

## Further High Grade HREE & Niobium Results from Final RC holes at Machinga

### HIGHLIGHTS

- **Further high-grade HREE and Nb results** returned from the remaining 13 holes of maiden 35-hole reverse circulation ("RC") program at Machinga Main Northern Zone
- **Continued widespread HREE and Nb intersections** with assays including:
  - ❖ **11m @ 0.74% TREO, 0.29% Nb<sub>2</sub>O<sub>5</sub> from surface (3.8% DyTb/TREO) incl. 2m @ 1.36% TREO, 0.49% Nb<sub>2</sub>O<sub>5</sub> from 6m (4% Dy/Tb/TREO) (MR024)**
  - ❖ **5m @ 0.56% TREO, 0.20% Nb<sub>2</sub>O<sub>5</sub> from 103m (3.7% DyTb/TREO) (MR027)**
  - ❖ **12m @ 0.39% TREO, 0.10% Nb<sub>2</sub>O<sub>5</sub> from 6m (3.5% DyTb/TREO) (MR034B)**
  - ❖ **6m @ 0.55% TREO, 0.18% Nb<sub>2</sub>O<sub>5</sub> from 43m (4.1% DyTb/TREO) (MR026)**
  - ❖ **4m @ 0.58% TREO, 0.14% Nb<sub>2</sub>O<sub>5</sub> from 16m (4.3% DyTb/TREO) (MR034)**
- **Results follow up on recent high-grade RC intercepts incl. 7m @ 1.42% TREO with 0.49% Nb<sub>2</sub>O<sub>5</sub> from 65m (MR011) and 13m @ 0.65% TREO with 0.25% Nb<sub>2</sub>O<sub>5</sub> from surface (MR019)**
- **Results returned an average of 29% HREE:TREO and 3.6% DyTb:TREO at a cutoff grade of >0.25% TREO**
- **First batch of assays from diamond drilling ("DD") at Machinga Main North Zone (8 holes for 900m) expected to be received next month**

Heavy rare earths and niobium explorer DY6 Metals Ltd (ASX: DY6) ("DY6", the "Company") is pleased to announce the receipt of the third and final batch of assays from the RC drilling program completed at the Machinga Main Northern Zone, part of the Company's flagship Machinga project in southern Malawi.

The results are from 1m and 3m composite intervals from the third batch of 13 holes (1161m) drilled as part of DY6's maiden 35-hole, 3,643m RC drill program at Machinga Main Northern Zone.

The two prior batches delivered high-grade RC intercepts including **7m @ 1.42% TREO with 0.49% Nb<sub>2</sub>O<sub>5</sub> from 65m (MR011)** and **13m @ 0.65% TREO with 0.25% Nb<sub>2</sub>O<sub>5</sub> from surface (MR019)**.

A series of significant intercepts based on a 0.25% total rare earth oxide + yttrium (TREO) cut-off grade was returned in the latest batch of assays from the Machinga Main Northern Zone including:

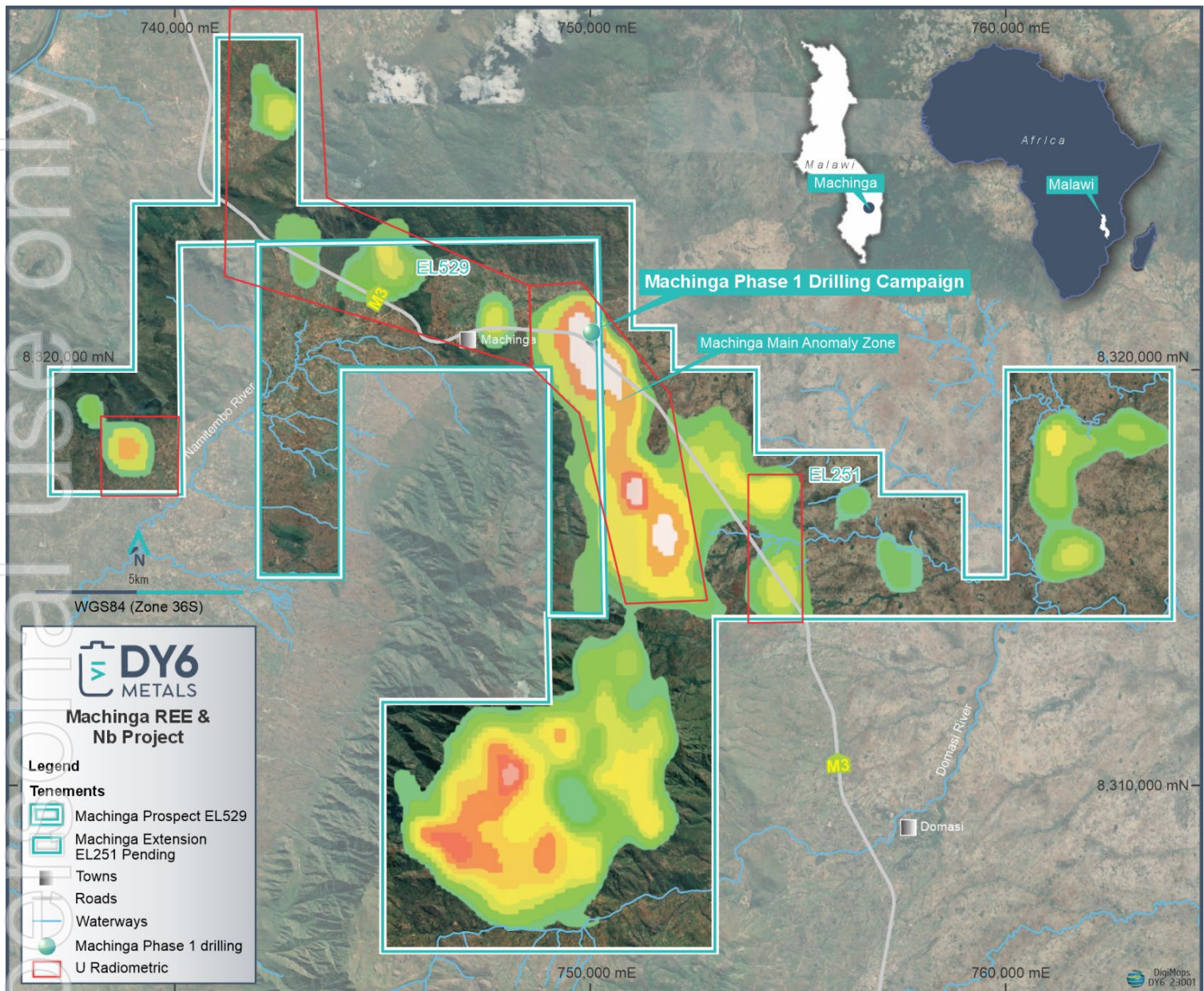
- ❖ **11m @ 0.74% TREO, 0.29% Nb<sub>2</sub>O<sub>5</sub> from surface (3.8% DyTb/TREO) incl. 2m @ 1.36% TREO, 0.49% Nb<sub>2</sub>O<sub>5</sub> from 6m (4% Dy/Tb/TREO) (MR024)**
- ❖ **5m @ 0.56% TREO, 0.20% Nb<sub>2</sub>O<sub>5</sub> from 103m (3.7% DyTb/TREO) (MR027)**
- ❖ **12m @ 0.39% TREO, 0.10% Nb<sub>2</sub>O<sub>5</sub> from 6m (3.5% DyTb/TREO) (MR034B)**
- ❖ **6m @ 0.55% TREO, 0.18% Nb<sub>2</sub>O<sub>5</sub> from 43m (4.1% DyTb/TREO) (MR026)**
- ❖ **4m @ 0.58% TREO, 0.14% Nb<sub>2</sub>O<sub>5</sub> from 16m (4.3% DyTb/TREO) (MR034)**

**The mineralisation at the Machinga alkaline complex contains a higher proportion of valuable dysprosium-terbium (DyTb) with results indicating an average 3.6% DyTb:TREO in samples greater than 0.25% TREO.**

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, as well as the suggestion of the mineralised zones thickening at depth. Significant drill intercepts received from the third batch of assays are included in Table 2.

