

Maiden drilling at Machinga identifies potential for widespread REE mineralisation

- **Successful completion of maiden drilling program at the Machinga HREE & Niobium Project in southern Malawi**
- *A total of 4,543m completed, consisting of 35 reverse circulation (RC) holes for 3,643m and 8 diamond drill (DD) holes for 900m*
- **Potential widespread REE mineralisation from visual inspection across majority of diamond drill core¹**
- **Potential for a large mineralised system of REE over numerous zones**
- *Assaying of the first and second batch of RC drill chips is underway at Intertek Perth with **results to be progressively released over the coming weeks***
- *Full assay results received from soil and rock chip sampling programs at Machinga North:*
 - *256 soil samples were taken on a 200m x 50m grid*
 - *Assays returned up to 3520ppm (0.35%) TREO, 3730ppm (0.37%) Nb and 1.84% Zr*
 - *35% of all soil samples returned >1000ppm (>0.1%) TREO*
 - *49 rock chip samples were taken from historic trenching*
 - *Assays returned up to 28,299 ppm (2.83%) TREO, 0.77% Nb and 6.59% Zr*

Maiden Drill Program Completed

Heavy rare earths and niobium explorer DY6 Metals Ltd (ASX: DY6) (“**DY6**”, “the **Company**”) is pleased to advise that the maiden drill program at the Company’s flagship, Machinga heavy rare earths (HREE) and niobium project (Nb) in southern Malawi has been successfully completed.

A total of 4,543 metres has been drilled at the Machinga North prospect, consisting of 35 RC holes for 3,643m and 8 DD holes for 900m (Figure 1). Three of the DD holes were drilled to provide adequate sample material for subsequent mineralogy and metallurgical test work to be carried out in the last quarter of 2023. Delineation of ore-types such as those dominated by eudialyte will assist early metallurgical testing and

¹ Note, visual observations of the presence of rock or mineral types and abundance should never be considered a proxy or substitute for petrography and laboratory analyses where mineral types, concentrations or grades are the factor of principal economic interest. Visual observations and estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. At this stage it is too early for the Company to make a determinative view on the abundances of any of these minerals. These abundances will be determined more accurately through petrography, assay, and XRF analysis. The observed presence of known REE-bearing minerals does not necessarily equate to rare earth mineralisation. It is not possible to estimate the concentration of mineralisation by visual estimation and this will be determined by chemical analysis.

commencement of mineralogical work to identify the REE-controlling phases and their distribution.



Figure 1. Diamond Drilling at Machinga North Prospect (MDD 005)

The initial drilling program has rapidly advanced geological knowledge of the Machinga alkaline complex. The drill core shows hydrothermal breccias, granite gneiss and migmatite with radiometric responses showing strong correlation with the hydrothermal breccias. **REE mineralisation was visually identified in the majority of drill core at the Machinga North prospect and indicates the potential for a large mineralised system over numerous zones.**

Preliminary interpretation of the drill core aligns with previously reported geological evaluation of the mineralisation, which is tentatively identified as Eudialyte, an important zirconosilicate and REE bearing mineral (REE, Nd, Ta, and Zr) that is enriched in HREEs, Dy and Tb (Figures 2, 3 & 4). Eudialyte was identified and confirmed by petrology by the previous project owners (refer Globe Metals and Mining ASX:GBE, 29/7/2010).

Note however that the presence of eudialyte does not necessarily equate to REE mineralisation until confirmed by chemical analysis. Furthermore, it is not possible to

visually estimate the percentage of REE mineralisation, and this will be determined by laboratory results reported in full once received.



Figure 2. Diamond drill core from hole MDD 005 containing potential REE mineralisation from visual inspection (pinkish coral colour) from approximately 130m to 135m down hole



Figure 3. Diamond drill core from hole MDD 005 containing potential REE mineralisation from visual inspection (pinkish coral colour) from approximately 139m to 143m down hole



Figure 4. Diamond drill core from hole MDD 006 (metallurgical DD hole) containing potential REE mineralisation from visual inspection (pinkish coral colour) from approximately 41m to 45m down hole

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Commenting on the conclusion of the maiden drill program, DY6 CEO Lloyd Kaiser said:

"DY6 has reached a significant milestone with the completion of its maiden drilling program on the Machinga North Prospect. The Company is pleased by the widespread visual rare earth mineralisation across the majority of diamond holes from its initial drilling campaign and the program provides an extensive sample set for future delineation of the deposit. We are optimistic that future assay and mineralogy results will further quantify visual assessment of the rare earth mineralisation in the core samples."

The diamond drill rigs have now been demobilised from the Machinga project site. Geological logging and sampling of diamond drill core is continuing on-site and is expected to be completed by late-September 2023. Core samples will be progressively submitted for assay.

The first and second batch of RC drill chips have now arrived at Intertek Perth. Assaying of the first batch is currently underway with results expected to be progressively released over the coming weeks and months, as and when they become available.

Once assays are available the geological team will commence a full geological interpretation of Machinga North in order to determine the controls on mineralisation and to identify the most prospective areas for further evaluation.

