

# ASX ANNOUNCEMENT

20/10/2022



## EXCEPTIONAL RARE EARTH DRILL RESULTS AT MORGANS CREEK

### HIGHLIGHTS

- Exceptional clay-hosted REE grades of up to **9,082ppm (0.91%) TREO<sup>1</sup>** with multiple holes mineralised from surface and to end of hole (EOH)
- **New assays extend mineralised strike by 300%, from 1.4km to 4.3km (open)**
- Very **high basket average of 34% MREO<sup>2</sup> (Nd + Pr + Dy + Tb)**, which is significantly higher than the peer average of 25% MREO, with **high levels of Dysprosium and Terbium**
- The mineralised rare earth clays assayed contain **low deleterious elements**, including low **cerium, low thorium and uranium**, low calcium, and low aluminium
- Metallurgical proxy testwork produced high MREO and TREO recoveries<sup>3</sup>, indicating high REE solubility in a weak acid environment and therefore potential for a simple and low-cost metallurgical flowsheet, consistent with ionic and colloidal REE mineralisation
- Australian Nuclear Science and Technology Organisation (ANSTO), world leaders in ionic adsorption clay metallurgy, have been engaged to conduct advanced ionic leach testwork on Morgans Creek REE clay samples with initial results expected late November
- Mineralisation is concentrated primarily within weathered Yednalue formation which has a **continuous strike of over 5.5km** at Morgans Creek with **exposures over 300m wide**
- Drill highlights include:

#### MCRB044 (Hydrothermal Hill)

- **43m @ 1,687ppm TREO from surface to EOH** (40% MREO) including:
  - **5m @ 3,343ppm (0.33%) TREO** from 12m, with **1m @ 9,082ppm (0.91%) TREO** from 13m (44% MREO)
  - **14m @ 2,979ppm (0.30%) TREO** from 29m to EOH, with **2m @ 7,052ppm (0.71%) TREO** from 29m (42% MREO)

#### MCRB045 (Hydrothermal Hill)

- **40m @ 1,582ppm TREO from surface to EOH** (41% MREO) including:
  - **17m @ 2,636 (0.26%) TREO** from 11m, including
    - **5m @ 4,930ppm (0.49%) TREO** from 19m with **1m @ 6,234ppm (0.62%) TREO** from 21m

#### MCRB053 (Hydrothermal Hill)

- **31m @ 1,444ppm TREO from surface to EOH** (44% MREO) including:
  - **2m @ 2,656ppm (0.27%) TREO** from 16m, and
  - **6m @ 3,903ppm (0.39%) TREO** from 22m with **2m @ 5,760ppm (0.58%) TREO** from 24m

#### MCRB040 (Hydrothermal Hill)

- **55m @ 678ppm TREO from surface to EOH** (25% MREO;) including:
  - **14m @ 1,230ppm TREO** from 41m to EOH with **4m @ 2,190ppm (0.22%) TREO** from 45m

#### CAPITAL STRUCTURE

581,026,785  
Shares on Issue

46,750,000  
Options on issue  
(various ex. prices  
and dates)

#### BOARD & MANAGEMENT

Thomas Line  
CEO

Paul Cronin  
Non-Executive Director

Gary Steinepreis  
Non-Executive Director

Eric De Mori  
Non-Executive Director

David Chapman  
Non-Executive Director

Dan Smith  
Company Secretary

#### CONTACT US

Level 8, 99 St Georges Terrace  
Perth WA 6000

T +61 (8) 9486 4036  
F +61 (8) 9486 4799

admin@tarugaminerals.com.au

## Strike Extension Drilling – 2.7km south of Hydrothermal Hill “Hydro Hill South”

MCRB057 (Hydro Hill South)

- **45m @ 726ppm TREO from surface** (34% MREO), including
  - **5m @ 1855ppm (0.19%) TREO from 17m** (37% MREO)

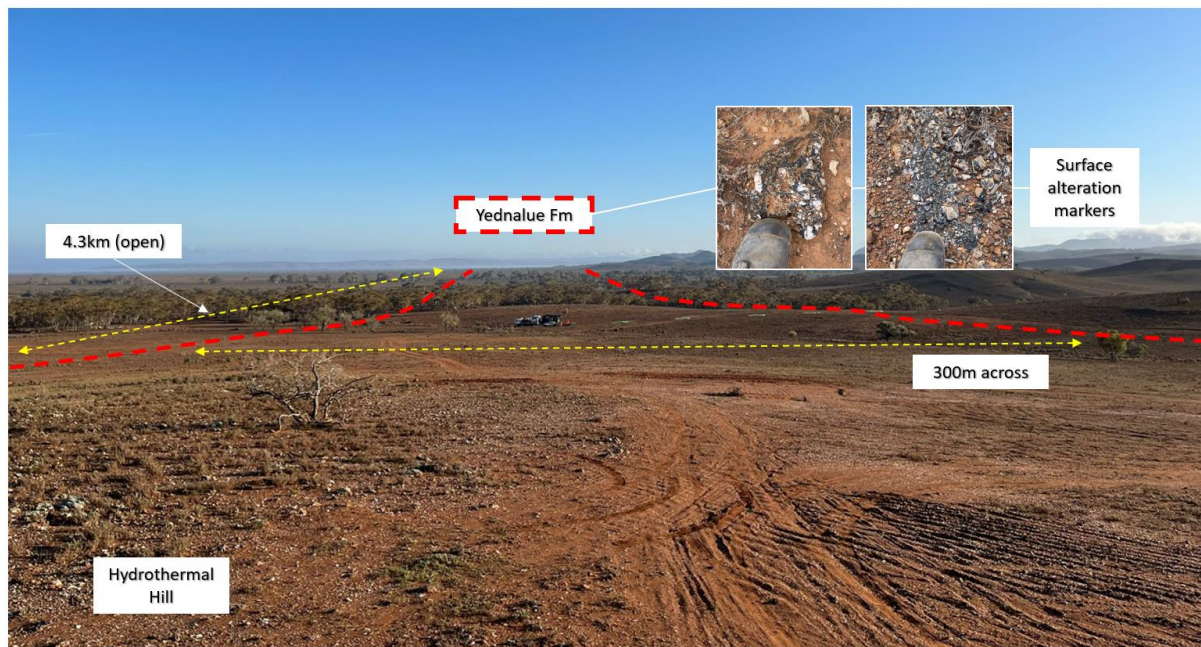
**CEO Thomas Line commented:** “These are remarkable intercepts. They are by far the highest grades we have seen at Morgans Creek to date, with the highest grade exceeding 9,000 ppm TREO. Many of the intercepts start from surface and end in mineralisation with some holes ending in high grade. The new results increase the mineralised strike at Morgans Creek from 1.4km to 4.3km. We are excited to return to complete systematic drilling over the Yednalue formation and other new clay-hosted REE targets at Morgans Creek early in Q1 2023.

We completed metallurgical proxy testwork on REE intercepts at Morgans Creek early in 2022. The results showed a high proportion of readily soluble REEs were extractable in a weak acid solution, supporting a low cost and simple metallurgical flowsheet consistent with ionically and colloidally bound REEs. We are very excited to be working with ANSTO, the world leaders in ionic REE leach metallurgy. We have selected a range of representative samples from Hydrothermal Hill which are on their way for analysis, with initial results expected in late November”.

<sup>1</sup>TREO refers to the sum of all 15 REEs in their respective oxide equivalent (see JORC table for conversion factors)

<sup>2</sup>MREO refers to the 4 high-value magnetic rare earth oxides ( $\text{Nd}_2\text{O}_3$   $\text{Pr}_2\text{O}_3$  +  $\text{Dy}_2\text{O}_3$  +  $\text{Tb}_2\text{O}_3$ ) used in renewable technologies and permanent magnets

<sup>3</sup>Recovery refers to the % extraction of soluble REEs as indicated by the modified (“weak”) aqua regia analytical analysis relative to the Fusion/Full Digest analysis obtained by dividing the weak aqua regia results by the Fusion/Full Digest results for a particular sample as announced on the 10/05/22.



**Figure 1.** Mapped weathered Yednalue quartzite unit looking north from Hydrothermal Hill towards Hydro Hill North. The mapped Yednalue quartzite extends a further 4km to the south (total 5.5km strike). Examples of prospective alteration markers associated with the Yednalue and other REE mineralised units is also shown.

## Summary

Taruga Minerals Limited (ASX: **TAR**, **Taruga** or the **Company**) is pleased to advise that the second batch of key assays have been returned for the rare earth focussed drilling program

at Morgans Creek (100% TAR), within the 1,500km<sup>2</sup> Mt Craig Project (MCP; 100% TAR). The program was comprised of 2,156m of RAB drilling over 59 drillholes. Drilling (**Figure 2**) was focussed on testing strike extensions of clay-hosted rare earth element (REE) mineralisation intercepted at Hydrothermal Hill in 2021 in weathered Yednalue quartzite (**Figure 1**).

Drilling intercepted high-grade clay-hosted REEs from surface, with many holes ending in mineralisation (**Figures 4 – 7**). The latest results have extended the strike at Hydrothermal Hill to 4.3km, with an additional 1.1km of strike remaining untested.

All remaining samples not previously despatched have now been sent to the lab for analysis. These samples were originally not despatched due to relatively low XRF readings; however, it has now been observed that the assay grades are significantly higher than handheld XRF, and often between 2 – 5 times higher. Therefore, there is potential to expand mineralised zones with the outstanding samples. Remaining samples are expected back in late November.

### Significant intercepts

#### MCRB044 (Hydrothermal Hill)

- **43m @ 1,687ppm TREO from surface to EOH** (40% MREO; 39% HREO; 57% CREO) including:
  - **5m @ 3,343ppm TREO** from 12m, with **1m @ 9,082ppm TREO** from 13m (44% MREO; 45% HREO; 64% CREO)
  - **14m @ 2979ppm TREO** from 29m to EOH, with **2m @ 7,052ppm TREO** from 29m (42% MREO; 45% HREO; 63% CREO)

#### MCRB045 (Hydrothermal Hill)

- **40m @ 1,582ppm TREO from surface to EOH** (41% MREO; 44% HREO; 62% CREO) including:
  - **17m @ 2,636 TREO** from 11m, including:
    - **5m @ 4,930ppm TREO** from 19m with **1m @ 6,234ppm TREO** from 21m

#### MCRB053 (Hydrothermal Hill)

- **31m @ 1,444ppm TREO from surface to EOH** (44% MREO; 33% HREO; 55% CREO) including:
  - **2m @ 2,656ppm TREO from 16m**, and
  - **6m @ 3,903ppm TREO from 22m with 2m @ 5,760ppm TREO from 24m**

#### MCRB040 (Hydrothermal Hill)

- **55m @ 678ppm TREO from surface to EOH** (23% MREO;) including:
  - **14m @ 1,230ppm TREO from 41m to EOH with 4m @ 2,190ppm TREO**

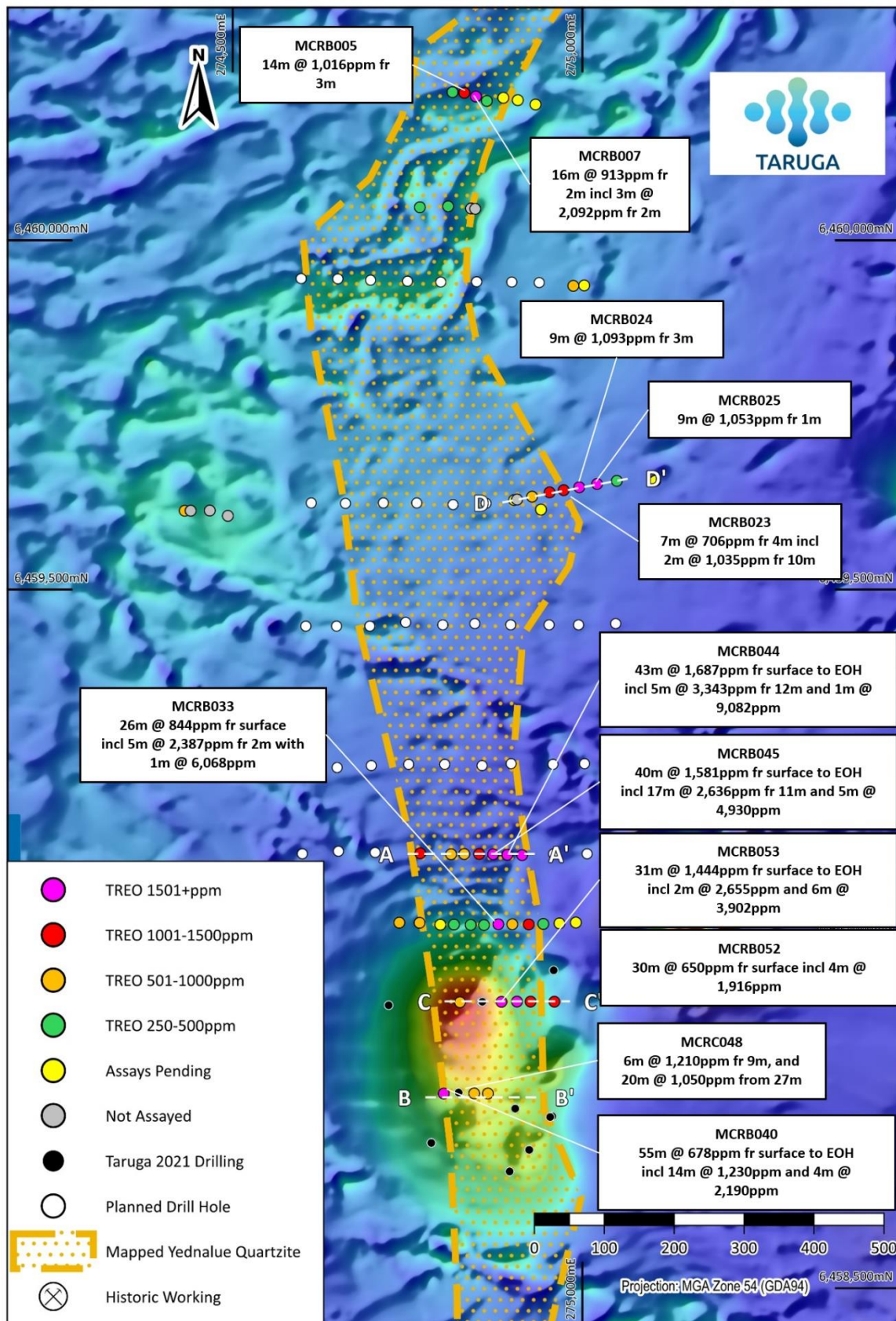
#### MCRB041 (Hydrothermal Hill)

- **13m @ 527ppm TREO from surface to EOH** (40% MREO) hole failed\* including
  - **5m @ 822ppm TREO from 8m to EOH** (40% MREO)

#### MCRB052 (Hydrothermal Hill)

- **30m @ 650ppm TREO from surface** (37% MREO), including
  - **4m @ 1916ppm TREO from 16m** (47% MREO)





**Figure 2.** Morgans Creek RAB drilling showing significant intercepts and max TREO grades. Also, lab assay status, the mapped Yedalue quartzite unit, previous Taruga 2021 drilling, and high-resolution ground magnetics TMI image.





