9.9	0.33	7.5	5.9	0.007	0.062
9816	528379	8081310	0.0004	0.011	0.147	8.71	0.46	7.89	14.4	0.011	0.057
9817	528364	8080392	0.0002	0.01	0.12	5.97	0.43	8.58	6.2	0.011	0.061
9818	528286	8079400	0.0005	0.008	0.1495	7.54	0.3	7.34	2.8	0.007	0.036
9819	528204	8078416	0.0009	0.008	0.1545	8.89	0.38	8.51	5.2	0.009	0.064
9820	528121	8077426	0.0005	0.013	0.227	14.6	0.54	12.15	7	0.01	0.083
9821	528036	8076438	0.0007	0.011	0.214	11.85	0.6	8.95	6.1	0.012	0.078
9822	527954	8075435	0.0012	0.035	0.332	20.6	1.07	18	11.4	0.025	0.197
9823	527864	8074407	0.0006	0.041	0.303	23.9	0.93	17.95	16.2	0.02	0.181
9824	527777	8073425	0.0009	0.015	0.277	16.85	0.8	15.35	10.8	0.02	0.17
9825	527694	8072430	0.0003	0.01	0.216	11.65	0.7	13.05	5.9	0.021	0.147
9826	527613	8071453	0.0009	0.011	0.23	12.8	0.64	11.4	6	0.012	0.088
9827	527523	8070453	0.0007	0.012	0.204	14.2	0.49	10.4	9.4	0.012	0.099
9828	527441	8069459	0.0003	0.009	0.166	10.6	0.29	8.74	10.4	0.008	0.046
9829	527356	8068475	0.0002	0.024	0.271	18	0.72	16.05	12.6	0.019	0.14
9830	527272	8067487	0.0005	0.022	0.268	17.5	0.81	16.2	7.3	0.018	0.155
9831	527184	8066498	0.0031	0.025	0.314	18.5	0.95	19	9.9	0.025	0.175
9832	527104	8065499	0.0014	0.02	0.341	14.25	0.84	16.95	7.6	0.028	0.203
9833	519551	8065326	0.0005	0.009	0.2	10.3	0.68	11.15	8.4	0.013	0.084
9834	519549	8066319	0.0003	0.01	0.1995	10.25	0.59	10.25	7	0.011	0.073
9835	519552	8067311	0.0009	0.016	0.238	14.6	0.59	10.8	7.4	0.019	0.109
9836	519551	8068303	0.0006	0.012	0.213	13.15	0.58	14.5	8.1	0.012	0.088
9837	519550	8069297	0.0006	0.008	0.19	11.4	0.44	8.73	5.3	0.007	0.051
9838	519552	8070286	0.0006	0.024	0.292	18.95	0.66	14.15	8.7	0.016	0.109
9839	519552	8071290	0.0009	0.03	0.227	21.4	0.69	17.3	11	0.015	0.101
9840	519550	8072271	0.0009	0.036	0.222	19.4	0.94	16	11	0.018	0.127
9841	519551	8073283	0.0005	0.013	0.256	16.85	1.05	19.5	6.3	0.021	0.18
9842	519550	8074269	0.0005	0.011	0.1795	12.45	0.55	11.7	4.8	0.013	0.084
9843	519550	8075257	0.0006	0.008	0.15	9.07	0.18	11.4	5.5	0.008	0.06
9844	519552	8076220	0.0005	0.014	0.185	13.6	0.81	14.2	4.5	0.014	0.081
9845	519550	8077230	0.0021	0.03	0.212	18.8	0.63	12.95	7.2	0.016	0.12
9846	519546	8078207	0.0006	0.018	0.156	11.35	0.33	16.9	11	0.012	0.077
9847	519546	8079197	0.0007	0.014	0.1935	14.15	0.47	14.2	7.6	0.011	0.083
9848	519550	8080191	0.0006	0.019	0.247	18.8	0.71	12.6	9.1	0.018	0.138
9849	519549	8081188	0.0009	0.038	0.306	23.6	0.89	17.35	9.4	0.021	0.235
9850	519546	8082177	0.0004	0.014	0.205	14.85	0.66	12.9	6.6	0.019	0.126
9851	519552	8083174	0.0005	0.017	0.236	13.9	0.43	9.63	6.5	0.007	0.054
9852	519546	8084175	<0.0002	0.012	0.1615	9.42	0.28	6.32	8.2	0.009	0.044
9853	519544	8085285	0.0002	0.007	0.1435	9.75	0.24	6.85	7.9	0.007	0.04
9854	519545	8086270	0.0003	0.008	0.1195	4.75	0.26	5.85	3	0.007	0.047