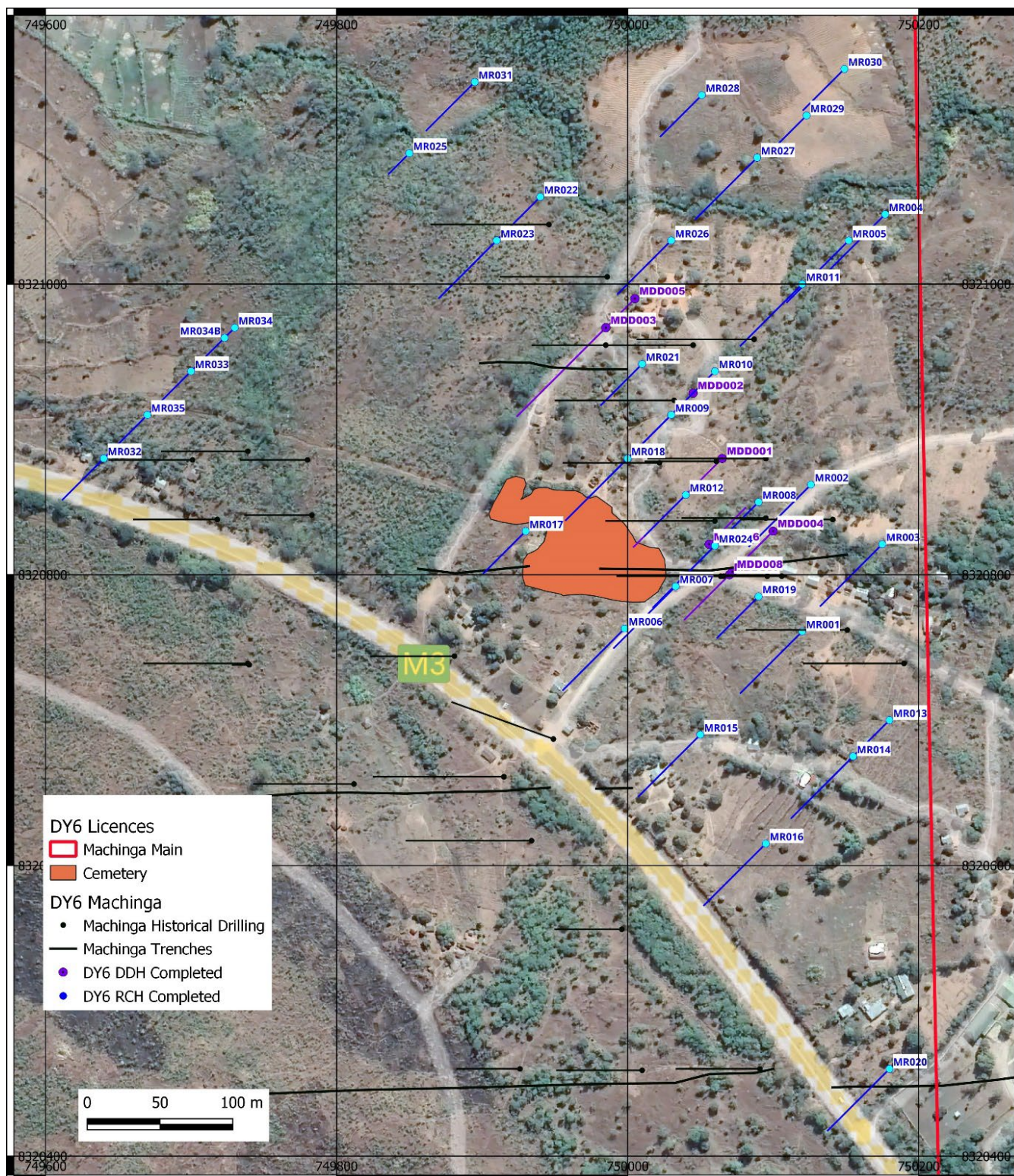


Figure 5. RC and Diamond Drill Hole Collar Locations

Machinga North Soil Sampling Program

Full assay results have also been received from the Machinga North soil and reconnaissance rock chip sampling programs. The soil results indicate significant potential exists uphill and to the south of the initial focus of drilling activity.

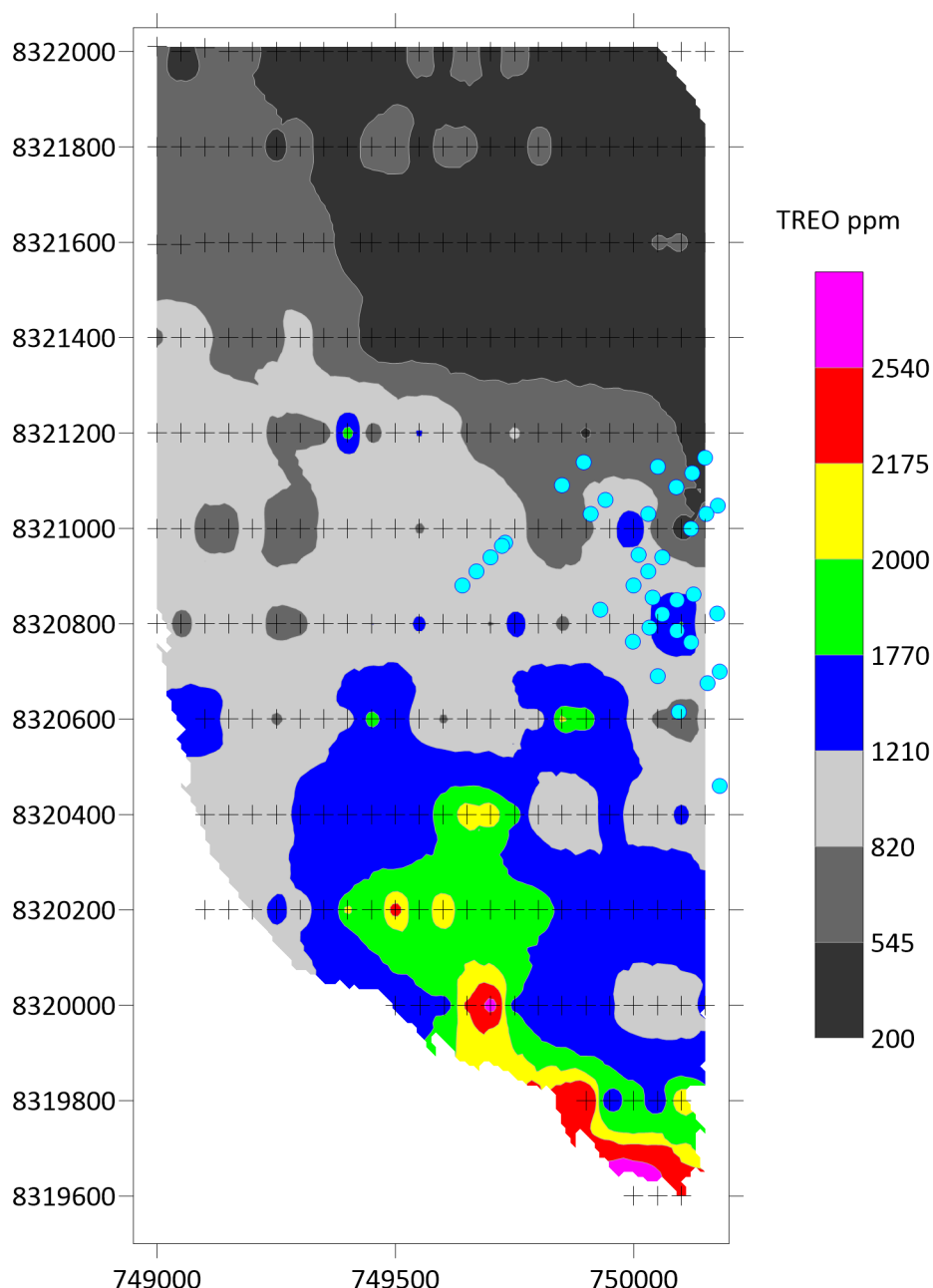


Figure 6. Contoured TREO ppm showing sample sites and DY6 RC drill collar locations