### Significant intercepts (continued)

MCRB039 (Hydrothermal Hill)

- 29m @ 515ppm TREO from 6m to EOH (25% MREO)

MCRB048 (Hydrothermal Hill)

- 15m @ 567ppm TREO from 6m to EOH (26% MREO)

MCRB057 (Hydro Hill South - 2.7km south of Hydrothermal Hill)

- **45m @ 720ppm TREO from surface** (32% MREO; 29% HREO; 43% CREO), including
  - **5m @ 1855ppm TREO from 17m** (36% MREO; 30% HREO; 48% CREO)

MCRB058 (Hydro Hill South - 2.7km south of Hydrothermal Hill)

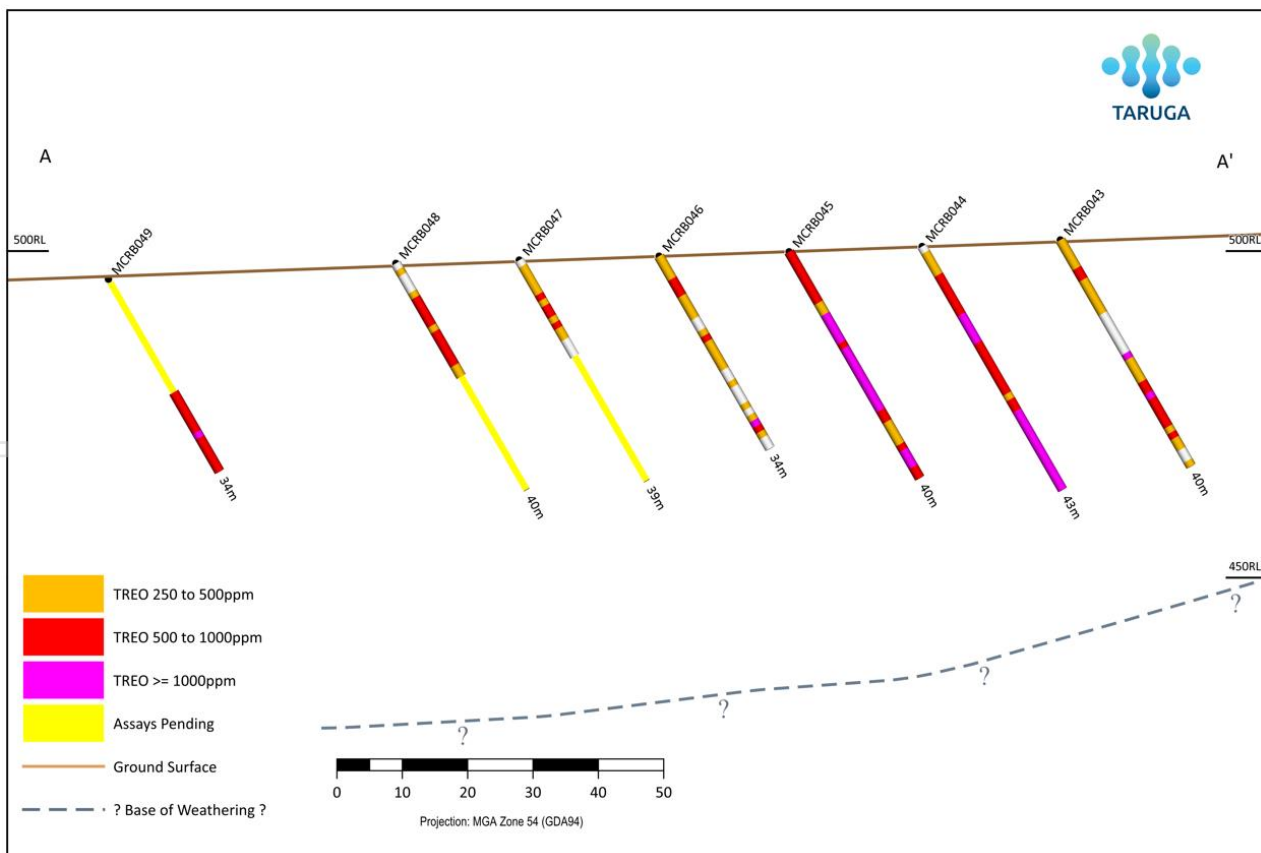
- 26m @ 559ppm TREO from 23m (24% MREO), including
  - **10m @ 867ppm TREO from 28m with 1m @ 1,703ppm TREO from 32m**

MCRB038 (Hydrothermal Hill)

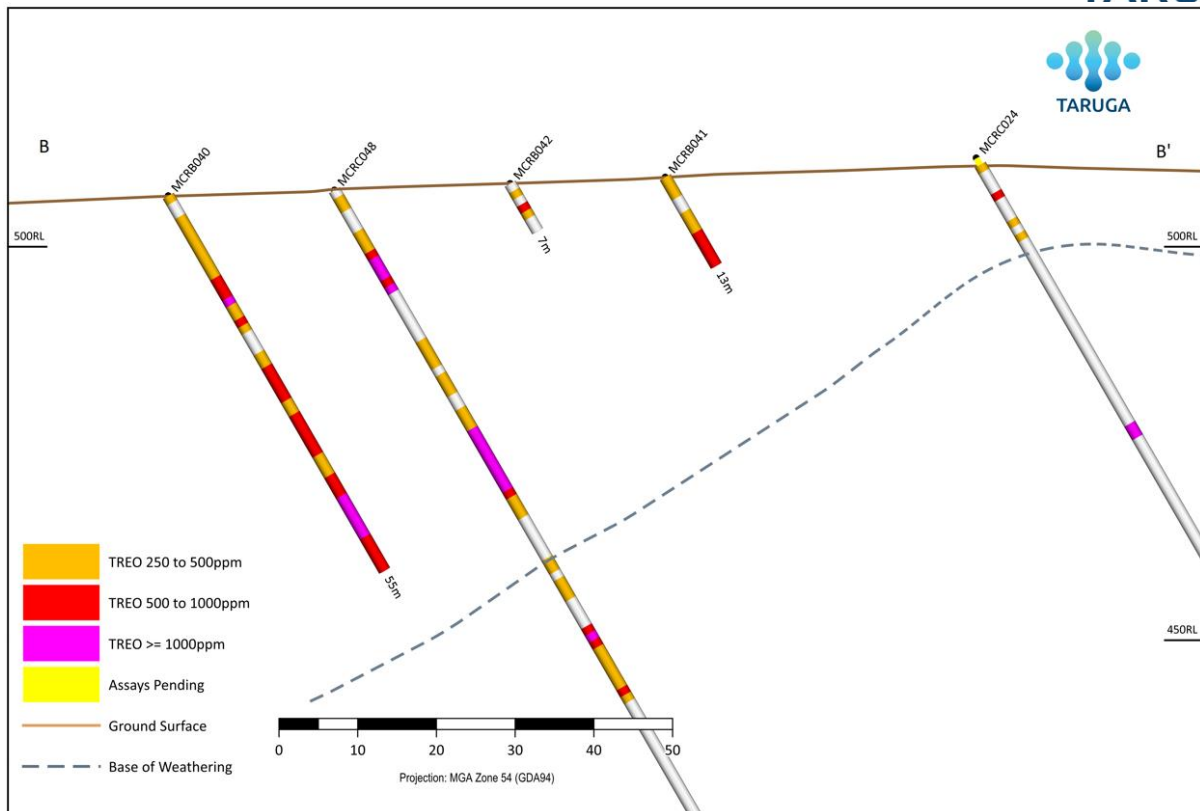
- 12m @ 567ppm TREO from 5m (35% MREO)

MCRB029 (Hydrothermal Hill)

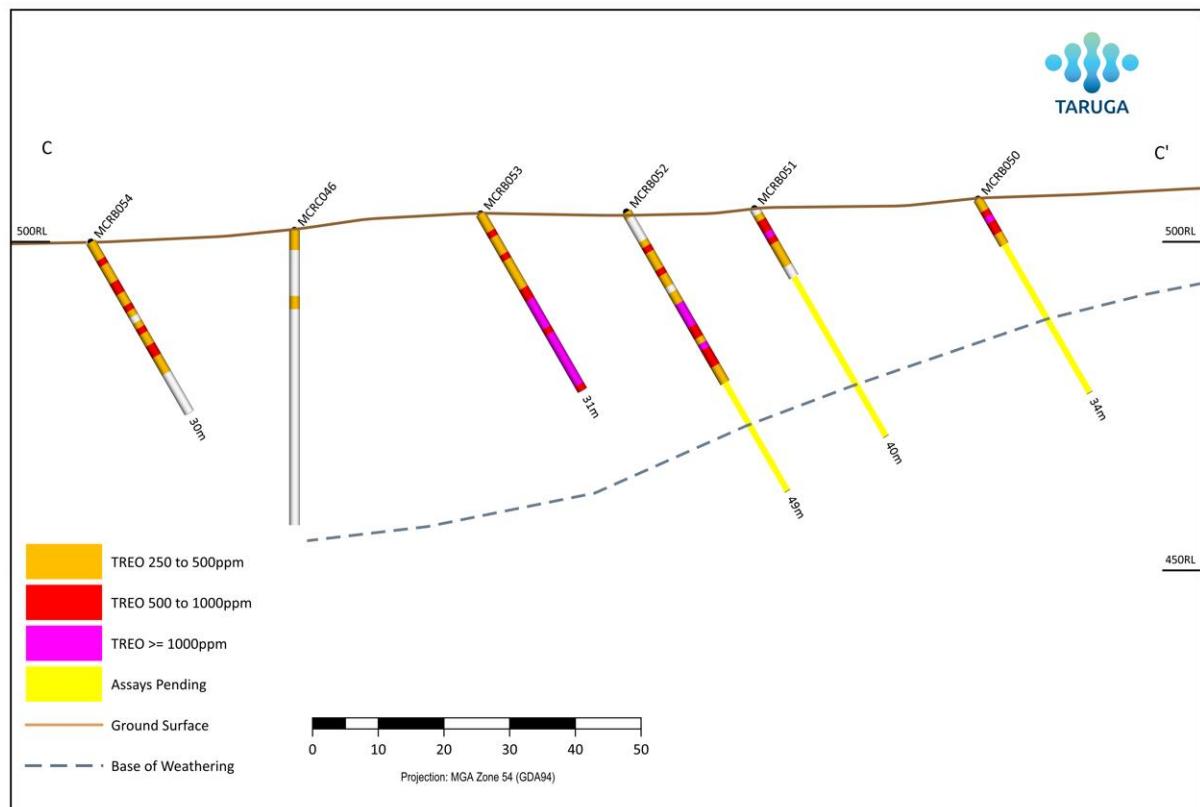
- 29m @ 515ppm TREO from 6m (25% MREO)



**Figure 4.** Cross Section A-A' colour coded by TREO grade. Note multiple holes on section either end in mineralisation or have assays pending. The base of mineralisation has not yet been found.

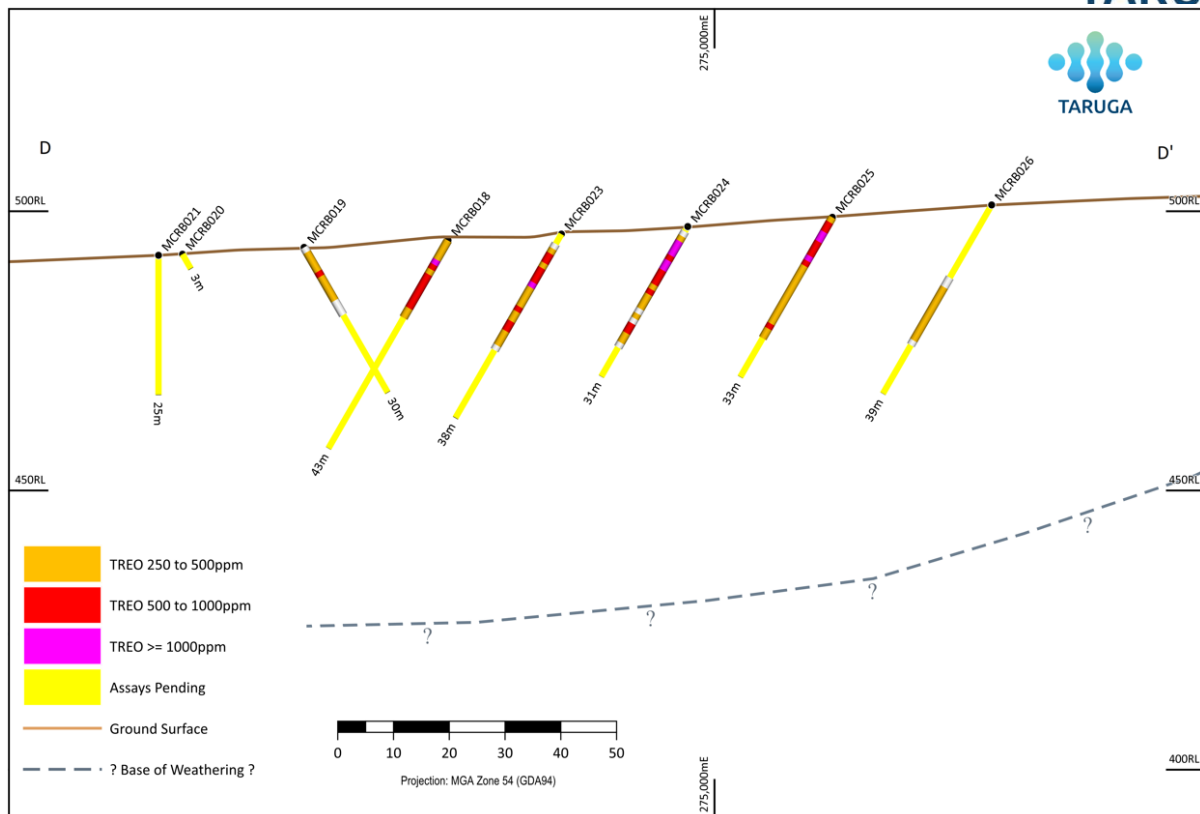


**Figure 5.** Cross Section B-B' colour coded by TREO grade. Note multiple holes on section either end in mineralisation.



