10 October 2023



# **High-grade REE + Nb results continue at Machinga**

#### **HIGHLIGHTS**

- Further high-grade HREE and Nb₂O₅ results returned from the next 11 holes of 35-hole reverse circulation ("RC") program at Machinga Main Northern Zone
- Continued widespread <u>HREE</u> and <u>Nb</u> intersections with assays including:
  - ★ 13m @ 0.65% TREO, 2544 ppm Nb<sub>2</sub>O<sub>5</sub> from surface (3.6% DyTb/TREO) incl. 1m @ 1.06% TREO, 3657ppm Nb<sub>2</sub>O<sub>5</sub> from 7m, and 1m @ 1.28% TREO, 4215ppm Nb<sub>2</sub>O<sub>5</sub> from 9m (MR019)
  - **♦** 4m @ 1.47% TREO, 0.62% Nb<sub>2</sub>O<sub>5</sub> (3.6% DyTb:TREO) from 17m (MR021)
  - **❖** 3m @ 1.10% TREO, 0.56% Nb<sub>2</sub>O<sub>5</sub> (4.0% DyTb:TREO) from 41m (MR013)
  - 3m @ 7482 ppm TREO, 2424 ppm Nb<sub>2</sub>O<sub>5</sub> from 77m (3.9% DyTb/TREO) incl. 1m @
     1.82% TREO, 6021 ppm Nb<sub>2</sub>O<sub>5</sub> from 77m (MR013)
- Results follow up on recent high-grade RC intercepts incl. 7m @ 1.42% TREO with 0.49% Nb₂O₅ (MR011) and 16m @ 0.54% TREO with 0.21% Nb₂O₅ (MR005)
- Results returned an average of 26% HREO:TREO and 3.2% DyTb:TREO at a cutoff grade of >2500ppm TREO

Heavy rare earths and niobium explorer DY6 Metals Ltd (ASX: DY6) ("DY6", the "Company") is pleased to announce the receipt of the second 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 second batch of 11 holes (1162m) drilled as part of DY6's maiden 35-hole, 3,643m RC drill program at Machinga Main Northern Zone. Note, some holes are incomplete due to composite samples being included in the upcoming third assay batch.

These results follow up on recent RC assays including 7m @ 1.42% TREO with 0.49% Nb<sub>2</sub>O<sub>5</sub> (MR011) and 16m @ 0.54% TREO with 0.21% Nb<sub>2</sub>O<sub>5</sub> (MR005).



Assays returned a series of significant intercepts based on a 2500 ppm total rare earth oxide + yttrium (TREO) cut-off grade from the Machinga Main Northern Zone including:

- **♦** 13m @ 0.65% TREO, 2544 ppm Nb<sub>2</sub>O<sub>5</sub> <u>from surface</u> (3.6% DyTb/TREO) incl. 1m @ 1.06% TREO, 3657ppm Nb<sub>2</sub>O<sub>5</sub> from 7m and 1m @ 1.28% TREO, 4215ppm Nb<sub>2</sub>O<sub>5</sub> from 9m (MR019)
- **4m** @ 1.47% TREO, 0.62% Nb<sub>2</sub>O<sub>5</sub> (3.6% DyTb:TREO) from 17m (MR021)
- **3m** @ 1.10% TREO, 0.56% Nb<sub>2</sub>O<sub>5</sub> (4.0% DyTb:TREO) from 41m (MR013)
- **3**m @ 7482 ppm TREO, 2424 ppm Nb<sub>2</sub>O<sub>5</sub> from 77m (3.9% DyTb/TREO) incl. 1m @ 1.82% TREO, 6021 ppm Nb<sub>2</sub>O<sub>5</sub> from 77m (MR013)

The mineralisation at the Machinga alkaline complex contains a higher proportion of valuable dysprosium-terbium (DyTb) with results indicating an average 3.2% DyTb:TREO in samples greater than 2500ppm 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 (Figure 3). Significant drill intercepts received from the initial two batches of assays from the drilling program are included in Table 2.

The breccia host was not recognised until the diamond drilling commenced, with the RC chips then being reviewed. Samples will be selected for petrography from both the core and RC drill material.

All Machinga site works have now been completed, with the rigs and crew demobilised and the team relocated to DY6's Salambidwe project. Exploration activity at Salambidwe is expected to begin this month.

Results for the remaining RC holes from Machinga Main Northern Zone are expected to be released progressively during October and the first batch of DD assays (from eight diamond holes drilled for 900m) are expected in the December guarter.

Drilling at the Machinga Main Northern target – one of six targets identified to date within the overall Machinga concession – aims to follow up on previous work undertaken by Globe Mining & Metals Limited during 2010/12. Exploration drilling by Globe intersected strong REE mineralisation alongside the holes drilled by DY6 at the northern end of the Machinga Main anomaly. Intercepts reported by Globe included 11m @ 1.0% TREO with 330ppm dysprosium oxide (Dy<sub>2</sub>O<sub>3</sub>) from 12m (MARC005), 5m @ 1.5% TREO with 596ppm Dy<sub>2</sub>O<sub>3</sub> from 26m (MARC015) and 3m @ 2.2% TREO with 295ppm dysprosium oxide (Dy<sub>2</sub>O<sub>3</sub>) from 66m (MARC033).



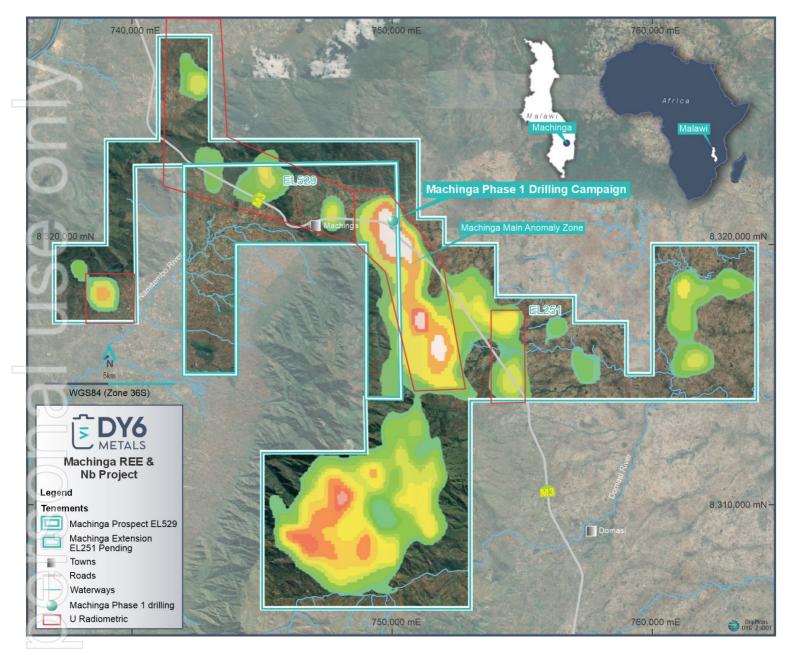


Figure 1: Machinga Project location in Southern Malawi (U radiometric)