The data is being reviewed but appears to reflect the regolith with the skeletal soils on the hill slope showing strong responses and the area of drilling more subdued responses due to material transported downslope and diluting the local responses.

A rock chip sampling program is already underway in this southern area of anomalous soil responses. It will also be worthwhile to extend the area of soil sampling further to the south at the Machinga prospect.

-ENDS-

This announcement has been authorised by the Board of DY6.

More information

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Competent Persons Statement

The Information in this report 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 report. Mr Younger holds shares in the Company.

Cautionary Statement

Visual observations of the presence of rock or mineral types and abundance should never be considered a proxy or substitute for petrography and laboratory analyses where mineral types, concentrations or grades are the factor of principal economic interest. Visual observations and estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. At this stage it is too early for the Company to make a determinative view on the abundances of any of these minerals. These abundances will be determined more accurately through petrography, assay, and XRF analysis. The observed presence of known REE-bearing minerals does not necessarily equate to rare earth mineralisation. It is not possible to estimate the concentration of mineralisation by visual estimation and this will be determined by chemical analysis.

Table 1: Machinga Drill Hole Location Table (RC and DD)

HOLE No	Type	DEPTH	Z36 East	Z36 North	RL	Dip	Azimuth
MR001	RC	120	750120	8320761	762	-60	225
MR002	RC	120	750126	8320862	755	-60	225
MR003	RC	120	750175	8320821	755	-60	225
MR004	RC	120	750177	8321048	744	-60	225
MR005	RC	120	750152	8321030	748	-60	225
MR006	RC	120	749998	8320763	769	-60	225
MR007	RC	120	750033	8320792	765	-60	225
MR008	RC	120	750090	8320850	753	-60	225
MR009	RC	120	750030	8320910	760	-60	225
MR010	RC	120	750060	8320940	758	-60	225
MR011	RC	120	750120	8321000	752	-60	225
MR012	RC	80	750040	8320855	756	-60	225
MR013	RC	120	750180	8320700	758	-60	225
MR014	RC	120	750155	8320675	760	-60	225
MR015	RC	120	750050	8320690	767	-60	225
MR016	RC	120	750095	8320615	753	-60	225
MR017	RC	82	749930	8320830	758	-60	225
MR018	RC	120	750000	8320880	756	-60	225
MR019	RC	80	750090	8320785	757	-60	225
MR020	RC	120	750180	8320460	760	-60	225
MR021	RC	80	750010	8320945	753	-60	225
MR022	RC	120	749940	8321060	746	-60	225
MR023	RC	112	749910	8321030	753	-60	225
MR024	RC	120	750060	8320820	758	-60	225
MR025	RC	40	749850	8321090	753	-60	225
MR026	RC	104	750030	8321030	753	-60	225
MR027	RC	120	750089	8321087	750	-60	225
MR028	RC	80	750051	8321130	750	-60	225
MR029	RC	80	750123	8321116	750	-60	225
MR030	RC	80	750149	8321148	750	-60	225
MR031	RC	94	749895	8321139	753	-60	225
MR032	RC	80	749640	8320880	753	-60	225
MR033	RC	79	749700	8320940	753	-60	225
MR034	RC	25	749730	8320970	753	-60	225
MR034B	RC	67	749723	8320963	753	-60	225
MR035	RC	80	749670	8320910	753	-60	225
MDD002	DDH	150	750045	8320925	753	-55	225
MDD001	DDH	150	750065	8320880	753	-55	225
MDD003	DDH	150	749985	8320970	753	-55	225
MDD004	DDH	150	750100	8320830	753	-55	225
MDD005	DDH	150	750005	8320990	753	-55	225
MDD006	DDH	50	750056	8320821	757	-45	45
MDD007	DDH	50	750070	8320800	757	-45	70
MDD008	DDH	50	750072	8320802	757	-45	45

All holes are currently located based on handheld GPS pending survey pickup.

Table 2: Soil Sampling Information

(*Note: MREO = Nd2O3, Pr2O3 Tb2O3, Dy2O3 (magnet rare earth oxides)