**Figure 6.** Cross Section C-C' colour coded by TREO grade. Note multiple holes on section either end in mineralisation or have assays pending.





**Figure 7.** Cross Section D-D'' colour coded by TREO grade. Note all holes have assays pending at bottom of hole, which could change the reported intercepts.

### Previously reported assays at Morgans Creek 2022 RAB program include:

MCRB005 (1.4km north of Hydrothermal Hill)

- **14m @ 1,016ppm TREO from 3m** (33% MREO; 44% HREO; 55% CREO)

MCRB007 (1.4km north of Hydrothermal Hill)

- **16m @ 913ppm TREO from 2m** (29% MREO; 51% HREO; 58% CREO)
- Includes **3m @ 2,092ppm TREO from 2m**

MCRB018 (900m north of Hydrothermal Hill)

- **10m @ 780ppm TREO from 4m** (27% MREO)

MCRB023 (900m north of Hydrothermal Hill)

- **7m @ 706ppm TREO from 4m** (34% MREO)

MCRB024 (900m north of Hydrothermal Hill)

- **9m @ 1,093ppm TREO from 3m** (25% MREO)

MCRB025 (900m north of Hydrothermal Hill)

- **9m @ 1053ppm TREO from 1m** (38% MREO; 40% HREO; 60% CREO)

MCRB031 (Hydrothermal Hill)

- **5m @ 822ppm TREO from 9m** (27% MREO)

MCRB033 (Hydrothermal Hill)



- **24m @ 886ppm TREO from surface** (35% MREO; 42% HREO; 56% CREO)
- Includes **5m @ 2,378ppm TREO from 2m**, with **1m @ 6,068ppm TREO from 3m**, and
- **3m @ 1,101ppm TREO from 17m**



**Figure 8.** Examples of clays intercepted in the deep weathering profile in multiple RAB drillholes during the recent drilling at Morgans Creek.

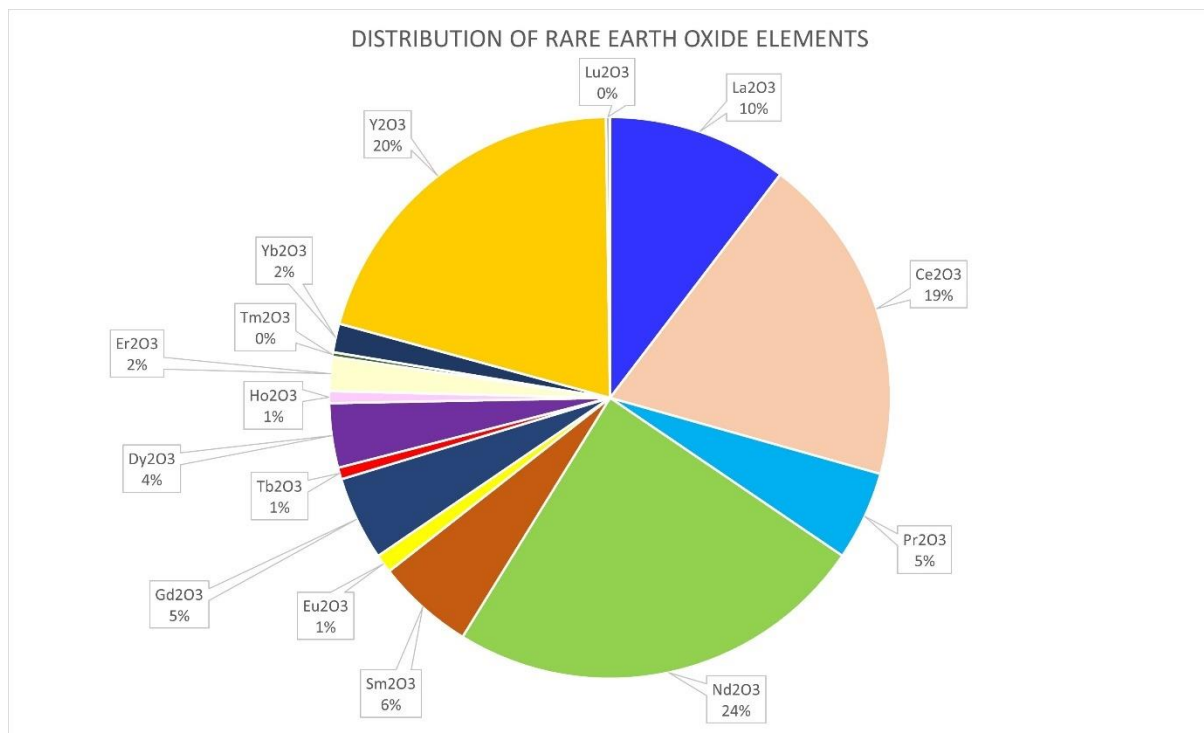
### Basket Summary

Figures 9 to 12 show the key distribution metrics of the REE basket at Morgans Creek, for all samples over 250ppm TREO. These key metrics allow a clear comparison to be made amongst clay-hosted REE peers, highlighting the high proportion of heavy and magnet REEs and low levels of cerium present at Morgans Creek.

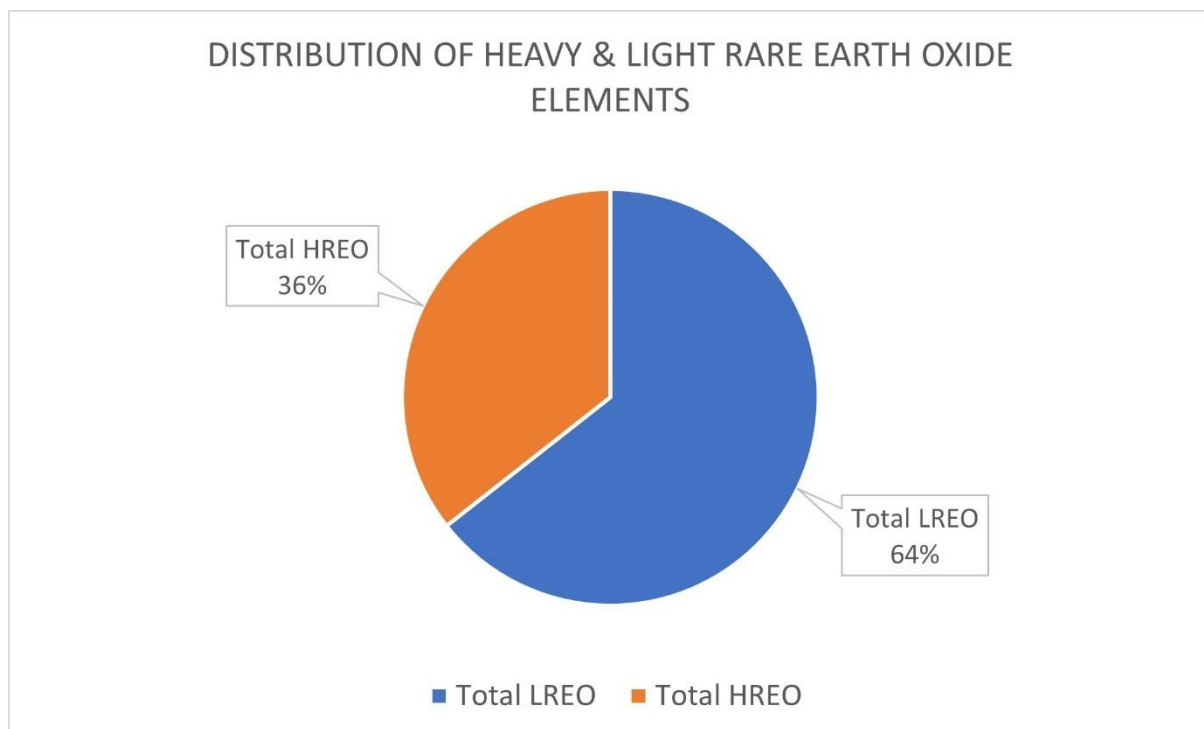
The data shows a trend of increasing proportion of high value REEs as the grade increases. For example, for the highest-grade intercept of 1m @ 9,082ppm TREO, only 3.8% of the TREO is made up of low value Ce; with 44% being high value MREO content.

In addition to having a high proportion of high-value magnet rare earths, the clay-hosted REE mineralisation at Morgans Creek contains low levels of deleterious elements including cerium, thorium and uranium, aluminium and calcium. Having low levels of the radioactive elements uranium and thorium is highly beneficial for downstream processing of rare earth element concentrates. Low cerium levels also provide significant processing benefits and mean that there are higher concentrations of the high-value REEs in the basket. High levels of  $\text{CaCO}_3$  increase the acid consumption requirements when leaching and therefore increase processing costs. High aluminium can create challenges when trying to separate the rare earth oxides once a concentrate has been produced, as the alumina tends to follow the REEs down the process flow sheet.

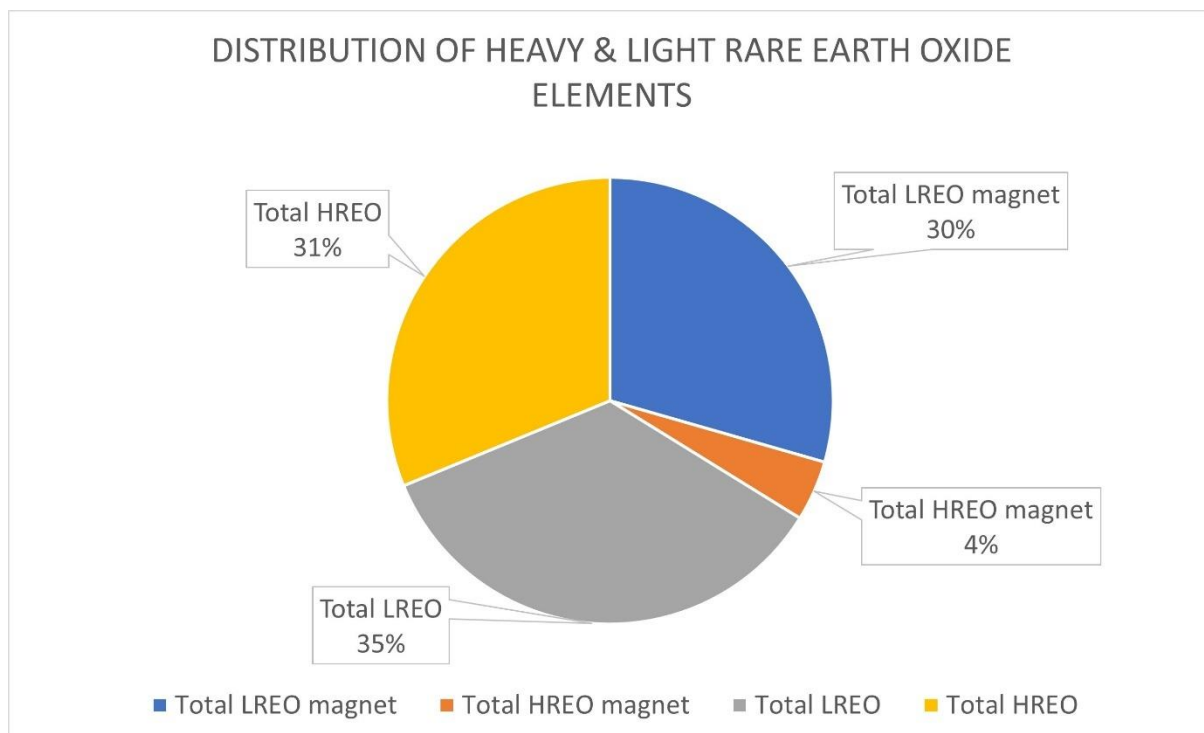
The vast majority of the Yednalue formation strike remains undrilled. Infill and extensional drill planning is currently underway. Several RAB drillholes are believed to have not reached the base of mineralisation, and the holes were ended early due to poor sample return. Therefore, in addition to infill and extensional drilling, Aircore or RC drilling will be used for the next phase to drill underneath RAB drill intercepts which are interpreted to have not reached the base of mineralisation.



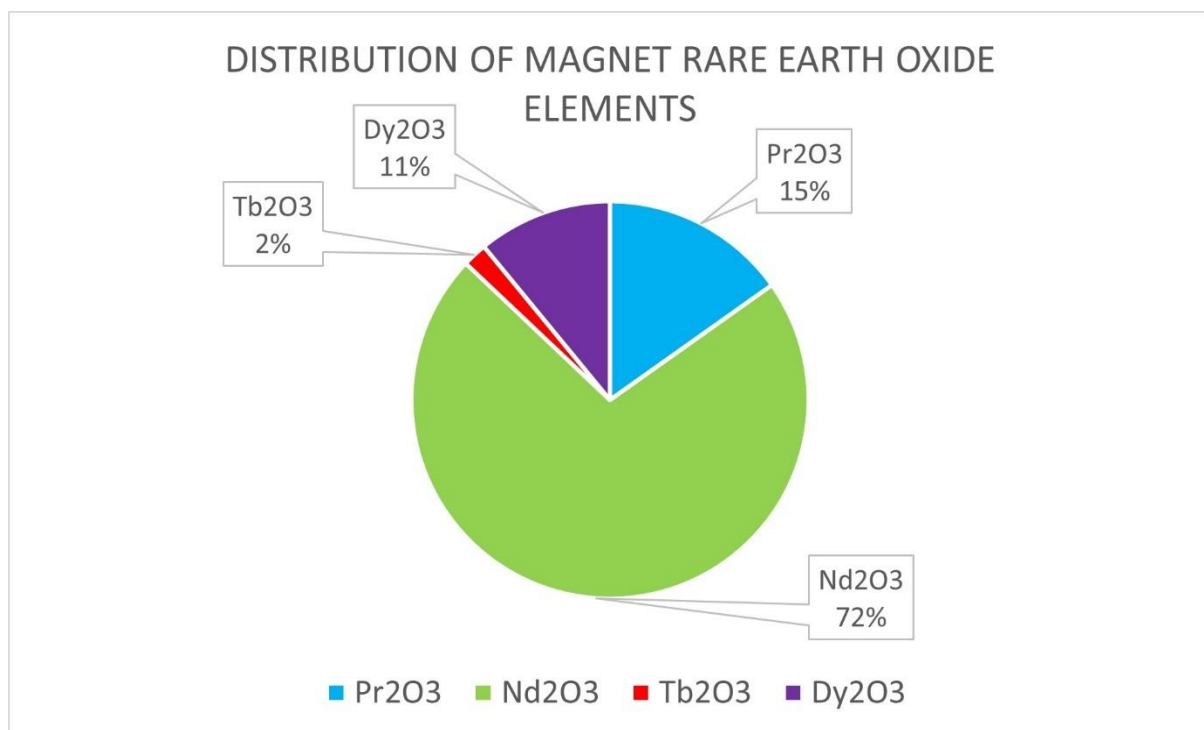
**Figure 9.** Pie chart showing percentages of individual rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.



