High Grade HREE & Nb Results From Diamond Drilling at Machinga

HIGHLIGHTS

- *Assays received from the 8-diamond drill hole program (totalling 900m) at Machinga*
- *Significant intercepts include:*
  - ***15.1m @ 1.01% TREO, 0.36% Nb_2O_5** from **23.9m** (3.71% DyTb/TREO) incl. **4m @ 1.75% TREO, 0.63% Nb_2O_5** from **33m** (3.8% Dy/Tb/TREO) drilled downdip (**MDD007**)*
  - ***9m @ 0.70% TREO, 0.3% Nb_2O_5** from **3m** (3.84% DyTb/TREO) incl. **2m @ 1.2% TREO, 0.58% Nb_2O_5** from **6m** (3.64% Dy/Tb/TREO) and **5.2m @ 1.61% TREO, 0.66% Nb_2O_5** from **41.4m** (3.99% DyTb/TREO) incl. **1m @ 2.67% TREO, 1.01% Nb_2O_5** from **44m** (3.9% Dy/Tb/TREO) drilled downdip (**MDD006**)*
  - ***6.1m @ 1.09% TREO, 0.4% Nb_2O_5** from **22.5m** (3.78% DyTb/TREO) (**MDD004**)*
  - ***7.3m @ 0.8% TREO, 0.33% Nb_2O_5** from **22.7m** (3.70% DyTb/TREO) (**MDD005**)*
  - ***9m @ 1.11% TREO, 0.41% Nb_2O_5** from **41m** (3.72% DyTb/TREO) incl. **3m @ 1.56% TREO, 0.49% Nb_2O_5** from **45m** (4.1% Dy/Tb/TREO) drilled downdip (**MDD008**)*
- *Results returned an average of 29% HREO:TREO and 3.6% DyTb:TREO at a cutoff grade of >0.25%TREO (consistent with RC holes' final results)*
- *Results highlight the near-surface and thick intersection intercepted in RC holes MARC005 and MARC016*

DY6 Metals Ltd (ASX: DY6) ("DY6", the "Company"), a strategic metals explorer targeting Heavy Rare Earths (HREE) and critical metals in southern Malawi, is pleased to announce the assay results from the 8-diamond drill (DD) holes (totalling 900m) at its flagship Machinga Project in southern Malawi.

The Company's CEO, Mr Lloyd Kaiser said:

"The assay results are showing outstanding intersections across multiple drill holes, especially MMD007 returning 15.1m @ 1.01%TREO with substantial Niobium grade, and a high proportion of valuable heavy rare earth elements from holes drilled for metallurgical material. The successful RC and DD drilling program has greatly improved the geological team's interpretation of the Machinga system including the structural and lithological controls. The final assay results and historic intersections will feed into our current geological model to guide our next exploration program design. The Company now moves towards progressing a technical evaluation of the mineralisation to target a REO concentrate and Niobium by-product".

A strongly mineralised hydrothermal breccia system striking NW-SE and dipping shallowly ~35° to the NE has been confirmed by the recent drilling. Pleasingly, very high-grade zones have been intersected from the diamond drill holes, as well as the suggestion of the mineralised zones thickening at depth and open to the NE. Significant drill intercepts received from the final batch of assays are included in Table 2. Significant intercepts include:

- **15.1m @ 1.01% TREO, 0.36% Nb_2O_5** from **23.9m** (3.71% DyTb/TREO) incl. **4m @ 1.75% TREO, 0.63% Nb_2O_5** from **33m** (3.8% Dy/Tb/TREO) **(MDD007);**
- **9m @ 0.70% TREO, 0.3% Nb_2O_5** from **3m** (3.84% DyTb/TREO) incl. **2m @ 1.2% TREO, 0.58% Nb_2O_5** from **6m** (3.64% Dy/Tb/TREO) and **5.2m @ 1.61% TREO, 0.66% Nb_2O_5** from **41.4m** (3.99% DyTb/TREO) incl. **1m @ 2.67% TREO, 1.01% Nb_2O_5** from **44m** (3.9% Dy/Tb/TREO) (**MDD006**);
- **6.1m @ 1.09% TREO, 0.4% Nb_2O_5** from **22.5m** (3.78% DyTb/TREO) (**MDD004**);
- **7.3m @ 0.8% TREO, 0.33% Nb_2O_5** from **22.7m** (3.70% DyTb/TREO) (**MDD005**); and
- **9m @ 1.11% TREO, 0.41% Nb_2O_5** from **41m** (3.72% DyTb/TREO) incl. **3m @ 1.56% TREO, 0.49% Nb_2O_5** from **45m** (4.1% Dy/Tb/TREO) (**MDD008**).

(Results returned an average of 29% HREO:TREO and 3.6% DyTb:TREO at a cutoff grade of >0.25%TREO)

Diamond drill holes MDD006, MDD007 and MDD008 were drilled downdip to obtain sufficient sample material to initiate the metallurgical test work program in Q1, 2024. The assay results are positive and significant for the Company as they continue to demonstrate continuity of mineralisation down dip and along strike of Machinga with excellent width and grade of mineralisation for a heavy rare earth rich deposit. As part of the upcoming metallurgical test work program, using core from this campaign, the Company will assess the amenability of the mineralisation to be treated through a relatively simple beneficiation process.

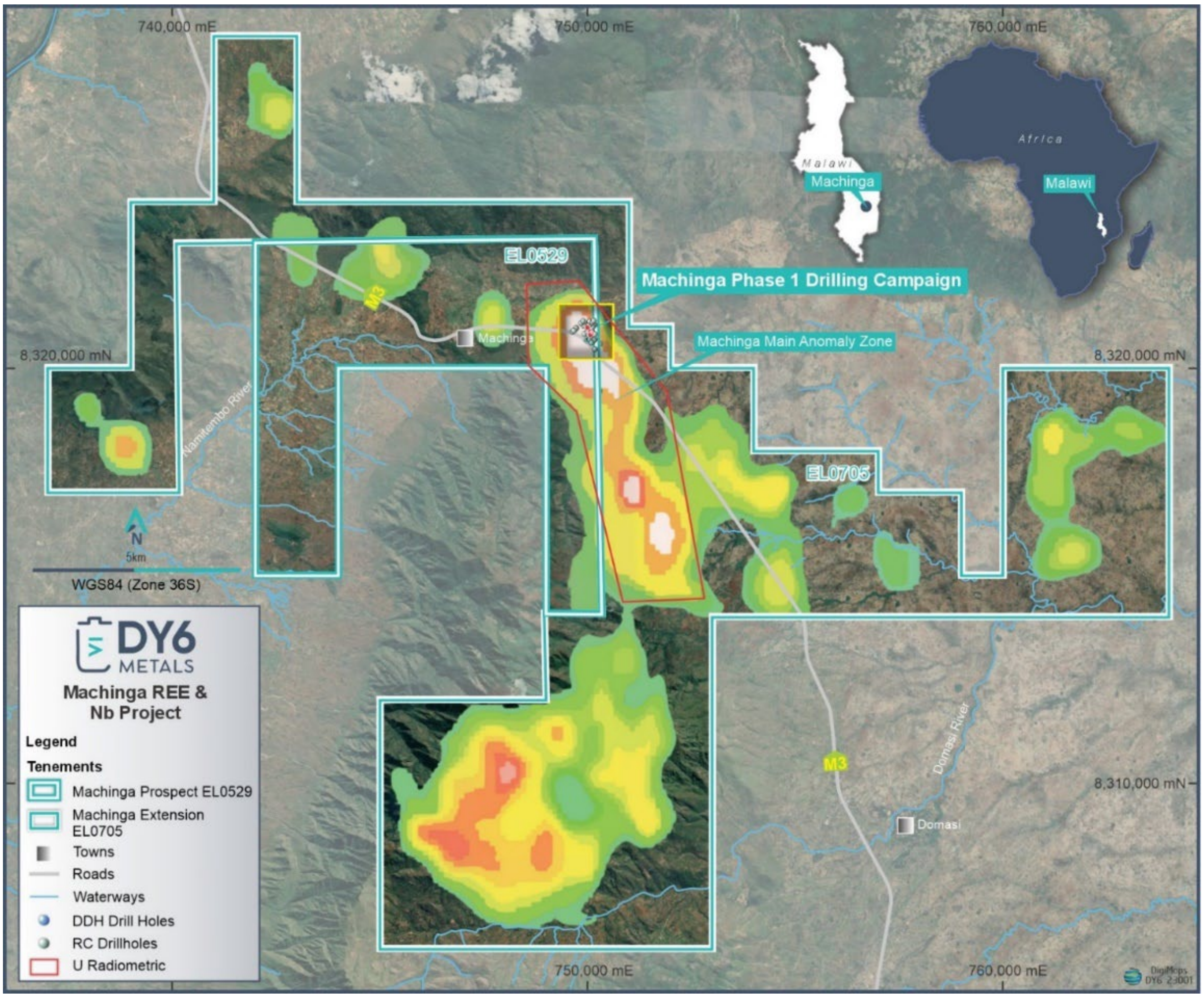

Figure 1. *Machinga Project location in Southern Malawi (U radiometric)*

The diamond drill program consisted of 5 holes to 150m and 3 holes to 50m depths to determine the structural setting and geology of the Machinga deposit and to obtain material for initial metallurgical studies.