Sample N	Z36 E	Z36N	Type	TREO ppm	MREO ppm	Nb ppm	Ta ppm	Zr ppm
MN0001	750000	8319600	Loam	3520.19	617.293	3550	289	7130
MN0002	750050	8319600	Loam	2540.98	445.909	3730	228	9320
MN0003	750100	8319600	Loam	2289.61	381.515	2550	229	10000
MN0004	749900	8319800	Loam	2532.59	476.549	2230	173.5	3860
MN0005	749950	8319800	Loam	1607.29	302.104	1105	82.5	2210
MN0006	750000	8319800	Loam	1813.57	328.25	1070	74.1	3140
MN0007	750050	8319800	clay	1659.71	299.752	797	55.4	3030
MN0008	750100	8319800	Loam	2140.44	390.007	1295	86.1	4330
MN0009	749500	8320000	gravel	1666.72	233.84	1635	127	3380
MN0010	749552	8319999	Loam	1707.14	266.47	1200	82.1	3370
MN0011	749603	8320000	sandy loam	1674.34	309.544	1095	81.1	2880
MN0012	749650	8320000	gravel	2190.39	337.914	1600	119	4210
MN0013	749700	8320000	gravel	2688.41	457.227	1285	79.1	6830
MN0014	749750	8320000	gravel	1715.44	298.082	930	68.6	3720
MN0015	749800	8320000	sandy loam	1502.77	282.364	804	57.2	2470
MN0016	749850	8320000	Loam	1501.34	299.347	537	35.5	2660
MN0017	749900	8320000	Loam	1428.28	284.7	644	43.3	2010
MN0018	749950	8320000	Loam	1231.51	255.195	445	31.3	1480
MN0019	750000	8320000	gravel	842.863	139.629	365	25.6	2330
MN0020	750050	8320000	gravel	991.976	190.53	676	49	2010
MN0021	750100	8320000	Loam	1039.02	192.467	441	29.6	2070
MN0022	750150	8320000	Loam	1268.34	241.482	486	31.7	1995
MN0023	749100	8320200	Loam	1308.24	240.201	339	21.8	2670
MN0024	749150	8320200	Loam	1075.67	191.328	393	23.6	2360
MN0025	749200	8320200	Loam	995.901	179.037	360	22.3	2010
MN0026	749250	8320200	Loam	1334.84	207.159	477	30.7	4750
MN0027	749300	8320200	Loam	1028.79	165.744	547	38.1	3020
MN0028	749350	8320200	Loam	1316.93	243.028	530	34.9	2730
MN0029	749400	8320200	Loam	2045.57	390.764	1150	82.7	2550
MN0030	749450	8320200	Loam	1778.4	360.238	952	69.3	1800
MN0031	749500	8320200	Loam	2256.74	472.773	1805	137	1925
MN0032	749550	8320200	Loam	1841.47	342.085	1200	88.2	2440
MN0033	749600	8320200	Loam	2152.43	367.359	1980	155.5	2800
MN0034	749650	8320200	Loam	1888.53	338.483	1350	99	3360
MN0035	749700	8320200	Loam	1808.76	303.624	1520	116	3750
MN0036	749750	8320200	clay	1818.08	336.48	1320	100	3670
MN0037	749800	8320200	sandy loam	1953.51	368.213	1255	85.8	3580
MN0038	749850	8320200	sandy loam	1762.88	311.462	1175	77.7	4050
MN0039	749900	8320200	sandy loam	1360.28	229.257	630	45	3150
MN0040	749950	8320200	clay	1234.85	239.725	897	61.6	3250
MN0041	750000	8320200	clay	1397.29	276.112	920	66.4	3140
MN0042	750050	8320200	clay	1730.98	333.185	1210	79.3	4390
MN0043	750100	8320200	sandy loam	1516.07	267.585	1435	98.5	4190
MN0044	750150	8320200	clay	1235.7	219.913	631	42.2	2720
MN0045	749100	8320400	clay	842.454	180.702	176	11.2	1135
MN0046	749150	8320400	Loam	838.104	156.132	251	15	1395
MN0047	749200	8320400	clay	938.627	188.12	306	19.6	1695
MN0048	749250	8320400	clay	959.996	173.126	497	30.5	2770
MN0049	749300	8320400	Loam	1296.23	246.404	570	38.5	2360

Sample N	Z36 E	Z36N	Type	TREO ppm	MREO ppm	Nb ppm	Ta ppm	Zr ppm
MN0050	749350	8320400	Loam	1405.83	237.269	724	50.5	2550
MN0051	749400	8320400	Loam	1551.62	268.665	919	68.2	3550
MN0052	749450	8320400	Loam	1419.75	274.393	948	68.1	2960
MN0053	749500	8320400	Loam	1340.36	242.89	803	55.4	3640
MN0054	749550	8320400	Loam	1479.53	305.722	669	44.3	2620
MN0055	749600	8320400	Loam	1946.34	402.83	781	50	3410
MN0056	749650	8320400	Loam	2095.68	397.181	1165	75	3980
MN0057	749700	8320400	Loam	2145.84	389.791	1230	80.7	4870
MN0058	749750	8320400	Loam	1920.19	356.085	1240	80.8	3820
MN0059	749800	8320400	Loam	802.727	170.865	249	15.9	1565
MN0060	749850	8320400	Loam	825.364	181.144	227	12.7	2320
MN0061	749900	8320400	Loam	848.316	182.111	568	36	3490
MN0062	749950	8320400	Loam	1649.1	297.988	1440	89.3	4190
MN0063	750000	8320400	Loam	986.467	210.514	764	48.6	2330
MN0064	750050	8320400	clay	891.061	185.378	566	34.2	3480
MN0065	750100	8320400	clay	1318.68	230.186	1895	120.5	4690
MN0066	750150	8320400	clay	902.295	214.009	357	22.4	2050
MN0067	749100	8320600	sandy loam	1710.21	286.492	716	42.8	3250
MN0068	749150	8320600	gravel	1075.09	179.022	647	40.7	2820
MN0069	749200	8320600	clay	1141.86	217.274	575	42	2280
MN0070	749250	8320600	gravel	768.167	121.64	322	19.4	1555
MN0071	749300	8320600	clay	931.299	172.126	301	19.3	1580
MN0072	749350	8320600	Loam	1167.23	189.299	668	50.8	3590
MN0073	749400	8320600	Loam	1117.83	191.917	643	50.3	2670
MN0074	749450	8320600	sandy loam	1910.96	361.237	963	72.3	4550
MN0075	749500	8320600	clay	1598.34	303.696	369	23.6	1755
MN0076	749550	8320600	gravel	988.323	160.154	261	15	1735
MN0077	749600	8320600	clay	782.78	141.063	194.5	12.7	1665
MN0078	749650	8320600	gravel	844.859	132.819	203	13.1	1800
MN0079	749700	8320600	gravel	1169.15	183.295	634	40.6	3350
MN0080	749750	8320600	gravel	1199.91	213.596	437	29.1	3030
MN0081	749800	8320600	gravel	1089.22	204.495	643	43	2560
MN0082	749850	8320600	gravel	2052.9	323.407	1865	121.5	4950
MN0083	749900	8320600	gravel	1883.49	322.029	1980	132	4370
MN0084	749950	8320600	Loam	1661.82	232.69	699	38.5	1755
MN0085	750000	8320600	Loam	1126.54	211.217	1015	72	4630
MN0086	750050	8320600	Loam	766.566	149.051	525	36.8	3370
MN0087	750100	8320600	Loam	650.204	134.315	298	18.2	2420
MN0088	750150	8320600	Loam	852.742	156.956	475	26.4	3770
MN0089	749000	8320800	Loam	1129.74	207.16	310	22.4	2440
MN0090	749050	8320800	Loam	676.715	134.119	326	23.2	1785
MN0091	749100	8320800	Loam	932.886	178.419	441	32.4	2400
MN0092	749150	8320800	Loam	903.183	165.148	488	35.3	3570
MN0093	749200	8320800	Loam	913.554	161.275	453	33	3160
MN0094	749250	8320800	Loam	731.229	141.681	290	21	2190
MN0095	749300	8320800	Loam	715.289	139.407	245	17.5	1240
MN0096	749350	8320800	Loam	1169.25	227.156	520	39.5	2690
MN0097	749400	8320800	Loam	1076.99	223.864	239	16.2	1820
MN0098	749450	8320800	Loam	1215.81	213.988	707	53.9	3470
MN0099	749500	8320800	Loam	973.34	199.364	233	13.6	2040
MN0100	749550	8320800	Loam	1275.09	261.688	372	23.1	2500
MN0101	749600	8320800	Loam	1011.31	190.038	474	33.7	3680
MN0102	749650	8320800	Loam	964.739	181.403	440	27.5	4280
MN0103	749700	8320800	Loam	797.031	154.503	318	20	2980