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb
9855	519546	8087271	0.0002	0.006	0.118	6.23	0.25	4.83	3	0.005	0.033
9856	519559	8088202	0.0002	0.007	0.138	7.08	0.32	7.07	5.7	0.009	0.05
9857	520558	8088080	<0.0002	0.007	0.134	7.34	0.32	6.68	4.9	0.009	0.053
9858	521545	8087969	0.0004	0.016	0.24	16.85	0.43	12.05	6.3	0.014	0.096
9859	522534	8087863	0.0002	0.014	0.228	15.85	0.7	14.25	9.6	0.019	0.116
9860	523540	8087751	<0.0002	0.008	0.1905	10.45	0.55	10.8	5.6	0.014	0.089
9861	524526	8087641	0.0004	0.011	0.167	9.44	0.45	8.87	4.2	0.014	0.078
9862	525528	8087536	0.0003	0.015	0.259	16.6	0.73	15.9	10.5	0.021	0.126
9863	526521	8087425	<0.0002	0.016	0.1875	13.4	0.61	11.85	8.7	0.016	0.101
9864	527508	8087316	0.0004	0.018	0.25	16.7	0.53	12.15	8.3	0.01	0.076
9865	528502	8087206	0.0002	0.009	0.202	14.45	0.57	11.5	11.4	0.015	0.108
9866	529749	8081747	0.0003	0.01	0.1655	10.3	0.57	10.55	9.9	0.012	0.077
9867	528751	8081649	0.0004	0.008	0.153	9.37	0.47	8.82	18.8	0.012	0.057
9868	527998	8081514	0.0005	0.019	0.173	11.55	0.69	14.2	14.4	0.017	0.068
9869	527000	8081431	0.0005	0.019	0.172	11.45	0.52	13.65	10.6	0.016	0.094
9870	526750	8081468	0.0004	0.011	0.1685	11.3	0.63	14.05	12.6	0.018	0.097
9871	519546	8089196	0.0004	0.006	0.167	8.65	0.31	6.45	4	0.008	0.051
9872	519553	8090185	0.0007	0.009	0.192	14.4	0.53	11.3	5.7	0.014	0.078
9873	519544	8091171	0.0005	0.013	0.232	16.7	0.49	11.55	6.4	0.012	0.085
9874	519541	8092180	0.0005	0.017	0.281	17.35	0.82	17.7	9.4	0.022	0.185
9875	519546	8093171	0.0011	0.019	0.276	19.2	1.2	17	6.8	0.023	0.211
9876	519542	8094152	0.0003	0.04	0.281	24.5	1.18	22.4	19	0.025	0.192
9877	519542	8095153	0.0007	0.023	0.3	21.3	1.28	21	7.3	0.024	0.223
9878	519547	8096142	0.0003	0.026	0.263	23.6	0.82	15.7	25.3	0.019	0.147
9879	519537	8097143	0.0004	0.123	0.294	31	0.81	20.5	24.5	0.018	0.173
9880	519535	8098145	0.0005	0.012	0.1945	9.89	0.43	7.38	10.1	0.01	0.057
9881	519535	8099110	<0.0002	0.012	0.177	10.3	0.44	8.55	7.6	0.017	0.105
9882	519533	8100089	0.0006	0.027	0.336	16.7	1.01	17.65	12.4	0.029	0.217
9883	519531	8101089	0.0004	0.019	0.239	15.9	0.7	13.45	8.1	0.018	0.117
9884	519529	8102079	0.0006	0.023	0.289	19.3	0.67	14.4	8	0.014	0.138
9885	519530	8103074	0.0004	0.02	0.252	13.95	0.33	7.87	5.8	0.007	0.071
9886	519525	8104066	0.0002	0.007	0.123	8.28	0.26	7.5	4	0.007	0.04
9887	519518	8105045	0.0003	0.019	0.222	13.75	0.5	10.8	6.2	0.013	0.092
9888	519519	8106049	0.0002	0.017	0.232	13.65	0.37	8.71	5.6	0.007	0.062
9889	520507	8096878	0.0006	0.024	0.278	21.4	1.05	15.75	11.2	0.027	0.221
9890	521508	8096823	<0.0002	0.076	0.286	29.4	0.9	24.4	28.5	0.027	0.188
9891	522513	8096767	0.0003	0.087	0.27	29.2	1.3	24.6	17.5	0.03	0.199
9892	523503	8096710	0.0009	0.016	0.218	12.4	1.14	13.5	5.4	0.022	0.168
9893	524512	8096656	0.0004	0.021	0.225	17.5	1.08	17.1	8	0.018	0.146
9894	525513	8096597	0.0005	0.047	0.28	22.6	0.9	18.5	9.6	0.019	0.164
9895	526510	8096547	0.0005	0.028	0.274	18.65	1.06	20.5	8.7	0.019	0.175
9896	527506	8096488	0.0004	0.016	0.205	18.4	0.79	12.4	5.6	0.012	0.098
9897	528468	8096085	<0.0002	0.008	0.1175	8.2	0.26	9.28	2.7	0.006	0.037
9898	529444	8095875	0.0006	0.011	0.205	14.05	0.73	14.6	5.7	0.015	0.11