The first 5 holes were to understand the geological nature of the deposit, its structural configuration and obtain contextual data to the results of the RC drillholes, both recent and historical.

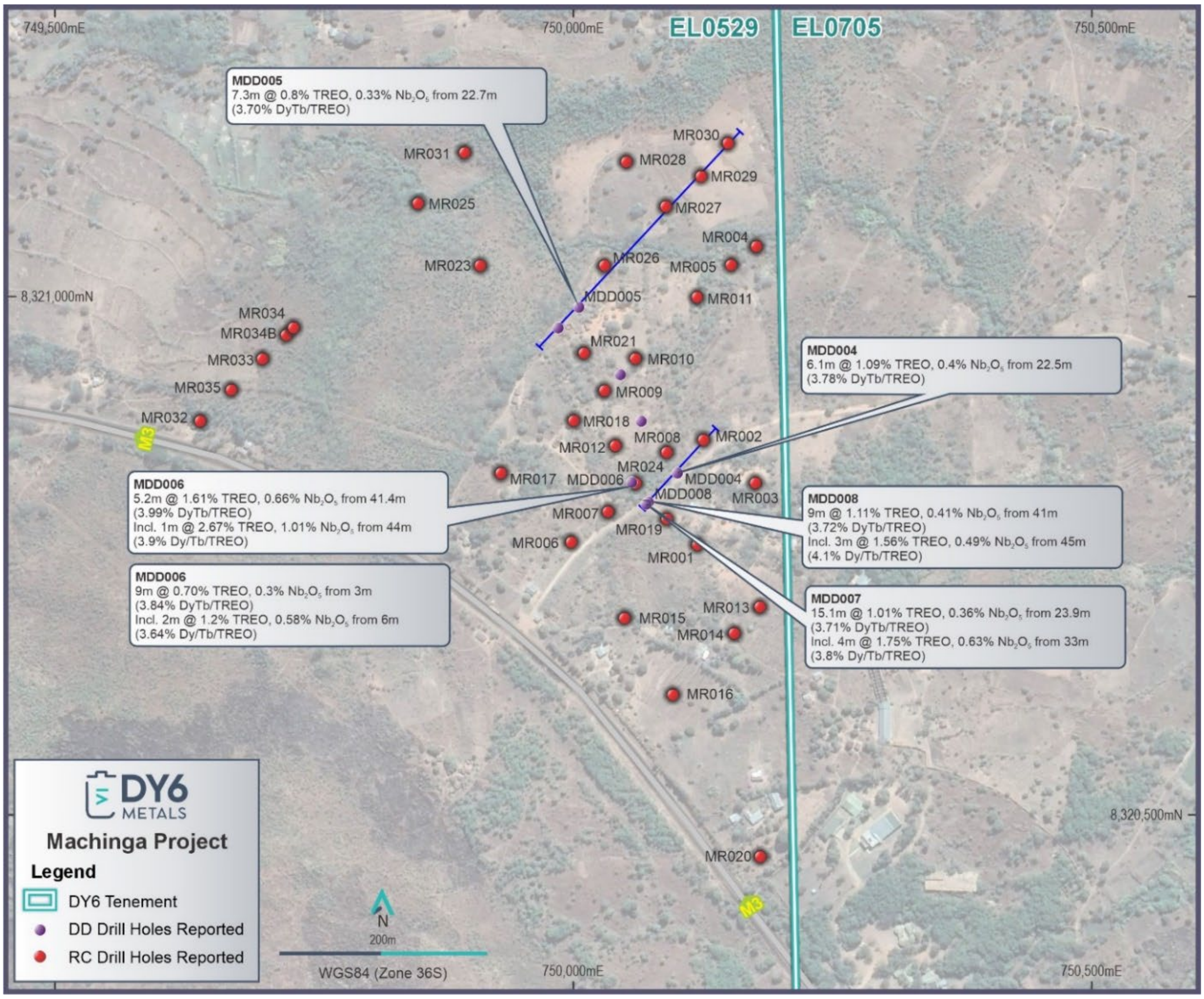

Figure 2. *Drill collar locations at Machinga North prospect – 8 DD hole collars*

The diamond holes confirmed the shallow northeasterly dips (Figure 3) inferred from the RC drilling with several of the zones showing downdip consistency (DY6 Metals ASX releases 10th Oct and 26th Oct, 2023) with numerous apparently more discontinuous mineralisation zones.

The mineralised zones have been geologically logged as hydrothermal breccias; no petrological work has been undertaken as yet, samples for petrological study and XRD analysis are being collected from the core and to assessed by ALS in Perth in Q1, 2024. XRD of selected RC samples containing high to low rare earth mineralisation and host rocks is under review and to be reported in Q1. The mineralogy and quantitative assessment of minerals contained in the core will provide valuable liberation characteristics of target minerals to guide the Company in formulating an initial metallurgical test program.

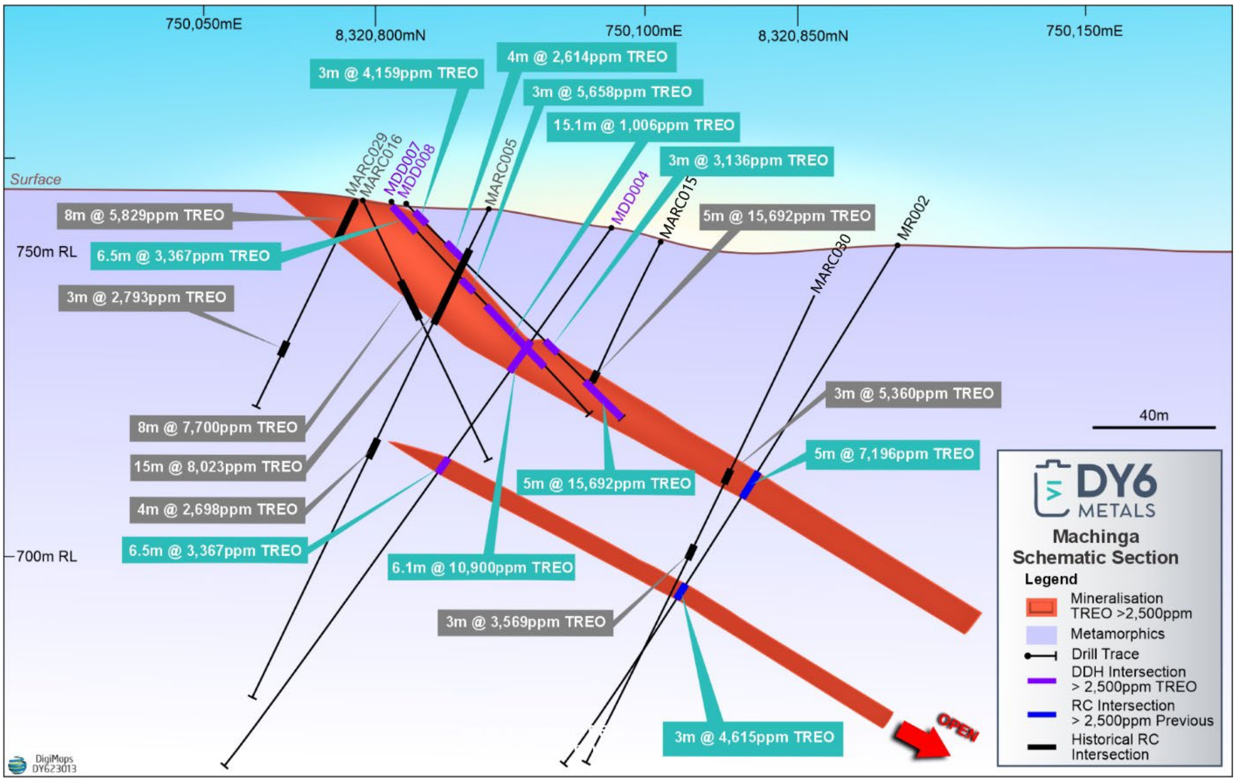

Figure 3. *Drill Section DY6 Metals holes MDD004, 007 & 008, RC hole MR002 with historical intersections from Globe MARC005, 015, 016, 029 & 030.*

Holes MDD001-005 were drilled at -55° to southwest attempting to intersect the mineralised zones at right angles; hence intersections within these holes approximate the true width of the mineralised zones at that location. Holes MDD006, MDD007 and MDD008 were drilled at -45° to the east and northeast, being down the estimated dip of the mineralisation. This was to maximise material available for the initial metallurgical stage.