Samples will be selected for petrography from both the core and RC drill material. The Company has engaged a consulting metallurgist to review the lithology, and selected RC sample pulps will be assayed for major and trace elements followed by x-ray diffraction ("XRD") for mineral characterisation. Once all the DD assays are completed, QEMSCAN will be used on selected core samples to determine mineralogy and assist with development of a metallurgical program.

Results for the first batch of DD assays (eight diamond holes drilled for 900m) are expected next month.

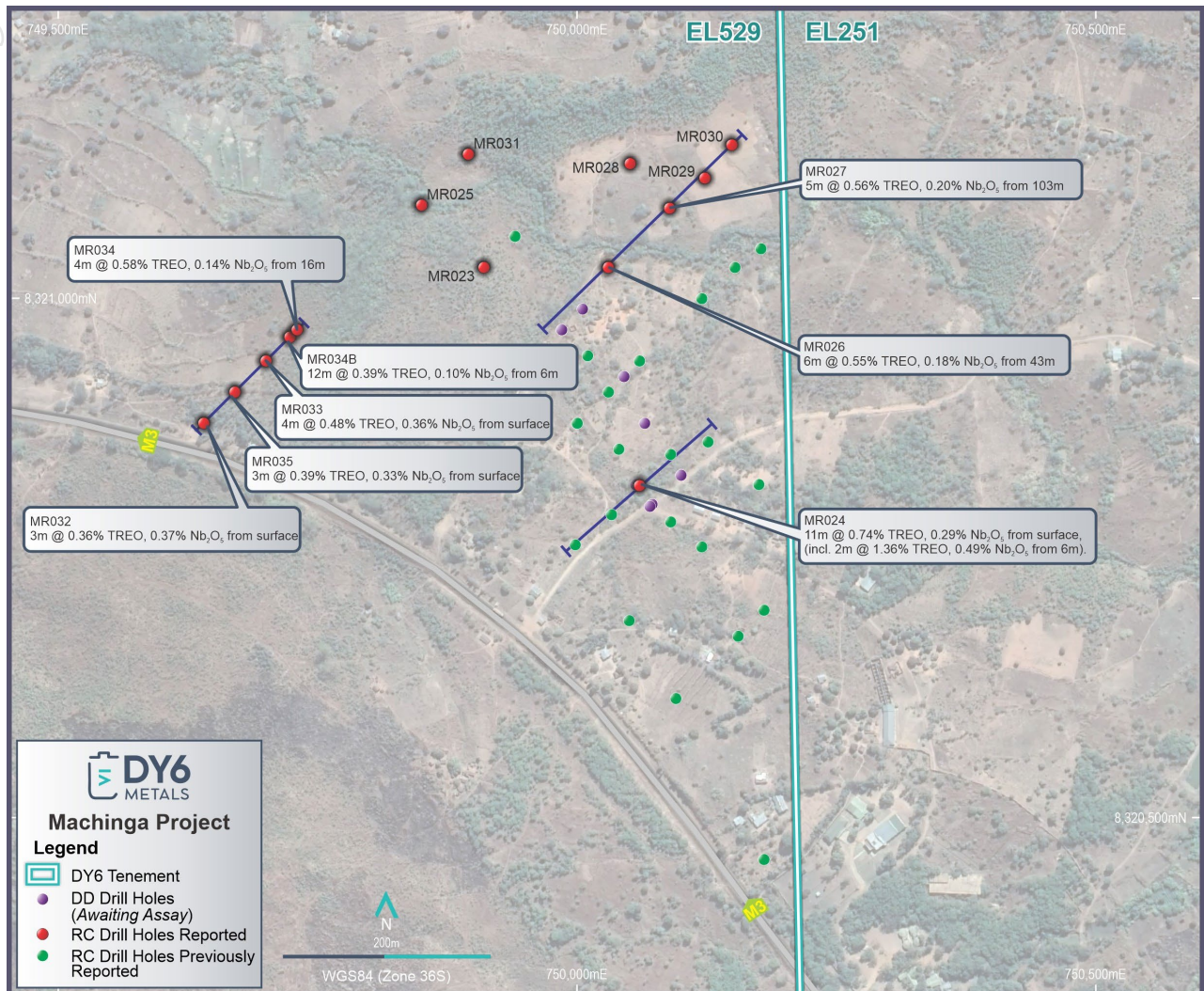


**Figure 1: Machinga Project location in Southern Malawi (U radiometric)**

The host rocks to the mineralisation at Machinga are a complex mix of syenitic intrusives relating to the nearby Malosa pluton that have been emplaced in the basement metamorphic gneisses and migmatites. The mineralisation appears to be hosted within hydrothermal breccias dipping at approximately 35° to the NE. It is likely there are several parallel structures stacking within the intrusion itself, which have the potential to increase the volume of mineralisation.

The foliation of the host complex appears to have a steep southwesterly dip suggesting the structures hosting the breccias are at right angles to the foliation. How and when the emplacement of the breccias and mineralisation occurred will require additional study.