sample	East	North	Au	Ag	Bi	Cu	Mo	Pb	Zn	Te	Sb

Appendix 2
Rare Earth Analyses

sample	Ce	Hf	La	Sc	Y	Dy	Gd	Ho	Nd	Pr	Sm	Tb	Yb	Total
9701	70	0.1	34	8.9	37	7	8.8	1.2	47	11	10	1.1	2	238
9702	42	0.1	24	6.5	22	4	5.7	0.8	32	7	6.7	0.7	2	152
9703	48	0.2	21	7.9	22	4	5.7	0.8	30	7	6.5	0.7	2	155
9704	52	0.3	31	6.5	27	5	7	0.9	39	9	8.1	0.9	2	190
9705	50	0	17	4.1	41	7	7.2	1.3	29	6	6.7	1	3	174
9706	64	0.1	23	6	41	8	9.8	1.4	48	10	11	1.3	3	228
9707	83	0.1	30	11	25	5	6.2	0.8	36	8	7.4	0.8	2	214
9708	82	0.1	33	11	30	5	7	0.9	40	9	8.2	0.9	2	230
9709	61	0.1	35	5.9	38	7	9.1	1.2	51	12	11	1.2	2	235
9710	57	0.1	28	6	35	6	8.2	1.1	44	10	9.3	1.1	2	207
9711	59	0.1	24	6.6	28	5	7	0.9	36	8	7.7	0.9	2	185
9712	57	0.1	21	5.8	33	6	7.6	1.1	34	7	8	1	2	183
9713	62	0.1	25	7.6	32	6	7.6	1	39	8	8.7	1	2	200
9714	35	0.1	13	4	16	3	4	0.6	19	4	4.4	0.5	1	105
9715	67	0	22	5.5	36	7	8.7	1.2	40	8	9.6	1.1	3	208
9716	80	0.1	26	7.4	48	9	11	1.6	47	10	11	1.5	3	255
9717	44	0.1	21	5.9	41	8	9.5	1.4	34	7	9	1.3	3	184
9718	48	0	22	3.7	35	7	8.5	1.2	34	7	8.5	1.2	3	178
9719	71	0.1	39	8.5	38	7	8.6	1.2	46	12	9.7	1.1	3	244
9720	57	0.1	28	8.3	24	5	6.1	0.8	32	7	6.8	0.8	2	178
9721	86	0.1	34	6	37	7	8.9	1.3	43	10	9.4	1.2	3	247
9722	31	0	18	2.7	18	3	4.4	0.6	22	5	4.6	0.6	1	112
9723	85	0.1	37	8.8	33	6	8	1.1	43	11	9	1	2	245
9724	60	0.1	27	7.7	27	5	6.4	0.9	35	8	7.1	0.8	2	187
9725	78	0.1	32	8.7	32	6	7.2	1	40	10	8.3	0.9	2	226
9726	56	0.2	29	8	30	5	6.9	0.9	37	8	7.7	0.9	2	192
9727	55	0.1	40	8.1	37	7	8.5	1.2	47	12	9.7	1.1	3	229
9728	46	0.1	32	6.9	29	5	6.9	0.9	38	10	7.8	0.9	2	185
9729	39	0.1	27	6	24	5	6	0.8	33	8	6.8	0.8	2	157
9730	43	0.2	19	3.3	13	3	3.3	0.5	17	4	3.5	0.4	1	111
9731	42	0.1	19	4.8	16	3	4.1	0.6	23	5	4.7	0.5	1	125
9732	48	0	21	4	14	3	3.5	0.5	20	5	3.9	0.4	1	124
9733	56	0	29	5.5	25	5	6.1	0.9	33	8	6.8	0.8	2	178
9734	94	0.2	43	10	41	7	9.6	1.4	58	13	11	1.3	3	293
9735	41	0	17	3.4	14	3	3.6	0.5	19	5	3.9	0.5	1	112
9736	33	0	16	2.7	13	2	3.3	0.4	19	4	3.7	0.4	1	98.8
9737	53	0.1	29	5.9	24	5	6.1	0.8	35	8	7	0.8	2	176
9738	73	0	35	6	26	5	6.6	0.9	39	10	7.8	0.8	2	212
9739	96	0.1	34	9.1	30	5	7.4	1	44	11	8.8	0.9	2	249
9740	74	0.1	39	8.4	33	6	8	1.1	44	11	8.9	1	2	237
9741	54	0	24	4	20	4	5.4	0.7	30	7	6.2	0.7	2	158