The core is shown in the photographs of the half core in Figure 4 from hole MDD007.

These photographs show gneissic foliation approximately 45° to the core axis suggesting a near vertical dip in the sequence foliation, whereas the mineralisation, the pink and tan zones, are irregularly orientated suggesting hydrothermal alteration. The core being too fractured for downhole orientation.

Rare earth rich mineralisation within the hydrothermal breccia were intersected in drillhole MDD007 from 23.9m for 15.1m with high TREO grade zones of 1.79wt% TREO @ 29m to 30m, 1.31wt% TREO @ 33m to 34m, 1.89wt% TREO @ 34m to 35m and 2.12wt% TREO from 35m to 36m (Figure 5).

The TREO distribution of this exceptional 15.1m intersection of MDD007 has shown a high proportion of heavy rare earth oxides (HREO) at 27.7% HREO/TREO and 3.7% DyTb:TREO along with valuable magnetic rare earths NdPr oxide of 15.2%.

The high proportion of Nd+Pr+Dy+Tb oxides identified at Machinga is highly valuable to the EV permanent magnets and defence industries, with a basket price of US$28 per kg TREO (using a 2500ppm TREO cutoff). The Company believes this compares very favourable relative to peers that are focussed predominately on light rare earth projects[1].

The initial focus of DY6 during the maiden drilling program was to test the known strike of the confirmed historic drill results in the northern anomalous zone. The next stage of the exploration program is already underway with further rock chip sampling at Machinga focused on stepping out NW of the phase 1 drilling campaign and along the southern zone of Machinga into EL0705 following the anomalous contour to delineate high priority drill targets for the phase 2 drill program next year.

[1] *Source: Lindian Resources Rare Earth distribution from 'Mineral Resource Estimate of 261 million LIN:ASX Announcement 3 August 2023'. Rare Earth Basket Price is calculated using NdPr, Dy and Tb oxide prices as at Oct 31st, 2023 from Baiinfo Market Intelligence.*

MDD007 26.74 – 30.81m

MDD007 30.81 -35.22m

MDD007 35.22 – 40.40m

Figure 4. *Half drill core of MMD007 showing high-grade rare earth mineralisation in the Machinga deposit.*

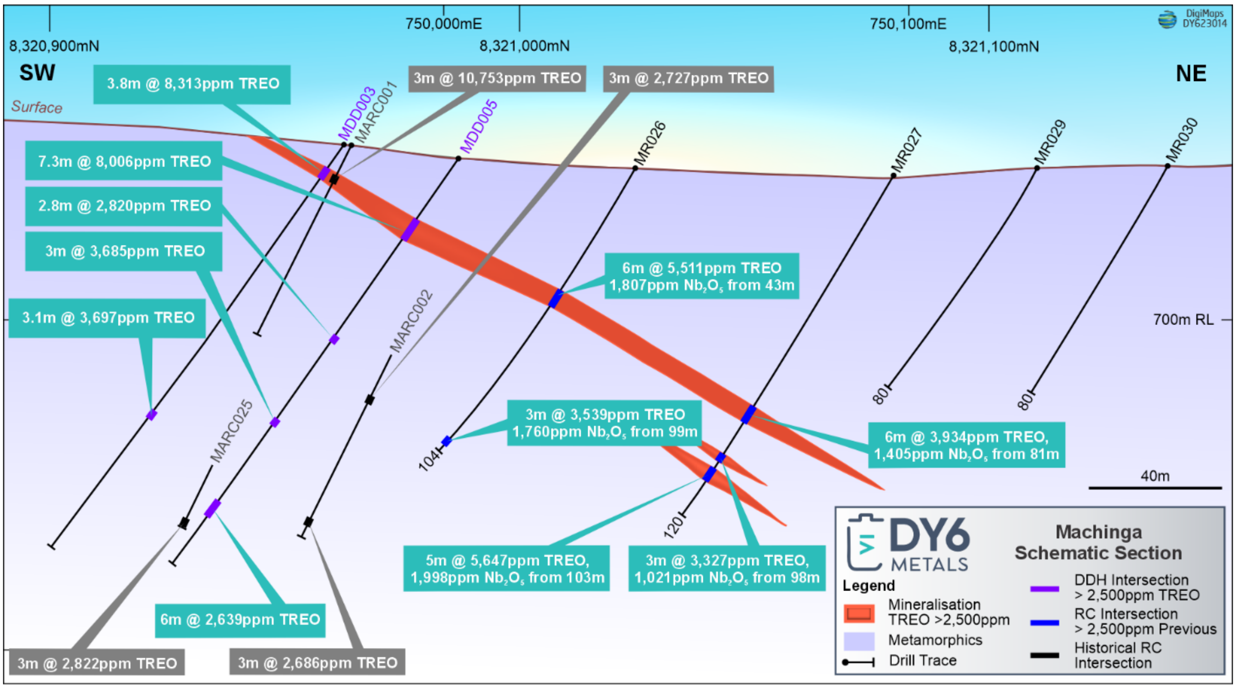

Figure 5. *Drill Section DY6 Metals holes MDD003 & MDD005.*

The Company plans to prepare a bulk ore sample using the diamond core collected from the Machinga central drill program to produce a representative ore sample to commence beneficiation test work program in Q1, 2024 based on the 3 downdip holes MDD006, 007 and 008.

Upon completion and interpretation of XRD analysis on RC samples and minerology of selected pieces of diamond core, a beneficiation test work program will be planned with the Company's consulting metallurgist.

-ENDS-

This announcement has been authorised by the Board of DY6.

More information

Mr Lloyd Kaiser	Mr John Kay	Mr Luke Forrestal
CEO	Director & Company Secretary	Investor Relations
lloyd.kaiser@dy6metals.com	john.kay@dy6metals.com	+61 411 479 144

Abbreviations

- **TREO** = Total Rare Earth Oxides – 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, Lu_2O_3, Y_2O_3
- **HREO** = Heavy Rare Earth Oxides –Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3
- **HREO%** = HREO/TREO * 100
- **DyTb:TREO** = (Dy_2O_3 + Tb_4O_7)/TREO * 100

Competent Persons Statement

The Information in this announcement that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Allan Younger, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Younger is a consultant of the Company. Mr Younger has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Younger consents to the inclusion of this information in the form and context in which it appears in this announcement. Mr Younger holds shares in the Company.

Table 1. Drill Collar Locations

Hole ID	Depth	Easting	Northing	Elevation	Datum	Dip	Azimuth
MDD001	150	750066.73	8320879.90	752.51	UTM84-36S	-55	225
MDD002	150	750046.92	8320922.44	752.54	UTM84-36S	-55	225
MDD003	150	749978.92	8320962.46	752.86	UTM84-36S	-55	225
MDD004	150	750096.19	8320827.65	753.76	UTM84-36S	-55	225
MDD005	150	749998.35	8320992.27	748.81	UTM84-36S	-55	225
MDD006	50	750058.17	8320824.77	756.18	UTM84-36S	-45	45
MDD007	50	750071.39	8320801.66	758.00	UTM84-36S	-45	70
MDD008	50	750072.96	8320803.66	757.96	UTM84-36S	-45	45

Table 2. Significant Intersections

Based on >2500ppm Weighted Average TREO cutoff, minimum3m width and maximum 2m internal dilution