Sample N	Z36 E	Z36N	Type	TREO ppm	MREO ppm	Nb ppm	Ta ppm	Zr ppm
MN0104	749750	8320800	Loam	1365.76	185.976	363	23.4	2670
MN0105	749800	8320800	Loam	1123.96	222.423	460	29.6	1855
MN0106	749850	8320800	Loam	736.036	132.286	363	24.9	1710
MN0107	749900	8320800	Loam	954.893	180.443	563	36.8	2300
MN0108	749950	8320800	Loam	1145.48	202.464	566	32.7	3290
MN0109	750000	8320800	Loam	1096.9	179.28	619	35.2	3110
MN0110	750050	8320800	Loam	1224.35	226.436	442	25.5	2890
MN0111	750100	8320800	Loam	1809.64	320.488	618	36.3	4140
MN0112	750150	8320800	Loam	890.669	175.726	311	17.4	3470
MN0113	749000	8321000	clay	907.064	188.609	264	17.2	1310
MN0114	749050	8321000	clay	938.077	186.109	307	20.9	1760
MN0115	749100	8321000	clay	734.953	150.73	379	25.4	1970
MN0116	749150	8321000	clay	739.485	146.418	354	25.5	1575
MN0117	749200	8321000	mud	971.965	174.885	431	29.6	3890
MN0118	749250	8321000	clay	697.25	134.455	250	17	936
MN0119	749300	8321000	clay	599.894	120.658	316	22.2	1160
MN0120	749350	8321000	clay	843.886	169.709	515	37.1	1885
MN0121	749400	8321000	mud	1037.05	199.772	643	46.9	2450
MN0122	749450	8321000	clay	1073.3	198.579	689	53.8	3790
MN0123	749500	8321000	clay	994.12	169.434	646	49.6	4040
MN0124	749550	8321000	Loam	795.633	153.003	571	43	3500
MN0125	749600	8321000	clay	846.364	152.927	544	38.9	3700
MN0126	749650	8321000	mud	1052.22	214.975	412	25.9	2300
MN0127	749700	8321000	clay	1017.79	218.791	359	22	1650
MN0128	749750	8321000	clay	1001.06	178.51	743	57.3	3910
MN0129	749800	8321000	clay	628.888	139.991	164.5	9.5	648
MN0130	749850	8321000	clay	546.913	136.226	162.5	8.4	1525
MN0131	749900	8321000	clay	705.865	150.127	245	12.6	1545
MN0132	749950	8321000	clay	1188.87	274.331	318	15	1620
MN0133	750000	8321000	clay	1692.6	334.628	545	28.3	3580
MN0134	750050	8321000	clay	614.84	122.555	187	11.2	2010
MN0135	750100	8321000	clay	423.023	104.924	93	5	876
MN0136	750150	8321000	clay	592.901	118.295	114.5	5.9	1460
MN0137	749000	8321200	clay	830.64	192.873	229	13.2	1380
MN0138	749050	8321200	clay	955.542	214.712	226	14.2	733
MN0139	749100	8321200	sandy loam	888.862	185.453	287	16.8	2010
MN0140	749150	8321200	clay	1208.15	233.71	349	22.9	3470
MN0141	749200	8321200	clay	912.584	189.769	286	19.2	1975
MN0142	749250	8321200	clay	755.377	155.597	279	17.4	3520
MN0143	749300	8321200	clay	734.682	150.469	410	28.4	3610
MN0144	749350	8321200	clay	649.221	130.645	324	22.3	2410
MN0145	749400	8321200	sandy loam	1981.46	348.499	700	49.6	10000
MN0146	749450	8321200	sandy loam	623.383	113.203	380	30.7	2480
MN0147	749500	8321200	sandy loam	953.598	173.071	479	34.4	3140
MN0148	749550	8321200	sandy loam	1240.06	260.71	473	32.1	1970
MN0149	749600	8321200	sandy loam	938.277	189.698	499	34.6	2350
MN0150	749650	8321200	clay	801.599	171.735	367	23.9	1495
MN0151	749700	8321200	clay	649.884	139.273	188.5	12.1	681
MN0152	749750	8321200	sand	848.605	164.389	517	25.8	7350
MN0153	749800	8321200	clay	705.866	131.97	152.5	9.9	895
MN0154	749850	8321200	Loam	598.117	120.913	162	8.2	2470
MN0155	749900	8321200	Loam	521.242	120.065	155.5	7.4	1355
MN0156	749950	8321200	Loam	797.833	171.898	218	9.7	1045
MN0157	750000	8321200	Loam	580.156	123.832	185.5	7.4	1055