sample	Ce	Hf	La	Sc	Y	Dy	Gd	Ho	Nd	Pr	Sm	Tb	Yb	Total
9742	49	0	25	4	18	3	4.5	0.6	27	6	5.1	0.6	1	145
9743	119	0.1	36	9.5	30	6	7.3	1	42	10	8.6	1	2	272
9744	56	0.1	27	6.3	21	4	5.8	0.7	32	8	6.6	0.7	2	171
9745	91	0.1	29	5.6	45	8	11	1.4	61	13	12	1.4	3	281
9746	54	0.1	29	5.2	26	5	7	0.9	39	10	7.9	0.9	2	187
9747	59	0.1	30	7.5	32	6	7.7	1	42	10	8.7	1	2	207
9748	68	0.2	29	7.9	24	5	6.6	0.8	36	8	7.3	0.8	2	196
9749	73	0	30	5.3	31	6	7.3	1	38	9	8	0.9	2	212
9750	52	0	25	4.3	22	4	5.5	0.8	29	7	6	0.7	2	157
9751	56	0	27	4.6	22	4	5.6	0.8	31	7	6.4	0.7	2	167
9752	78	0.1	26	8.1	27	5	6.8	0.9	36	8	7.6	0.8	2	206
9753	128	0.1	38	11	43	8	11	1.5	56	13	12	1.4	3	325
9754	93	0.1	28	6.6	31	5	7.5	1	41	10	8.4	0.9	2	234
9755	90	0.1	33	8.3	27	5	7	0.9	40	10	8	0.9	2	232
9756	56	0.2	27	9.7	21	4	5.7	0.8	32	8	6.6	0.7	2	175
9757	73	0.1	29	8.3	26	5	6.4	0.8	37	9	7.3	0.8	2	205
9758	72	0.1	39	10	41	7	9.8	1.3	55	13	11	1.2	3	263
9759	59	0.1	31	8	27	5	6.9	0.9	38	9	7.8	0.9	2	194
9760	59	0	32	4.3	22	4	5.6	0.7	32	8	6.2	0.7	2	176
9761	39	0.1	17	4	13	3	3.4	0.5	19	5	3.8	0.4	1	109
9762	49	0.1	28	6.9	20	4	5.3	0.7	31	7	6.2	0.7	2	161
9763	39	0	21	3.9	15	3	3.8	0.5	22	5	4.4	0.5	1	119
9764	50	0.1	31	6	23	4	5.7	0.7	31	7	6.2	0.7	2	167
9765	38	0.2	21	6.6	15	3	3.7	0.5	22	5	4.3	0.5	1	120
9766	72	0.1	28	8.6	22	5	6	0.8	33	8	6.8	0.8	2	192
9767	56	0.1	26	7.9	21	4	5.5	0.7	31	7	6.2	0.7	2	167
9768	99	0.1	42	7.8	44	8	10	1.3	62	14	11	1.3	3	303
9769	116	0	38	9.2	38	7	8.4	1.2	49	12	9.5	1.1	3	292
9770	54	0	23	5.6	21	4	5.3	0.7	28	7	5.8	0.7	2	157
9771	62	0.1	34	8.2	29	6	7.3	1	40	10	8.3	1	2	208
9772	92	0	38	8.9	36	7	9.1	1.2	52	12	10	1.2	3	270
9773	90	0.1	41	8.5	35	7	8.9	1.2	53	12	10	1.2	3	270
9774	62	0.2	25	6.4	20	4	5.3	0.7	28	7	6	0.7	2	165
9775	64	0	31	5.4	24	5	6.2	0.8	36	8	7.1	0.8	2	190
9776	90	0	34	6.9	27	5	7.3	1	41	10	8.4	1	2	234
9777	62	0	33	4.5	28	5	6.8	0.9	39	10	7.7	0.9	2	199
9778	45	0	22	3.5	21	4	5.4	0.8	27	6	5.6	0.7	2	143
9779	92	0.1	32	7.6	25	5	6.8	0.9	40	10	8.2	0.9	2	230
9780	66	0.1	30	7.4	24	5	6.3	0.8	34	8	7	0.8	2	191
9781	47	0	24	4.4	19	4	5.1	0.7	28	6	5.7	0.7	1	146
9782	89	0	39	9.1	56	#	14	1.9	73	15	15	1.7	4	328
9783	57	0	28	6.7	22	4	6	0.8	33	8	6.7	0.8	2	175
9784	52	0.1	26	5.1	20	4	5.2	0.7	28	7	5.8	0.7	2	155
9785	27	0	14	2.7	14	3	3.4	0.5	16	4	3.5	0.4	1	89
9786	71	0	32	6.7	27	5	6.8	0.9	36	9	7.4	0.9	2	205