All values weighted average grades in ppm unless stated

Hole ID	From	To	Length	TREO	TREO %	MREO	HREO/TREO	La_2O_3	CeO_2	Pr_6O_{11}	Nd_2O_3	Tb_4O_7	Dy_2O_3	Lu_2O_3	Y_2O_3	Nd_2O_3 $+Pr_6O_{11}$	HREO	Nb_2O_5	Ta_2O_5
MDD001	0	7	7	3324		626	26.06%	574	1207	120	393	15	98	7	601	513	866	1194	64
MDD001	12	15.2	3.2	3469		645	31.07%	545	1155	120	395	17	114	11	737	514	1078	1450	58
MDD001	27	30.4	3.4	5824		1042	34.21%	954	1794	188	615	30	209	23	1326	803	1992	2744	142
MDD002	30	34.6	4.6	5921		1035	34.53%	961	1834	185	607	32	210	23	1379	792	2044	2300	120
MDD002	94	97	3	4344		827	27.06%	786	1484	155	517	22	134	9	813	671	1176	1237	68
MDD003	8.7	12.5	3.8	8313		1465	32.99%	1312	2755	263	862	42	298	26	1854	1125	2742	4152	181
MDD003	98.7	101.8	3.1	3697		727	31.76%	549	1184	136	457	18	117	11	826	593	1174	1415	57
MDD004	**22.5**	**28.6**	**6.1**	**10901**	**1.09%**	**2078**	**28.91%**	**1895**	**3643**	**389**	**1278**	**55**	**357**	**26**	**2157**	**1666**	**3151**	**4032**	**194**
MDD004	46	49	3	2555		514	21.21%	483	967	103	334	10	67	4	366	437	542	741	34
MDD004	138	141.2	3.2	2470		457	34.33%	354	779	86	292	10	69	14	570	378	848	1978	89
MDD005	22.7	30	7.3	8006		1537	27.48%	1405	2754	288	953	39	258	17	1496	1241	2200	3330	138
MDD005	65.2	68	2.8	2820		537	30.86%	443	935	101	336	12	87	9	604	437	870	1353	50
MDD005	96	99	3	3685		685	27.16%	620	1341	137	430	15	103	14	669	567	1001	5777	222
MDD005	126.5	132.5	6	2639		515	27.25%	449	913	98	324	12	81	6	494	422	719	1136	50
MDD006	3	12	9	7046		1142	28.61%	912	2929	201	670	33	237	25	1274	872	2016	2973	163
MDD006	**41.4**	**46.6**	**5.2**	**16061**	**1.61%**	**2953**	**30.49%**	**2721**	**5333**	**541**	**1772**	**80**	**560**	**48**	**3249**	**2313**	**4897**	**6583**	**337**
MDD007	0	6.5	6.5	6368		877	33.85%	662	2669	152	481	30	214	24	1457	633	2156	3207	138
MDD007	18	21	3	5658		956	24.28%	843	2417	183	579	26	168	14	880	762	1374	2680	121
MDD007	**23.9**	**39**	**15.1**	**10064**	**1.01%**	**1900**	**27.69%**	**1786**	**3439**	**363**	**1164**	**51**	**322**	**23**	**1879**	**1527**	**2787**	**3587**	**174**
MDD008	2	5	3	4159		791	29.93%	717	1337	157	495	19	120	13	859	652	1245	1135	58
MDD008	9	13	4	2615		514	22.51%	428	1028	103	337	11	63	5	405	441	588	1113	39
MDD008	32	35	3	3136		615	26.62%	532	1104	120	387	15	93	6	577	507	835	1118	47
MDD008	**41**	**50**	**9**	**11074**	**1.11%**	**2112**	**27.54%**	**1926**	**3835**	**404**	**1295**	**57**	**355**	**25**	**2053**	**1699**	**3050**	**4099**	**197**

Table 3. Assay Results

Samples with >2500ppm TREO

Hole ID	From	To	Length	Sample	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Sm ppm	Ta ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
MDD001	5	6	1	MD05006	1632.5	159.0	100.3	8.1	119.9	32.4	850.7	10.4	1095.2	557.3	165.5	114.3	91.4	23.2	13.5	832.4	83.5	5674
MDD001	**6**	**7**	**1**	**MD05007**	**3676.3**	**298.4**	**188.9**	**17.4**	**257.6**	**63.3**	**1935.1**	**18.4**	**3103.0**	**1343.4**	**393.7**	**274.4**	**197.5**	**46.3**	**27.0**	**1646.6**	**157.7**	**12471**
MDD001	13	13.9	0.9	MD05014	1244.2	111.4	73.7	5.9	93.2	23.1	602.5	10.0	1390.0	454.5	135.0	97.5	64.0	16.7	11.7	643.3	71.5	4337
MDD001	**13.9**	**14.5**	**0.6**	**MD05015**	**2782.9**	**303.5**	**216.0**	**12.6**	**220.9**	**68.1**	**1377.1**	**32.2**	**3059.1**	**973.2**	**283.4**	**212.3**	**144.7**	**43.5**	**34.3**	**1719.0**	**245.8**	**10290**
MDD001	19.8	20.8	1	MD05025	882.8	101.3	72.7	5.2	73.0	22.2	490.3	10.2	698.9	334.4	98.6	73.6	41.2	14.3	11.3	553.3	74.3	3398
MDD001	21.4	22	0.6	MD05027	1037.0	117.8	74.2	6.8	94.5	24.5	547.8	7.7	782.2	405.5	115.8	89.3	44.1	17.7	10.4	609.9	63.7	3886
MDD001	**28.5**	**29.2**	**0.7**	**MD05035**	**2726.9**	**379.1**	**310.2**	**13.5**	**239.4**	**86.8**	**1529.2**	**51.0**	**4417.9**	**976.3**	**287.7**	**208.6**	**265.9**	**51.7**	**52.1**	**2329.8**	**359.5**	**11598**
MDD001	**29.2**	**29.8**	**0.6**	**MD05036**	**4373.0**	**537.3**	**395.0**	**21.2**	**368.6**	**119.5**	**2460.8**	**54.2**	**5259.9**	**1544.6**	**461.4**	**340.1**	**334.1**	**76.5**	**62.1**	**2921.1**	**415.2**	**17071**
MDD001	54	55	1	MD05068	2698.4	235.6	132.2	12.5	212.4	45.9	1358.3	12.4	2630.6	1076.2	304.7	213.6	119.7	37.7	19.1	1209.8	109.0	9253
MDD001	65.7	66.2	0.5	MD05080	1116.6	117.7	109.1	5.0	75.6	29.7	593.0	21.2	2448.2	385.3	114.7	71.0	127.8	15.7	18.7	842.7	144.4	4423
MDD001	87.3	87.7	0.4	MD05109	1809.0	179.9	140.7	7.8	125.2	41.7	956.7	23.9	3903.1	640.4	187.2	125.8	203.8	25.8	23.5	1183.5	159.8	6801
MDD001	109	109.7	0.7	MD05135	949.7	83.8	53.2	4.9	66.7	18.0	498.2	5.8	1189.9	348.2	100.6	70.1	52.7	12.7	7.7	482.1	48.3	3318
MDD001	109.7	110.2	0.5	MD05136	933.8	103.7	95.3	4.2	63.6	25.9	467.5	20.0	2477.2	327.9	98.4	64.8	118.3	13.8	16.7	756.6	124.1	3768
MDD001	112.8	113.3	0.5	MD05140	688.0	64.6	61.3	3.0	39.0	16.2	362.3	11.8	2248.8	230.8	69.9	41.5	102.9	8.8	10.5	472.3	75.3	2604
MDD001	139.9	140.6	0.7	MD05174	791.7	89.2	99.4	3.2	50.8	22.8	422.3	20.7	2466.4	276.4	84.4	53.4	130.5	10.7	16.9	690.0	134.9	3344