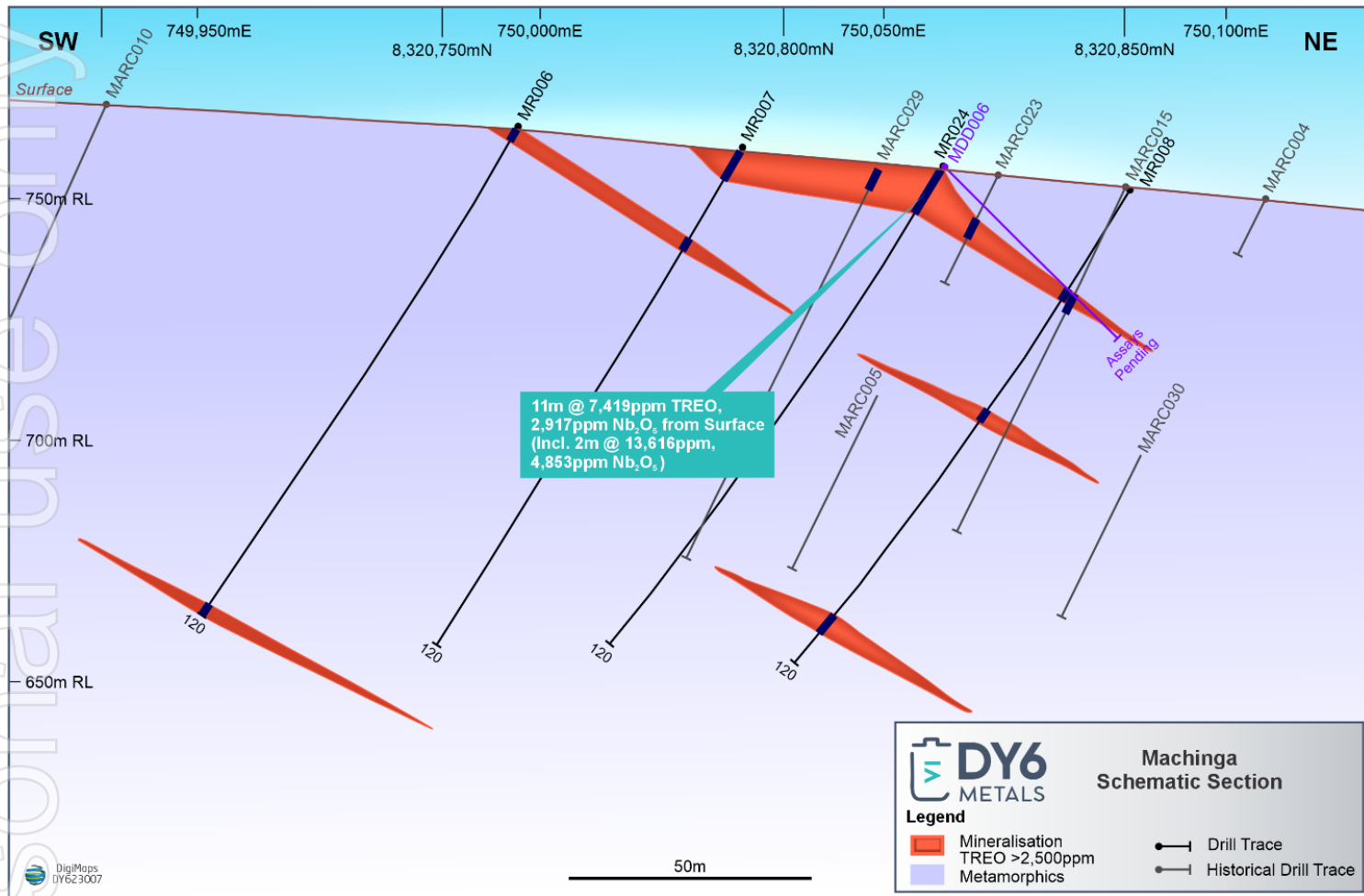




**Figure 2: Drill collar locations at Machinga North prospect – third batch of 13 RC hole collars**

The mineralised zones (as shown in Figures 3, 4 & 5 cross-sections below) demonstrate excellent continuity with radiometrics predicting the mineralised higher-grade zones with accuracy during drilling.

As more information becomes available it is becoming apparent that post mineralisation faulting has occurred, as shown below in Figure 3, where possible faulting between MR007 and MR024 creates the changes in dip and breaks in the mineralised zones at depth in MR008, MR024 and MR007.