**Figure 10.** Pie chart showing percentages of heavy and light rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.



**Figure 11.** Pie chart showing percentages of heavy and light rare earth element oxides, along with the percentages of heavy and light magnet rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.



**Figure 12.** Pie chart showing percentages of each of the four-magnet rare earth element oxides (Nd + Pr + Dy + Tb) for all 2022 RAB drilling over 250ppm TREO.



## Ionic Adsorption Clay (IAC) hosted REEs

Ionic Adsorption Clay (IAC) REE deposits hold several advantages over hard rock deposits (**Table 1**). Typically, IAC REE deposits contain higher concentrations of HREO and higher value MREO in the REE basket; require lower mining strip ratios and simple processing to produce concentrate; and are able to make a higher-grade concentrate product than hard rock REE deposits. IAC REE deposits also have low radioactivity (low thorium and uranium) as opposed to hard rock deposits which have issues with radionuclides. IAC REE separation and refining require much lower capex than hard rock deposits which require high-temperature mineral "cracking".

**Table 1.** Generalised differences between Ionic clay rare earth element deposits v.s. hard rock rare earth element deposits (source: Ionic Rare Earths ASX: IXR 2022 corporate presentation).

| Mining and Processing Stages                            | Ionic Adsorption Clay – Hosted REE  | Hard Rock – Hosted REE  |
|---|---|---|
| Mineralisation  | Soft material, negligible (if any) blasting<br>Elevated HREO/CREO product content   | Hard rock:<br>Bastnaesite and Monazite (LREO dominant):<br>Xenotime (HREO dominant)   |
| Mining  | Low relative operating costs:<br>Surface mining (~0-20m)<br>Minimal stripping of waste material<br>Progressive rehabilitation of mined areas                    | High relative operating costs:<br>Blasting required<br>Could have high strip ratios   |
| Processing Mining Site                                  | No/limited crushing or milling<br>Simple process plant<br>Potential for static or in-situ leaching with low reagent at ambient temperatures                     | Comminution, followed by beneficiaron that often requires expensive (flotation) reagents to produce mineral concentrate   |
| Mine Product  | Mixed high-grade Rare Earths precipitate, either oxide or carbonate (+90% TREO grade) for feedstock directly Into Rare Earth separation plant, low LaCe content | Mixed REE mineral concentrate (typically 20-40% TREO grade), high LaCe content, requires substantial processing before suitable for feed to rare earth separation plant   |
| Product Payability                                      | 60-70% payability as mixed Rare Earth oxide/ carbonate  | 30-35% payability as a mineral concentrate  |
| Processing - Environmental                              | Non-radioactive tailings<br>Solution treatment and reagent recovery requirements  | Tailings often radioactive (complex and costly disposal)<br>Legacy tailing management   |
| Processing - Refinery<br>(Typically not on Mining site) | Simple acid solubilisation followed by conventional REE separation<br>Complex recycling of reagents and water<br>Lower Capex (~\$100-\$200m)                    | High temperature mineral 'cracking' using strong reagents to solubilise the refractory REE minerals<br>Complex capital-intensive plant (~\$500m-\$1B)<br>required Radionuclide issues follow REE mineral concentrates |

## Exploration Plan

- Mapping of the Yednalue Quartzite unit (complete)
- Systematic RAB drill testing over the shallow weathered layers of Yednalue quartzite strike extensions from Hydrothermal Hill (Phase 1 complete)
- Review of drill results against radiometrics and magnetics from the recent airborne geophysics survey for regional targeting (underway)
- Advanced REE metallurgy and concentrate analysis (Q4 2022 – Q2 2023)
- Phase 2 Aircore/RC drilling (Q1 2023):
  - Drill to base of mineralisation
  - Infill and extensional drilling of Yednalue quartzite
  - Drill test other prospective units such as the Wirrawilka limestone
  - Commence JORC resource drilling
- Reconnaissance exploration for additional Yednalue quartzite and its analogues throughout the Mt Craig Project (underway)
- Investigate and target REE source rock
- Phase 3 drilling: new REE targets (Q1-Q2 2023)

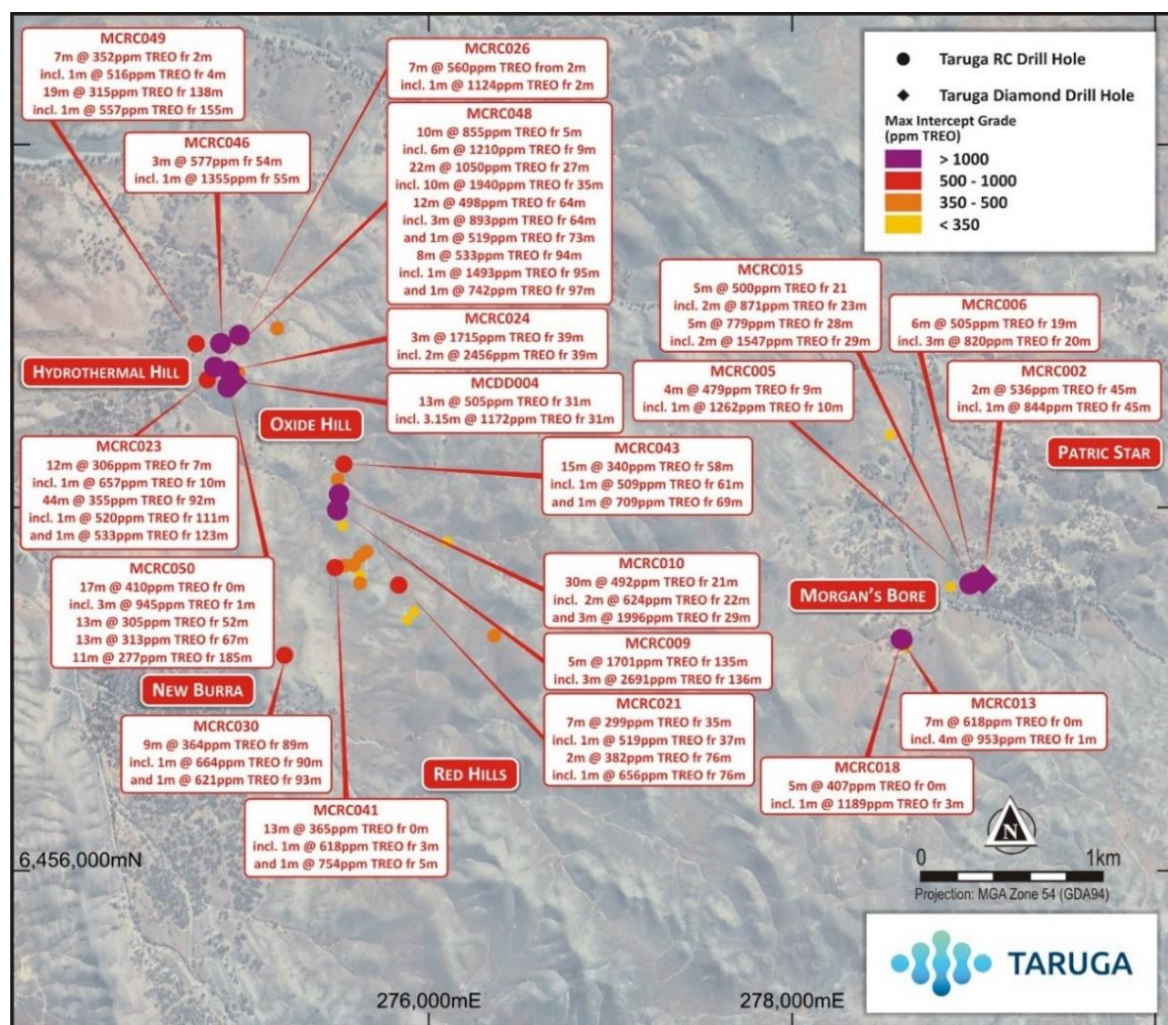
## About Morgans Creek

Two rounds of reconnaissance RC drilling were conducted at Morgans Creek by Taruga in 2021. Drilling was focussed on copper targeting, however clay hosted REE mineralisation was discovered in several drillholes at the Hydrothermal Hill prospect, which contained a high

concentration of the high-value magnetic rare earth elements (Nd + Pr + Tb + Dy). Significant intercepts of REEs have been recorded in sporadic drilling over an area of approximately 6km x 2km.

Weak acid leach testwork conducted in early 2022 indicated that the REE mineralisation has a very high proportion of readily soluble REEs, and as such it may be amenable to a low-cost simplistic metallurgical flow sheet.

Taruga's current exploration model is to focus on weathered zones of clay and saprolite over the Yednalue Quartzite unit, which outcrops for more than 5km of strike at Morgans Creek, and a further 5km of mapped strike in the northern portion of the Mt Craig Project. Large volumes of Yednalue Quartzite may be buried under shallow cover, and identification of further concealed prospects is underway. It is also apparent that REE mineralisation is not constrained to the Yednalue Quartzite, and so other units in the stratigraphic sequence such as the Wirrawilka limestone are being investigated using soils geochemistry, magnetics and radiometrics geophysics



**Figure 13.** REE Drill results from Taruga's 2021 drilling at Morgans Creek with collars colour coded by maximum TREO grade (purple represents >1000ppm TREO). Note this excludes current 2022 RAB drilling results.

This announcement was approved by the Board of Taruga Minerals Limited.

**For more information contact:**

Thomas Line

CEO

+61 8 9486 4036

**Competent person's statement**

*The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr Brent Laws, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Laws is the Exploration Manager of Taruga Minerals Limited. Mr Laws has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Laws consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.*

*\*Refer to announcements dated 10/03/2022 "polymetallic drill results at Hydrothermal Hill Skarn; and 07/02/2022 "partial drill results from MCCP". Taruga confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. Taruga confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.*

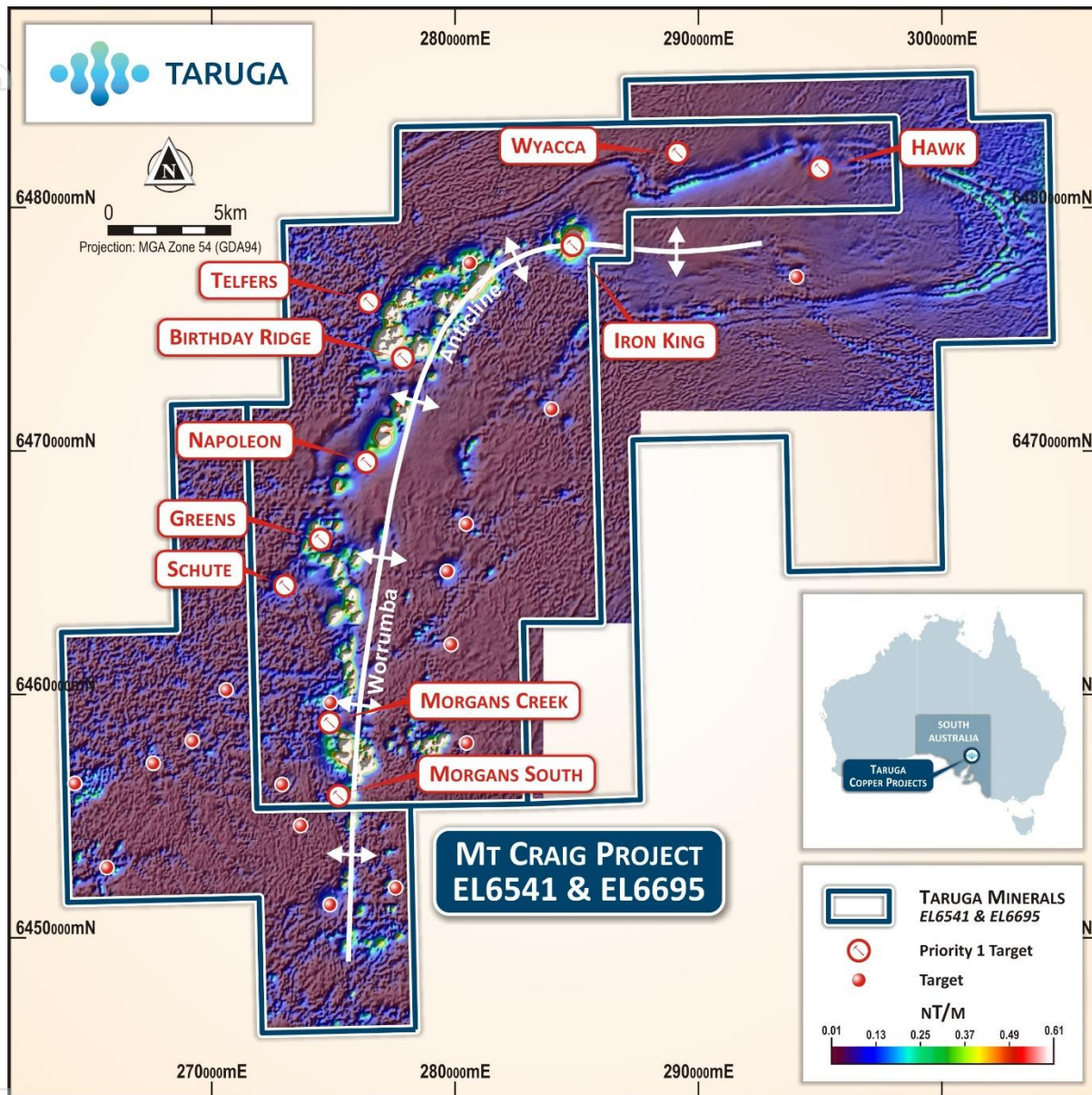
**Forward looking statements**

*This announcement contains certain forward-looking statements and comments about future events, including the Company's expectations about the proposed transaction, the proposed tenements and the performance of its businesses. Forward looking statements can generally be identified by the use of forward-looking words such as 'expect', 'anticipate', 'likely', 'intend', 'should', 'could', 'may', 'predict', 'plan', 'propose', 'will', 'believe', 'forecast', 'estimate', 'target' and other similar expressions within the meaning of securities laws of applicable jurisdictions. Indications of, and guidance on, future earnings or financial position or performance are also forward-looking statements.*

*Forward looking statements involve inherent risks and uncertainties, both general and specific, and there is a risk that such predictions, forecasts, projections and other forward-looking statements will not be achieved. Forward looking statements are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. Forward looking statements involve known and unknown risks, uncertainty and other factors which can cause the Company's actual results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in such forward-looking statements and many of these factors are outside the control of the Company. As such, undue reliance should not be placed on any forward-looking statement. Past performance is not necessarily a guide to future performance and no representation or warranty is made by any person as to the likelihood of achievement or reasonableness of any forward-looking statements, forecast financial information or other forecast. Nothing contained in this announcement nor any information made available to you is, or shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of the Company.*

*Except as required by law or the ASX Listing Rules, the Company assumes no obligation to provide any additional or updated information or to update any forward-looking statements, whether as a result of new information, future events or results, or otherwise.*





**Figure 14.** MCP Project outline showing priority exploration targets, the main structural feature being the Worrumba Anticline, and the Analytical Signal magnetics image.