MDD002	30	31	1	MD05221	2176.8	235.8	181.3	11.0	180.1	57.8	1183.1	25.6	2366.6	760.5	223.6	160.0	123.0	35.6	31.1	1455.8	179.2	8328
MDD002	**31**	**32**	**1**	**MD05222**	**2799.4**	**334.1**	**239.3**	**13.4**	**237.4**	**78.9**	**1545.1**	**29.8**	**2770.0**	**951.2**	**281.8**	**203.9**	**181.4**	**50.4**	**38.4**	**1772.4**	**214.7**	**10606**
MDD002	32	34	2	MD05223	1462.4	229.8	208.6	7.2	144.4	61.4	818.0	37.6	2066.9	517.2	153.8	115.2	134.8	31.8	37.4	1588.8	240.5	6840
MDD002	34	72.6	38.6	MD05226	1104.8	133.7	92.5	5.6	96.3	30.6	604.6	11.1	1149.4	397.8	115.3	84.2	75.6	19.5	15.2	700.6	84.6	4218
MDD002	72.6	94	21.4	MD05271	1108.4	63.5	46.4	4.4	64.2	14.4	521.1	8.6	1676.0	437.1	125.7	77.3	64.3	10.3	8.8	419.2	54.1	3571
MDD002	94	95	1	MD05296	932.8	74.7	46.8	6.9	69.9	15.9	518.0	4.4	619.5	348.8	100.6	67.5	36.0	12.5	7.1	411.9	36.9	3199
MDD002	95	110	15	MD05297	2325.8	246.4	163.7	12.3	199.3	56.0	1304.0	18.1	1694.4	840.1	243.9	173.3	120.9	39.0	24.7	1343.7	130.7	8590
MDD002	110	110.9	0.9	MD05312	862.0	107.6	93.8	3.7	80.1	28.1	463.3	16.9	1316.1	319.9	93.6	63.7	74.6	15.7	17.6	761.9	110.1	3673
MDD002	110.9	117	6.1	MD05313	1397.5	134.0	108.3	5.7	100.7	32.5	748.9	17.9	3047.9	485.9	145.7	91.5	151.6	19.9	18.4	854.2	114.1	5161
MDD002	117	118	1	MD05320	990.1	78.2	47.6	4.6	65.9	16.5	525.8	5.0	950.4	356.7	105.2	68.7	44.6	12.4	7.3	411.0	41.8	3298
MDD002	124.5	0	-124.5	MD05331	1626.5	121.6	114.9	4.9	77.9	30.3	846.9	22.8	7186.2	515.3	160.9	87.7	384.4	16.2	20.3	837.9	153.5	5597
MDD003	0	1	1	MD05338	936.2	81.9	67.0	3.6	38.8	19.8	258.9	8.2	1047.1	172.4	52.6	33.9	59.3	10.1	10.3	449.8	68.8	2682
MDD003	1	2	1	MD05339	516.7	73.0	37.1	10.7	83.9	13.5	519.0	3.2	329.9	439.1	115.6	86.9	19.4	13.8	4.9	367.8	25.3	2768
MDD003	8.7	9.3	0.6	MD05350	1995.7	258.8	196.1	10.4	160.6	59.9	1051.8	21.5	2687.3	674.1	196.9	139.1	140.3	35.2	28.1	1466.2	178.3	7820
MDD003	9.3	10	0.7	MD05351	2861.2	284.4	187.8	12.2	197.8	60.4	1388.9	19.2	3269.1	938.5	275.7	197.1	134.5	41.3	27.4	1525.4	165.1	9879
MDD003	10	11	1	MD05352	1673.2	209.0	157.0	8.1	129.6	46.4	898.7	21.7	1678.9	572.8	167.4	118.8	94.5	28.9	25.5	1250.4	166.7	6614
MDD003	**11**	**11.7**	**0.7**	**MD05353**	**2885.7**	**347.9**	**273.2**	**12.6**	**211.7**	**80.5**	**1411.2**	**37.9**	**4531.4**	**946.2**	**278.1**	**188.8**	**246.7**	**48.1**	**44.0**	**2032.5**	**293.0**	**10986**
MDD003	11.7	12.5	0.8	MD05354	2036.2	223.1	144.7	8.8	143.4	48.4	952.4	14.4	2846.9	640.1	191.1	133.8	147.5	30.8	20.6	1160.2	126.0	7096
MDD003	34	35	1	MD05377	1543.9	101.2	60.1	8.1	101.4	20.9	692.1	8.8	1158.1	656.5	186.0	124.4	32.6	16.6	9.7	582.2	68.6	5036
MDD003	54.4	54.5	0.1	MD05385	2405.9	219.7	155.7	11.6	182.6	48.6	1196.4	24.8	2634.1	950.4	274.4	184.3	96.2	32.8	25.1	1464.3	187.7	8891
MDD003	66.8	67	0.2	MD05393	2354.9	189.1	139.2	10.4	154.3	43.2	1069.9	23.8	7572.5	874.9	266.4	169.3	348.4	28.2	22.8	1444.9	173.4	8420
MDD003	67	67.6	0.6	MD05394	1243.2	98.6	73.2	5.6	77.6	21.9	589.7	13.3	2862.7	467.4	140.3	81.8	136.6	13.5	12.3	754.0	93.6	4455
MDD003	75	76	1	MD05404	961.3	58.9	47.4	5.6	45.0	14.1	541.3	8.7	1314.1	320.4	102.2	52.7	65.4	8.8	8.0	400.4	60.5	3177
MDD003	76	76.6	0.6	MD05405	812.6	62.5	50.7	3.9	45.8	14.7	406.8	9.1	1739.1	302.3	91.9	51.9	86.8	8.8	8.1	437.0	63.7	2860
MDD003	76.6	77.2	0.6	MD05406	1044.6	97.2	63.0	5.3	73.1	20.6	557.3	7.8	1289.4	384.2	114.6	71.9	65.5	14.3	9.8	522.7	64.5	3678
MDD003	93	93.6	0.6	MD05416	588.9	80.4	53.9	3.4	56.8	17.4	274.3	7.2	498.0	248.8	70.6	53.8	28.1	11.4	8.1	545.3	58.6	2516
MDD003	99.3	100.3	1	MD05427	829.5	77.8	53.2	4.3	62.8	17.2	400.7	6.9	822.6	339.7	97.9	68.6	39.0	11.7	7.9	489.9	55.4	3046
MDD003	100.8	101.8	1	MD05429	1693.2	177.8	122.8	8.2	136.6	41.3	832.4	18.5	1897.7	668.2	193.0	144.8	88.1	26.4	20.5	1148.8	146.6	6497
MDD003	123.6	124.2	0.6	MD05443	1114.5	65.9	85.5	2.3	34.0	20.3	567.3	25.6	7728.2	318.5	109.5	38.9	459.6	7.5	17.2	676.2	150.5	3909
MDD003	124.2	125	0.8	MD05444	705.0	64.1	82.8	2.5	34.7	20.3	361.5	23.8	4118.8	226.0	73.5	32.3	256.2	7.8	16.9	646.4	142.3	2953
MDD004	16	16.5	0.5	MD05459	1108.6	87.4	48.5	5.5	82.0	17.1	529.6	4.7	1197.5	499.3	136.4	101.1	40.8	14.2	6.8	456.0	39.5	3777
MDD004	16.5	17.2	0.7	MD05460	1953.4	175.5	110.0	9.1	139.8	37.6	1000.4	11.0	1779.4	730.5	210.2	147.1	88.1	26.9	15.5	951.7	91.2	6766
MDD004	22.5	23.5	1	MD05470	727.8	69.6	38.4	4.5	54.2	14.2	369.4	4.1	597.7	276.8	82.6	55.1	21.0	10.6	5.8	390.3	33.4	2579
MDD004	23.5	24.4	0.9	MD05471	2655.1	270.3	168.7	12.0	207.0	59.1	1411.7	18.4	3039.8	983.2	291.6	204.9	141.3	40.9	26.0	1490.2	153.1	9643
MDD004	**24.4**	**25**	**0.6**	**MD05472**	**6316.9**	**735.5**	**506.1**	**30.3**	**527.5**	**166.0**	**3508.6**	**56.4**	**6428.1**	**2354.9**	**679.5**	**493.5**	**357.1**	**108.2**	**72.6**	**4027.7**	**446.9**	**24169**
MDD004	**25**	**26**	**1**	**MD05473**	**3367.1**	**369.7**	**246.4**	**16.5**	**277.2**	**84.2**	**1842.9**	**26.6**	**3200.5**	**1256.7**	**367.3**	**256.2**	**184.6**	**55.6**	**36.0**	**2029.1**	**219.5**	**12609**