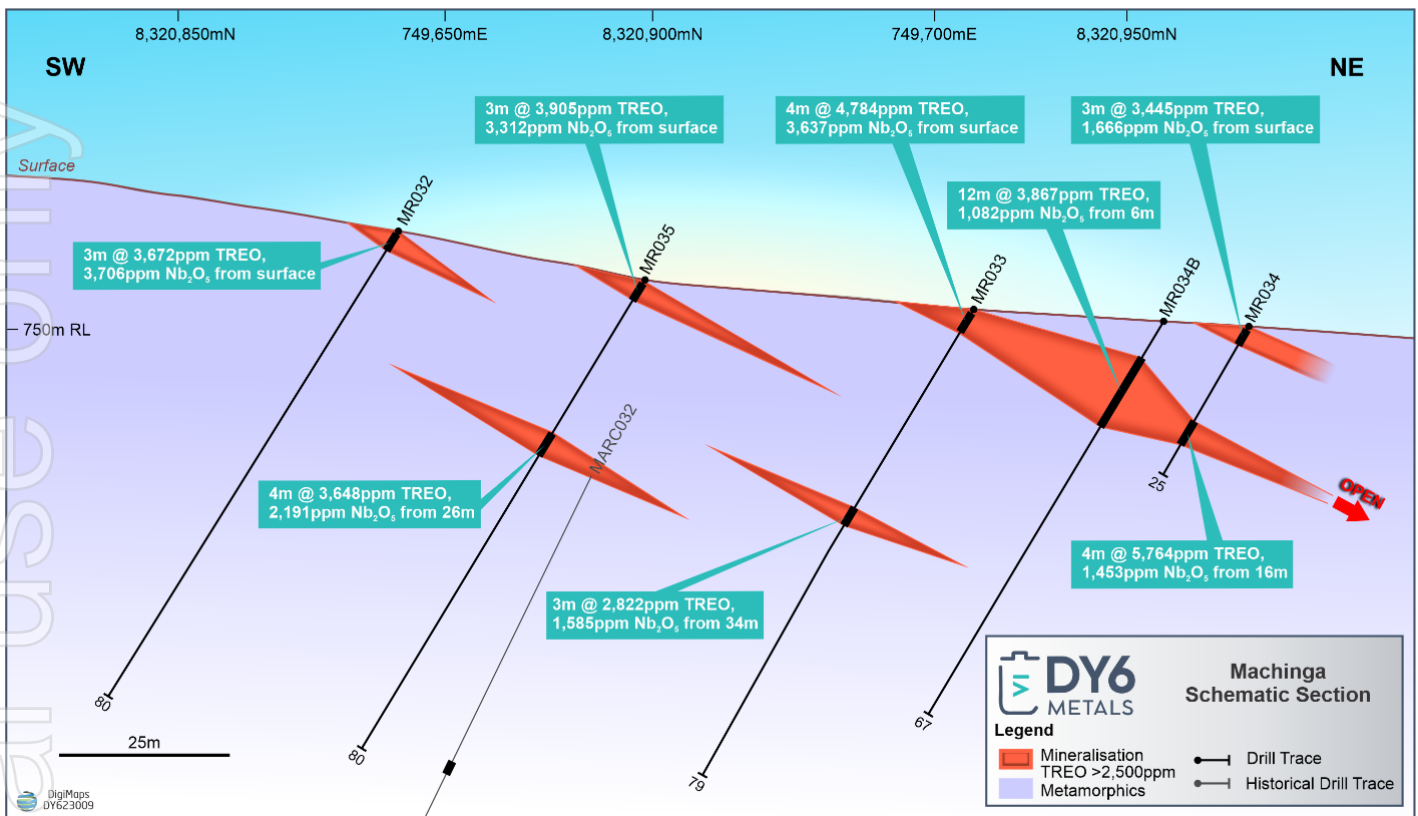


**Figure 3:** Drill Section DY6 Metals holes MR006, 007, 008 and 024.

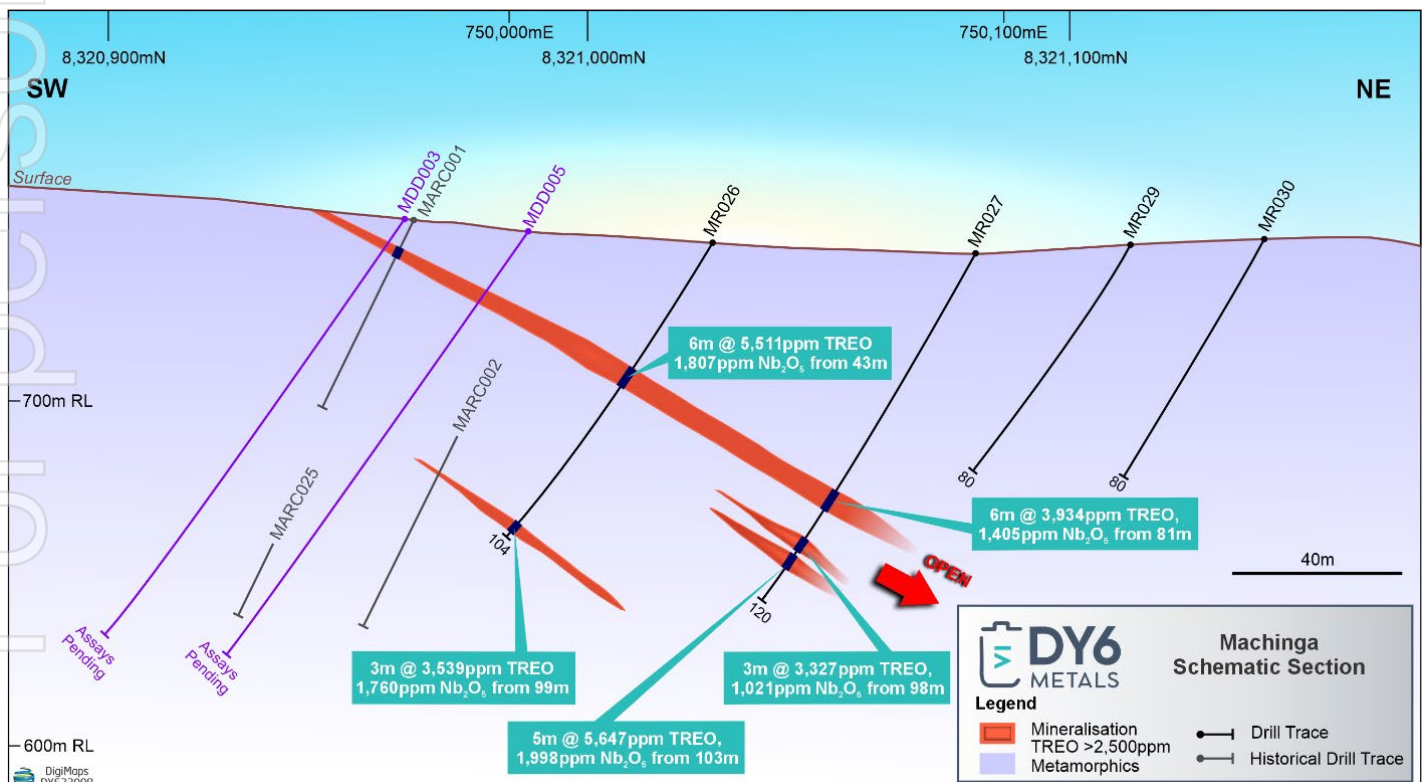
Figure 4 (below) also shows the probability of faulting with the discontinuity of mineralised zones between holes, especially since hole MR034 was terminated early due to excessive water inflows and broken ground and the initial inference as to why no significant mineralisation was intersected in holes MR025 and MR031.

The mineralisation in holes MR032-035 is a continuation of the mineralisation intersected in historic drilling by Globe Mining and Metals (ASX:GBE) to the west of the main highway (M3). Results in hole MR020 previously reported (DY6 ASX Announcement 10 October 2023) are interpreted to be the southward continuation of this zone, indicating a strike length in excess of 650m for the mineralised system.

This system is open to both the northwest and southeast of the Machinga prospect.



**Figure 4: Drill Section DY6 Metals holes MR032, 033, 034, 034B and 035.**



**Figure 5: RC drill section, showing mineralisation down dip of structural/stratigraphic diamond holes MDD001 & MDD002 in DY6 Metals holes MR026, 027, 029 and 030.**



RC holes MR026 & MR027 tested the continuity of mineralised zones from the south and to ensure there were mineralised zones on section and remaining open at depth. Shallow RC holes MR029 and MR030 were to test for the presence of mineralised zones to the east where historical high grade surface rock chip samples from this area were reported.

The diamond drill holes MDD003, MDD005 & MDD006 were planned as geological holes based on the premise that mineralisation was hosted in pegmatitic units within the host sequence and assumed to be sub-parallel to the foliation of the metamorphic sequence. The metamorphic sequence was interpreted to have a shallow foliation dip to the northeast.

This assumption appears to have been incorrect and the holes then became important in developing an understanding of the structural controls of the host hydrothermal breccias.

Most REE breccias occurrences are typically pipelike structures, whereas Machinga shows a strong planar structurally controlled character.

Samples are being selected for petrology and mineralogical studies; these will show if the breccia zones are a related variant of fenite dyke systems derived from an unknown carbonatite-type intrusion or related to the adjoining Malosa Syenite pluton which is part of the regional Chilwa alkaline province of Southern Malawi.

Geophysical consultants are undertaking a full reprocessing and reinterpretation of regional data obtained from the Government of Malawi covering the entire southern half of Malawi.

#### Salambidwe

Geological mapping, geochemical sampling and the ground radiometric survey commenced this month at the Salambidwe Project, 200km from Machinga, with the purpose of identification and delineation of a geochemical anomaly to be tested in future drilling. An airborne electromagnetic survey is planned to be conducted over Salambidwe in November. Community engagement will take place prior to commencement of the survey.

-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
<a href="mailto:lloyd.kaiser@dy6metals.com">lloyd.kaiser@dy6metals.com</a>	<a href="mailto:john.kay@dy6metals.com">john.kay@dy6metals.com</a>	+61 411 479 144

## Abbreviations

- **TREO** = Total Rare Earth Oxides – La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>
- **HREO** = Heavy Rare Earth Oxides – Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>
- **HREO%** = HREO/TREO \* 100
- **DyTb:TREO** = (Dy<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub>)/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.*

*The exploration results contained in this announcement were first reported by the Company in its prospectus dated 3 April 2023 and announced to ASX on 27 June 2023. The results were reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus.*

## Technical References

Simandl, G.J. and Paradis, S., 2018: Carbonatites: related ore deposits, resources, footprint, and exploration methods, Applied Earth Science, 127:4, 123-152.

Kaonga, H., Echigo, T. and Watanabe, Y., 2023: HFSE and REE mineralization at Machinga prospect in the Chilwe alkaline province, southern Malawi. Journal of African Earth Sciences, Vol 198.