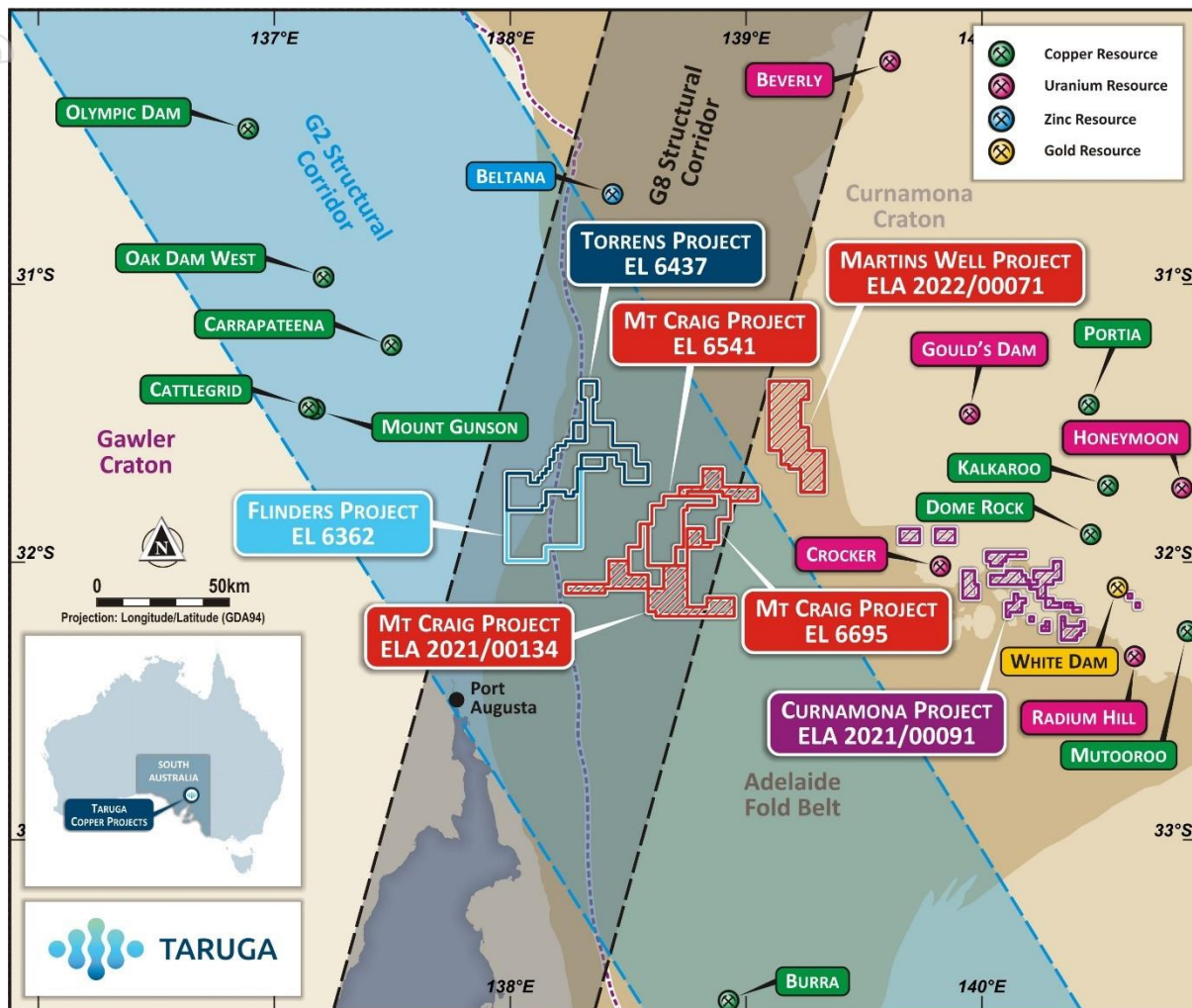


Figure 15. Tenement Map showing Taruga's South Australian projects.

#### Appendix 1. Significant intercepts

| Hole ID   | From (m) | To (m) | Width (m) | TREO ppm | HREO% | CREO% | MREO% |
|-----------|----------|--------|-----------|----------|-------|-------|-------|
| MCRB038   | 5        | 17     | 12        | 567      | 39%   | 53%   | 35%   |
| MCRB039   | 6        | 35     | 29        | 515      | 28%   | 38%   | 25%   |
| MCRB040   | 0        | 55     | 55        | 678      | 24%   | 35%   | 25%   |
| including | 41       | 55     | 14        | 1,230    | 37%   | 49%   | 31%   |
| including | 45       | 49     | 4         | 2,190    | 39%   | 54%   | 35%   |
| MCRB041   | 0        | 13     | 13        | 528      | 33%   | 52%   | 40%   |
| including | 8        | 13     | 5         | 822      | 36%   | 55%   | 40%   |
| MCRB044   | 0        | 43     | 43        | 1,687    | 39%   | 57%   | 40%   |
| including | 12       | 17     | 5         | 3,343    | 47%   | 63%   | 40%   |
| including | 13       | 14     | 1         | 9,082    | 45%   | 64%   | 44%   |
| including | 29       | 43     | 14        | 2,979    | 38%   | 60%   | 46%   |
| including | 29       | 31     | 2         | 7,052    | 45%   | 63%   | 42%   |
| MCRB045   | 0        | 40     | 40        | 1,582    | 44%   | 62%   | 41%   |
| including | 11       | 28     | 17        | 2,636    | 46%   | 64%   | 42%   |
| including | 19       | 24     | 5         | 4,930    | 48%   | 64%   | 40%   |
| including | 21       | 22     | 1         | 6,234    | 47%   | 65%   | 43%   |

| Hole ID   | From (m) | To (m) | Width (m) | TREO ppm | HREO% | CREO% | MREO% |
|-----------|----------|--------|-----------|----------|-------|-------|-------|
| MCRB048   | 5        | 20     | 15        | 567      | 44%   | 51%   | 26%   |
| MCRB052   | 0        | 30     | 30        | 650      | 27%   | 46%   | 37%   |
| including | 16       | 20     | 4         | 1,916    | 35%   | 60%   | 47%   |
| MCRB053   | 0        | 31     | 31        | 1,444    | 33%   | 55%   | 44%   |
| including | 16       | 18     | 2         | 2,656    | 23%   | 56%   | 53%   |
| including | 22       | 28     | 6         | 3,903    | 41%   | 61%   | 44%   |
| including | 24       | 26     | 2         | 5,761    | 46%   | 62%   | 42%   |
| MCRB057   | 0        | 45     | 45        | 726      | 28%   | 44%   | 34%   |
| including | 17       | 22     | 5         | 1,855    | 29%   | 47%   | 37%   |
| MCRB058   | 23       | 49     | 26        | 559      | 35%   | 42%   | 24%   |
| including | 28       | 38     | 10        | 867      | 38%   | 45%   | 25%   |
| including | 32       | 33     | 1         | 1,703    | 23%   | 44%   | 38%   |

## Appendix 2. Assay Results

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB034 | 6    | 7  | 64  | 7   | 5   | 1   | 8   | 2   | 32  | 1   | 33  | 8   | 7   | 1   | 1   | 51  | 4   | 266  |
| MCRB035 | 1    | 2  | 23  | 17  | 10  | 3   | 18  | 3   | 12  | 1   | 43  | 7   | 13  | 3   | 1   | 105 | 7   | 320  |
| MCRB035 | 2    | 3  | 16  | 25  | 13  | 6   | 32  | 5   | 10  | 1   | 89  | 13  | 28  | 5   | 2   | 109 | 9   | 431  |
| MCRB035 | 3    | 4  | 13  | 15  | 8   | 4   | 19  | 3   | 8   | 1   | 55  | 8   | 17  | 3   | 1   | 70  | 5   | 273  |
| MCRB035 | 4    | 5  | 19  | 17  | 8   | 6   | 25  | 3   | 11  | 1   | 85  | 12  | 25  | 3   | 1   | 67  | 6   | 342  |
| MCRB035 | 5    | 6  | 39  | 24  | 11  | 7   | 33  | 4   | 22  | 1   | 114 | 17  | 32  | 5   | 2   | 90  | 8   | 485  |
| MCRB035 | 6    | 7  | 17  | 27  | 13  | 7   | 38  | 5   | 12  | 1   | 98  | 13  | 31  | 5   | 2   | 104 | 9   | 454  |
| MCRB035 | 7    | 8  | 15  | 18  | 9   | 5   | 25  | 3   | 10  | 1   | 61  | 9   | 19  | 3   | 1   | 80  | 6   | 317  |
| MCRB036 | 3    | 4  | 69  | 8   | 4   | 3   | 11  | 1   | 70  | 0   | 87  | 33  | 15  | 2   | 1   | 32  | 4   | 398  |
| MCRB036 | 4    | 5  | 99  | 9   | 5   | 3   | 13  | 2   | 92  | 1   | 108 | 33  | 18  | 2   | 1   | 36  | 5   | 499  |
| MCRB036 | 5    | 6  | 70  | 8   | 4   | 2   | 9   | 1   | 52  | 1   | 71  | 21  | 13  | 1   | 1   | 30  | 4   | 339  |
| MCRB036 | 6    | 7  | 67  | 7   | 4   | 2   | 10  | 1   | 50  | 1   | 76  | 22  | 13  | 1   | 1   | 31  | 4   | 341  |
| MCRB036 | 7    | 8  | 83  | 12  | 6   | 4   | 15  | 2   | 34  | 1   | 80  | 17  | 20  | 2   | 1   | 41  | 5   | 380  |
| MCRB036 | 11   | 12 | 82  | 9   | 5   | 3   | 11  | 2   | 39  | 1   | 70  | 14  | 16  | 2   | 1   | 40  | 5   | 351  |
| MCRB036 | 12   | 13 | 68  | 8   | 4   | 3   | 11  | 1   | 30  | 1   | 56  | 11  | 13  | 2   | 1   | 34  | 4   | 289  |
| MCRB036 | 13   | 14 | 64  | 10  | 5   | 3   | 12  | 2   | 30  | 1   | 58  | 12  | 14  | 2   | 1   | 42  | 4   | 306  |
| MCRB036 | 14   | 15 | 85  | 12  | 6   | 3   | 15  | 2   | 41  | 1   | 75  | 15  | 17  | 2   | 1   | 52  | 5   | 394  |
| MCRB036 | 15   | 16 | 56  | 8   | 4   | 3   | 11  | 2   | 27  | 1   | 47  | 9   | 11  | 2   | 1   | 35  | 3   | 259  |
| MCRB036 | 16   | 17 | 67  | 9   | 5   | 2   | 11  | 2   | 32  | 1   | 42  | 9   | 11  | 2   | 1   | 40  | 4   | 279  |
| MCRB036 | 17   | 18 | 80  | 7   | 4   | 2   | 9   | 1   | 38  | 1   | 42  | 10  | 10  | 1   | 1   | 37  | 3   | 292  |
| MCRB036 | 18   | 19 | 77  | 11  | 6   | 2   | 13  | 2   | 38  | 1   | 43  | 10  | 11  | 2   | 1   | 70  | 5   | 348  |
| MCRB036 | 19   | 20 | 85  | 14  | 8   | 3   | 17  | 3   | 42  | 1   | 49  | 11  | 13  | 2   | 1   | 90  | 6   | 410  |
| MCRB036 | 20   | 21 | 85  | 10  | 6   | 2   | 13  | 2   | 42  | 1   | 45  | 11  | 11  | 2   | 1   | 62  | 4   | 352  |
| MCRB036 | 23   | 24 | 80  | 6   | 3   | 1   | 7   | 1   | 38  | 0   | 35  | 10  | 7   | 1   | 0   | 33  | 3   | 267  |
| MCRB036 | 24   | 25 | 82  | 7   | 3   | 2   | 9   | 1   | 39  | 0   | 38  | 10  | 8   | 1   | 0   | 37  | 3   | 286  |
| MCRB036 | 30   | 31 | 65  | 7   | 4   | 2   | 9   | 1   | 34  | 0   | 34  | 9   | 8   | 1   | 1   | 46  | 3   | 268  |
| MCRB036 | 31   | 32 | 68  | 7   | 4   | 2   | 8   | 1   | 35  | 0   | 34  | 9   | 8   | 1   | 1   | 42  | 3   | 263  |
| MCRB036 | 32   | 33 | 62  | 7   | 4   | 2   | 8   | 1   | 29  | 1   | 31  | 8   | 7   | 1   | 1   | 53  | 4   | 261  |
| MCRB036 | 33   | 34 | 63  | 8   | 5   | 2   | 9   | 2   | 32  | 1   | 33  | 9   | 8   | 1   | 1   | 59  | 4   | 279  |
| MCRB038 | 5    | 6  | 63  | 15  | 7   | 5   | 20  | 3   | 66  | 1   | 143 | 32  | 31  | 3   | 1   | 53  | 7   | 530  |
| MCRB038 | 6    | 7  | 52  | 12  | 6   | 4   | 17  | 2   | 48  | 1   | 89  | 20  | 21  | 2   | 1   | 38  | 6   | 377  |
| MCRB038 | 7    | 8  | 60  | 16  | 8   | 5   | 22  | 3   | 91  | 1   | 145 | 36  | 29  | 3   | 1   | 56  | 7   | 569  |
| MCRB038 | 8    | 9  | 44  | 16  | 8   | 5   | 23  | 3   | 31  | 1   | 89  | 17  | 24  | 3   | 1   | 44  | 6   | 372  |
| MCRB038 | 9    | 10 | 56  | 15  | 7   | 5   | 23  | 2   | 59  | 1   | 123 | 27  | 27  | 3   | 1   | 46  | 6   | 470  |
| MCRB038 | 10   | 11 | 86  | 23  | 12  | 8   | 33  | 4   | 64  | 2   | 187 | 37  | 41  | 4   | 2   | 108 | 11  | 735  |
| MCRB038 | 11   | 12 | 85  | 26  | 15  | 6   | 30  | 5   | 56  | 2   | 131 | 26  | 30  | 4   | 2   | 141 | 13  | 681  |



| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB038 | 12   | 13 | 83  | 33  | 20  | 7   | 36  | 7   | 53  | 2   | 130 | 25  | 32  | 6   | 3   | 195 | 16  | 771  |
| MCRB038 | 13   | 14 | 80  | 33  | 19  | 8   | 39  | 7   | 50  | 2   | 146 | 27  | 36  | 6   | 3   | 190 | 15  | 789  |
| MCRB038 | 14   | 15 | 84  | 23  | 13  | 6   | 30  | 4   | 51  | 1   | 118 | 23  | 28  | 4   | 2   | 125 | 10  | 622  |
| MCRB038 | 15   | 16 | 79  | 15  | 8   | 4   | 21  | 3   | 43  | 1   | 77  | 15  | 19  | 3   | 1   | 77  | 6   | 440  |
| MCRB038 | 16   | 17 | 78  | 17  | 9   | 4   | 22  | 3   | 37  | 1   | 67  | 13  | 17  | 3   | 1   | 99  | 7   | 449  |
| MCRB039 | 3    | 4  | 97  | 3   | 2   | 1   | 4   | 1   | 48  | 0   | 36  | 11  | 6   | 1   | 0   | 17  | 2   | 269  |
| MCRB039 | 6    | 7  | 162 | 9   | 3   | 3   | 14  | 1   | 157 | 0   | 93  | 31  | 17  | 2   | 0   | 31  | 2   | 618  |
| MCRB039 | 7    | 8  | 173 | 6   | 3   | 2   | 9   | 1   | 165 | 0   | 90  | 34  | 13  | 1   | 0   | 34  | 3   | 629  |
| MCRB039 | 8    | 9  | 155 | 6   | 3   | 2   | 8   | 1   | 95  | 0   | 64  | 21  | 11  | 1   | 0   | 24  | 3   | 463  |
| MCRB039 | 9    | 10 | 176 | 5   | 3   | 1   | 7   | 1   | 75  | 0   | 56  | 18  | 9   | 1   | 0   | 24  | 3   | 448  |
| MCRB039 | 10   | 11 | 144 | 5   | 3   | 1   | 7   | 1   | 77  | 0   | 62  | 20  | 11  | 1   | 1   | 25  | 3   | 423  |
| MCRB039 | 11   | 12 | 314 | 6   | 3   | 2   | 7   | 1   | 73  | 1   | 61  | 19  | 10  | 1   | 1   | 26  | 4   | 620  |
| MCRB039 | 12   | 13 | 211 | 6   | 3   | 1   | 7   | 1   | 74  | 1   | 61  | 20  | 10  | 1   | 1   | 26  | 3   | 499  |
| MCRB039 | 13   | 14 | 135 | 6   | 4   | 1   | 7   | 1   | 77  | 1   | 65  | 22  | 10  | 1   | 1   | 29  | 4   | 429  |
| MCRB039 | 14   | 15 | 180 | 6   | 3   | 1   | 7   | 1   | 59  | 1   | 55  | 17  | 9   | 1   | 1   | 26  | 4   | 433  |
| MCRB039 | 15   | 16 | 239 | 6   | 4   | 2   | 7   | 1   | 58  | 1   | 60  | 18  | 11  | 1   | 1   | 25  | 4   | 513  |
| MCRB039 | 16   | 17 | 311 | 8   | 5   | 2   | 9   | 1   | 75  | 1   | 81  | 25  | 13  | 1   | 1   | 31  | 5   | 667  |
| MCRB039 | 17   | 18 | 180 | 8   | 5   | 2   | 9   | 2   | 69  | 1   | 83  | 24  | 14  | 1   | 1   | 31  | 5   | 512  |
| MCRB039 | 18   | 19 | 156 | 12  | 6   | 4   | 15  | 2   | 82  | 1   | 139 | 38  | 24  | 2   | 1   | 38  | 7   | 618  |
| MCRB039 | 19   | 20 | 133 | 11  | 6   | 3   | 12  | 2   | 71  | 1   | 109 | 30  | 18  | 2   | 1   | 37  | 6   | 519  |
| MCRB039 | 20   | 21 | 138 | 10  | 6   | 3   | 12  | 2   | 66  | 1   | 102 | 27  | 18  | 2   | 1   | 38  | 6   | 508  |
| MCRB039 | 21   | 22 | 125 | 11  | 6   | 3   | 13  | 2   | 66  | 1   | 108 | 27  | 21  | 2   | 1   | 39  | 6   | 507  |
| MCRB039 | 22   | 23 | 108 | 11  | 6   | 4   | 15  | 2   | 50  | 1   | 102 | 23  | 22  | 2   | 1   | 38  | 6   | 459  |
| MCRB039 | 23   | 24 | 114 | 10  | 5   | 3   | 13  | 2   | 54  | 1   | 94  | 22  | 19  | 2   | 1   | 37  | 6   | 451  |
| MCRB039 | 24   | 25 | 84  | 10  | 5   | 4   | 15  | 2   | 41  | 1   | 82  | 16  | 20  | 2   | 1   | 37  | 5   | 380  |
| MCRB039 | 25   | 26 | 93  | 25  | 14  | 6   | 27  | 5   | 41  | 2   | 102 | 18  | 27  | 4   | 2   | 126 | 12  | 598  |
| MCRB039 | 26   | 27 | 81  | 28  | 17  | 5   | 29  | 6   | 35  | 2   | 85  | 15  | 24  | 5   | 2   | 174 | 14  | 624  |
| MCRB039 | 27   | 28 | 90  | 14  | 8   | 3   | 16  | 3   | 35  | 1   | 58  | 12  | 15  | 2   | 1   | 80  | 7   | 410  |
| MCRB039 | 28   | 29 | 84  | 15  | 8   | 3   | 17  | 3   | 38  | 1   | 65  | 13  | 16  | 3   | 1   | 80  | 7   | 422  |
| MCRB039 | 29   | 30 | 89  | 15  | 9   | 3   | 16  | 3   | 40  | 1   | 63  | 14  | 15  | 2   | 1   | 92  | 8   | 442  |
| MCRB039 | 30   | 31 | 87  | 36  | 20  | 7   | 44  | 7   | 39  | 2   | 89  | 15  | 28  | 6   | 3   | 257 | 14  | 788  |
| MCRB039 | 31   | 32 | 87  | 36  | 21  | 6   | 48  | 8   | 45  | 2   | 83  | 15  | 25  | 6   | 2   | 332 | 13  | 882  |
| MCRB039 | 32   | 33 | 82  | 14  | 8   | 3   | 17  | 3   | 37  | 1   | 46  | 11  | 11  | 2   | 1   | 118 | 6   | 430  |
| MCRB039 | 33   | 34 | 75  | 12  | 7   | 2   | 15  | 2   | 34  | 1   | 42  | 10  | 10  | 2   | 1   | 102 | 5   | 384  |
| MCRB039 | 34   | 35 | 70  | 6   | 4   | 1   | 7   | 1   | 33  | 0   | 32  | 8   | 7   | 1   | 1   | 51  | 3   | 269  |
| MCRB039 | 38   | 39 | 72  | 14  | 8   | 3   | 17  | 3   | 32  | 1   | 46  | 10  | 12  | 2   | 1   | 109 | 6   | 405  |
| MCRB039 | 39   | 40 | 65  | 10  | 6   | 2   | 12  | 2   | 29  | 1   | 35  | 8   | 9   | 2   | 1   | 72  | 4   | 305  |
| MCRB040 | 0    | 1  | 70  | 6   | 3   | 2   | 8   | 1   | 35  | 0   | 44  | 11  | 9   | 1   | 0   | 33  | 3   | 268  |
| MCRB040 | 3    | 4  | 91  | 4   | 3   | 1   | 6   | 1   | 56  | 0   | 52  | 15  | 9   | 1   | 0   | 20  | 3   | 308  |
| MCRB040 | 4    | 5  | 109 | 5   | 3   | 2   | 6   | 1   | 67  | 1   | 63  | 18  | 11  | 1   | 1   | 24  | 4   | 369  |
| MCRB040 | 5    | 6  | 94  | 5   | 3   | 2   | 6   | 1   | 62  | 0   | 61  | 17  | 11  | 1   | 1   | 21  | 3   | 338  |
| MCRB040 | 6    | 7  | 100 | 5   | 3   | 1   | 6   | 1   | 58  | 0   | 55  | 16  | 9   | 1   | 0   | 21  | 3   | 327  |
| MCRB040 | 7    | 8  | 111 | 5   | 3   | 2   | 7   | 1   | 110 | 0   | 62  | 21  | 10  | 1   | 0   | 20  | 3   | 416  |
| MCRB040 | 8    | 9  | 109 | 5   | 3   | 2   | 8   | 1   | 141 | 0   | 75  | 26  | 11  | 1   | 0   | 20  | 3   | 477  |
| MCRB040 | 9    | 10 | 101 | 4   | 2   | 1   | 6   | 1   | 103 | 0   | 57  | 20  | 8   | 1   | 0   | 18  | 3   | 383  |
| MCRB040 | 10   | 11 | 101 | 3   | 2   | 1   | 4   | 1   | 58  | 0   | 36  | 12  | 5   | 1   | 0   | 15  | 3   | 285  |
| MCRB040 | 11   | 12 | 131 | 4   | 2   | 1   | 4   | 1   | 65  | 0   | 41  | 14  | 6   | 1   | 0   | 17  | 3   | 341  |
| MCRB040 | 12   | 13 | 275 | 4   | 3   | 1   | 5   | 1   | 65  | 0   | 43  | 14  | 7   | 1   | 0   | 20  | 3   | 521  |
| MCRB040 | 13   | 14 | 304 | 6   | 3   | 2   | 7   | 1   | 94  | 1   | 60  | 21  | 10  | 1   | 1   | 24  | 4   | 631  |
| MCRB040 | 14   | 15 | 392 | 9   | 5   | 2   | 9   | 2   | 118 | 1   | 73  | 25  | 12  | 1   | 1   | 36  | 6   | 813  |
| MCRB040 | 15   | 16 | 533 | 21  | 12  | 5   | 21  | 4   | 133 | 2   | 102 | 30  | 24  | 3   | 2   | 85  | 11  | 1161 |
| MCRB040 | 16   | 17 | 154 | 9   | 5   | 2   | 11  | 2   | 71  | 1   | 58  | 17  | 13  | 2   | 1   | 37  | 4   | 455  |
| MCRB040 | 17   | 18 | 161 | 4   | 2   | 1   | 5   | 1   | 64  | 0   | 39  | 13  | 6   | 1   | 0   | 18  | 2   | 374  |
| MCRB040 | 18   | 19 | 463 | 5   | 2   | 1   | 6   | 1   | 86  | 0   | 48  | 17  | 8   | 1   | 0   | 18  | 2   | 772  |