sample	Ce	Hf	La	Sc	Y	Dy	Gd	Ho	Nd	Pr	Sm	Tb	Yb	Total
9787	69	0	33	5.4	31	6	7.8	1	42	10	8.7	1	2	217
9788	43	0	24	3.9	18	3	4.5	0.6	26	6	5	0.6	1	135
9789	61	0.1	29	6	24	5	5.9	0.8	33	8	6.6	0.8	2	181
9790	59	0.1	30	7	29	6	7.1	1	37	9	7.8	0.9	2	195
9791	41	0	19	5.7	16	3	4.2	0.6	23	5	4.7	0.5	1	124
9792	55	0	38	5.4	36	6	8.1	1.1	44	11	8.9	1	3	216
9793	70	0.1	34	10	34	6	7.9	1.1	46	11	9	1	2	231
9794	33	0.1	14	3.7	11	2	2.8	0.4	15	4	3.1	0.4	1	90.5
9795	55	0.3	32	8.6	29	6	7.5	1	35	9	7.5	1	2	194
9796	22	0.3	11	4.2	9	2	2.3	0.3	12	3	2.6	0.3	1	69.2
9797	45	0	26	4	23	4	5.4	0.7	29	7	6	0.7	2	152
9798	62	0.1	27	9.7	23	5	5.8	0.8	32	7	6.6	0.8	2	182
9799	57	0	27	6.6	21	4	5.5	0.7	30	7	6.1	0.7	2	168
9800	44	0.1	23	6.8	22	4	5.4	0.7	27	6	5.7	0.7	2	147
9801	82	0	38	7.7	35	7	8.6	1.2	47	12	9.8	1.1	3	251
9802	56	0.1	22	6.9	21	4	5.7	0.7	29	7	6.2	0.7	2	160
9803	45	0.1	14	9.4	12	3	3.4	0.5	19	4	3.9	0.4	1	115
9804	65	0.1	21	9.7	24	5	6.8	0.9	35	8	7.7	0.9	2	186
9805	75	0.1	22	10	28	5	7.2	0.9	38	8	8.1	0.9	2	206
9806	57	0.1	19	9.1	18	4	4.7	0.6	26	6	5.4	0.6	1	151
9807	32	0	19	3.3	15	3	3.7	0.5	21	5	4.3	0.5	1	108
9808	53	0.1	29	5.8	23	5	5.6	0.8	31	7	6.4	0.7	2	169
9809	47	0	25	3.2	21	4	5.1	0.7	27	7	5.4	0.7	1	148
9810	58	0.1	30	6.3	27	5	6.7	0.9	37	9	7.7	0.9	2	191
9811	64	0	33	6.4	30	6	7.5	1.1	39	9	8.3	1	3	209
9812	67	0	33	5.1	27	5	6.7	0.9	37	9	7.6	0.9	2	202
9813	32	0	13	3.3	12	2	2.9	0.4	16	4	3.3	0.4	1	90.8
9814	50	0	22	3.8	22	4	5.3	0.7	26	6	5.6	0.7	2	148
9815	30	0.1	18	4.3	14	3	3.5	0.5	20	5	3.9	0.5	1	102
9816	30	0.1	12	4.4	11	2	2.3	0.4	11	3	2.3	0.3	1	78.5
9817	24	0	8.5	2.9	6	2	1.8	0.3	9.8	2	2.1	0.3	1	60.2
9818	57	0.1	22	5.2	21	5	5.6	0.8	27	6	6	0.8	2	158
9819	51	0.1	24	4.2	20	4	4.9	0.7	26	6	5.4	0.6	2	148
9820	61	0.1	32	6.6	28	6	7.2	1	37	9	7.8	0.9	2	199
9821	38	0.2	16	5.7	15	3	3.8	0.5	20	5	4.1	0.5	1	113
9822	76	0.2	29	10	31	6	7.9	1.1	43	10	8.9	1.1	2	227
9823	71	0.1	39	9.6	47	8	11	1.4	55	13	12	1.4	3	270
9824	57	0.1	17	7.2	18	4	4.8	0.6	26	6	5.5	0.6	1	148
9825	51	0.1	21	5.5	17	3	4.3	0.6	24	6	4.8	0.6	1	138
9826	60	0.1	33	7.1	24	5	6.4	0.8	35	9	7.1	0.8	2	190
9827	41	0.2	22	6.4	18	4	4.9	0.6	26	6	5.6	0.7	1	138
9828	102	0	46	5.5	36	7	9.2	1.2	52	13	10	1.2	3	284
9829	74	0.1	30	7.2	25	5	6.3	0.8	36	8	7.3	0.8	2	202
9830	93	0.1	34	8.5	30	6	7.7	1	43	10	8.7	1	2	244
9831	84	0.1	29	8.7	24	5	6.3	0.8	34	8	7.1	0.8	2	210