**Table 1: Drill Collar Locations**

Hole Id	Easting	Northing	Elevation	Azimuth	Dip	Total Depth
MR001	750120.3	8320756.9	761.7	214.3	-60.0	120
MR002	750128.0	8320862.7	751.4	217.4	-60.0	120
MR003	750173.6	8320819.7	756.1	222.6	-60.0	120
MR004	750179.6	8321045.6	739.1	228.1	-60.0	120
MR005	750151.7	8321030.3	739.8	221.5	-60.0	120
MR006	749997.2	8320760.5	764.5	228.0	-60.0	120
MR007	750031.5	8320791.8	759.8	228.2	-60.0	120
MR008	750083.3	8320853.2	751.8	230.1	-60.0	120
MR009	750033.9	8320909.0	754.0	225.7	-60.0	120
MR010	750061.4	8320940.6	750.8	225.7	-60.0	120
MR011	750116.8	8320995.6	744.3	223.9	-60.0	120
MR012	750041.4	8320854.4	755.2	224.3	-60.0	80
MR013	750182.5	8320702.3	764.6	223.9	-60.0	120
MR014	750144.6	8320683.0	768.8	226.7	-60.0	120
MR015	750044.3	8320684.8	768.1	227.7	-60.0	120
MR016	750096.3	8320612.6	771.6	225.7	-60.0	120
MR017	749918.6	8320827.1	764.4	215.3	-60.0	82.27
MR018	749982.0	8320880.1	760.9	227.4	-60.0	120
MR019	750088.5	8320786.7	759.1	217.7	-60.0	80
MR020	750177.5	8320462.6	765.0	233.6	-60.0	120
MR021	750007.7	8320938.0	754.2	228.6	-60.0	80
MR022	749939.5	8321059.3	743.9	221.6	-60.0	120
MR023	749905.8	8321021.2	751.1	223.3	-60.0	112
MR024	750056.1	8320825.6	756.2	224.4	-60.0	120
MR025	749834.1	8321078.0	742.0	226.2	-60.0	40
MR026	750051.6	8321014.4	745.6	221.6	-60.0	104
MR027	750087.2	8321088.3	743.3	225.6	-60.0	120
MR028	750054.5	8321128.9	748.1	226.3	-60.0	80
MR029	750121.2	8321116.8	745.5	225.3	-60.0	80
MR030	750149.3	8321144.2	746.6	230.7	-60.0	80
MR031	749893.3	8321136.8	745.8	231.2	-60.0	94
MR032	749656.5	8320862.1	764.4	222.4	-60.0	80
MR033	749696.0	8320941.8	752.9	202.7	-60.0	79
MR034	749723.1	8320971.5	750.4	227.5	-60.0	25
MR034B	749714.6	8320962.4	751.0	224.8	-60.0	67
MR035	749666.2	8320903.0	757.1	227.0	-60.0	80

**Table 2: Significant Intersections, Holes MR023-35** (based on 2500 ppm TREO cutoff, minimum 3m width and maximum 2m internal dilution)

Hole ID		From	To	Length	TREO	MREO	HREO/TREO	La <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	Pr <sub>6</sub> O <sub>11</sub>	Nd <sub>2</sub> O <sub>3</sub>	Tb <sub>4</sub> O <sub>7</sub>	Dy <sub>2</sub> O <sub>3</sub>	Lu <sub>2</sub> O <sub>3</sub>	Y <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub> +Pr <sub>6</sub> O <sub>11</sub>	HREO	Nb <sub>2</sub> O <sub>5</sub>	Ta <sub>2</sub> O <sub>5</sub>
MR023		0	3	3	4196	563	31.38%	444	1896	102	303	17	142	14	878	405	1317	2888	113
MR023		5	8	3	3651	663	32.40%	602	1182	123	391	18	131	14	786	514	1183	1909	104
	including	6	7	1	10104	1821	32.57%	1664	3275	339	1069	49	364	38	2182	1407	3291	5429	296
MR024		0	11	11	7419	1367	27.55%	1109	2818	256	828	37	246	20	1355	1084	2044	2917	149
	Including	6	8	2	13616	2518	29.03%	2095	4911	467	1506	71	474	42	2591	1973	3952	4853	260
MR026		43	49	6	5511	1019	32.50%	904	1752	181	611	28	200	18	1199	791	1791	1807	95
MR026		99	102	3	3539	618	35.30%	569	1079	110	372	16	119	17	836	483	1249	1760	89
MR027		81	87	6	3934	777	28.46%	653	1327	141	487	19	129	9	767	629	1120	1405	57
MR027		98	101	3	3327	653	28.59%	552	1125	119	401	18	115	7	638	520	951	1021	54
MR028		103	108	5	5647	1096	27.80%	960	1938	204	681	29	182	12	1070	885	1570	1998	97
MR032		0	3	3	3672	613	29.95%	518	1409	119	373	16	106	12	752	491	1100	3706	170
MR033		0	4	4	4784	722	32.59%	623	1867	137	417	20	148	17	1071	554	1559	3637	195
MR033		34	37	3	2822	520	27.68%	492	986	105	328	11	75	9	537	433	781	1585	91
MR034		0	3	3	3445	635	30.46%	530	1194	124	393	15	103	12	714	517	1049	1666	94
MR034		16	20	4	5764	1119	25.99%	1016	2037	216	708	26	169	13	1022	924	1498	1453	85
MR034B		6	18	12	3867	742	32.11%	616	1225	133	444	22	143	9	874	577	1242	1082	59
MR035		0	3	3	3905	696	37.02%	531	1216	125	403	20	149	16	992	527	1446	3312	150
MR035		26	30	4	3648	700	25.62%	647	1303	137	449	15	99	9	649	586	934	2191	97