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



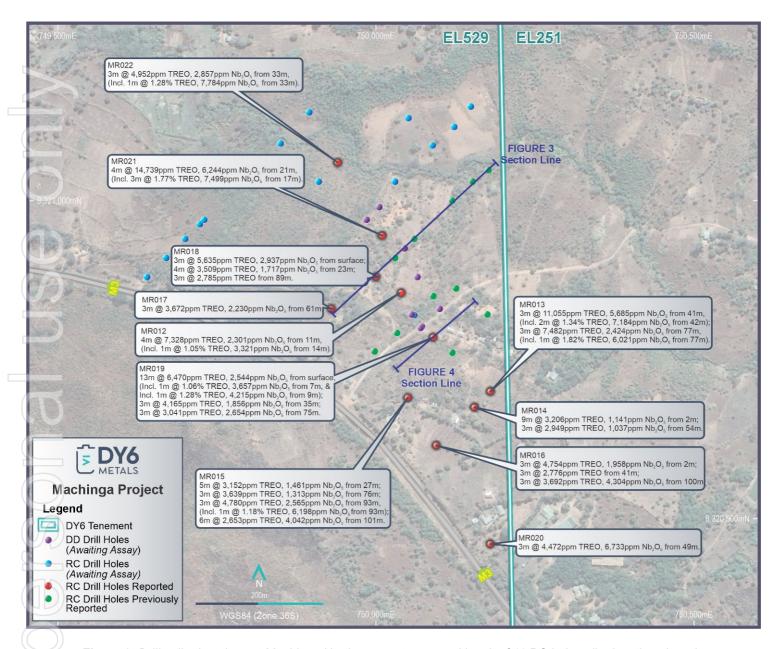


Figure 2: Drill collar locations at Machinga North prospect – second batch of 11 RC hole collar locations in red

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

The intersection at surface in hole MR018 extends the continuity of mineralisation updip by another 50m from the zone defined by MR009-011, MR005 and MR004 (*DY6 ASX announcement*, 3 October 2023).

The thick intersection in MR019 increases the confidence in the historical 2010 drilling data of Globe Metals and Mining and shows the mineralised zones "bell out" for as-yet unknown reasons and that the 16m @ 5,399ppm TREO in MR005 (*DY6 ASX announcement*, 3 October 2023) is not an isolated occurrence.

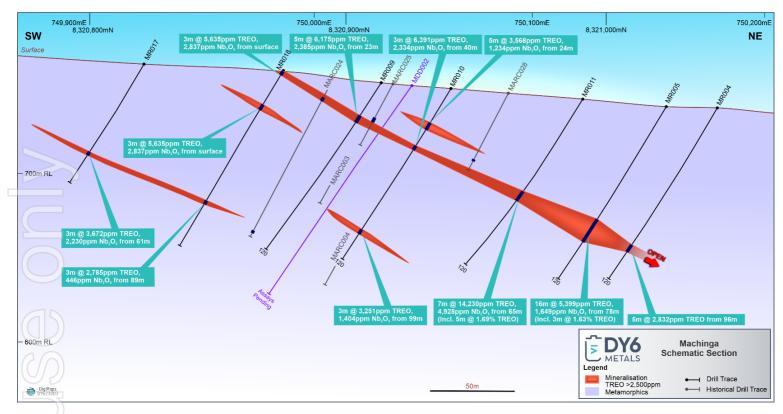
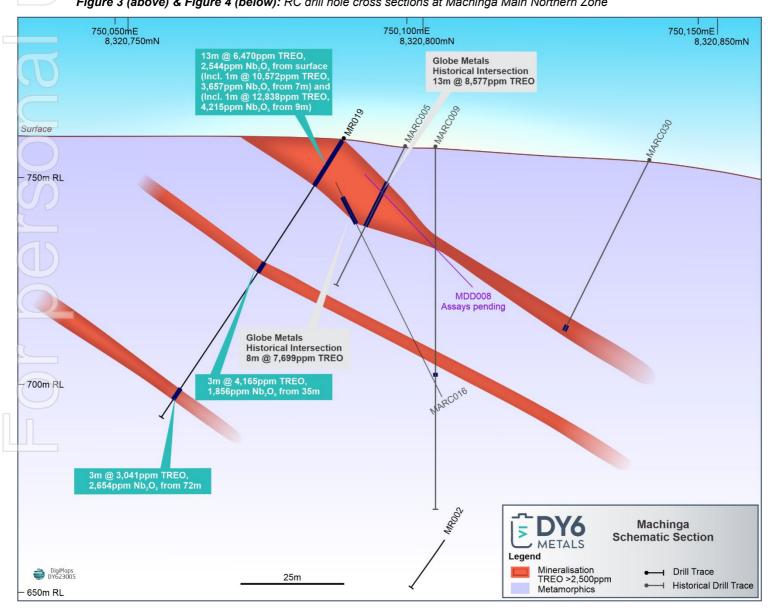


Figure 3 (above) & Figure 4 (below): RC drill hole cross sections at Machinga Main Northern Zone





#### -ENDS-

This announcement has been authorised by the Board of DY6.

#### More information

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|----------------------------|------------------------------|--------------------|
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#### **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.



**Table 1: Drill Collar Locations** 

| Hole Id | Easting  | Northing  | Elevation | Azimuth | Dip   | Total<br>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 MR012-022