sample	Ce	Hf	La	Sc	Y	Dy	Gd	Ho	Nd	Pr	Sm	Tb	Yb	Total
9832	57	0.2	14	9.1	14	3	3.9	0.5	21	5	4.4	0.5	1	134
9833	42	0	15	4.4	13	3	3.3	0.5	17	4	3.6	0.4	1	106
9834	44	0	19	4.1	14	3	3.5	0.5	19	5	4	0.5	1	118
9835	32	0.2	21	6.6	19	4	4.6	0.7	22	5	4.6	0.6	1	122
9836	51	0.2	28	6.8	20	4	5.2	0.7	28	7	5.7	0.7	2	158
9837	54	0.1	30	5.7	24	5	6.3	0.8	34	8	7.1	0.8	2	178
9838	71	0.1	35	6.8	34	6	8.4	1.1	43	10	9	1.1	2	229
9839	91	0	32	7.2	33	6	8.3	1.1	45	10	9.4	1.1	2	247
9840	68	0	23	8.2	21	5	5.9	0.8	33	8	6.9	0.8	2	181
9841	76	0.1	33	9.3	26	5	6.5	0.9	36	9	7.4	0.9	2	211
9842	61	0.1	30	5.9	22	4	5.8	0.8	33	8	6.7	0.8	2	179
9843	47	0.2	20	4.5	15	3	3.9	0.5	22	5	4.5	0.5	1	128
9844	100	0.1	27	6.6	21	5	5.8	0.8	33	8	6.8	0.8	2	217
9845	64	0.1	22	9.2	23	5	5.9	0.8	31	8	6.6	0.8	2	178
9846	84	0.1	33	4.7	27	5	7.1	0.9	38	9	7.8	0.9	2	220
9847	75	0.1	32	6.9	29	6	7.8	1	43	10	9.2	1	2	224
9848	64	0.1	29	8.9	33	6	8.3	1.1	45	11	9.6	1.1	2	219
9849	78	0.1	42	11	45	9	11	1.5	58	13	12	1.5	3	285
9850	82	0	30	6.1	28	6	7.3	1	38	9	8.2	1	2	219
9851	66	0.1	40	7.4	34	7	9.2	1.3	48	12	10	1.2	3	240
9852	39	0.1	23	4.1	22	5	5.5	0.8	25	6	5.8	0.8	2	138
9853	48	0.1	29	4.5	27	6	6.6	1	32	8	7	0.9	2	171
9854	30	0	16	3.2	12	2	3	0.4	17	4	3.3	0.4	1	93.1
9855	28	0	15	2.7	11	2	2.9	0.4	16	4	3.2	0.4	1	86.5
9856	39	0	22	3.7	18	3	4.4	0.6	24	6	4.8	0.6	1	127
9857	43	0	22	3.7	17	3	4.1	0.6	23	6	4.6	0.6	1	128
9858	77	0.1	37	6.6	26	5	6.3	0.9	35	9	7.1	0.8	2	211
9859	69	0	25	6.3	18	4	4.6	0.6	25	6	5.1	0.6	1	166
9860	62	0	26	5.9	24	5	6.1	0.9	30	7	6.5	0.8	2	177
9861	55	0.1	25	5.6	21	4	5.1	0.7	27	7	5.7	0.7	2	157
9862	81	0.1	35	7.4	26	5	6.8	0.9	36	9	7.5	0.9	2	218
9863	68	0	27	5.1	21	4	5.2	0.7	29	7	5.9	0.7	2	175
9864	75	0.1	40	7.3	29	6	7.3	1	41	10	8.1	1	2	227
9865	74	0	31	5.4	24	5	6.2	0.8	32	8	6.7	0.8	2	196
9866	46	0	22	5.5	13	3	3.4	0.5	19	5	3.8	0.5	1	122
9867	28	0.1	13	4.7	7	1	1.7	0.2	10	3	1.9	0.2	1	71.3
9868	51	0.2	24	7.1	17	4	4.2	0.6	21	6	4.4	0.6	1	141
9869	55	0.2	26	6.4	21	4	5.1	0.7	25	6	5.3	0.7	2	158
9870	55	0.1	24	6.2	19	4	4.5	0.7	23	6	4.9	0.6	1	149
9871	43	0.1	25	5	20	4	5.4	0.7	29	7	6.1	0.7	1	147
9872	66	0.1	32	6.1	24	5	6.4	0.8	35	9	7.2	0.8	2	193
9873	66	0.1	33	6.8	26	5	6.7	0.9	36	9	7.6	0.9	2	200
9874	77	0.1	31	7.7	29	6	7.6	1	41	10	8.6	1	2	221
9875	80	0.1	24	9.2	22	4	5.5	0.7	30	7	6.3	0.7	2	191
9876	86	0.1	37	9.1	33	6	8	1.1	45	11	9.6	1.1	2	249