**Table 3: Assay Results for Samples with Total Rare Earth Oxide >2500 ppm**

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
MR023	0	1	1	MD03104	3259.1	272.4	225.4	7.1	103.5	64.0	677.1	28.9	4361.7	412.1	139.8	88.7	232.3	28.9	36.0	1543.3	220.7	8640
MR023	1	2	1	MD03105	1024.8	72.2	46.5	3.8	46.0	15.1	322.4	6.2	1433.7	259.7	81.2	53.9	34.5	9.9	7.3	396.4	45.9	2894
<b>MR023</b>	<b>6</b>	<b>7</b>	<b>1</b>	<b>MD03110</b>	<b>2666.2</b>	<b>317.2</b>	<b>227.3</b>	<b>12.9</b>	<b>201.4</b>	<b>68.2</b>	<b>1418.6</b>	<b>33.6</b>	<b>3794.9</b>	<b>916.4</b>	<b>280.2</b>	<b>189.4</b>	<b>242.4</b>	<b>41.9</b>	<b>37.8</b>	<b>1718.2</b>	<b>242.4</b>	<b>10104</b>
MR023	31	32	1	MD03138	699.6	91.8	62.9	3.8	60.7	19.5	363.7	8.8	760.0	263.1	77.8	55.8	41.1	12.1	9.9	477.9	65.5	2743
MR023	68	69	1	MD03184	973.9	97.3	76.6	5.0	68.5	22.1	515.4	11.9	1963.2	339.9	104.2	66.6	108.0	13.2	12.1	579.7	87.2	3588
MR023	98	99	1	MD03217	1020.4	64.1	64.5	4.0	44.0	16.6	545.9	15.6	3255.0	332.4	107.4	52.0	185.0	8.5	12.3	484.4	99.6	3463
MR024	0	1	1	MD03245	1878.8	174.9	145.9	5.3	82.0	43.8	420.0	21.7	1809.2	294.1	91.6	60.2	117.3	22.0	23.7	1114.8	156.8	5514
MR024	2	3	1	MD03247	2622.1	244.2	149.5	11.6	189.2	51.3	1230.7	17.6	2167.5	839.6	252.1	164.1	144.1	35.4	23.3	1119.7	134.9	8544
MR024	3	4	1	MD03248	2275.8	117.7	73.5	7.3	96.2	25.5	583.8	9.8	2076.8	496.8	149.4	95.1	100.7	18.4	12.0	579.3	75.7	5587
MR024	4	5	1	MD03249	1411.1	88.8	54.1	5.7	71.6	17.4	426.5	7.3	1302.5	376.1	114.1	73.5	74.0	13.3	9.1	380.9	55.0	3749
MR024	5	6	1	MD03250	2360.7	239.9	148.7	11.1	188.8	49.2	1049.6	16.1	1924.3	799.4	235.9	163.9	116.2	35.8	22.8	1127.5	129.3	7936
<b>MR024</b>	<b>6</b>	<b>7</b>	<b>1</b>	<b>MD03251</b>	<b>3311.2</b>	<b>321.3</b>	<b>224.4</b>	<b>14.2</b>	<b>244.2</b>	<b>71.7</b>	<b>1353.9</b>	<b>32.1</b>	<b>2884.5</b>	<b>1014.2</b>	<b>303.7</b>	<b>207.0</b>	<b>173.3</b>	<b>47.1</b>	<b>36.6</b>	<b>1648.7</b>	<b>234.0</b>	<b>10944</b>
<b>MR024</b>	<b>7</b>	<b>8</b>	<b>1</b>	<b>MD03252</b>	<b>4685.0</b>	<b>505.0</b>	<b>322.3</b>	<b>20.9</b>	<b>372.2</b>	<b>106.7</b>	<b>2217.9</b>	<b>41.6</b>	<b>3900.1</b>	<b>1567.4</b>	<b>470.0</b>	<b>326.6</b>	<b>252.7</b>	<b>74.1</b>	<b>51.7</b>	<b>2432.5</b>	<b>307.6</b>	<b>16287</b>
MR024	8	9	1	MD03253	1836.7	173.3	101.8	9.2	148.7	35.6	880.1	12.4	1541.5	709.9	206.4	137.9	78.7	26.8	15.6	894.1	91.1	6366
MR024	9	10	1	MD03254	1517.7	136.5	82.8	7.5	124.3	28.0	685.3	8.7	1292.3	589.9	169.6	113.9	66.8	21.4	12.3	708.7	70.8	5158
MR024	10	11	1	MD03255	2678.2	316.9	202.3	13.2	236.4	66.8	1320.8	21.6	3014.0	942.2	281.2	192.5	193.2	45.8	30.3	1546.5	170.2	9731
MR024	30	31	1	MD03278	1280.7	149.3	94.7	7.6	105.9	31.5	571.8	10.1	2961.7	466.2	141.0	90.8	110.7	21.6	13.7	904.1	80.9	4803
MR024	42	43	1	MD03293	937.6	83.3	55.3	5.8	68.4	17.3	467.3	7.5	865.0	351.1	104.0	64.8	43.5	12.5	8.7	461.8	54.8	3256
MR024	68	69	1	MD03325	1325.4	84.0	59.4	6.4	85.3	18.8	598.9	11.1	2061.4	504.1	149.0	93.0	83.3	13.5	10.5	568.3	70.1	4340
MR026	43	44	1	MD03576	2067.8	255.5	171.3	10.7	171.8	52.7	1101.1	19.7	2114.2	763.3	219.8	166.8	118.0	35.2	26.0	1300.9	156.7	7865
<b>MR026</b>	<b>44</b>	<b>45</b>	<b>1</b>	<b>MD03577</b>	<b>2794.7</b>	<b>386.3</b>	<b>294.1</b>	<b>14.4</b>	<b>250.1</b>	<b>84.7</b>	<b>1540.6</b>	<b>43.9</b>	<b>2647.3</b>	<b>1022.2</b>	<b>288.8</b>	<b>225.7</b>	<b>181.2</b>	<b>51.4</b>	<b>48.7</b>	<b>2233.7</b>	<b>325.5</b>	<b>11598</b>
MR026	45	46	1	MD03578	1000.8	121.1	84.6	5.0	81.9	25.7	528.8	11.2	753.8	366.2	105.5	78.0	45.2	16.5	13.5	663.3	85.3	3847
MR026	46	47	1	MD03579	1399.9	171.3	115.9	7.5	113.2	36.5	763.5	14.4	1113.8	512.2	145.2	109.4	76.1	22.6	18.4	869.2	117.5	5326
MR026	48	49	1	MD03584	876.8	77.8	48.2	4.7	57.9	15.3	478.4	6.1	653.4	316.4	91.2	59.0	33.2	10.7	7.2	418.9	45.4	3031
MR026	59	60	1	MD03595	749.4	85.6	58.6	4.9	61.8	18.5	385.6	7.1	1025.0	291.7	80.7	61.3	60.6	12.0	8.8	459.5	55.7	2824
MR026	94	95	1	MD03636	774.8	85.6	61.3	3.9	60.5	17.9	416.5	7.9	1116.7	290.1	82.2	58.5	62.1	11.4	9.6	461.3	59.9	2896
MR026	100	101	1	MD03645	927.6	89.5	56.1	5.3	65.7	18.1	530.5	6.3	540.5	332.9	94.9	66.2	36.3	12.6	8.8	444.8	54.3	3270
MR026	101	102	1	MD03646	1653.2	215.2	199.5	7.9	128.8	53.2	900.4	36.8	3131.5	592.8	172.2	122.4	180.6	27.6	36.0	1492.1	250.6	7117
MR027	81	82	1	MD03764	744.8	72.1	42.7	4.0	56.0	14.4	368.0	4.5	692.8	286.6	81.4	60.7	26.3	10.9	6.1	408.9	37.6	2654
MR027	82	83	1	MD03765	2719.5	288.1	182.8	13.3	221.8	60.3	1450.9	18.8	2944.8	1026.9	290.5	215.8	151.6	42.2	27.4	1487.2	157.7	9892
MR027	84	85	1	MD03767	1676.9	185.7	131.6	8.2	127.5	39.8	863.4	19.3	1206.0	639.4	180.0	129.6	60.6	25.4	21.3	1054.6	140.5	6327
MR027	86	87	1	MD03769	761.4	77.5	43.8	5.1	61.6	15.1	383.5	4.1	603.3	308.0	83.7	64.9	27.5	11.2	6.3	398.9	36.6	2727
MR027	90	91	1	MD03773	858.0	91.5	57.7	5.2	67.2	18.8	425.3	5.7	801.5	334.4	94.3	71.2	34.8	13.3	8.9	494.2	51.0	3133
MR027	98	99	1	MD03784	1038.5	110.7	70.4	6.2	86.3	23.2	539.1	6.8	716.0	386.2	111.0	82.8	45.1	17.0	10.0	559.5	62.5	3750