Based on 2500 ppm TREO cutoff, minimum 3m width and maximum 2m internal dilution

| Hole  |           |      |     |        |       |      | HREO/ |                                |                  |                                 |           |                                |                                |                                |          | Nd <sub>2</sub> O <sub>3</sub> + |      |           |  |
|-------|-----------|------|-----|--------|-------|------|-------|--------------------------------|------------------|---------------------------------|-----------|--------------------------------|--------------------------------|--------------------------------|----------|----------------------------------|------|-----------|--|
| ID    |           | From | То  | Length | TREO  | MREO | TREO  | La <sub>2</sub> O <sub>3</sub> | CeO <sub>2</sub> | Pr <sub>6</sub> O <sub>11</sub> | $Nd_2O_3$ | Tb <sub>4</sub> O <sub>7</sub> | Dy <sub>2</sub> O <sub>3</sub> | Lu <sub>2</sub> O <sub>3</sub> | $Y_2O_3$ | Pr <sub>6</sub> O <sub>11</sub>  | HREO | $Nb_2O_5$ | Ta <sub>2</sub> O <sub>5</sub>                   |
| MR012 |           | 11   | 15  | 4      | 7328  | 1306 | 35%   | 1130                           | 2281             | 239                             | 780       | 37                             | 250                            | 28                             | 1769     | 1019                             | 2542 | 2301      | 107  |
|       | including | 14   | 15  | 1      | 10495 | 1892 | 31%   | 1784                           | 3444             | 356                             | 1150      | 51                             | 335                            | 34                             | 2250     | 1506                             | 3261 | 3321      | 161  |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR013 |           | 41   | 44  | 3      | 11055 | 2085 | 29%   | 1950                           | 3750             | 387                             | 1253      | 57                             | 387                            | 29                             | 2112     | 1641                             | 3167 | 5685      | 290  |
|       | including | 42   | 44  | 2      | 13428 | 2550 | 28%   | 2405                           | 4587             | 472                             | 1533      | 69                             | 477                            | 33                             | 2515     | 2004                             | 3773 | 7184      | 374  |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR013 |           | 77   | 80  | 3      | 7482  | 1483 | 27%   | 1344                           | 2575             | 277                             | 917       | 38                             | 251                            | 14                             | 1358     | 1194                             | 1983 | 2424      | 116  |
|       | including | 77   | 78  | 1      | 18245 | 3557 | 28%   | 3254                           | 6136             | 654                             | 2162      | 97                             | 644                            | 35                             | 3476     | 2816                             | 5090 | 6021      | 298  |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR014 |           | 2    | 11  | 9      | 3206  | 621  | 26%   | 522                            | 1190             | 118                             | 393       | 15                             | 96                             | 6                              | 574      | 511                              | 822  | 1141      | 44   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR014 |           | 54   | 57  | 3      | 2949  | 590  | 23%   | 548                            | 1090             | 116                             | 382       | 13                             | 80                             | 5                              | 464      | 497                              | 668  | 1037      | 46   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR015 |           | 27   | 32  | 5      | 3152  | 622  | 25%   | 517                            | 1150             | 121                             | 403       | 13                             | 85                             | 6                              | 565      | 524                              | 796  | 1461      | 56   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR015 |           | 76   | 79  | 3      | 3639  | 716  | 27%   | 602                            | 1261             | 135                             | 455       | 18                             | 109                            | 9                              | 683      | 590                              | 986  | 1313      | 62   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR015 |           | 93   | 96  | 3      | 4780  | 912  | 28%   | 778                            | 1664             | 178                             | 586       | 20                             | 127                            | 13                             | 938      | 764                              | 1323 | 2565      | 65   |
|       | including | 93   | 94  | 1      | 11843 | 2252 | 28%   | 1929                           | 4119             | 442                             | 1451      | 49                             | 309                            | 34                             | 2338     | 1894                             | 3274 | 6198      | 143  |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR015 |           | 101  | 107 | 6      | 2653  | 474  | 27%   | 459                            | 977              | 98                              | 307       | 9                              | 60                             | 11                             | 477      | 405                              | 712  | 4042      | 201  |
|       |           |      |     |        | 2000  |      | 2.70  |                                | 0                |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MD040 |           | -    | 5   | 3      | 4754  | 004  | 25%   | 796                            | 1755             | 177                             | 600       | 20                             | 132                            | 8                              | 832      | 777                              | 1101 | 1958      | 00   |
| MR016 |           | 2    | 3   | 3      | 4754  | 931  | 25%   | 790                            | 1755             | 1//                             | 600       | 22                             | 132                            | 0                              | 032      | 777                              | 1184 | 1936      | 88   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR016 |           | 41   | 44  | 3      | 2776  | 571  | 24%   | 490                            | 981              | 110                             | 369       | 13                             | 79                             | 4                              | 474      | 479                              | 677  | 925       | 43   |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           | <del>                                     </del> |
| MR016 |           | 100  | 103 | 3      | 3692  | 697  | 25%   | 660                            | 1352             | 144                             | 451       | 14                             | 87                             | 12                             | 631      | 596                              | 920  | 4304      | 214  |
|       |           |      |     |        |       |      |       |                                |                  |                                 |           |                                |                                |                                |          |                                  |      |           |  |
| MR017 |           | 61   | 64  | 3      | 3672  | 739  | 25%   | 606                            | 1306             | 148                             | 488       | 15                             | 89                             | 9                              | 655      | 635                              | 929  | 2230      | 71   |



| Hole<br>ID |           | From | То | Length | TREO  | MREO | HREO/<br>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> +<br>Pr <sub>6</sub> O <sub>11</sub> | HREO | Nb <sub>2</sub> O <sub>5</sub> | Ta₂O₅ |
|------------|-----------|------|----|--------|-------|------|---------------|--------------------------------|------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|---|------|--------------------------------|-------|
|            |           |      |    |        |       |      |               |                                |                  |                                 |                                |                                |                                |                                |                               |   |      |                                |       |
| MR018      |           | 0    | 3  | 3      | 5635  | 891  | 20%           | 689                            | 2886             | 176                             | 563                            | 20                             | 131                            | 10                             | 744                           | 740   | 1105 | 2837                           | 105   |
| MR018      |           | 23   | 27 | 4      | 3509  | 704  | 25%           | 603                            | 1263             | 138                             | 457                            | 15                             | 93                             | 7                              | 621                           | 596   | 876  | 1717                           | 54    |
|            |           |      |    |        |       |      |               |                                |                  |                                 |                                |                                |                                |                                |                               |   |      |                                |       |
| MR018      |           | 89   | 92 | 3      | 2785  | 545  | 2%            | 482                            | 968              | 104                             | 342                            | 14                             | 86                             | 7                              | 508                           | 1082  | 52   | 446                            | 742   |
|            |           |      |    |        |       |      |               |                                |                  |                                 |                                |                                |                                |                                |                               |   |      |                                |       |
| MR019      |           | 0    | 13 | 13     | 6470  | 1231 | 25%           | 1001                           | 2536             | 232                             | 764                            | 29                             | 205                            | 13                             | 1072                          | 996   | 1612 | 2544                           | 111   |
|            | including | 7    | 8  | 1      | 10572 | 2102 | 26%           | 1819                           | 3741             | 392                             | 1304                           | 52                             | 355                            | 22                             | 1835                          | 1696  | 2751 | 3657                           | 181   |
|            | including | 9    | 10 | 1      | 12838 | 2494 | 27%           | 2298                           | 4394             | 471                             | 1512                           | 64                             | 447                            | 27                             | 2322                          | 1984  | 3494 | 4215                           | 222   |
|            |           |      |    |        |       |      |               |                                |                  |                                 |                                |                                |                                |                                |                               |   |      |                                |       |
| MR019      |           | 35   | 38 | 3      | 4165  | 825  | 26%           | 726                            | 1475             | 160                             | 519                            | 19                             | 128                            | 8                              | 724                           | 678   | 1071 | 1856                           | 90    |
| MR019      |           | 72   | 75 | 3      | 3041  | 567  | 28%           | 521                            | 1047             | 113                             | 359                            | 12                             | 84                             | 12                             | 576                           | 471   | 866  | 2654                           | 136   |
| MR020      |           | 49   | 52 | 3      | 4472  | 712  | 32%           | 776                            | 1540             | 152                             | 436                            | 14                             | 111                            | 25                             | 945                           | 587   | 1431 | 6733                           | 395   |
|            |           |      |    |        |       |      |               |                                |                  |                                 |                                |                                |                                |                                |                               |   |      |                                |       |
| MR021      |           | 17   | 21 | 4      | 14739 | 2875 | 28%           | 2456                           | 5092             | 529                             | 1814                           | 72                             | 460                            | 34                             | 2804                          | 2343  | 4107 | 6244                           | 253   |
|            | including | 17   | 20 | 3      | 17708 | 3450 | 28%           | 2939                           | 6112             | 635                             | 2172                           | 86                             | 557                            | 41                             | 3383                          | 2807  | 4962 | 7499                           | 304   |
| MR022      |           | 33   | 36 | 3      | 4952  | 933  | 33%           | 769                            | 1569             | 162                             | 558                            | 27                             | 186                            | 16                             | 1084                          | 720   | 1628 | 2857                           | 148   |
|            | including | 33   | 34 | 1      | 12813 | 2394 | 33%           | 1987                           | 4036             | 413                             | 1422                           | 71                             | 488                            | 42                             | 2837                          | 1836  | 4274 | 7784                           | 405   |