Hole ID	From	To	Length	Sample	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Sm ppm	Ta ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
MDD004	26	27	1	MD05474	2414.6	216.8	136.3	11.0	177.7	46.2	1248.1	13.8	2054.1	912.0	265.2	180.2	107.0	33.4	19.6	1189.2	117.8	8420
MDD004	**27**	**27.9**	**0.9**	**MD05475**	**4965.4**	**504.0**	**340.9**	**22.7**	**375.4**	**114.7**	**2794.7**	**37.3**	**4477.2**	**1769.0**	**528.6**	**359.2**	**285.7**	**75.9**	**49.6**	**2733.8**	**298.2**	**18054**
MDD004	27.9	28.6	0.7	MD05476	1329.0	148.0	101.3	6.9	106.1	33.6	724.1	12.1	1025.7	494.0	145.0	105.9	84.4	22.1	15.2	764.5	91.5	4942
MDD004	46	47	1	MD05484	1184.7	105.7	65.8	5.6	86.6	21.8	614.8	6.5	893.9	433.1	127.3	86.6	47.6	15.6	9.4	522.2	57.5	4029
MDD004	47	48	1	MD05485	854.9	55.6	33.1	4.9	50.7	11.0	454.5	3.4	526.3	307.1	92.2	57.0	26.5	8.5	4.3	273.5	28.3	2696
MDD004	**54.6**	**55.2**	**0.6**	**MD05493**	**3035.5**	**300.5**	**211.9**	**13.3**	**224.5**	**67.3**	**1652.1**	**23.2**	**5113.8**	**1053.5**	**315.7**	**202.9**	**298.6**	**42.0**	**29.7**	**1490.9**	**195.7**	**10676**
MDD004	55.2	56	0.8	MD05494	966.6	63.9	45.2	5.0	53.5	13.4	493.5	5.7	2921.1	335.4	101.7	55.7	164.6	9.2	6.4	329.3	47.1	3049
MDD004	80.6	81.6	1	MD05507	1385.6	175.0	140.2	7.6	131.0	39.6	692.9	23.2	1568.0	531.6	152.8	118.8	74.1	24.8	22.5	1148.3	165.5	5751
MDD004	103.9	104.7	0.8	MD05524	1771.4	150.8	118.2	8.2	116.4	33.1	950.6	19.1	3541.4	619.4	186.7	117.9	188.7	21.3	19.3	875.5	138.8	6204
MDD004	109	109.6	0.6	MD05530	1749.0	143.0	106.3	8.4	117.0	30.8	1001.9	14.9	1714.8	587.8	178.3	109.7	87.5	20.6	16.4	837.3	116.8	6073
MDD004	138.6	139.6	1	MD05545	617.8	82.1	103.3	2.7	41.7	23.4	311.8	25.8	2304.0	203.7	63.5	34.6	132.0	9.5	20.4	739.6	159.2	2954
MDD004	139.6	140.6	1	MD05546	1089.9	81.1	63.7	5.6	76.5	18.1	507.6	10.5	1886.1	445.0	124.8	84.4	93.3	13.1	10.0	524.4	68.6	3766
MDD005	22.7	23.3	0.6	MD05565	1935.5	182.0	120.5	8.5	137.9	38.3	1023.2	11.9	2755.7	677.1	199.0	131.3	114.1	26.1	16.5	925.5	100.8	6673
MDD005	**23.3**	**24**	**0.7**	**MD05566**	**4746.0**	**529.8**	**356.9**	**22.2**	**380.5**	**112.4**	**2616.1**	**35.8**	**4401.7**	**1658.1**	**490.7**	**347.4**	**257.1**	**74.0**	**49.6**	**2709.8**	**304.6**	**17409**
MDD005	24	25	1	MD05567	2185.3	246.1	167.0	11.0	174.4	53.7	1214.8	17.8	1929.9	771.7	226.5	159.0	112.7	34.9	23.0	1294.6	145.5	8113
MDD005	**25**	**26**	**1**	**MD05568**	**3308.0**	**306.3**	**198.3**	**16.1**	**249.0**	**62.6**	**1712.7**	**19.8**	**3314.5**	**1254.4**	**360.9**	**255.7**	**146.1**	**46.4**	**26.2**	**1603.3**	**167.9**	**11558**
MDD005	**27.6**	**28.2**	**0.6**	**MD05571**	**3947.3**	**340.3**	**228.2**	**19.1**	**295.0**	**71.3**	**2049.5**	**22.8**	**4469.0**	**1463.5**	**427.4**	**291.5**	**189.3**	**52.4**	**32.0**	**1876.6**	**186.3**	**13629**
MDD005	**29**	**30**	**1**	**MD05573**	**3837.4**	**385.7**	**252.7**	**18.3**	**295.9**	**80.1**	**2051.1**	**25.2**	**4209.7**	**1395.8**	**408.6**	**280.3**	**196.9**	**56.6**	**33.7**	**2030.6**	**207.3**	**13700**
MDD005	65.2	66.2	1	MD05591	1040.6	82.5	60.6	5.2	65.2	17.6	559.5	9.8	1187.6	356.0	107.9	67.4	58.9	11.9	10.6	509.8	66.1	3583
MDD005	66.2	67	0.8	MD05592	1225.9	143.4	107.0	6.7	100.2	32.8	563.5	14.8	1693.9	491.8	139.2	96.7	63.0	19.1	16.5	924.0	105.8	4820
MDD005	81.8	82.6	0.8	MD05598	1590.4	193.1	188.3	6.3	110.8	49.0	822.4	41.5	4455.9	534.4	164.0	100.5	240.8	24.1	33.6	1399.7	261.1	6673
MDD005	97	98	1	MD05613	965.0	69.1	58.1	2.3	41.8	15.6	469.9	11.4	5007.5	302.1	96.5	43.9	234.4	8.5	9.8	474.0	74.5	3192
MDD005	98	99	1	MD05614	1766.0	146.8	103.1	6.3	104.0	31.3	861.2	20.7	6625.5	568.2	180.0	103.2	279.9	21.1	17.2	794.5	136.9	5861
MDD005	126.5	127.5	1	MD05627	958.9	105.5	72.3	5.6	76.8	22.1	496.5	10.2	891.5	360.4	102.9	73.9	51.3	14.4	10.7	567.1	70.0	3555
MDD005	127.5	128.5	1	MD05628	928.3	84.2	56.6	4.4	70.9	18.1	471.0	7.9	1397.1	341.0	100.0	68.4	70.1	12.4	8.6	513.2	59.6	3312
MDD005	129.5	130.5	1	MD05630	752.6	66.8	43.8	4.1	55.4	14.5	383.8	4.7	794.7	286.0	83.1	57.4	36.7	10.2	6.1	373.1	38.5	2629
MDD005	131.5	132.5	1	MD05632	1036.4	90.0	56.9	5.0	77.0	19.3	538.3	5.8	1069.0	379.4	112.0	76.6	57.0	12.9	7.7	480.6	50.7	3555
MDD006	3	4	1	MD05641	1654.8	177.6	145.0	4.2	69.1	42.7	243.1	20.8	1435.0	154.4	49.2	41.8	98.5	20.6	21.8	1014.4	156.9	4649
MDD006	4.6	5.2	0.6	MD05643	1333.3	75.5	45.9	4.3	58.5	14.8	367.5	5.7	1444.9	312.5	90.1	65.0	65.2	10.8	6.8	321.3	47.0	3335
MDD006	**5.2**	**6**	**0.8**	**MD05644**	**3796.2**	**299.8**	**240.4**	**12.5**	**184.5**	**68.2**	**965.3**	**39.5**	**3498.9**	**738.1**	**215.4**	**179.9**	**239.6**	**39.9**	**39.3**	**1470.6**	**292.3**	**10386**
MDD006	**6**	**7**	**1**	**MD05645**	**4030.0**	**363.4**	**267.2**	**14.9**	**228.0**	**77.9**	**1362.0**	**38.5**	**3641.0**	**1004.2**	**291.4**	**226.6**	**249.3**	**50.1**	**41.2**	**1448.8**	**296.2**	**11753**
MDD006	**7**	**8**	**1**	**MD05646**	**4972.8**	**302.0**	**198.6**	**14.4**	**220.6**	**63.0**	**1348.6**	**24.0**	**4464.5**	**1023.5**	**301.9**	**236.3**	**281.3**	**45.1**	**30.2**	**1195.9**	**199.3**	**12300**
MDD006	8	8.6	0.6	MD05647	2647.5	245.4	161.1	11.4	186.1	51.2	1286.1	19.6	2218.2	876.7	253.6	182.9	127.5	35.2	23.6	1181.7	164.5	8832
MDD006	8.6	9.4	0.8	MD05648	2164.8	352.0	311.9	13.5	221.9	84.5	1052.7	56.1	1862.9	799.6	221.2	186.7	123.3	45.3	50.0	2276.9	391.3	9950
MDD006	9.4	10	0.6	MD05649	2863.4	227.1	144.4	12.4	175.3	46.0	1122.4	16.9	2238.4	809.2	234.2	176.3	156.9	33.3	21.4	953.6	142.2	8415
MDD006	11	12	1	MD05651	1310.8	138.1	95.6	7.6	98.5	29.8	591.5	10.9	1141.9	432.5	124.1	91.4	62.3	19.2	13.5	723.2	86.4	4556
MDD006	**41.4**	**42**	**0.6**	**MD05669**	**4885.4**	**506.5**	**345.5**	**21.5**	**358.1**	**109.3**	**2652.1**	**38.6**	**7777.2**	**1652.1**	**498.0**	**336.9**	**421.0**	**71.3**	**49.7**	**2575.9**	**315.3**	**17385**
MDD006	**42**	**43**	**1**	**MD05670**	**5160.7**	**578.6**	**404.2**	**24.9**	**426.1**	**124.4**	**2801.7**	**44.5**	**5115.2**	**1854.5**	**541.9**	**394.9**	**287.0**	**81.8**	**56.9**	**3031.2**	**371.9**	**19174**
MDD006	43	44	1	MD05671	1849.8	162.3	102.4	9.0	140.7	33.9	910.4	10.7	1565.5	713.8	202.9	144.7	76.8	25.1	14.5	829.2	89.6	6314
MDD006	**44**	**45**	**1**	**MD05672**	**7413.8**	**800.9**	**557.2**	**34.1**	**579.0**	**177.0**	**3995.3**	**61.9**	**7072.4**	**2507.8**	**748.4**	**534.2**	**464.8**	**114.2**	**78.9**	**4056.4**	**507.8**	**26732**
MDD006	**45**	**45.8**	**0.8**	**MD05673**	**2597.7**	**361.2**	**288.5**	**13.0**	**228.4**	**83.0**	**1392.1**	**46.5**	**2085.2**	**916.4**	**270.5**	**204.4**	**160.8**	**46.9**	**46.9**	**2135.6**	**341.8**	**10837**
MDD006	**45.8**	**46.6**	**0.8**	**MD05674**	**3926.2**	**501.2**	**380.1**	**18.2**	**324.3**	**113.1**	**2063.9**	**50.7**	**4803.9**	**1375.7**	**399.9**	**294.8**	**282.3**	**67.5**	**56.3**	**2668.4**	**393.5**	**15245**
MDD007	**0**	**1**		**MD05679**	**4004.2**	**314.2**	**311.1**	**7.9**	**130.4**	**84.3**	**447.8**	**54.4**	**5150.1**	**348.9**	**109.6**	**104.5**	**265.7**	**38.4**	**51.6**	**2139.1**	**380.5**	**10392**
MDD007	1	2		MD05680	2501.1	167.5	147.9	5.4	79.8	43.5	356.7	19.7	2410.0	256.3	82.5	66.9	124.1	21.2	22.9	1028.5	151.0	6028
MDD007	2	3		MD05681	1626.5	134.9	128.3	4.1	60.1	35.6	265.4	18.1	1085.3	197.7	62.1	49.9	66.7	16.9	19.8	939.9	135.6	4500
MDD007	4.7	5.5		MD05684	2135.6	188.8	123.1	9.9	150.8	40.5	909.3	12.8	2106.0	665.6	200.5	155.4	82.2	30.4	16.3	1122.4	100.4	7086
MDD007	**5.5**	**6.5**		**MD05685**	**3807.8**	**378.2**	**271.8**	**15.3**	**234.7**	**86.9**	**1329.4**	**29.1**	**3890.7**	**924.4**	**278.4**	**218.5**	**192.0**	**54.4**	**36.8**	**2142.4**	**237.2**	**12167**
MDD007	18	19		MD05698	2071.5	205.6	153.3	9.0	150.5	47.4	932.0	17.6	1933.6	647.6	194.2	153.8	111.3	30.8	21.6	1050.4	135.3	7024
MDD007	19	20		MD05699	3215.6	186.2	133.3	9.0	138.4	40.8	977.8	15.7	3035.1	672.7	207.0	147.7	151.9	28.7	18.5	828.4	125.7	8153
MDD007	23.9	24.8		MD05707	924.4	104.0	73.1	4.9	74.3	24.2	486.2	8.0	861.3	328.8	98.2	79.8	56.0	16.2	10.0	526.7	63.2	3403
MDD007	24.8	25.4		MD05708	1790.8	181.6	129.5	9.1	143.2	42.6	945.3	14.4	1510.3	638.6	188.1	145.2	101.7	29.1	18.2	947.0	113.1	6433
MDD007	25.4	26		MD05709	1285.2	129.6	97.9	5.7	93.5	30.5	616.4	10.8	1094.3	409.8	123.7	92.9	65.3	19.6	13.7	672.8	79.7	4443
MDD007	26	27		MD05710	2344.4	207.0	142.6	11.4	170.0	45.7	1277.2	14.6	2059.5	833.5	252.5	183.2	93.9	33.4	19.5	1109.1	118.9	8152
MDD007	27	28		MD05711	1046.6	110.3	79.0	5.7	86.0	25.1	524.2	7.5	838.1	385.4	114.9	90.0	41.0	17.1	9.9	606.8	64.2	3828
MDD007	28	29		MD05712	1549.6	148.4	102.0	8.5	119.6	33.5	785.6	9.9	1183.6	583.9	174.1	134.0	56.0	23.6	13.5	780.8	79.1	5481
MDD007	**29**	**30**		**MD05713**	**4843.8**	**512.0**	**376.2**	**22.2**	**395.2**	**116.4**	**2743.4**	**37.8**	**4369.0**	**1712.8**	**523.2**	**389.1**	**247.4**	**79.0**	**49.6**	**2750.9**	**308.3**	**17918**