Sample N	Z36 E	Z36N	Type	TREO ppm	MREO ppm	Nb ppm	Ta ppm	Zr ppm
MN0158	750050	8321200	sandy loam	572.314	123.036	169.5	7.7	1540
MN0159	750100	8321200	sandy loam	543.563	109.62	116	5.1	1215
MN0160	750150	8321200	clay	513.45	100.502	101.5	5.1	738
MN0161	749000	8321400	Loam	795.828	185.925	248	14.2	1940
MN0162	749050	8321400	Dambo clay	973.745	237.605	242	14.8	797
MN0163	749100	8321400	Dambo clay	887.091	215.7	209	12.3	971
MN0164	749150	8321400	Loam	562.03	105.379	373	23.4	3450
MN0165	749200	8321400	Loam	819.956	195.917	222	13.2	1435
MN0166	749250	8321400	Loam	748.531	170.613	290	18.8	1460
MN0167	749300	8321400	Loam	1059.61	239.304	259	15.4	822
MN0168	749350	8321400	Loam	648.6	141.78	156.5	11.3	686
MN0169	749400	8321400	Loam	614.084	133.191	132.5	9.6	517
MN0170	749450	8321400	Loam	429.663	91.3783	107	6.5	561
MN0171	749500	8321400	Loam	394.845	80.1843	142	9	804
MN0172	749550	8321400	Loam	517.335	106.498	130	7.7	651
MN0173	749600	8321400	Loam	474.046	95.8529	112.5	6.8	527
MN0174	749650	8321400	Loam	395.81	89.1311	124.5	7.7	601
MN0175	749700	8321400	Loam	394.988	86.9337	123.5	7.7	599
MN0176	749750	8321400	Loam	355.674	76.1353	136.5	7.9	800
MN0177	749800	8321400	Loam	425.595	92.7673	135.5	7.9	611
MN0178	749850	8321400	Loam	494.231	114.196	147	8.5	621
MN0179	749900	8321400	Loam	471.11	111.358	131	7.7	531
MN0180	749950	8321400	Loam	444.079	99.057	141	7.7	632
MN0181	750000	8321400	Loam	450.112	100.413	140	7.8	652
MN0182	750050	8321400	Loam	441.918	99.8486	133	7.3	555
MN0183	750100	8321400	Loam	500.388	114.35	138.5	7.5	569
MN0184	750150	8321400	Loam	486.499	114.543	141	8.3	626
MN0185	749000	8321595	Loam	767.436	176.019	220	14.3	987
MN0186	749050	8321595	Loam	638.473	143.489	162.5	11.8	581
MN0187	749100	8321600	clay	716.819	166.085	144	8.7	455
MN0188	749150	8321600	Loam	737.255	153.788	181	11.2	675
MN0189	749200	8321600	Loam	790.217	177.516	205	13.2	806
MN0190	749250	8321600	clay	705.042	116.622	149	9.4	534
MN0191	749307	8321600	clay	667.241	98.6251	145.5	8.5	467
MN0192	749350	8321600	Loam	545.029	109.378	157	9.6	659
MN0193	749426	8321600	clay	489.964	103.825	110.5	6.6	489
MN0194	749450	8321600	clay	454.561	91.36	110.5	6.4	461
MN0195	749506	8321600	clay	499.018	99.6118	138.5	8.5	529
MN0196	749550	8321600	clay	491.043	105.562	128.5	7.2	566
MN0197	749600	8321600	clay	516.501	107.53	137.5	7.9	601
MN0198	749650	8321600	Loam	462.056	99.164	118.5	7	515
MN0199	749700	8321600	clay	431.936	87.107	110.5	6.6	519
MN0200	749750	8321600	Loam	410.659	92.5665	127	7.7	524
MN0201	749800	8321600	Loam	408.565	90.8195	118	7.3	435
MN0202	749850	8321600	Loam	382.902	90.3649	134.5	8.6	536
MN0203	749900	8321600	sandy loam	401.904	94.9621	191	11.6	468
MN0204	749950	8321600	Loam	545.954	129.815	130	8	542
MN0205	750000	8321600	Loam	439.193	102.52	137	8.3	454
MN0206	750050	8321600	clay	560.446	135.338	135	7.7	525
MN0207	750100	8321600	sandy loam	575.839	140.412	107.5	5.9	372
MN0208	750150	8321600	sandy loam	344.372	79.2694	116	6.7	481
MN0209	749000	8321800	clay	593.772	132.019	198	12	768
MN0210	749050	8321800	clay	552.189	113.602	151	8.4	577
MN0211	749100	8321800	sandy loam	587.247	127.743	164.5	10.4	587