sample	Ce	Hf	La	Sc	Y	Dy	Gd	Ho	Nd	Pr	Sm	Tb	Yb	Total
9877	88	0.1	34	11	34	6	8.1	1.1	45	11	9.2	1	2	251
9878	79	0.1	39	8.7	44	7	10	1.3	51	12	11	1.3	3	268
9879	102	0.1	51	12	71	#	17	2.1	86	21	19	2.1	4	399
9880	34	0.1	21	4.4	15	3	3.8	0.5	22	5	4.4	0.5	1	115
9881	36	0	17	3.9	15	3	3.9	0.5	22	5	4.4	0.5	1	113
9882	73	0.1	28	9	24	5	6.5	0.8	36	9	7.5	0.8	2	201
9883	70	0.1	38	6.6	28	5	7.4	1	41	10	8.5	0.9	2	219
9884	80	0.1	43	8.3	32	6	8.1	1.1	44	11	9.1	1	2	246
9885	42	0.1	41	7	35	6	8.9	1.1	48	12	9.9	1.1	2	214
9886	59	0	26	3.4	19	4	4.9	0.7	27	7	5.5	0.7	1	158
9887	75	0.1	35	5.8	29	5	7.1	0.9	38	10	7.7	0.9	2	216
9888	52	0.1	43	7.7	37	7	9.2	1.2	51	13	11	1.2	2	234
9889	53	0.1	21	7.7	24	5	6.2	0.8	30	7	6.7	0.8	2	165
9890	121	0.1	57	9.3	58	#	14	1.8	70	17	15	1.7	4	377
9891	130	0	51	9	45	9	11	1.5	60	15	13	1.4	3	348
9892	73	0.1	21	6.9	21	4	4.8	0.7	27	6	5.6	0.6	2	172
9893	80	0.1	33	8.6	34	7	8.8	1.2	45	11	9.7	1.2	3	242
9894	112	0.1	53	10	59	#	13	1.7	70	16	14	1.7	4	364
9895	101	0	30	8.8	29	5	6.9	0.9	37	9	7.7	0.9	2	238
9896	79	0	39	8.1	32	6	8.1	1.1	43	11	8.9	1.1	2	240
9897	69	0	29	4.5	19	4	5.2	0.7	30	8	5.9	0.7	2	178
9898	88	0.1	38	6.8	30	5	6.9	1	39	10	7.8	0.9	2	236