Hole ID	From	To	Length	Sample	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Pr ppm	Sm ppm	Ta ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
MDD007	**30**	**31**		**MD05714**	**2911.2**	**268.5**	**178.0**	**14.7**	**223.3**	**58.8**	**1502.5**	**17.4**	**2799.1**	**1075.4**	**318.3**	**238.1**	**116.9**	**42.9**	**23.9**	**1459.0**	**146.3**	**10224**
MDD007	31	32		MD05715	824.9	71.9	47.4	4.5	62.4	15.5	404.0	4.6	681.7	333.1	95.3	70.3	22.4	11.3	6.6	408.3	37.3	2891
MDD007	**32**	**33**		**MD05716**	**3079.6**	**296.7**	**204.4**	**14.9**	**243.4**	**65.9**	**1653.0**	**21.8**	**2818.9**	**1080.4**	**326.2**	**240.0**	**135.9**	**46.6**	**29.2**	**1619.4**	**174.6**	**10970**
MDD007	**33**	**34**		**MD05717**	**3629.2**	**376.5**	**261.5**	**17.4**	**285.2**	**84.1**	**2080.5**	**27.0**	**3668.2**	**1235.7**	**384.7**	**275.8**	**225.8**	**58.5**	**34.3**	**1909.3**	**217.1**	**13111**
MDD007	**34**	**35**		**MD05718**	**5154.3**	**547.0**	**390.4**	**23.9**	**406.9**	**124.6**	**2916.2**	**40.4**	**4876.0**	**1757.2**	**535.6**	**389.8**	**321.2**	**83.4**	**53.1**	**2920.5**	**322.0**	**18894**
MDD007	**35**	**36**		**MD05719**	**5763.4**	**630.5**	**448.7**	**28.0**	**469.5**	**141.7**	**3173.9**	**46.8**	**4788.8**	**2079.3**	**614.6**	**474.1**	**346.5**	**94.7**	**61.7**	**3217.9**	**367.2**	**21232**
MDD007	**36**	**37**		**MD05720**	**4720.3**	**469.2**	**332.4**	**22.7**	**358.9**	**107.1**	**2644.2**	**34.6**	**4301.8**	**1680.8**	**506.7**	**363.5**	**253.5**	**74.6**	**45.3**	**2409.7**	**267.7**	**16919**
MDD007	37	38		MD05721	2415.0	217.7	141.8	11.6	177.3	46.7	1259.6	13.7	2034.8	892.1	263.7	191.5	91.9	34.3	19.3	1187.2	111.4	8421
MDD007	38	39		MD05722	1312.4	98.8	60.5	6.0	90.6	20.7	654.8	6.7	1103.6	500.0	146.9	103.5	44.4	16.3	8.3	520.9	54.5	4338
MDD008	**2**	**3**		**MD05726**	**2903.1**	**272.6**	**225.4**	**13.7**	**195.5**	**66.5**	**1415.3**	**32.8**	**2207.6**	**963.2**	**299.4**	**215.4**	**133.2**	**40.0**	**34.2**	**1815.3**	**240.0**	**10551**
MDD008	9	10		MD05733	740.4	76.1	63.5	4.1	50.0	18.6	342.6	8.6	594.8	236.8	72.2	51.0	32.9	11.1	9.5	462.1	67.4	2675
MDD008	12	13		MD05736	1861.5	93.9	61.2	7.5	101.5	20.0	794.1	7.0	1851.3	626.3	185.6	119.8	73.2	17.2	8.6	513.5	55.0	5391
MDD008	21.4	22.1		MD05749	2546.7	198.1	156.5	10.3	146.9	46.6	999.1	19.5	2816.3	811.4	244.0	164.6	76.1	30.1	21.7	1285.8	148.8	8258
MDD008	33	34		MD05762	1088.4	100.9	69.1	5.8	77.8	22.3	552.4	6.2	1016.5	398.4	118.7	81.6	41.7	15.7	8.9	580.5	51.9	3836
MDD008	34	35		MD05763	1336.7	117.6	77.9	7.6	96.5	25.8	673.7	8.2	999.9	493.8	147.2	97.4	60.9	18.9	10.7	622.0	65.7	4581
MDD008	37.6	38.2		MD05767	2128.1	233.6	173.3	11.6	161.0	53.3	1133.4	20.2	1701.5	749.8	225.4	159.4	118.1	34.6	24.3	1271.4	158.3	7888
MDD008	41	42		MD05771	861.0	68.4	43.3	6.8	64.8	14.6	461.5	6.0	690.9	321.8	96.0	69.0	43.7	12.3	6.2	346.2	40.4	2912
MDD008	42	43		MD05772	1169.1	83.8	45.9	5.5	86.5	17.1	593.2	4.1	1182.8	430.3	128.8	92.2	59.2	15.6	6.0	391.1	35.7	3738
MDD008	43	44		MD05773	2853.6	209.6	117.5	14.2	201.9	41.3	1472.2	11.8	2950.0	1032.7	308.5	218.9	134.1	36.8	15.8	946.1	94.0	9118
MDD008	44	45		MD05774	2888.8	208.1	126.7	12.4	194.3	43.5	1521.1	13.4	3105.9	1032.1	312.2	210.5	141.9	35.1	16.5	990.7	100.8	9278
MDD008	**45**	**46**		**MD05775**	**2721.2**	**299.5**	**217.1**	**14.2**	**214.3**	**69.0**	**1452.6**	**22.4**	**1888.6**	**962.3**	**293.1**	**207.0**	**133.5**	**44.6**	**29.8**	**1630.0**	**183.7**	**10088**
MDD008	**46**	**47**		**MD05776**	**3314.1**	**345.4**	**237.6**	**16.4**	**258.9**	**78.4**	**1758.7**	**24.9**	**2727.4**	**1197.8**	**361.2**	**262.5**	**176.4**	**53.7**	**31.8**	**1801.5**	**199.0**	**11989**
MDD008	**47**	**48**		**MD05777**	**6458.6**	**785.2**	**583.7**	**33.0**	**522.7**	**183.1**	**3405.4**	**61.6**	**5705.6**	**2277.0**	**682.4**	**498.1**	**375.2**	**114.1**	**82.0**	**4242.3**	**501.0**	**24660**
MDD008	**48**	**49**		**MD05778**	**3866.5**	**421.0**	**292.5**	**18.9**	**297.1**	**93.6**	**2008.5**	**28.7**	**3565.4**	**1373.6**	**413.0**	**297.1**	**193.5**	**64.2**	**38.5**	**2162.2**	**237.3**	**14008**
MDD008	**49**	**50**		**MD05779**	**3963.0**	**365.2**	**256.0**	**18.1**	**280.1**	**82.6**	**2110.5**	**26.1**	**3973.2**	**1366.8**	**415.3**	**270.0**	**195.5**	**58.3**	**35.4**	**2040.6**	**211.1**	**13873**