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
MR027	99	100	1	MD03785	1607.2	179.2	116.1	8.7	132.8	37.3	821.9	10.8	1357.9	600.2	172.9	128.8	83.0	27.5	16.1	897.9	106.7	5866
MR027	103	104	1	MD03789	1286.4	142.8	94.4	6.9	109.8	30.6	666.1	9.5	1194.0	472.9	136.1	100.9	73.9	21.8	13.4	753.9	85.3	4742
MR027	104	105	1	MD03790	1035.5	84.2	50.5	5.7	78.9	17.4	499.1	4.7	834.7	408.8	117.8	83.0	35.5	14.0	7.2	465.6	43.6	3516
MR027	105	106	1	MD03791	2131.0	207.0	128.9	10.6	167.5	42.0	1093.0	13.0	1952.7	789.1	227.8	163.7	94.4	31.9	18.4	1109.9	115.0	7537
MR027	106	107	1	MD03792	2006.0	216.9	141.2	9.9	165.5	46.2	1083.1	14.1	1689.8	721.9	209.0	148.1	114.8	32.8	20.1	1143.1	127.1	7340
MR027	107	108	1	MD03793	1430.7	142.8	96.9	6.5	112.0	30.6	749.4	9.8	1311.2	525.5	153.4	106.0	80.5	22.3	14.2	741.5	88.8	5100
<b>MR028</b>	<b>79</b>	<b>80</b>	<b>1</b>	<b>MD03900</b>	<b>5074.5</b>	<b>464.1</b>	<b>316.2</b>	<b>24.6</b>	<b>394.4</b>	<b>97.0</b>	<b>2670.8</b>	<b>33.6</b>	<b>4747.3</b>	<b>1829.4</b>	<b>534.3</b>	<b>383.9</b>	<b>233.1</b>	<b>74.2</b>	<b>47.3</b>	<b>2563.1</b>	<b>309.1</b>	<b>17865</b>
MR032	0	1	1	MD04373	1426.8	113.9	91.1	5.9	77.7	26.8	509.9	13.0	2531.1	366.7	114.7	72.4	130.1	17.0	14.5	751.4	99.4	4482
MR032	1	2	1	MD04374	1592.2	116.3	94.9	5.8	78.1	27.3	598.7	15.8	4419.2	410.9	130.4	78.1	250.3	16.6	15.6	748.9	114.1	4892
MR032	8	9	1	MD04384	784.1	65.3	49.5	3.2	48.7	14.5	377.8	7.7	2400.9	259.4	78.4	49.0	142.3	9.6	7.8	398.4	57.3	2669
MR032	11	12	1	MD04387	687.3	74.9	53.9	4.2	54.2	16.9	356.6	6.8	997.0	241.4	71.5	50.0	55.3	11.1	8.1	436.7	57.8	2573
MR032	45	46	1	MD04427	1147.2	97.6	72.6	5.6	72.0	21.6	585.0	9.9	2229.3	379.1	114.7	75.6	136.3	14.7	11.1	549.2	73.9	3896
MR032	48	49	1	MD04430	1003.6	99.2	65.2	5.5	74.3	20.8	498.4	7.2	1037.8	349.5	103.4	72.3	52.8	14.4	9.3	551.4	58.8	3541
MR032	51	52	1	MD04433	959.0	44.7	30.6	3.4	40.2	9.8	460.1	5.5	4529.7	309.0	97.5	50.1	246.2	6.9	4.9	289.9	35.3	2830
MR033	0	1	1	MD04468	3242.9	272.7	238.5	8.7	137.4	68.0	881.5	34.6	6765.6	570.5	190.3	114.9	424.5	33.1	40.0	1845.5	254.7	9636
MR033	1	2	1	MD04469	1423.4	140.9	110.0	5.4	86.2	32.6	476.1	13.9	1832.3	350.8	106.2	79.5	116.5	18.3	18.1	877.4	110.2	4665
MR033	3	4	1	MD04471	1078.8	79.2	59.3	4.8	70.7	18.0	569.4	10.2	1305.4	369.5	115.1	68.1	82.5	11.9	10.1	521.2	68.7	3686
MR033	34	35	1	MD04508	1152.1	124.7	94.1	7.6	99.9	29.1	599.7	12.6	958.3	424.1	126.3	86.2	67.2	18.1	14.9	761.8	91.1	4398
MR033	35	36	1	MD04509	768.6	49.6	37.8	4.3	45.7	11.9	386.4	6.9	1351.8	273.9	84.9	49.1	84.6	7.6	7.0	340.1	45.8	2557
MR033	75	76	1	MD04555	910.6	76.6	63.2	4.9	62.1	17.4	445.2	11.3	1707.4	323.9	99.5	66.2	82.5	11.1	10.2	543.9	73.9	3285
MR034	1	2	1	MD04564	988.5	126.1	100.4	5.6	75.7	29.5	479.0	13.9	1471.0	347.6	107.9	72.3	103.7	16.2	16.2	796.4	106.8	3969
MR034	2	3	1	MD04565	1364.9	82.1	56.3	6.1	78.2	17.9	659.1	7.1	832.3	501.2	149.8	93.2	56.5	13.3	8.6	479.5	55.8	4306
MR034	16	17	1	MD04579	2803.7	260.9	172.4	12.8	200.4	54.9	1453.2	18.5	1682.2	1003.2	298.1	201.5	131.7	38.8	24.5	1380.2	155.2	9742
MR034	17	18	1	MD04580	1839.9	159.3	112.2	9.2	131.9	34.8	985.6	14.8	1006.5	661.5	195.7	131.6	80.0	24.2	16.7	875.9	114.4	6397
MR034	18	19	1	MD04584	1250.8	109.9	75.9	6.1	91.4	23.4	651.7	9.1	827.0	470.9	138.1	98.8	46.4	16.8	10.6	615.0	59.9	4375
MR034	19	20	1	MD04585	737.8	59.1	37.7	4.2	53.4	12.2	376.1	4.2	546.7	292.5	83.2	57.6	20.8	9.4	5.1	347.4	27.3	2541
MR034B	6	7	1	MD04597	912.7	81.4	54.7	5.4	61.3	17.2	492.2	5.9	550.1	335.4	97.9	65.5	37.4	11.9	7.7	441.8	40.9	3174
MR034B	8	9	1	MD04599	611.5	86.7	83.5	3.3	50.6	22.0	330.0	15.9	832.3	224.4	66.4	47.0	64.7	11.1	13.8	597.3	92.2	2727
MR034B	11	12	1	MD04605	907.4	67.2	44.8	4.6	61.0	13.8	484.5	6.6	828.7	342.6	100.4	66.4	61.3	10.6	7.1	353.3	43.5	3027
MR034B	12	13	1	MD04606	1454.7	115.0	66.3	7.7	103.6	21.9	750.3	7.7	791.8	539.3	159.6	114.0	62.8	18.6	9.5	495.6	53.4	4714
MR034B	14	15	1	MD04608	1134.9	117.9	85.0	6.0	84.4	25.5	597.9	11.1	944.2	420.5	123.8	87.7	66.7	16.8	12.1	653.1	72.9	4162
MR034B	15	16	1	MD04609	1163.8	127.6	101.4	6.0	89.0	28.7	629.3	16.2	2262.6	425.1	125.4	89.4	155.2	18.4	15.5	795.5	98.0	4503
<b>MR034B</b>	<b>17</b>	<b>18</b>	<b>1</b>	<b>MD04611</b>	<b>4004.3</b>	<b>754.3</b>	<b>388.8</b>	<b>28.0</b>	<b>497.0</b>	<b>142.9</b>	<b>2029.9</b>	<b>24.3</b>	<b>1697.1</b>	<b>1575.2</b>	<b>443.5</b>	<b>385.0</b>	<b>62.0</b>	<b>110.3</b>	<b>43.3</b>	<b>4152.1</b>	<b>209.4</b>	<b>17916</b>
MR034B	40	41	1	MD04637	864.3	81.4	55.4	6.1	64.0	17.5	467.2	6.1	666.8	337.3	96.8	68.8	49.6	12.2	7.2	397.3	43.6	3041
MR035	0	1	1	MD04670	1279.9	186.8	142.8	7.3	105.5	41.6	593.4	20.2	3296.9	447.6	135.8	99.3	178.6	24.0	21.6	1112.1	135.8	5268
MR035	1	2	1	MD04671	1069.7	150.2	116.6	6.2	84.0	33.8	437.7	15.3	3031.0	332.2	101.2	76.6	143.6	19.6	17.8	921.0	102.0	4221