ALLONS IN MERCOULA



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

| Hole Id | From | То  | Length | Sample  | Ce<br>ppm | Dy<br>ppm | Er<br>ppm | Eu<br>ppm | Gd<br>ppm | Ho<br>ppm | La<br>ppm | Lu<br>ppm | Nb<br>ppm | Nd<br>ppm | Pr<br>ppm | Sm<br>ppm | Ta<br>ppm | Tb<br>ppm | Tm<br>ppm | Y ppm  | Yb<br>ppm |     |
|---------|------|-----|--------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|-----------|-----|
| MR012   | 11   | 12  | 1      | MD01564 | 859.2     | 110.4     | 77.3      | 4.6       | 75.7      | 23.7      | 427.3     | 12.0      | 802.0     | 317.2     | 93.3      | 71.7      | 38.8      | 15.7      | 12.1      | 691.1  | 83.3      | 1   |
| MR012   | 12   | 13  | 1      | MD01565 | 2422.1    | 289.6     | 209.4     | 12.5      | 209.8     | 64.4      | 1242.1    | 32.2      | 2181.8    | 875.4     | 257.0     | 196.7     | 123.7     | 42.4      | 33.1      | 1844.4 | 219.6     | _   |
| MR012   | 13   | 14  | 1      | MD01566 | 1341.5    | 180.3     | 138.2     | 7.1       | 117.7     | 39.5      | 662.7     | 23.5      | 1129.2    | 495.6     | 145.8     | 109.0     | 55.6      | 24.7      | 23.1      | 1263.3 | 164.0     | _   |
| MR012   | 14   | 15  | 1      | MD01567 | 2803.6    | 292.3     | 206.0     | 13.2      | 208.5     | 64.3      | 1521.1    | 29.7      | 2321.6    | 985.9     | 294.8     | 210.3     | 131.9     | 43.1      | 32.7      | 1771.8 | 214.9     | _   |
| MR012   | 69   | 70  | 1      | MD01631 | 980.2     | 88.7      | 72.3      | 4.5       | 67.7      | 19.6      | 492.9     | 12.3      | 1244.1    | 360.4     | 108.1     | 73.9      | 61.8      | 13.1      | 11.2      | 583.7  | 85.4      | _   |
| MR013   | 41   | 42  | 1      | MD01031 | 1689.2    | 181.9     | 138.4     | 8.1       | 136.9     | 38.5      | 888.7     | 18.1      | 1879.6    | 595.9     | 180.9     | 133.1     | 99.1      | 28.0      | 24.4      | 1028.8 | 136.9     | _   |
| MR013   | 42   | 43  | 1      | MD01739 | 3354.3    | 395.8     | 256.4     | 15.8      | 259.8     | 83.0      | 1830.8    | 29.1      | 4052.0    | 1196.5    | 353.1     | 260.3     | 238.7     | 55.9      | 37.0      | 1929.4 | 208.7     | -   |
| MR013   | 43   | 44  | 1      | MD01739 | 4114.3    | 434.8     | 268.3     | 18.1      | 295.1     | 89.7      | 2269.8    | 28.3      | 5991.4    | 1431.5    | 427.6     | 291.6     | 374.4     | 62.0      | 36.8      | 2031.6 | 209.6     | _   |
| MR013   | 77   | 78  | 1      | MD01740 | 4995.0    | 561.2     | 333.6     | 24.7      | 406.3     | 114.3     | 2774.5    | 31.0      | 4209.2    | 1853.2    | 541.3     | 391.0     | 244.2     | 82.5      | 44.4      | 2737.5 | 240.4     |     |
| MR013   | 78   | 79  | 1      | MD01784 | 850.7     | 66.2      | 35.8      | 4.4       | 51.3      | 12.6      | 439.9     | 3.2       | 541.2     | 326.7     | 95.3      | 60.8      | 25.1      | 10.0      | 4.6       | 318.9  | 25.9      |     |
| MR013   | 100  | 101 | 1      | MD01704 | 854.3     | 118.4     | 99.7      | 4.1       | 65.8      | 27.3      | 468.0     | 18.3      | 2270.3    | 318.1     | 93.3      | 62.8      | 125.5     | 15.0      | 16.7      | 782.2  | 112.6     |     |
| MR013   | 101  | 102 | 1      | MD01810 | 829.3     | 48.0      | 31.7      | 5.9       | 39.4      | 9.8       | 478.3     | 4.8       | 581.2     | 275.5     | 88.3      | 48.5      | 36.0      | 7.3       | 5.0       | 257.5  | 30.4      |     |
| MR013   | 109  | 110 | 1      | MD01818 | 894.2     | 90.9      | 56.6      | 5.1       | 64.5      | 19.4      | 485.5     | 6.5       | 882.8     | 324.7     | 96.8      | 63.7      | 50.3      | 12.9      | 8.1       | 443.7  | 48.8      | _   |
| MR013   | 110  | 111 | 1      | MD01819 | 734.3     | 77.4      | 47.1      | 3.7       | 53.4      | 15.5      | 402.5     | 5.4       | 639.6     | 278.3     | 80.6      | 58.0      | 30.8      | 10.6      | 6.4       | 390.4  | 39.0      | _   |
| MR013   | 118  | 119 | 1      | MD01830 | 1338.3    | 109.4     | 81.5      | 5.8       | 81.3      | 24.2      | 680.9     | 15.0      | 3627.1    | 491.1     | 148.8     | 87.5      | 192.7     | 16.0      | 13.6      | 679.0  | 90.8      |     |
| MR014   | 2    | 3   | 1      | MD01834 | 1269.0    | 56.8      | 40.8      | 2.8       | 32.6      | 12.4      | 211.5     | 6.0       | 1085.6    | 149.8     | 46.0      | 34.7      | 64.8      | 7.6       | 6.9       | 268.1  | 39.6      |     |
| MR014   | 3    | 4   | 1      | MD01835 | 1606.4    | 96.9      | 69.4      | 5.0       | 61.9      | 20.5      | 455.4     | 10.2      | 1526.4    | 335.9     | 99.9      | 69.6      | 66.1      | 13.2      | 10.6      | 544.9  | 66.8      | _   |
| MR014   | 6    | 7   | 1      | MD01838 | 2239.4    | 178.4     | 104.6     | 11.7      | 154.3     | 35.6      | 1170.9    | 9.9       | 1794.3    | 857.8     | 254.8     | 164.2     | 68.1      | 27.7      | 14.0      | 973.6  | 76.1      | _   |
| MR014   | 9    | 10  | 1      | MD01844 | 1264.7    | 158.2     | 96.7      | 7.8       | 117.9     | 31.7      | 743.2     | 10.6      | 1039.5    | 542.6     | 158.1     | 114.2     | 61.7      | 23.6      | 13.0      | 795.1  | 73.6      | ,   |
| MR014   | 10   | 11  | 1      | MD01845 | 947.8     | 87.8      | 50.6      | 6.0       | 76.6      | 16.4      | 449.0     | 4.8       | 734.1     | 393.2     | 108.3     | 81.2      | 27.1      | 13.5      | 6.3       | 443.8  | 35.6      | ,   |
| MR014   | 15   | 16  | 1      | MD01850 | 1014.6    | 29.8      | 15.3      | 9.1       | 33.3      | 5.8       | 551.1     | 1.6       | 96.0      | 324.3     | 101.4     | 44.6      | 4.0       | 5.5       | 2.4       | 160.4  | 12.4      | 7   |
| MR014   | 24   | 25  | 1      | MD01859 | 1211.8    | 146.5     | 88.1      | 6.9       | 108.9     | 29.6      | 655.1     | 9.2       | 1191.0    | 474.1     | 137.2     | 104.8     | 64.1      | 21.0      | 12.9      | 745.6  | 67.5      | ,   |
| MR014   | 54   | 55  | 1      | MD01895 | 1462.5    | 121.5     | 70.4      | 6.8       | 98.6      | 24.3      | 764.1     | 6.9       | 1129.2    | 538.2     | 156.6     | 109.4     | 57.4      | 19.3      | 9.8       | 651.9  | 57.4      | T   |
| MR014   | 55   | 56  | 1      | MD01896 | 872.3     | 68.1      | 40.8      | 5.0       | 55.8      | 14.1      | 469.3     | 4.3       | 858.7     | 321.1     | 94.3      | 60.8      | 44.6      | 10.6      | 5.8       | 355.9  | 32.5      | Ţ   |
| MR014   | 88   | 89  | 1      | MD01935 | 813.5     | 76.2      | 46.2      | 4.1       | 60.5      | 15.5      | 435.2     | 5.4       | 702.5     | 313.9     | 90.0      | 62.1      | 39.1      | 11.1      | 6.9       | 403.5  | 39.4      | T   |
| MR015   | 2    | 3   | 1      | MD01975 | 998.0     | 68.7      | 43.1      | 3.5       | 46.5      | 14.2      | 239.9     | 5.6       | 1201.8    | 183.0     | 54.4      | 43.4      | 47.7      | 9.6       | 6.7       | 396.2  | 41.6      |     |
| MR015   | 27   | 28  | 1      | MD02006 | 1385.7    | 102.8     | 72.0      | 5.7       | 87.8      | 22.8      | 672.1     | 11.0      | 2504.0    | 475.6     | 141.4     | 97.5      | 134.4     | 15.4      | 11.2      | 658.3  | 75.5      | ,   |
| MR015   | 30   | 31  | 1      | MD02009 | 1321.6    | 120.2     | 69.7      | 6.5       | 99.4      | 24.3      | 618.2     | 7.6       | 988.5     | 484.6     | 140.3     | 104.7     | 35.0      | 17.7      | 9.9       | 678.2  | 62.1      |     |
| MR015   | 31   | 32  | 1      | MD02010 | 736.0     | 60.2      | 35.9      | 4.3       | 59.5      | 12.8      | 324.0     | 3.5       | 526.4     | 300.5     | 82.7      | 67.8      | 13.6      | 9.7       | 4.9       | 370.1  | 28.4      |     |
| MR015   | 58   | 59  | 1      | MD02040 | 878.8     | 81.5      | 52.4      | 4.9       | 61.1      | 17.2      | 497.8     | 6.9       | 745.3     | 288.4     | 87.4      | 58.4      | 59.4      | 11.6      | 7.5       | 411.8  | 45.1      |     |
| MR015   | 60   | 61  | 1      | MD02045 | 783.9     | 59.9      | 42.2      | 3.8       | 47.9      | 13.0      | 411.7     | 7.5       | 889.3     | 269.2     | 82.2      | 52.1      | 54.4      | 8.8       | 7.1       | 371.1  | 50.0      | J   |
| MR015   | 76   | 77  | 1      | MD02064 | 794.1     | 67.6      | 43.8      | 5.0       | 68.2      | 14.5      | 381.3     | 6.2       | 532.1     | 317.9     | 89.3      | 73.7      | 25.7      | 11.9      | 6.2       | 405.6  | 42.5      | ,   |
| MR015   | 78   | 79  | 1      | MD02066 | 1675.8    | 153.7     | 101.8     | 8.1       | 125.5     | 32.9      | 864.0     | 12.5      | 1886.9    | 605.4     | 177.6     | 128.7     | 108.7     | 23.2      | 15.0      | 858.3  | 94.4      | . [ |