JORC Code, 2012 Edition – Table 1 report template

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.*	• *DY6 diamond drilling at Machinga was to test mineralisation identified in trenching and validate historical drill results.* • *This drilling was nominally sampled at one metre intervals, this varied when lithological or structural breaks deemed significant were encountered.* • *Core was halved using a diamond saw with one half bagged generating a 2-4kg sample for laboratory multi-element analysis including: Be, Ca, Ce, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Li, Lu, Nb, Nd, P, Pr, Sm, Sn, Ta, Tb, Th, Tm, U, W, Y, Yb, Zr* • *Core was tested with 4 measurements per for radioactive content using a hand-held scintillometer; based on these results, zones of apparently low-grade mineralization were not sampled.*
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).*	• *A total of 900m of diamond drilling was been completed at Machinga in 2023, with a maximum hole depth of 150m.* • *The Diamond drill rig was supplied by Thompson Drilling of Tete, Mozambique.* • *Both types of drilling were surveyed downhole using REFLEX GYRO SPRINTIQ north seeking gyroscopic units at 5m intervals.*
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*	• *The diamond drilling core was measured by the geologist during logging with core recovery being determined and structural index RQD also calculated.* • *Insufficient data exists to determine whether a relationship exists between grade and recovery. This will be assessed when sufficient statistical data is available.*

Criteria	JORC Code explanation	Commentary
	loss/gain of fine/coarse material.	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• *Drill samples were geologically logged over 1m lengths intervals to an appropriate level of detail to correlate specifically with sampling.* • *Geological logging of drilling was quantitative in nature.* • *All RC drill holes were logged in full.* • *All diamond drill holes are being geologically logged in detail.*
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.*	• *The RC drill ~30kg samples were riffle split in the field to obtain a representative sub-sample of 2-4kg.* • *All portions of the samples were weighted.* • *Samples were mostly dry.* • *Diamond core was not subsampled* • *The field sample size of approximately 2kg or greater is appropriate to the grain size of material sampled.* • *Appropriate industry standard quality control procedures were adopted at each stage of sub-sampling to maximize representivity of samples, with reference standards inserted during drilling, nominally every 20 samples.* • *Field duplicates were used at a rate of 5% and analyzed to ensure representivity of in situ material, nominally every 20 samples.* • *Diamond drill is being halved for analysis with the sample being weighted.* • *Sample intervals are nominally 1m intervals and varied based on lithological or mineralization contacts as required.*
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• *Samples from the DY6 DDH drilling were submitted to Intertek Minerals Laboratory Services in Kitwe, Zambia for sample preparation prior to export to Perth, Western Australia for analysis sodium peroxide fusion (DX) with hydrochloric acid digest ICP/OES or MS finish as appropriate.* • *At Intertek, samples were dried, then crushed to either -2mm or -10mm as appropriate. Large samples were riffle split and the excess stored. Samples were pulverized in an enclosed unit to 85% -75micron. A 120-150gm analytical split was taken for export to Australia and the pulp residue was retained and stored.*

Criteria	JORC Code explanation	Commentary
		• Elements analysed for the drill samples were: Ce, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Ta, Tb, Th, Tm, U, Y, Yb, Zr. • A field duplicate, blank (silica sand) and a CRM (certified reference material) were inserted approximately every 20 samples for the drilling samples. CRM codes were recorded to maintain on-going quality assurance and acceptable levels of accuracy and precision. • Three separate CRM were utilised of low, medium and high REE content in a rolling sequence during drilling.
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.*	• Assay results are reviewed by 2 company personnel. • No adjustments to data were considered necessary. •
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.*	• Drillhole collars were surveyed using DGPS on completion of the program by a licensed surveyor. • The grid system used is UTM Zone 36S, WGS 84. • Approximately 50% of the historical drill collars were located and re-surveyed to ensure coherency between both phases of drilling. •
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.*	• Current drillhole spacing is irregular as the program was first pass evaluation. • Drill samples were collected on 1m intervals on site and composited to 3m samples in zones indicated by the scintillometer to be only weakly mineralized or barren. • All other drill samples were submitted on as collected on a 1m basis.
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.*	• Drilling has been undertaken and orientated perpendicular to the inferred orientation of the mineralised structures based on the trench mapping and previous drilling results. • Three core holes were orientated to drill down the mineralized structures to generate material for metallurgical testwork.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected from the drill site and delivered by secure transport to Intertek Commodities preparation facility in Kitwe, Zambia.

Criteria	JORC Code explanation	Commentary
		• *Chain of custody was overseen by the Geology Manager.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *Data was reviewed and audited on a regular basis, along with QAQC checks, no problematic issues were identified.*

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.*	*Exploration is conducted within several licenses in Malawi, being:* • *Machinga EL0529 which is held 100% by Green Exploration Limited covering an area of 42.9km2.* • *Machinga South EL0705 of 157.5km2 is held by Green Exploration Limited. All licenses are in good standing and no known impediments area known to exist.*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	*Machinga was first identified by the American Smelting and Refining Company and the Atomic Energy Division of the Geological Survey of Britain in 1955 who completed preliminary geological work (Scintillometer survey, mapping trenching and drilling). Radiometric anomalies were found but none of the factual data is available.* *Detailed geological mapping of the Malosa-Zomba mountains was completed by Bloomfield et al in 1965.* *In 1986, the United Nation Development Program sponsored an airborne magnetic and radiometric survey was undertaken by Huntington Geology and Geophysics Limited. Interpretation was completed by Paterson, Grant & Watson Limited in 1987. The survey located Uranium channel anomalies in the region.* *In 2009 Resource Star Limited completed an orientation soil sampling program over the Machinga Main Anomaly, 149 samples were collected.* *Globe Metals then joint ventured into the property and completed a trenching and follow-up drilling programs in 2010 and 2102 with 1635m of trenching and 4045m of RC drilling completed.* *(See DY6 ASX release July 6th 2023.)* *A total of 281 samples were submitted from the trench sampling and 2130 samples were submitted from the RC drilling.*

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	*The area of the Machinga licence is dominated by rocks of the Mesozoic Chilwa Alkaline Province; consisting of granite, syenite, nepheline-syenite plutons with associated volcanic vents characterized by carbonatite and agglomerate.* *The Malosa Pluton consists of a heterogeneous mixture of syenitic and granitic units. The REE-Nb-Ta mineralisation at Machinga is associated with the eastern margin of the Malosa Pluton of the Chilwa Alkaline Province.* *Uranium and thorium anomalies are associated with the REE-Nb-Ta mineralisation.*
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.*	*Drill hole positions located in the field during using handheld GPS units prior to a full survey being undertaken.*
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.*	*Core Intersection lengths are length weighted, a minimum width of 3m was used with weighted average grade required to be >2500ppm TREO to be deemed significant.* *Numerous individual samples with values >2500ppm TREO were excluded as when calculated over a 3m interval did not exceed the threshold.* *No metal equivalent values are being used.*
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*	*Core drilling intersection widths approach true widths of the mineralization in holes MDD001-005 which were drilled normal to the structure.* *Due to the low to moderate dips identified in the trenching and drilling to date, it is expected true widths will be less than reported downhole*

Criteria	JORC Code explanation	Commentary
	width not known').	*thicknesses.*
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.*	*Location maps of projects within the release with relevant exploration information contained.*
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.*	*The reporting of exploration results is considered balanced by the competent person. All results have been reported.*
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 exploration to report.*
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.*	*Mineralisation has been identified at the project area; with the worldwide focus transition to renewal energy requiring major new sources of elements critical to this transition.* *This project has been shown to host potentially economic grades of mineralisation but has not been fully explored to define the extent of this mineralisation.*