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
MR035	26	27	1	MD04699	1384.2	105.0	67.2	6.4	93.8	20.7	692.6	7.6	1476.2	516.5	148.0	99.4	66.5	16.1	9.6	555.5	53.0	4550
MR035	28	29	1	MD04704	1314.4	115.8	75.5	7.5	100.4	24.4	695.0	9.9	1484.4	475.6	140.5	95.2	79.5	17.3	11.7	700.2	71.1	4651
MR035	29	30	1	MD04705	1026.3	84.7	67.2	4.2	63.1	18.6	544.3	12.2	2627.2	344.6	106.4	62.5	148.7	11.7	11.5	577.3	81.0	3641
MR035	40	41	1	MD04716	837.0	58.8	35.1	5.2	57.3	11.8	442.6	4.3	1003.7	305.2	90.2	55.9	48.7	8.7	5.3	343.4	32.3	2764
MR035	55	56	1	MD04734	809.3	68.7	43.4	4.5	58.0	14.1	451.6	5.4	860.2	286.4	86.0	57.3	44.8	10.5	6.4	388.1	40.2	2809
MR035	66	67	1	MD04748	740.5	55.4	36.0	4.6	51.2	12.2	389.1	5.2	2181.3	262.5	78.7	48.3	106.9	8.6	5.8	366.9	37.2	2537

## APPENDIX 1. JORC Code, 2012 Edition Table 1 – Machinga HREE-Nb-Ta Project

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at Machinga.

### Section 1: Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>RC drilling at Machinga was to test mineralisation identified in trenching and validate historical drill results. This drilling was sampled at one metre intervals, from which a 2-4kg sub sample was collected 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</li> <li>Samples were tested for radioactive content using a hand-held scintillometer; based on these results, zones of apparently low grade mineralisation were manually composited from the analytical sample split.</li> <li>A scoop portion was combined into a representative 3m sample with the balance of the analytical split sample available for follow-up analysis if required.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>A total of 3543m of RC drilling has been completed at Machinga in 2023, with a maximum hole depth of 120m.</li> <li>The PR54R RC drilling rig was supplied by Thompson Drilling of Tete, Mozambique.</li> <li>The Diamond drill rig was supplied by Thompson Drilling of Tete.</li> <li>Both types of drilling were surveyed downhole using REFLEX GYRO SPRINTIQ north seeking gyroscopic units at 5m intervals.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Sample recoveries were monitored by the geologist in the field during logging and sampling.</li> <li>If poor recoveries were encountered, the geologist and driller endeavor to rectify the problem to ensure maximum sample recovery.</li> <li>Visual assessments are made for recovery, moisture and possible contamination.</li> <li>Samples were split through a rig mounted static cone splitter to obtain a representative sample, which was inspected and cleaned as required.</li> <li>Samples were predominately dry, four RC holes were terminated early short of full depth due to excessive water inflows.</li> <li>Insufficient data exists to determine whether a relationship exists between grade and recovery. This will be assessed when sufficient statistical data is available.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Drill samples were geologically logged over 1m lengths intervals to an appropriate level of detail to correlate specifically with sampling.</li> <li>Geological logging of drilling was quantitative in nature.</li> <li>All RC drill holes were logged in full.</li> <li>All diamond drill holes are being geologically logged in detail.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>The RC drill ~30kg samples were riffle split in the field to obtain a representative sub-sample of 2-4kg.</li> <li>All portions of the samples were weighted.</li> <li>Samples were mostly dry.</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>The field sample size of approximately 2kg or greater is appropriate to the grain size of material sampled.</li> <li>Appropriate industry standard quality control procedures were adopted at each stage of sub-sampling to maximise representivity of samples, with reference standards inserted during drilling, nominally every 20 samples.</li> <li>Field duplicates were used at a rate of 5% and analyzed to ensure representivity of in situ material, nominally every 20 samples.</li> <li>Diamond drill is being halved for analysis with the sample being weighted.</li> <li>Sample intervals are nominally 1m intervals and varied based on lithological or mineralisation contacts as required.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>Samples from the RC and 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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Three separate CRM were utilised of low, medium and high REE content in a rolling sequence during drilling.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Assay results are reviewed by 2 company personnel.</li> <li>No adjustments to data were considered necessary.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Not reported</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Drillhole collars were surveyed using DGPS on completion of the program by a licensed surveyor.</li> <li>The grid system used is UTM Zone 36S, WGS 84.</li> <li>Approximately 50% of the historical drill collars were located and re-surveyed to ensure coherency between both phases of drilling.</li> <li></li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Current drillhole spacing is irregular as the program was first pass evaluation.</li> <li>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.</li> <li>All other drill samples were submitted on as collected on a 1m basis.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Drilling has been undertaken and orientated perpendicular to the inferred orientation of the mineralised structures based on the trench mapping and previous drilling results.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Samples were collected from the drill site, and delivered by secure transport to Intertek Commodities preparation facility in Kitwe, Zambia.</li> <li>Chain of custody was overseen by the Geology Manager.</li> </ul>

Criteria	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Data was reviewed and audited on a regular basis, along with QAQC checks, no problematic issues were identified.</li> </ul>

## Section 2: Reporting of Exploration Results

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

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Exploration is conducted within several licenses in Malawi, being:</p> <ul style="list-style-type: none"> <li>Machinga EL0529 which is held 100% by Green Exploration Limited covering an area of 42.9km<sup>2</sup>.</li> <li>Application Machinga South APL0251 of 157.5km<sup>2</sup> is held by Green Exploration Limited.</li> </ul> <p>All licenses are in good standing and no known impediments area known to exist.</p>
<b>Exploration done by other parties</b>	<p>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.</p> <p>Detailed geological mapping of the Malosa-Zomba mountains was completed by Bloomfield et al in 1965.</p> <p>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 &amp; Watson Limited in 1987. The survey located Uranium channel anomalies in the region.</p> <p>In 2009 Resource Star Limited completed an orientation soil sampling program over the Machinga Main Anomaly, 149 samples were collected.</p> <p>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 6<sup>th</sup> 2023.)</p> <p>A total of 281 samples were submitted from the trench sampling and 2130 samples were submitted from the RC drilling.</p>
<b>Geology</b>	<p>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.</p> <p>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.</p> <p>Uranium and thorium anomalies are associated with the REE-Nb-Ta mineralisation.</p>
<b>Drill hole Information</b>	<p>Drill hole positions located in the field during using hand held GPS units prior to a full survey being undertaken.</p>

Criteria	Commentary
<b>Data aggregation methods</b>	Other than compositing of samples on lower radiometric responses no data aggregation has been applied. No metal equivalent values are being used.
<b>Relationship between mineralisation widths and intercept lengths</b>	Insufficient drilling has been completed to determine true widths of mineralisation. 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 thicknesses.
<b>Diagrams</b>	Location maps of projects within the release with relevant exploration information contained.
<b>Balanced reporting</b>	The reporting of exploration results is considered balanced by the competent person. All results have been reported.
<b>Other substantive exploration data</b>	No other exploration to report.
<b>Further work</b>	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.