| Hole I | d Fror | n To  | Length | Sample  | Ce<br>ppm | Dy<br>ppm | Er<br>ppm | Eu<br>ppm | Gd<br>ppm | Ho<br>ppm | La<br>ppm | Lu<br>ppm | Nb<br>ppm | Nd<br>ppm | Pr<br>ppm | Sm<br>ppm | Ta<br>ppm | Tb<br>ppm | Tm<br>ppm | Y ppm  | Yb<br>ppm | TRE |
|--------|--------|-------|--------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|-----------|-----|
| MR01   |        | -     | 1      | MD02084 | 3353.4    | 269.6     | 183.9     | 17.0      | 254.0     | 58.8      | 1644.5    | 29.5      | 4333.0    | 1244.4    | 366.1     | 271.9     | 117.5     | 41.8      | 32.0      | 1841.0 | 201.7     | 11  |
| MR01   | 5 10   |       | 1      | MD02092 | 874.5     | 44.2      | 38.7      | 3.2       | 38.6      | 10.6      | 437.7     | 8.3       | 3152.3    | 292.8     | 90.6      | 45.2      | 176.9     | 6.5       | 6.2       | 316.8  | 53.8      | 2   |
| MR01   |        | 2 103 | 1      | MD02093 | 971.2     | 47.9      | 35.8      | 5.8       | 47.2      | 9.9       | 473.0     | 5.3       | 2656.3    | 349.6     | 103.1     | 56.1      | 144.5     | 8.1       | 5.0       | 289.4  | 39.1      |     |
| MR01   | 5 10   | 5 106 | 1      | MD02096 | 1514.5    | 66.9      | 66.2      | 3.6       | 51.8      | 16.3      | 749.8     | 14.7      | 8282.8    | 428.7     | 144.5     | 57.5      | 501.4     | 9.9       | 11.4      | 511.2  | 94.2      |     |
| MR01   | 5 10   | 6 107 | 1      | MD02097 | 1065.4    | 131.6     | 141.1     | 4.4       | 81.0      | 35.2      | 516.7     | 30.1      | 2522.5    | 375.2     | 110.8     | 73.6      | 144.9     | 18.2      | 23.9      | 1011.7 | 187.7     |     |
| MR01   | 6      | 3 4   | 1      | MD02117 | 2290.5    | 188.7     | 122.8     | 11.7      | 166.9     | 40.6      | 1152.3    | 11.2      | 2197.9    | 847.5     | 242.9     | 170.4     | 108.8     | 31.8      | 16.0      | 1095.1 | 101.7     |     |
| MR01   | 6 -    | 4 5   | 1      | MD02118 | 1217.1    | 91.6      | 52.6      | 7.1       | 89.5      | 18.7      | 613.8     | 5.2       | 787.6     | 491.5     | 138.8     | 93.0      | 39.8      | 15.6      | 7.1       | 525.7  | 40.7      |     |
| MR01   | 6 1    | 1 12  | 1      | MD02128 | 748.9     | 63.9      | 40.2      | 4.2       | 57.5      | 13.4      | 363.7     | 3.8       | 523.4     | 295.9     | 81.2      | 59.5      | 25.2      | 11.0      | 5.2       | 327.1  | 34.4      |     |
| MR01   | 6 1    | 3 14  | 1      | MD02130 | 1266.4    | 119.1     | 77.8      | 6.6       | 92.0      | 25.5      | 663.1     | 8.0       | 931.5     | 466.1     | 134.7     | 95.9      | 47.6      | 19.3      | 9.9       | 628.0  | 69.1      |     |
| MR01   | 6 4    | 1 42  | 1      | MD02164 | 632.3     | 88.7      | 53.6      | 5.4       | 64.5      | 18.2      | 339.8     | 4.9       | 733.0     | 262.4     | 75.2      | 57.9      | 44.1      | 12.8      | 6.9       | 510.5  | 43.9      |     |
| MR01   | 6 4:   | 2 43  | 1      | MD02165 | 801.5     | 48.1      | 28.4      | 7.4       | 49.3      | 9.3       | 415.9     | 2.8       | 543.1     | 306.7     | 88.5      | 54.5      | 27.0      | 8.0       | 3.8       | 255.9  | 24.2      |     |
| MR01   | 6 4    | 3 44  | 1      | MD02166 | 962.9     | 68.6      | 40.0      | 7.4       | 66.4      | 13.5      | 497.2     | 3.8       | 663.6     | 380.2     | 109.8     | 73.5      | 34.3      | 12.0      | 5.2       | 354.3  | 33.5      |     |
| MR01   | 6 5    | 4 55  | 1      | MD02177 | 958.7     | 59.7      | 48.1      | 3.7       | 48.2      | 13.5      | 478.1     | 10.2      | 2654.1    | 318.9     | 99.9      | 53.2      | 156.6     | 8.5       | 8.0       | 386.6  | 65.6      |     |
| MR01   | 6 7    | 2 73  | 1      | MD02198 | 839.6     | 65.9      | 43.3      | 4.0       | 55.5      | 14.1      | 401.5     | 5.7       | 818.8     | 296.4     | 87.3      | 57.8      | 48.3      | 9.7       | 6.0       | 361.1  | 43.3      |     |
| MR01   | 6 8    | 3 84  | 1      | MD02212 | 1058.8    | 73.1      | 50.7      | 4.6       | 60.2      | 15.3      | 535.8     | 9.1       | 2433.7    | 371.7     | 114.4     | 66.9      | 121.4     | 11.0      | 8.5       | 449.7  | 65.3      |     |
| MR01   | 6 10   | 0 101 | 1      | MD02232 | 831.4     | 62.8      | 48.8      | 4.2       | 55.5      | 14.1      | 432.9     | 9.5       | 1686.4    | 308.0     | 91.1      | 58.7      | 99.7      | 9.7       | 8.3       | 440.6  | 69.4      |     |
| MR01   | 6 10   | 1 102 | 1      | MD02233 | 902.9     | 64.5      | 45.1      | 4.9       | 58.4      | 14.0      | 459.9     | 7.5       | 1740.3    | 330.1     | 100.8     | 61.5      | 103.0     | 10.5      | 7.2       | 409.7  | 52.3      |     |