Appendix 1: JORC Code, 2012 Edition - Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• New batch of 198 samples announced. All were collected as surface 1kg samples in the field and processed by ALS laboratories in Perth. The samples were sieved to 75 microns by ALS and analysed by the ME-MS 41L – REE method for all applicable elements. This is the same methods used in the 2022 survey announced by GCM 3rd January 2023. • Geoscience Australia publicly available North Australian Geochemical Survey (NAGS) 75 micron sampling was used in Figures 1 and 2. GCM announcement February 14 2023. • Duplicate samples were taken at 10 sites with high and low results. The analyses are comparable within 10% for the elements reported, apart from gold which was within 20%. • This geochemical technique is relatively new in Australia and the results are considered to be guides to future drilling priorities only.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• No drilling
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 drilling
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.*	• No drilling

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No drilling
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• This sensitive technique is relatively new and can only be applied in areas without nearby dust contamination from mines or percussion drilling. There are no causes of contamination in the survey area. • All processing is done by ALS in a special facility for low level analyses of this type. • Apart from ALS duplicates and standards, GCM took 10 duplicate samples from a variety of locations. The assay variations were within 10% for all reported elements apart from gold which was about 20%.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All samples were located by handheld GPS.

Criteria	JORC Code explanation	Commentary
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.*	• The data spacing is adequate for the purpose of detecting and outlining first pass drilling targets. Trends are consistent for a large variety of ore forming elements.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The helicopter sampling is mostly on an evenly spaced grid pattern, and clearly has a ENE orientation, but the road based samples are in some places difficult to correlate geometrically.
Sample security	• *The measures taken to ensure sample security.*	• Samples were secured in a donga, until taken by GCM personnel to ALS.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• GCM sampling as previously reported, prior company sampling and Geoscience Australia sampling are all mutually supportive in identifying the area as anomalous in a variety of metals and rare earths.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The announcement refers to 100% Green Critical Minerals Ltd (GCM) granted ELs 33128, 33129, and 33130, as well as EL applications 33229, 33230, 33467 and 33468. The applications mainly cover a mix of freehold leasehold and solely in the case of 33468 Aboriginal land. • There are no known security issues with the tenure at this time, however EL application 33468 may involve protracted negotiations to secure tenure.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• There has been airborne EM by BHP (1993) and also by Geoscience Australia (2018) – Tempest wide spaced survey – EM and drilling details are available for download by the public. CRs 1993-191, 1994-139, 1995-181, 1996-210.

Criteria	JORC Code explanation	Commentary
		• Geoscience Australia (GA) has conducted wide spaced geochemical sampling throughout the region, as part of the North Australian Geochemical Survey. • Stream sediment sampling with gold anomalous results draining the project is reported on the public NT geochemical database – CR1995-0365, CR1984-0247. and CR1989-0751 • CRA explored for diamonds and drilled RC collared corehole RK2 into the magnetic alteration bodies of interest and the logs are publicly available in CR1995-0520. •
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Iron Oxide Copper Gold (IOCG) deposits containing copper gold rare earths molybdenum and other elements in association with haematite or magnetite alteration and replacements. • Mount Isa Style zoned Co Cu Pb Zn, associated with basin margin faulting. • An ionic clay hosted rare earths deposit within a Tertiary laterite weathering profile. The rare earths originate in the IOCG systems but are remobilised in the laterite profiles.

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.*
		• No IOCG drilling
		• No rare earths drilling.
		• Drilling by BHP in 1994 and as previously reported.

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.*	• No drilling

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• No drilling and no sections reported
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Not applicable
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.*	• Not applicable
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.*	• Geoscience Australia and NT Geological Survey public magnetic data has been modelled by Geodiscovery Geophysical consultants to produce imagery. The depth slice imagery displays the magnetism of rocks at varying depths. The geological interpretation is by Neil Wilkins M.Sc who has had several years of mineral and petroleum experience across the McArthur Basin.
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.*	• The company plans to conduct drilling later in 2023.