Sample N	Z36 E	Z36N	Type	TREO ppm	MREO ppm	Nb ppm	Ta ppm	Zr ppm
MN0212	749150	8321800	clay	662.901	139.681	154	8.6	595
MN0213	749200	8321800	clay	562.498	128.934	154.5	9	667
MN0214	749250	8321800	clay	512.314	115.21	157	9.3	554
MN0215	749300	8321800	clay	597.236	121.191	78.6	4.3	308
MN0216	749350	8321800	clay	511.808	104.308	165	10	541
MN0217	749400	8321800	Loam	524.835	106.36	133	8.6	450
MN0218	749450	8321800	Loam	565.056	115.504	136	8.5	392
MN0219	749500	8321800	clay	616.198	121.631	154	9.4	649
MN0220	749550	8321800	clay	497.72	100.238	90.5	5.2	444
MN0221	749600	8321800	clay	567.092	117.851	149.5	9.4	693
MN0222	749650	8321800	clay	580.789	109.67	180	10.8	1050
MN0223	749700	8321800	clay	506.082	101.98	160	9.7	723
MN0224	749750	8321800	sandy	420.927	85.7943	120.5	7.8	428
MN0225	749800	8321800	clay	644.96	135.577	106.5	6	399
MN0226	749850	8321800	clay	490.459	99.4086	123.5	7.2	482
MN0227	749900	8321800	Loam	496	106.468	123.5	7.1	531
MN0228	749950	8321800	Loam	475.521	98.298	126	7.1	469
MN0229	750000	8321800	sandy	379.848	82.5792	98.4	6.7	428
MN0230	750050	8321800	Loam	273.496	59.1183	104.5	6.5	484
MN0231	750100	8321800	clay	408.185	92.5212	103.5	6.2	458
MN0232	750150	8321800	clay	475.116	109.47	101	6.3	428
MN0233	749000	8322010	Dambo clay	684.021	137.137	106	6.1	398
MN0234	749050	8322000	Dambo clay	397.758	81.516	86.5	4.5	267
MN0235	749100	8322008	Dambo clay	593.742	125.193	205	11.5	810
MN0236	749150	8322000	Dambo clay	591.455	124.603	189	10.9	766
MN0237	749200	8322000	Dambo clay	574.167	122.864	169.5	9.1	618
MN0238	749250	8322000	Dambo clay	451.986	95.6933	180	10.2	796
MN0239	749300	8322000	Dambo clay	545.583	112.761	159	8.8	555
MN0240	749350	8322000	Dambo clay	468.87	103.738	182	11	725
MN0241	749400	8322000	Dambo clay	492.941	102.29	186	11.7	615
MN0242	749450	8322000	Dambo clay	500.419	103.739	183.5	12.1	666
MN0243	749500	8322000	Dambo clay	514.688	100.566	98.7	5.7	390
MN0244	749550	8322000	Dambo clay	590.479	128.452	219	14.1	778
MN0245	749600	8322000	Loam	518.56	107.554	148	8.9	555
MN0246	749650	8322000	Loam	583.496	134.961	201	12.5	780
MN0247	749700	8322000	Loam	508.888	104.693	161.5	9.3	696
MN0248	749750	8322000	Loam	596.777	133.5	170.5	9.9	580
MN0249	749800	8322000	Loam	529.475	112.806	168.5	10	727
MN0250	749850	8322000	Loam	480.242	94.4503	131	7.3	544
MN0251	749900	8322000	Loam	472.845	95.8619	122	6.4	650
MN0252	749950	8322000	Loam	504.658	72.0557	107	5.3	429
MN0253	750000	8322000	Loam	509.893	108.612	149.5	7.7	595
MN0254	750050	8322000	Loam	436.881	94.4443	131.5	7.5	617
MN0255	750100	8322000	Loam	467.172	107.192	92.7	4.8	489
MN0256	750150	8322000	Loam	330.516	74.6228	67.4	3.7	339

Table 3: Rock Chip Sampling Information

Sample ID	Easting	Nothing	Sample Type	TREO	MREO	Nb ppm	Ta ppm	Zr ppm
MC01	749941	8320957	Rock	16276.5	2170.5	7460	378	16300
MC02	749946	8320956	Rock	5192.8	678.5	2270	78	6370
MC03	749956	8320956	Soil	2406.7	354.4	648	35.7	1950
MC04	749962	8320956	Rock	8064.6	1544.6	2850	159.5	7410

Sample ID	Easting	Nothing	Sample Type	TREO	MREO	Nb ppm	Ta ppm	Zr ppm
MC05	749958	8320956	Rock	7938.8	1514.6	1475	115.5	6890
MC06	749845	8320831	Rock	4795.9	596.7	4700	291	24700
MC07	750008	8320798	Rock	13811.9	2679.1	4490	243	9110
MC08	750008	8320798	Soil	2927.8	427.1	957	35	2100
MC09	749992	8320804	Soil	1857.3	273.7	936	47.3	5260
MC10	749743	8320666	Rock	2981.8	403.5	1640	85.8	21900
MC11	749750	8320655	Rock	1065.1	254.5	256	14.9	1355
MC12	749762	8320650	Soil	975.1	189.0	312	17.5	1055
MC13	749787	8320652	Rock	6322.2	1277.4	2590	135	4830
MC14	749788	8320653	Rock	5175.7	939.6	6690	399	12750
MC15	749812	8320660	Rock	775.2	200.5	177	8.9	647
MC16	749723	8320673	Rock	262.0	56.3	477	41.1	522
MC17	749952	8320265	Rock	4954.4	859.6	1280	73.6	18000
MC18	749926	8320255	Rock	1177.9	197.3	346	22.9	22700
MC19	749830	8320448	Rock	3229.7	320.0	1665	59.7	12150
MC20	749857	8320452	Rock	2093.1	266.5	1640	81.7	19100
MC21	749921	8320451	Rock	3717.1	676.6	864	38	2620
MC22	749943	8320451	Rock	3188.0	576.4	724	23.6	1765
MC23	749971	8320452	Soil	672.6	174.5	93.6	5.3	992
MC24	750057	8320453	Rock	2772.8	404.2	2020	109.5	19650
MC25	750075	8320454	Rock	7066.1	1068.6	3590	191	20900
MC26	750063	8320455	Rock	4291.8	424.6	>2500	218	>65900
MC27	752215	8316036	Rock	1072.9	191.3	753	47.1	2350
MC28	752140	8316075	Rock	1255.5	225.6	135.5	5.2	855
MC29	752189	8316062	Rock	257.8	40.2	178.5	8.6	978
MC30	751928	8315420	Rock	310.3	80.6	48.9	2.6	203
MC31	751981	8315344	Rock	186.2	49.5	7.87	0.6	53
MC32	752004	8315256	Soil	532.9	102.1	167.5	10.6	929
MC33	752040	8315143	Rock	116.0	21.7	128.5	8.3	1155
MC34	752404	8315196	Rock	675.0	106.9	270	16.2	7630
MC35	752529	8315353	Rock	4814.4	878.3	2460	155	42000
MC36	752570	8315506	Rock	278.4	34.1	194.5	5.7	788
MC37	752516	8315564	Rock	1649.0	384.8	52.7	3.1	1465
LG01	761478	8318039	Soil	1466.6	336.9	48.4	2.3	1415
LG02	761379	8318004	Soil	1364.2	319.5	57.1	2.8	1410
LG03	761289	8317968	Soil	1475.9	342.6	62.9	2.9	1715
LG04	761340	8317883	Soil	1765.6	415.4	79.1	4	1765
LG05	761380	8317881	Soil	1506.8	352.6	57.4	3.2	1400
LG06	761527	8317562	Soil	1129.9	263.7	36.6	1.5	1020
LG07	760460	8315165	Soil	639.8	125.1	206	12.2	2520
MCH02	749967	8320944	Rock	28299.8	3685.9	7730	570	29100
MCH03	749972	8320949	Rock	10454.3	1459.2	2840	208	17650
MCH04	749947	8320957	Rock	13377.9	2238.3	4470	261	13750
MCH05	749856	8320454	Rock	4512.1	646.6	2790	153	16550
MCH06	749919	8320455	Rock	3782.3	694.7	1395	62.3	4370