| MR01   | 6 10   | 2 103 | 1      | MD02234 | 1567.9    | 100.3     | 75.2      | 5.9       | 83.4      | 22.8      | 794.6     | 13.6      | 5600.1    | 523.0     | 166.0     | 94.5      | 322.1     | 16.1      | 12.2      | 639.5  | 95.5      |     |
| MR01   | 7 1    | 9 20  | 1      | MD02277 | 1092.3    | 30.3      | 15.4      | 7.1       | 33.4      | 5.6       | 595.9     | 1.4       | 328.3     | 322.2     | 101.3     | 46.8      | 20.6      | 5.2       | 2.3       | 145.7  | 12.0      |     |
| MR01   | 7 3    | 2 33  | 1      | MD02293 | 747.8     | 59.3      | 42.9      | 3.1       | 45.3      | 12.7      | 368.0     | 6.5       | 1555.7    | 257.9     | 74.7      | 46.7      | 86.7      | 8.8       | 6.7       | 351.3  | 44.6      |     |
| MR01   | 7 6    | 2 63  | 1      | MD02329 | 1721.2    | 128.8     | 94.9      | 9.3       | 121.0     | 28.5      | 829.0     | 14.0      | 2607.6    | 674.5     | 196.8     | 145.0     | 84.4      | 20.8      | 14.6      | 861.8  | 97.0      |     |
| MR01   | 7 6    | 3 64  | 1      | MD02330 | 771.0     | 59.6      | 44.3      | 4.4       | 52.9      | 13.0      | 376.2     | 7.3       | 1328.2    | 299.2     | 88.6      | 62.7      | 60.6      | 9.0       | 7.5       | 409.5  | 53.5      |     |
| MR01   | 8      | 0 1   | 1      | MD02396 | 3972.3    | 173.0     | 117.5     | 8.2       | 101.1     | 36.6      | 628.2     | 14.1      | 3526.2    | 502.1     | 156.7     | 104.2     | 159.1     | 23.6      | 18.4      | 893.5  | 112.1     |     |
| MR01   | 8      | 1 2   | 1      | MD02397 | 1624.4    | 80.7      | 48.1      | 6.0       | 65.8      | 15.5      | 514.6     | 5.4       | 1323.3    | 409.7     | 124.0     | 79.1      | 57.2      | 12.5      | 6.7       | 392.7  | 45.5      |     |
| MR01   | 8 :    | 2 3   | 1      | MD02398 | 1450.6    | 90.0      | 51.4      | 8.0       | 83.4      | 18.1      | 618.8     | 5.6       | 1099.9    | 537.1     | 157.0     | 106.8     | 40.7      | 15.2      | 7.5       | 472.0  | 45.9      |     |
| MR01   | 8 2    | 3 24  | 1      | MD02425 | 821.9     | 80.1      | 53.8      | 4.7       | 58.8      | 17.5      | 397.0     | 5.1       | 793.9     | 320.2     | 93.6      | 63.0      | 19.2      | 12.2      | 7.8       | 550.1  | 42.8      |     |
| MR01   | 8 2    | 4 25  | 1      | MD02426 | 2252.4    | 169.5     | 107.6     | 10.3      | 145.3     | 33.7      | 1092.1    | 14.1      | 3126.5    | 874.1     | 253.5     | 169.0     | 118.7     | 26.4      | 16.1      | 1002.3 | 105.0     |     |
| MR01   | 8 2    | 6 27  | 1      | MD02428 | 935.6     | 65.5      | 37.7      | 4.4       | 54.0      | 13.9      | 521.5     | 4.2       | 759.5     | 336.6     | 100.5     | 63.6      | 33.2      | 10.3      | 5.4       | 348.5  | 35.0      |     |
| MR01   | 8 4    | 1 42  | 1      | MD02446 | 988.3     | 70.9      | 68.1      | 3.9       | 50.6      | 17.8      | 506.4     | 13.5      | 1926.3    | 335.3     | 104.1     | 60.7      | 121.3     | 9.9       | 11.8      | 516.0  | 90.3      |     |
| MR01   | 8 4    | 2 43  | 1      | MD02447 | 720.1     | 63.0      | 51.4      | 2.7       | 41.4      | 14.4      | 386.7     | 9.7       | 1671.4    | 238.5     | 74.4      | 42.5      | 97.7      | 8.6       | 9.3       | 401.5  | 64.6      |     |
| MR01   | 8 8    | 4 85  | 1      | MD02495 | 903.8     | 80.3      | 58.7      | 3.8       | 56.7      | 18.2      | 471.3     | 9.1       | 1948.3    | 313.1     | 97.0      | 61.0      | 115.4     | 11.2      | 10.0      | 466.2  | 66.6      |     |
| MR01   |        |       | 1      | MD02504 | 1610.8    | 160.0     | 104.0     | 8.5       | 124.5     | 34.5      | 859.5     | 10.8      | 1448.6    | 587.5     | 172.9     | 128.5     | 82.1      | 24.7      | 15.0      | 840.1  | 90.6      |     |
| MR01   |        |       | 1      | MD02508 | 1365.2    | 129.6     | 82.6      | 6.4       | 98.0      | 27.5      | 736.8     | 8.6       | 1338.0    | 476.5     | 146.3     | 98.4      | 75.7      | 19.7      | 12.4      | 663.9  | 71.0      | _   |
| MR01   | 9      | 0 1   | 1      | MD02537 | 3728.7    | 261.6     | 186.4     | 8.3       | 119.2     | 57.1      | 480.9     | 26.6      | 4084.5    | 398.9     | 120.2     | 104.5     | 244.5     | 30.6      | 30.8      | 1226.8 | 212.3     | _   |
| MR01   |        | 1 2   | 1      | MD02538 | 3703.1    | 252.4     | 157.7     | 12.5      | 170.0     | 50.4      | 1077.2    | 17.7      | 3264.3    | 876.6     | 260.7     | 193.8     | 168.3     | 34.8      | 23.1      | 1129.2 | 154.7     |     |
| MR01   | 9      | 2 3   | 1      | MD02539 | 2078.6    | 157.8     | 86.8      | 9.3       | 113.0     | 30.1      | 797.1     | 9.7       | 2029.9    | 676.3     | 198.5     | 144.2     | 72.5      | 22.1      | 12.7      | 719.6  | 82.8      |     |



|                |          |          |        |                    | Се               | Dy             | Er            | Eu         | Gd            | Но           | La             | Lu           | Nb               | Nd             | Pr             | Sm            | Та            | Tb           | Tm           |                | Yb             | TREO         |
|----------------|----------|----------|--------|--------------------|------------------|----------------|---------------|------------|---------------|--------------|----------------|--------------|------------------|----------------|----------------|---------------|---------------|--------------|--------------|----------------|----------------|--------------|
| Hole Id        | From     | То       | Length | Sample             | ppm              | ppm            | ppm           | ppm        | ppm           | ppm          | ppm            | ppm          | ppm              | ppm            | ppm            | ppm           | ppm           | ppm          | ppm          | Y ppm          | ppm            | ppm          |
| MR019          | 3        | 4        | 1      | MD02540            | 1695.3           | 126.0          | 65.9          | 9.1        | 109.8         | 23.4         | 893.3          | 7.3          | 1122.7           | 722.2          | 215.8          | 141.1         | 44.7          | 19.1         | 9.4          | 568.7          | 58.9           | 5611         |
| MR019          | 4        | 5        | 1      | MD02544            | 1664.5           | 115.1          | 60.3          | 7.7        | 97.1          | 22.3         | 606.9          | 6.1          | 1372.0           | 572.3          | 163.8          | 125.2         | 40.8          | 18.1         | 8.2          | 546.2          | 56.5           | 4910         |
| MR019          | 5        | 6        | 1      | MD02545            | 1949.2           | 185.7          | 98.2          | 10.7       | 152.0         | 35.1         | 905.8          | 9.3          | 1573.3           | 778.9          | 220.0          | 171.0         | 57.1          | 26.7         | 14.2         | 897.0          | 84.8           | 6676         |
| MR019          | 6        | 7        | 1      | MD02546            | 2704.6           | 276.6          | 160.2         | 13.9       | 205.2         | 55.8         | 1472.3         | 15.9         | 2046.8           | 1016.6         | 302.2          | 224.6         | 123.0         | 39.7         | 22.0         | 1323.2         | 138.0          | 9605         |
| MR019          | 7        | 8        | 1      | MD02547            | 3045.3           | 309.0          | 185.1         | 14.7       | 227.3         | 61.6         | 1551.0         | 19.6         | 2556.3           | 1118.2         | 324.2          | 246.8         | 147.9         | 43.8         | 25.0         | 1445.1         | 155.5          | 10572        |
| MR019          | 9        | 10       | 1      | MD02549            | 3577.4           | 389.2          | 235.5         | 18.0       | 275.9         | 78.7         | 1959.5         | 24.1         | 2946.7           | 1296.6         | 390.0          | 283.6         | 182.1         | 54.4         | 32.8         | 1828.2         | 208.9          | 12838        |
| MR019          | 12       | 13       | 1      | MD02552            | 1273.1           | 118.2          | 67.6          | 6.3        | 92.2          | 23.6         | 620.5          | 6.5          | 1026.9           | 471.6          | 138.8          | 99.6          | 51.3          | 17.4         | 8.9          | 573.9          | 58.4           | 4312         |
| MR019          | 27       | 28       | 1      | MD02570            | 901.9            | 80.1           | 46.4          | 4.9        | 63.6          | 16.8         | 461.7          | 5.1          | 1108.1           | 325.0          | 98.8           | 70.9          | 52.8          | 12.2         | 6.7          | 425.9          | 40.8           | 3088         |
| MR019          | 36       | 37       | 1      | MD02579            | 2675.5           | 261.3          | 172.5         | 12.6       | 197.5         | 54.4         | 1399.0         | 18.0         | 3227.1           | 963.6          | 290.0          | 201.8         | 190.1         | 37.5         | 25.2         | 1352.3         | 153.8          | 9423         |
| MR019          | 73       | 74       | 1      | MD02625            | 1804.1           | 166.7          | 144.6         | 6.7        | 113.7         | 37.9         | 943.8          | 25.8         | 4700.2           | 620.0          | 194.5          | 118.4         | 282.4         | 22.5         | 25.6         | 1061.3         | 181.0          | 6596         |
| MR020          | 5        | 6        | 1      | MD02686            | 1086.8           | 90.2           | 66.2          | 5.1        | 69.3          | 18.9         | 645.3          | 10.7         | 1193.1           | 373.5          | 116.3          | 72.9          | 67.5          | 12.4         | 11.2         | 550.7          | 75.9           | 3865         |
| MR020          | 6        | 7        | 1      | MD02687            | 693.8            | 64.0           | 55.0          | 3.4        | 47.4          | 14.6         | 389.0          | 8.8          | 642.9            | 248.4          | 73.7           | 46.5          | 44.0          | 8.3          | 9.4          | 400.7          | 59.9           | 2560         |
| MR020          | 10       | 11       | 1      | MD02691            | 1407.6           | 73.2           | 41.3          | 5.3        | 71.6          | 14.2         | 781.4          | 4.1          | 2446.3           | 494.3          | 153.6          | 82.5          | 147.6         | 11.5         | 5.7          | 430.3          | 35.1           | 4351         |
| MR020          | 49       | 50       | 1      | MD02736            | 782.2            | 104.8          | 113.1         | 3.1        | 49.4          | 26.8         | 405.7          | 23.0         | 2264.1           | 251.1          | 79.3           | 48.8          | 149.0         | 11.5         | 20.2         | 795.9          | 157.0          | 3475         |
| MR020          | 50       | 51       | 1      | MD02737            | 1479.1           | 93.3           | 106.3         | 3.5        | 52.6          | 25.3         | 760.2          | 24.5         | 6710.1           | 409.8          | 141.5          | 59.1          | 467.0         | 10.9         | 21.4         | 754.8          | 154.9          | 4948         |
| MR020          | 51       | 52       | 1      | MD02738            | 1500.9           | 93.1           | 93.2          | 4.0        | 63.9          | 23.7         | 820.3          | 19.2         | 5147.0           | 459.3          | 155.5          | 70.8          | 355.4         | 12.2         | 17.1         | 682.4          | 123.2          | 4993         |
| MR020          | 55       | 56       | 1      | MD02745            | 858.4            | 47.6           | 33.7          | 3.7        | 42.4          | 10.4         | 422.7          | 5.2          | 2224.4           | 299.7          | 87.7           | 48.1          | 142.9         | 7.5          | 5.3          | 288.9          | 33.7           | 2646         |
| MR021          | 17       | 18       | 1      | MD02839            | 5597.7           | 469.1          | 307.9         | 25.1       | 384.8         | 100.9        | 2803.5         | 30.0         | 6485.7           | 2079.6         | 590.9          | 383.8         | 294.9         | 72.6         | 42.1         | 2441.6         | 255.7          | 18787        |
| MR021          | 18       | 19       | 1      | MD02840            | 3281.6           | 308.5          | 203.8         | 15.8       | 246.1         | 67.5         | 1715.1         | 21.7         | 3318.0           | 1214.9         | 344.3          | 235.1         | 131.4         | 46.4         | 29.5         | 1735.0         | 178.6          | 11634        |
| MR021          | 19       | 20       | 1      | MD02844            | 6047.1           | 677.2          | 482.3         | 30.8       | 509.4         | 153.7        | 2999.6         | 56.9         | 5923.7           | 2292.4         | 642.3          | 472.0         | 320.6         | 100.6        | 70.9         | 3815.8         | 459.6          | 22704        |
| MR021          | 20       | 21       | 1      | MD02845            | 1654.9           | 149.8          | 97.2          | 10.6       | 127.0         | 32.6         | 859.4          | 10.6         | 1733.4           | 633.9          | 175.1          | 122.0         | 81.5          | 24.1         | 14.1         | 838.3          | 85.7           | 5831         |
| MR021<br>MR022 | 71<br>18 | 72<br>19 | 1      | MD02905<br>MD02984 | 1236.8<br>1438.6 | 106.3<br>170.7 | 81.7<br>122.5 | 6.6<br>7.9 | 89.4<br>137.7 | 24.3<br>38.5 | 584.9<br>766.7 | 15.9<br>14.6 | 3150.1<br>1390.5 | 468.7<br>533.2 | 132.9<br>149.4 | 87.6<br>110.9 | 144.8<br>81.4 | 15.9<br>25.6 | 13.6<br>18.2 | 676.6<br>923.5 | 102.2<br>113.3 | 4396<br>5515 |
| MR022          | 24       | 25       | 1      | MD02904<br>MD02990 | 1165.4           | 107.6          | 75.4          | 6.4        | 99.0          | 24.2         | 588.9          | 9.8          | 886.5            | 458.8          | 127.4          | 90.9          | 50.3          | 16.5         | 11.2         | 621.0          | 73.9           | 4192         |
| MR022          | 33       | 34       | 1      | MD02999            | 3285.9           | 424.8          | 303.5         | 17.8       | 316.5         | 95.1         | 1694.2         | 36.8         | 5441.5           | 1219.4         | 342.2          | 253.7         | 331.8         | 60.5         | 45.9         | 2234.0         | 288.5          | 12813        |
| MR022          | 91       | 92       | 1      | MD03069            | 1350.5           | 80.9           | 56.0          | 6.1        | 83.4          | 16.8         | 675.2          | 13.7         | 3324.9           | 488.0          | 141.4          | 83.8          | 164.1         | 12.8         | 10.3         | 490.5          | 81.6           | 4326         |
| MR022          | 106      | 107      | 1      | MD03087            | 795.3            | 50.1           | 31.4          | 6.0        | 52.6          | 10.7         | 382.2          | 3.6          | 842.7            | 312.8          | 86.6           | 54.9          | 44.4          | 8.1          | 4.5          | 278.6          | 28.9           | 2537         |
|                |          | •        | •      |                    |                  |                |               |            |               |              |                |              | •                |                |                |               |               | •            |              | •              |                |              |
|                |          |          |        |                    |                  |                |               |            |               |              |                |              |                  |                |                |               |               |              |              |                |                |              |
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|                |          |          |        |                    |                  |                |               |            |               |              |                |              |                  |                |                |               |               |              |              |                |                |              |
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|                |          |          |        |                    |                  |                |               |            |               |              |                |              |                  |                |                |               |               |              |              |                |                |              |
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|                |          |          |        |                    |                  |                |               |            |               |              |                |              |                  |                |                |               |               |              |              |                |                |              |
|                |          |          |        |                    |                  |                |               |            |               |              |                |              |                  |                |                |               |               |              |              |                |                |              |