Table 4: Conversion Factors Applied

CeO ₂	1.2284
Dy ₂ O ₃	1.1477
Er ₂ O ₃	1.1435
Eu ₂ O ₃	1.1579
Gd ₂ O ₃	1.1526
Ho ₂ O ₃	1.1455
La ₂ O ₃	1.1728
Lu ₂ O ₃	1.1371
Nb ₂ O ₅	1.4305
Nd ₂ O ₃	1.1664
Pr ₆ O ₁₁	1.2082
Sm ₂ O ₃	1.1596
Sc ₂ O ₃	1.5338
Ta ₂ O ₅	1.2211
Tb ₄ O ₇	1.1762
Tm ₂ O ₃	1.1421
Y ₂ O ₃	1.2699
Yb ₂ O ₃	1.1387
ZrO ₂	1.3508

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
Sampling techniques	- Ground radiometric surveys were conducted using a handheld ThermoScientific Radeye brand scintillometer integrated with a GPS (GARMIN GPSMAP78s). Soil sampling was carried out in a grid pattern with approximately 2kg samples collected at each point. - Rock chip samples were collected where outcropping rock occurs. - Careful bagging of samples in individual plastic bags and accurate numbering and labelling of samples was completed in the field. - Re-sampling was carried out where necessary. Hand held GPS units (GARMIN GPSMAP 78s) were used to locate sampling locations, which undergo regular checks. Hand held ThermoScientific Radeye brand scintillometer is regularly calibrated. - RC drilling at Machinga was to test mineralisation identified in trenching. 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 - 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. - 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.
Drilling techniques	- A total of 3543m of RC drilling has been completed at Machinga in 2023, with a maximum hole depth of 120m. - The PR54R RC drilling rig was supplied by Thompson Drilling of Tete, Mozambique. - The Diamond drill rig was supplied by Thompson Drilling of Tete. - Both types of drilling were surveyed downhole using REFLEX GYRO SPRINTIQ north seeking gyroscopic units at 5m intervals.
Drill sample recovery	- Sample recoveries were monitored by the geologist in the field during logging and sampling. - If poor recoveries were encountered, the geologist and driller endeavor to rectify the problem to ensure maximum sample recovery. - Visual assessments are made for recovery, moisture and possible contamination. - Samples were split through a rig mounted static cone splitter to obtain a representative sample, which was inspected and cleaned as required. - Samples were predominately dry, four RC holes were terminated early short of full depth due to excessive water inflows. - Insufficient data exists to determine whether a relationship exists between grade and recovery. This will be assessed when sufficient statistical data is available.

Criteria	Commentary
Logging	• 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	• The RC drill ~30kg samples were riffle split in the field to obtain a representative sub-sample of 2-4kg. • All samples were weighted. • Samples were mostly dry. • 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 maximise representivity of samples, with reference standards inserted during drilling. • Field duplicates were used at a rate of 5% and analyzed to ensure representivity of in situ material. • Diamond drill is being halved for analysis with the sample being weighted. • Sample intervals are nominally 1m intervals and varied based on lithological or mineralisation contacts as required.
Quality of assay data and laboratory tests	• 256 -2mm soil samples and rock chip samples were submitted to ALS Chemex Laboratories Johannesburg for sample preparation. • Sample pulps were then forward to ALS Laboratories, Perth for analysis by lithium borate fusion with ICP finish using method ME-MS81u and for a representative suite of elements. • Elements were: Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb, Zr. • Samples from the RC and DDH 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. • 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.
Verification of sampling and assaying	• Assay results are reviewed by 2 company personnel. • No adjustments to data were considered necessary.
Verification of sampling and assaying	• Not reported
Location of data points	• All locations determined by handheld GPS units (GARMIN GPSMAP 78s were used to define field locations of soil, rock chip samples, trenches and drill collars. These locations were considered accurate to 5m. • The grid system used is UTM Zone 36S, WGS 84. • Downhole surveys were not completed. • Drillhole collars were surveyed using DGPS on completion of the program.

Criteria	Commentary
	The GPS was sufficient topographic control with data downloaded via Map Source to spreadsheet.
Data spacing and distribution	- 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	- Soil and rock chip sampling was of a reconnaissance nature only and was not designed to achieve unbiased sampling. - Drilling has been undertaken and orientated perpendicular to the inferred orientation of the mineralised structures based on the trench mapping and previous drilling results.
Sample security	- Samples were collected from the drill site and delivered by secure transport to Intertek Commodities preparation facility in Kitwe, Zambia. - Chain of custody was overseen by the Geology Manager.
Audits or reviews	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	Commentary
Mineral tenement and land tenure status	- Exploration is conducted within several licences in Malawi, being: - Machinga EL0529 which is held 100% by Green Exploration Limited covering an area of 42.9km². - Application Machinga South APL0251 of 157.5km² is held by Green Exploration Limited. - All licences are in good standing and no known impediments area known to exist.
Exploration done 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 Malsoa-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.

Criteria	Commentary
	- 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. - Eudialyte was identified in thin section mineralogical studies completed by petrologists in 2010; ASX announcement 29/7/2010 by Globe Metals & Mining Ltd
Geology	- 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	Drill hole positions located in the field during using hand held GPS units prior to a full survey being undertaken.
Data aggregation methods	- Drill results have not been reported. - No metal equivalent values are being used.
Relationship between mineralisation widths and intercept lengths	- 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.
Diagrams	Location maps of projects within the release with relevant exploration information contained.
Balanced reporting	- The reporting of exploration results is considered balanced by the competent person. - All results have been reported.
Other substantive exploration data	No other exploration to report.
Further work	- 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.