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

#### **Section 1: Sampling Techniques and Data**

| (Criteria in this se                                 | ection applies to all succeeding sections)  |
|--|---|
|  |   |
| Criteria   | Commontony  |
|  | Commentary  |
| Sampling techniques                                  | <ul> <li>RC drilling at Machinga was to test mineralisation identified in trenching and validate historical drill results. This drilling was sampled at one metre interfrom 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, NP, 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 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 red</li> </ul>  |
| Drilling techniques                                  | <ul> <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>  |
| Drill sample recovery                                | <ul> <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 dayailable.</li> </ul> |
| Logging  | <ul> <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>  |
| Sub-sampling<br>techniques and sample<br>preparation | <ul> <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> <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, 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>   |
| Quality of assay data and laboratory tests              | <ul> <li>Samples from the RC and DDH drilling were submitted to Intertek Minerals Laboratory Services in Kitwe, Zambia for sample preparation prior to exto 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. Sam 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 retain 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 samp 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> |
| Verification of sampling and assaying                   | <ul> <li>Assay results are reviewed by 2 company personnel.</li> <li>No adjustments to data were considered necessary.</li> </ul>  |
| Verification of sampling and assaying                   | Not reported   |
| Location of data points                                 | <ul> <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> </ul>  |
| Data spacing and distribution                           | <ul> <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>   |
| Orientation of data in relation to geological structure | <ul> <li>Drilling has been undertaken and orientated perpendicular to the inferred orientation of the mineralised structures based on the trench mapping<br/>previous drilling results.</li> </ul>   |
| Sample security   | <ul> <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   |
|-------------------|--|
| 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 | <ul> <li>Exploration is conducted within several licenses in Malawi, being:</li> <li>Machinga EL0529 which is held 100% by Green Exploration Limited covering an area of 42.9km².</li> <li>Application Machinga South APL0251 of 157.5km² is held by Green Exploration Limited.</li> </ul>                                       |
| 15                                      | All licenses 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 w completed preliminary geological work (Scintillometer survey, mapping trenching and drilling). Radiometric anomalies were found but none of the factual data 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 a Geophysics Limited. Interpretation was completed by Paterson, Grant & Watson Limited in 1987. The survey located Uranium channel anomalies in the regi                               |
|   | 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 a 4045m of RC drilling completed.  |
|   | (See DY6 ASX release July 6 <sup>th</sup> 2023.)   |
|   | A total of 281 samples were submitted from the trench sampling and 2130 samples were submitted from the RC drilling.   |
| Geology                                 | The area of the Machinga licence is dominated by rocks of the Mesozoic Chilwa Alkaline Province; consisting of granite, syenite, nepheline-syenite plutons vassociated 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 east 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.  |
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| Criteria   | Commentary  |
|--|---|
| Data aggregation methods   | Other than compositing of samples on lower radiometric responses no data aggregation has been applied.  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 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. |
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