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB040 | 19   | 20 | 127 | 5   | 3   | 1   | 6   | 1   | 103 | 0   | 52  | 19  | 8   | 1   | 0   | 19  | 2   | 407  |
| MCRB040 | 23   | 24 | 167 | 2   | 1   | 1   | 3   | 0   | 23  | 0   | 21  | 6   | 4   | 0   | 0   | 9   | 1   | 279  |
| MCRB040 | 24   | 25 | 208 | 4   | 2   | 1   | 6   | 1   | 29  | 0   | 38  | 10  | 8   | 1   | 0   | 16  | 2   | 383  |
| MCRB040 | 25   | 26 | 149 | 11  | 6   | 4   | 15  | 2   | 80  | 1   | 110 | 29  | 23  | 2   | 1   | 39  | 5   | 559  |
| MCRB040 | 26   | 27 | 310 | 12  | 6   | 4   | 17  | 2   | 68  | 1   | 125 | 31  | 27  | 2   | 1   | 41  | 5   | 766  |
| MCRB040 | 27   | 28 | 365 | 13  | 7   | 4   | 17  | 3   | 64  | 1   | 114 | 28  | 26  | 3   | 1   | 46  | 6   | 821  |
| MCRB040 | 28   | 29 | 166 | 13  | 7   | 4   | 15  | 2   | 58  | 1   | 94  | 23  | 21  | 2   | 1   | 45  | 6   | 538  |
| MCRB040 | 29   | 30 | 184 | 12  | 6   | 4   | 15  | 2   | 74  | 1   | 107 | 28  | 23  | 2   | 1   | 45  | 6   | 600  |
| MCRB040 | 30   | 31 | 106 | 8   | 5   | 2   | 9   | 1   | 66  | 1   | 60  | 18  | 12  | 1   | 1   | 32  | 4   | 383  |
| MCRB040 | 31   | 32 | 117 | 10  | 5   | 3   | 12  | 2   | 59  | 1   | 67  | 18  | 15  | 2   | 1   | 38  | 5   | 417  |
| MCRB040 | 32   | 33 | 390 | 8   | 4   | 2   | 8   | 1   | 52  | 1   | 49  | 14  | 11  | 1   | 1   | 31  | 4   | 677  |
| MCRB040 | 33   | 34 | 387 | 9   | 5   | 2   | 9   | 2   | 62  | 1   | 56  | 16  | 12  | 2   | 1   | 36  | 5   | 710  |
| MCRB040 | 34   | 35 | 371 | 8   | 5   | 2   | 9   | 2   | 66  | 1   | 54  | 16  | 10  | 1   | 1   | 35  | 5   | 688  |
| MCRB040 | 35   | 36 | 395 | 9   | 5   | 2   | 9   | 2   | 81  | 1   | 55  | 18  | 11  | 2   | 1   | 34  | 5   | 739  |
| MCRB040 | 36   | 37 | 498 | 7   | 4   | 2   | 8   | 1   | 111 | 1   | 59  | 23  | 9   | 1   | 1   | 28  | 4   | 888  |
| MCRB040 | 37   | 38 | 532 | 7   | 4   | 2   | 8   | 1   | 63  | 1   | 45  | 14  | 9   | 1   | 1   | 30  | 4   | 848  |
| MCRB040 | 38   | 39 | 137 | 6   | 4   | 1   | 6   | 1   | 42  | 1   | 34  | 10  | 7   | 1   | 1   | 27  | 4   | 332  |
| MCRB040 | 39   | 40 | 179 | 7   | 4   | 2   | 7   | 1   | 75  | 1   | 52  | 17  | 9   | 1   | 1   | 29  | 4   | 455  |
| MCRB040 | 40   | 41 | 124 | 5   | 3   | 1   | 6   | 1   | 61  | 1   | 41  | 13  | 7   | 1   | 1   | 23  | 3   | 341  |
| MCRB040 | 41   | 42 | 240 | 7   | 4   | 2   | 7   | 1   | 60  | 1   | 47  | 14  | 9   | 1   | 1   | 29  | 4   | 502  |
| MCRB040 | 42   | 43 | 370 | 8   | 5   | 2   | 9   | 2   | 72  | 1   | 57  | 17  | 11  | 1   | 1   | 35  | 5   | 700  |
| MCRB040 | 43   | 44 | 392 | 8   | 4   | 2   | 9   | 1   | 55  | 1   | 53  | 16  | 12  | 1   | 1   | 28  | 4   | 687  |
| MCRB040 | 44   | 45 | 465 | 51  | 34  | 10  | 49  | 11  | 113 | 5   | 186 | 44  | 44  | 8   | 5   | 350 | 26  | 1667 |
| MCRB040 | 45   | 46 | 291 | 61  | 28  | 21  | 91  | 11  | 203 | 3   | 461 | 101 | 112 | 12  | 4   | 264 | 21  | 1990 |
| MCRB040 | 46   | 47 | 216 | 92  | 45  | 26  | 126 | 17  | 155 | 5   | 472 | 91  | 125 | 17  | 6   | 450 | 32  | 2229 |
| MCRB040 | 47   | 48 | 380 | 85  | 40  | 28  | 119 | 15  | 187 | 5   | 501 | 105 | 133 | 17  | 5   | 412 | 29  | 2442 |
| MCRB040 | 48   | 49 | 200 | 85  | 40  | 26  | 119 | 16  | 168 | 5   | 451 | 90  | 118 | 16  | 5   | 400 | 29  | 2099 |
| MCRB040 | 49   | 50 | 108 | 76  | 33  | 22  | 116 | 13  | 131 | 3   | 368 | 67  | 96  | 15  | 4   | 325 | 22  | 1663 |
| MCRB040 | 50   | 51 | 76  | 23  | 11  | 7   | 33  | 4   | 53  | 1   | 123 | 25  | 30  | 4   | 2   | 105 | 8   | 597  |
| MCRB040 | 51   | 52 | 90  | 20  | 9   | 6   | 31  | 4   | 55  | 1   | 118 | 24  | 29  | 4   | 1   | 89  | 7   | 575  |
| MCRB040 | 52   | 53 | 96  | 20  | 9   | 6   | 30  | 4   | 55  | 1   | 116 | 24  | 28  | 4   | 1   | 93  | 7   | 587  |
| MCRB040 | 53   | 54 | 125 | 32  | 15  | 9   | 46  | 6   | 76  | 2   | 176 | 35  | 43  | 6   | 2   | 159 | 11  | 883  |
| MCRB040 | 54   | 55 | 93  | 21  | 10  | 6   | 30  | 4   | 56  | 1   | 115 | 24  | 28  | 4   | 1   | 105 | 7   | 600  |
| MCRB041 | 0    | 1  | 67  | 12  | 6   | 4   | 18  | 2   | 64  | 1   | 110 | 27  | 23  | 2   | 1   | 52  | 5   | 465  |
| MCRB041 | 1    | 2  | 50  | 7   | 3   | 2   | 10  | 1   | 47  | 0   | 72  | 18  | 14  | 1   | 0   | 27  | 3   | 300  |
| MCRB041 | 2    | 3  | 50  | 9   | 4   | 4   | 14  | 1   | 64  | 0   | 103 | 26  | 20  | 2   | 1   | 30  | 3   | 389  |
| MCRB041 | 5    | 6  | 31  | 9   | 5   | 3   | 12  | 2   | 39  | 1   | 68  | 17  | 15  | 2   | 1   | 39  | 4   | 289  |
| MCRB041 | 6    | 7  | 41  | 11  | 6   | 4   | 15  | 2   | 52  | 1   | 97  | 24  | 20  | 2   | 1   | 43  | 5   | 378  |
| MCRB041 | 7    | 8  | 42  | 14  | 6   | 5   | 19  | 2   | 63  | 1   | 129 | 31  | 26  | 3   | 1   | 61  | 5   | 479  |
| MCRB041 | 8    | 9  | 57  | 20  | 10  | 7   | 28  | 4   | 89  | 1   | 178 | 41  | 37  | 4   | 1   | 74  | 8   | 659  |
| MCRB041 | 9    | 10 | 63  | 26  | 13  | 8   | 33  | 5   | 94  | 1   | 196 | 46  | 42  | 5   | 2   | 102 | 11  | 762  |
| MCRB041 | 10   | 11 | 56  | 33  | 17  | 9   | 41  | 6   | 103 | 2   | 224 | 51  | 48  | 6   | 2   | 142 | 14  | 895  |
| MCRB041 | 11   | 12 | 56  | 38  | 21  | 10  | 45  | 8   | 103 | 2   | 227 | 52  | 50  | 7   | 3   | 170 | 16  | 957  |
| MCRB041 | 12   | 13 | 62  | 34  | 18  | 8   | 38  | 7   | 89  | 2   | 190 | 44  | 43  | 6   | 2   | 148 | 15  | 837  |
| MCRB042 | 1    | 2  | 38  | 6   | 2   | 3   | 9   | 1   | 36  | 0   | 68  | 15  | 15  | 1   | 0   | 19  | 2   | 253  |
| MCRB042 | 3    | 4  | 59  | 29  | 17  | 6   | 29  | 6   | 74  | 2   | 137 | 32  | 32  | 5   | 2   | 160 | 13  | 717  |
| MCRB042 | 4    | 5  | 49  | 12  | 7   | 3   | 14  | 2   | 42  | 1   | 75  | 18  | 17  | 2   | 1   | 61  | 6   | 366  |
| MCRB043 | 0    | 1  | 81  | 5   | 3   | 2   | 7   | 1   | 35  | 0   | 40  | 11  | 8   | 1   | 0   | 25  | 3   | 262  |
| MCRB043 | 1    | 2  | 137 | 5   | 3   | 1   | 6   | 1   | 43  | 0   | 37  | 11  | 7   | 1   | 0   | 24  | 3   | 329  |
| MCRB043 | 2    | 3  | 142 | 5   | 3   | 1   | 5   | 1   | 55  | 0   | 40  | 13  | 7   | 1   | 0   | 24  | 3   | 354  |
| MCRB043 | 3    | 4  | 151 | 5   | 3   | 1   | 5   | 1   | 51  | 1   | 37  | 12  | 6   | 1   | 1   | 31  | 3   | 364  |
| MCRB043 | 4    | 5  | 179 | 4   | 2   | 1   | 4   | 1   | 42  | 0   | 29  | 9   | 5   | 1   | 0   | 19  | 2   | 349  |
| MCRB043 | 5    | 6  | 291 | 5   | 3   | 1   | 6   | 1   | 46  | 0   | 39  | 12  | 7   | 1   | 1   | 25  | 3   | 519  |
| MCRB043 | 6    | 7  | 338 | 6   | 3   | 1   | 6   | 1   | 39  | 0   | 37  | 10  | 8   | 1   | 1   | 25  | 3   | 563  |

| Hole ID | From | To | Ce   | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd   | Pr  | Sm  | Tb  | Tm  | Y    | Yb  | TREO |
|---------|------|----|------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|------|
|         |      |    | ppm  | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  | ppm | ppm | ppm | ppm | ppm  | ppm | ppm  |
| MCRB043 | 7    | 8  | 107  | 5   | 3   | 1   | 5   | 1   | 44  | 0   | 36   | 11  | 7   | 1   | 0   | 29   | 3   | 298  |
| MCRB043 | 8    | 9  | 252  | 4   | 2   | 2   | 5   | 1   | 21  | 0   | 37   | 9   | 9   | 1   | 0   | 11   | 2   | 417  |
| MCRB043 | 9    | 10 | 169  | 6   | 4   | 1   | 7   | 1   | 46  | 1   | 43   | 12  | 9   | 1   | 1   | 27   | 4   | 388  |
| MCRB043 | 10   | 11 | 134  | 4   | 2   | 1   | 4   | 1   | 27  | 0   | 25   | 7   | 5   | 1   | 0   | 22   | 2   | 278  |
| MCRB043 | 11   | 12 | 259  | 3   | 2   | 1   | 3   | 1   | 22  | 0   | 22   | 6   | 4   | 1   | 0   | 14   | 2   | 399  |
| MCRB043 | 12   | 13 | 168  | 3   | 2   | 1   | 4   | 1   | 30  | 0   | 26   | 7   | 5   | 1   | 0   | 15   | 2   | 312  |
| MCRB043 | 20   | 21 | 734  | 4   | 3   | 2   | 5   | 1   | 31  | 1   | 39   | 10  | 8   | 1   | 0   | 18   | 3   | 1007 |
| MCRB043 | 21   | 22 | 144  | 4   | 3   | 1   | 5   | 1   | 45  | 0   | 40   | 12  | 7   | 1   | 0   | 18   | 3   | 334  |
| MCRB043 | 22   | 23 | 120  | 6   | 4   | 2   | 7   | 1   | 61  | 1   | 74   | 22  | 13  | 1   | 1   | 26   | 4   | 400  |
| MCRB043 | 23   | 24 | 124  | 4   | 3   | 1   | 5   | 1   | 46  | 0   | 52   | 15  | 9   | 1   | 0   | 20   | 3   | 334  |
| MCRB043 | 24   | 25 | 128  | 6   | 4   | 2   | 7   | 1   | 45  | 1   | 48   | 13  | 10  | 1   | 1   | 29   | 4   | 350  |
| MCRB043 | 25   | 26 | 305  | 7   | 4   | 2   | 8   | 1   | 51  | 1   | 63   | 18  | 13  | 1   | 1   | 31   | 6   | 600  |
| MCRB043 | 26   | 27 | 471  | 7   | 4   | 2   | 8   | 1   | 50  | 1   | 65   | 18  | 13  | 1   | 1   | 29   | 5   | 792  |
| MCRB043 | 27   | 28 | 1130 | 7   | 4   | 2   | 8   | 1   | 55  | 1   | 82   | 23  | 16  | 1   | 1   | 29   | 5   | 1600 |
| MCRB043 | 28   | 29 | 403  | 5   | 3   | 2   | 7   | 1   | 45  | 1   | 61   | 17  | 12  | 1   | 0   | 23   | 3   | 685  |
| MCRB043 | 29   | 30 | 361  | 5   | 3   | 2   | 7   | 1   | 52  | 1   | 77   | 21  | 14  | 1   | 0   | 21   | 4   | 668  |
| MCRB043 | 30   | 31 | 315  | 7   | 3   | 5   | 14  | 1   | 84  | 1   | 194  | 52  | 34  | 2   | 1   | 24   | 4   | 867  |
| MCRB043 | 31   | 32 | 273  | 8   | 4   | 5   | 15  | 1   | 89  | 1   | 213  | 57  | 37  | 2   | 1   | 24   | 4   | 859  |
| MCRB043 | 32   | 33 | 291  | 7   | 3   | 4   | 12  | 1   | 69  | 0   | 166  | 44  | 30  | 1   | 0   | 20   | 3   | 765  |
| MCRB043 | 33   | 34 | 179  | 4   | 2   | 2   | 6   | 1   | 31  | 0   | 69   | 18  | 14  | 1   | 0   | 11   | 2   | 398  |
| MCRB043 | 34   | 35 | 331  | 6   | 3   | 4   | 10  | 1   | 53  | 1   | 124  | 33  | 24  | 1   | 0   | 18   | 3   | 717  |
| MCRB043 | 35   | 36 | 122  | 2   | 1   | 1   | 4   | 0   | 20  | 0   | 41   | 11  | 8   | 0   | 0   | 7    | 1   | 258  |
| MCRB043 | 36   | 37 | 223  | 4   | 2   | 2   | 6   | 1   | 36  | 0   | 73   | 19  | 14  | 1   | 0   | 13   | 2   | 464  |
| MCRB043 | 39   | 40 | 206  | 3   | 2   | 2   | 4   | 1   | 31  | 0   | 36   | 10  | 8   | 1   | 0   | 10   | 2   | 370  |
| MCRB044 | 1    | 2  | 139  | 6   | 3   | 1   | 5   | 1   | 57  | 1   | 39   | 12  | 7   | 1   | 0   | 25   | 3   | 352  |
| MCRB044 | 2    | 3  | 105  | 4   | 3   | 1   | 5   | 1   | 70  | 0   | 40   | 14  | 6   | 1   | 0   | 22   | 3   | 324  |
| MCRB044 | 3    | 4  | 107  | 5   | 3   | 1   | 5   | 1   | 69  | 0   | 46   | 15  | 7   | 1   | 0   | 21   | 3   | 335  |
| MCRB044 | 4    | 5  | 82   | 3   | 2   | 1   | 4   | 1   | 72  | 0   | 37   | 14  | 5   | 1   | 0   | 14   | 2   | 278  |
| MCRB044 | 5    | 6  | 161  | 6   | 4   | 2   | 8   | 1   | 127 | 1   | 74   | 27  | 11  | 1   | 1   | 27   | 4   | 532  |
| MCRB044 | 6    | 7  | 550  | 9   | 5   | 3   | 11  | 2   | 95  | 1   | 85   | 25  | 16  | 2   | 1   | 39   | 6   | 998  |
| MCRB044 | 7    | 8  | 152  | 10  | 5   | 3   | 13  | 2   | 116 | 1   | 88   | 27  | 14  | 2   | 1   | 46   | 5   | 570  |
| MCRB044 | 8    | 9  | 162  | 8   | 4   | 2   | 11  | 2   | 124 | 1   | 87   | 29  | 13  | 1   | 1   | 37   | 4   | 572  |
| MCRB044 | 9    | 10 | 153  | 6   | 3   | 2   | 9   | 1   | 136 | 0   | 89   | 32  | 12  | 1   | 1   | 24   | 3   | 556  |
| MCRB044 | 10   | 11 | 278  | 7   | 4   | 2   | 9   | 1   | 111 | 1   | 85   | 28  | 13  | 1   | 1   | 25   | 4   | 670  |
| MCRB044 | 11   | 12 | 299  | 7   | 4   | 3   | 10  | 1   | 81  | 1   | 82   | 25  | 16  | 1   | 1   | 22   | 4   | 652  |
| MCRB044 | 12   | 13 | 236  | 70  | 34  | 21  | 102 | 13  | 89  | 4   | 456  | 85  | 108 | 13  | 4   | 279  | 26  | 1821 |
| MCRB044 | 13   | 14 | 295  | 384 | 197 | 115 | 541 | 71  | 414 | 23  | 2480 | 462 | 609 | 72  | 27  | 1800 | 160 | 9082 |
| MCRB044 | 14   | 15 | 118  | 155 | 83  | 41  | 222 | 29  | 182 | 10  | 831  | 147 | 203 | 28  | 11  | 857  | 63  | 3554 |
| MCRB044 | 15   | 16 | 80   | 52  | 30  | 10  | 74  | 11  | 76  | 3   | 182  | 32  | 42  | 9   | 4   | 351  | 20  | 1173 |
| MCRB044 | 16   | 17 | 92   | 46  | 27  | 10  | 65  | 9   | 76  | 3   | 175  | 32  | 41  | 8   | 3   | 300  | 18  | 1084 |
| MCRB044 | 17   | 18 | 85   | 35  | 20  | 7   | 48  | 7   | 67  | 2   | 130  | 25  | 30  | 6   | 2   | 233  | 14  | 850  |
| MCRB044 | 18   | 19 | 98   | 32  | 19  | 6   | 41  | 7   | 67  | 2   | 108  | 22  | 24  | 5   | 2   | 232  | 13  | 813  |
| MCRB044 | 19   | 20 | 93   | 26  | 15  | 5   | 34  | 5   | 60  | 2   | 98   | 20  | 22  | 4   | 2   | 173  | 10  | 680  |
| MCRB044 | 20   | 21 | 84   | 22  | 12  | 5   | 32  | 4   | 63  | 1   | 100  | 20  | 22  | 4   | 2   | 136  | 8   | 613  |
| MCRB044 | 21   | 22 | 86   | 32  | 18  | 7   | 42  | 6   | 63  | 2   | 124  | 24  | 28  | 5   | 2   | 198  | 13  | 777  |
| MCRB044 | 22   | 23 | 77   | 37  | 21  | 7   | 46  | 7   | 54  | 2   | 117  | 22  | 28  | 6   | 3   | 254  | 15  | 836  |
| MCRB044 | 23   | 24 | 87   | 24  | 14  | 5   | 32  | 5   | 56  | 1   | 93   | 19  | 21  | 4   | 2   | 166  | 10  | 643  |
| MCRB044 | 24   | 25 | 86   | 17  | 10  | 4   | 24  | 3   | 53  | 1   | 74   | 16  | 16  | 3   | 1   | 116  | 7   | 514  |
| MCRB044 | 25   | 26 | 89   | 18  | 10  | 4   | 25  | 4   | 56  | 1   | 79   | 17  | 17  | 3   | 1   | 118  | 7   | 534  |
| MCRB044 | 26   | 27 | 88   | 14  | 8   | 3   | 19  | 3   | 49  | 1   | 64   | 14  | 13  | 2   | 1   | 95   | 6   | 453  |
| MCRB044 | 27   | 28 | 71   | 20  | 12  | 4   | 26  | 4   | 45  | 1   | 65   | 14  | 15  | 3   | 1   | 154  | 8   | 532  |
| MCRB044 | 28   | 29 | 63   | 37  | 23  | 6   | 44  | 8   | 57  | 3   | 98   | 19  | 23  | 6   | 3   | 276  | 16  | 822  |
| MCRB044 | 29   | 30 | 65   | 320 | 172 | 92  | 430 | 60  | 656 | 23  | 1980 | 389 | 467 | 59  | 25  | 1560 | 156 | 7667 |
| MCRB044 | 30   | 31 | 72   | 259 | 142 | 79  | 365 | 49  | 559 | 18  | 1720 | 342 | 397 | 49  | 20  | 1230 | 125 | 6437 |



| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd   | Pr  | Sm  | Tb  | Tm  | Y    | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  | ppm | ppm | ppm | ppm | ppm  | ppm | ppm  |
| MCRB044 | 31   | 32 | 72  | 125 | 63  | 41  | 184 | 22  | 296 | 8   | 918  | 184 | 213 | 24  | 8   | 536  | 53  | 3250 |
| MCRB044 | 32   | 33 | 65  | 86  | 43  | 29  | 129 | 15  | 219 | 5   | 676  | 137 | 153 | 16  | 6   | 364  | 37  | 2342 |
| MCRB044 | 33   | 34 | 57  | 63  | 31  | 22  | 97  | 11  | 197 | 4   | 552  | 115 | 120 | 12  | 4   | 290  | 27  | 1896 |
| MCRB044 | 34   | 35 | 56  | 64  | 32  | 22  | 97  | 11  | 197 | 4   | 557  | 115 | 120 | 12  | 4   | 280  | 27  | 1890 |
| MCRB044 | 35   | 36 | 57  | 98  | 48  | 35  | 143 | 17  | 283 | 6   | 816  | 171 | 188 | 19  | 7   | 346  | 42  | 2683 |
| MCRB044 | 36   | 37 | 52  | 75  | 36  | 27  | 108 | 13  | 236 | 4   | 659  | 137 | 145 | 14  | 5   | 252  | 31  | 2114 |
| MCRB044 | 37   | 38 | 42  | 74  | 38  | 23  | 98  | 13  | 207 | 5   | 541  | 112 | 121 | 14  | 5   | 260  | 36  | 1876 |
| MCRB044 | 38   | 39 | 37  | 60  | 28  | 23  | 90  | 10  | 210 | 4   | 544  | 114 | 123 | 12  | 4   | 179  | 25  | 1721 |
| MCRB044 | 39   | 40 | 42  | 83  | 38  | 32  | 125 | 13  | 285 | 5   | 761  | 157 | 173 | 17  | 5   | 242  | 35  | 2369 |
| MCRB044 | 40   | 41 | 48  | 93  | 43  | 36  | 139 | 15  | 320 | 6   | 851  | 174 | 192 | 18  | 6   | 284  | 39  | 2665 |
| MCRB044 | 41   | 42 | 47  | 85  | 39  | 33  | 129 | 14  | 295 | 5   | 782  | 162 | 178 | 17  | 5   | 265  | 35  | 2463 |
| MCRB044 | 42   | 43 | 52  | 80  | 37  | 31  | 120 | 13  | 271 | 5   | 741  | 153 | 166 | 16  | 5   | 260  | 33  | 2334 |
| MCRB045 | 0    | 1  | 73  | 15  | 8   | 5   | 19  | 3   | 55  | 1   | 140  | 31  | 29  | 3   | 1   | 69   | 7   | 540  |
| MCRB045 | 1    | 2  | 91  | 16  | 8   | 5   | 22  | 3   | 73  | 1   | 153  | 35  | 31  | 3   | 1   | 73   | 8   | 618  |
| MCRB045 | 2    | 3  | 91  | 11  | 5   | 4   | 17  | 2   | 73  | 1   | 144  | 34  | 28  | 2   | 1   | 46   | 6   | 546  |
| MCRB045 | 3    | 4  | 105 | 13  | 6   | 5   | 19  | 2   | 78  | 1   | 181  | 42  | 35  | 3   | 1   | 52   | 6   | 646  |
| MCRB045 | 4    | 5  | 73  | 15  | 7   | 7   | 22  | 3   | 55  | 1   | 231  | 50  | 46  | 3   | 1   | 61   | 7   | 685  |
| MCRB045 | 5    | 6  | 96  | 15  | 8   | 6   | 21  | 3   | 56  | 1   | 203  | 44  | 40  | 3   | 1   | 64   | 7   | 670  |
| MCRB045 | 6    | 7  | 98  | 20  | 10  | 6   | 25  | 4   | 61  | 1   | 198  | 43  | 41  | 4   | 2   | 83   | 10  | 714  |
| MCRB045 | 7    | 8  | 92  | 27  | 15  | 7   | 30  | 5   | 64  | 2   | 153  | 35  | 35  | 5   | 2   | 145  | 13  | 746  |
| MCRB045 | 8    | 9  | 167 | 24  | 14  | 6   | 27  | 5   | 63  | 2   | 133  | 31  | 30  | 4   | 2   | 156  | 11  | 802  |
| MCRB045 | 9    | 10 | 62  | 10  | 6   | 3   | 13  | 2   | 22  | 1   | 73   | 16  | 17  | 2   | 1   | 58   | 5   | 344  |
| MCRB045 | 10   | 11 | 66  | 11  | 6   | 4   | 14  | 2   | 19  | 1   | 89   | 18  | 21  | 2   | 1   | 47   | 5   | 361  |
| MCRB045 | 11   | 12 | 119 | 66  | 31  | 20  | 87  | 11  | 56  | 4   | 415  | 76  | 108 | 12  | 4   | 251  | 27  | 1523 |
| MCRB045 | 12   | 13 | 101 | 71  | 37  | 20  | 88  | 13  | 80  | 5   | 439  | 86  | 109 | 13  | 5   | 317  | 33  | 1679 |
| MCRB045 | 13   | 14 | 122 | 100 | 46  | 38  | 155 | 17  | 165 | 5   | 934  | 179 | 222 | 20  | 6   | 384  | 39  | 2869 |
| MCRB045 | 14   | 15 | 52  | 37  | 17  | 13  | 55  | 6   | 53  | 2   | 314  | 58  | 74  | 7   | 2   | 141  | 14  | 1001 |
| MCRB045 | 15   | 16 | 53  | 54  | 25  | 17  | 75  | 9   | 57  | 3   | 358  | 64  | 89  | 10  | 3   | 217  | 21  | 1249 |
| MCRB045 | 16   | 17 | 34  | 30  | 14  | 10  | 45  | 5   | 36  | 2   | 227  | 41  | 56  | 6   | 2   | 116  | 12  | 749  |
| MCRB045 | 17   | 18 | 37  | 60  | 24  | 21  | 98  | 10  | 79  | 2   | 542  | 84  | 117 | 12  | 3   | 233  | 17  | 1581 |
| MCRB045 | 18   | 19 | 94  | 81  | 42  | 23  | 108 | 15  | 102 | 5   | 569  | 111 | 129 | 15  | 6   | 385  | 36  | 2040 |
| MCRB045 | 19   | 20 | 277 | 185 | 107 | 38  | 206 | 36  | 159 | 13  | 836  | 164 | 198 | 30  | 14  | 1070 | 87  | 4089 |
| MCRB045 | 20   | 21 | 267 | 221 | 125 | 55  | 263 | 43  | 230 | 15  | 1290 | 252 | 304 | 38  | 17  | 1200 | 106 | 5272 |
| MCRB045 | 21   | 22 | 219 | 271 | 139 | 77  | 349 | 50  | 223 | 16  | 1690 | 312 | 415 | 49  | 19  | 1300 | 118 | 6234 |
| MCRB045 | 22   | 23 | 277 | 224 | 125 | 61  | 281 | 44  | 212 | 15  | 1420 | 265 | 339 | 40  | 17  | 1200 | 105 | 5503 |
| MCRB045 | 23   | 24 | 223 | 141 | 77  | 38  | 178 | 27  | 150 | 9   | 918  | 177 | 215 | 25  | 11  | 736  | 65  | 3553 |
| MCRB045 | 24   | 25 | 92  | 49  | 27  | 12  | 59  | 9   | 58  | 3   | 303  | 59  | 68  | 8   | 4   | 266  | 23  | 1238 |
| MCRB045 | 25   | 26 | 145 | 95  | 51  | 26  | 120 | 18  | 94  | 6   | 610  | 115 | 145 | 17  | 7   | 501  | 43  | 2368 |
| MCRB045 | 26   | 27 | 108 | 69  | 41  | 17  | 80  | 14  | 62  | 5   | 375  | 73  | 92  | 11  | 5   | 427  | 33  | 1686 |
| MCRB045 | 27   | 28 | 209 | 90  | 57  | 18  | 92  | 19  | 66  | 7   | 379  | 73  | 94  | 14  | 8   | 637  | 47  | 2170 |
| MCRB045 | 28   | 29 | 45  | 32  | 17  | 9   | 42  | 6   | 32  | 2   | 213  | 39  | 51  | 6   | 2   | 184  | 14  | 826  |
| MCRB045 | 29   | 30 | 44  | 32  | 17  | 9   | 41  | 6   | 32  | 2   | 203  | 37  | 48  | 6   | 2   | 169  | 13  | 785  |
| MCRB045 | 30   | 31 | 30  | 20  | 11  | 5   | 25  | 4   | 20  | 1   | 113  | 21  | 27  | 3   | 1   | 120  | 9   | 490  |
| MCRB045 | 31   | 32 | 31  | 19  | 11  | 5   | 23  | 4   | 20  | 1   | 106  | 20  | 25  | 3   | 1   | 116  | 9   | 470  |
| MCRB045 | 32   | 33 | 27  | 17  | 9   | 5   | 22  | 3   | 19  | 1   | 104  | 19  | 24  | 3   | 1   | 102  | 7   | 434  |
| MCRB045 | 33   | 34 | 48  | 17  | 10  | 5   | 22  | 3   | 23  | 1   | 109  | 21  | 25  | 3   | 1   | 105  | 8   | 477  |
| MCRB045 | 34   | 35 | 68  | 19  | 11  | 5   | 22  | 4   | 33  | 1   | 114  | 23  | 25  | 3   | 1   | 120  | 9   | 546  |
| MCRB045 | 35   | 36 | 168 | 88  | 49  | 21  | 101 | 17  | 78  | 6   | 446  | 83  | 112 | 15  | 7   | 532  | 41  | 2105 |
| MCRB045 | 36   | 37 | 154 | 98  | 51  | 28  | 129 | 18  | 85  | 6   | 573  | 103 | 146 | 18  | 7   | 514  | 41  | 2343 |
| MCRB045 | 37   | 38 | 112 | 62  | 33  | 16  | 78  | 12  | 61  | 4   | 362  | 66  | 88  | 11  | 4   | 338  | 27  | 1517 |
| MCRB045 | 38   | 39 | 67  | 36  | 19  | 10  | 46  | 7   | 38  | 2   | 214  | 40  | 51  | 6   | 2   | 193  | 15  | 887  |
| MCRB045 | 39   | 40 | 73  | 36  | 19  | 10  | 46  | 7   | 39  | 2   | 218  | 40  | 52  | 6   | 3   | 202  | 16  | 916  |
| MCRB046 | 0    | 1  | 53  | 12  | 6   | 4   | 16  | 2   | 30  | 1   | 89   | 18  | 19  | 2   | 1   | 60   | 5   | 375  |
| MCRB046 | 1    | 2  | 44  | 8   | 4   | 3   | 11  | 1   | 25  | 0   | 79   | 16  | 17  | 1   | 0   | 35   | 3   | 293  |

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB046 | 2    | 3  | 51  | 12  | 6   | 4   | 17  | 2   | 27  | 1   | 104 | 20  | 23  | 2   | 1   | 59  | 5   | 395  |
| MCRB046 | 3    | 4  | 41  | 16  | 8   | 5   | 20  | 3   | 23  | 1   | 107 | 20  | 25  | 3   | 1   | 91  | 7   | 442  |
| MCRB046 | 4    | 5  | 28  | 19  | 10  | 5   | 24  | 4   | 25  | 1   | 124 | 24  | 29  | 3   | 1   | 117 | 8   | 505  |
| MCRB046 | 5    | 6  | 36  | 22  | 12  | 6   | 27  | 4   | 25  | 1   | 136 | 25  | 32  | 4   | 2   | 136 | 9   | 568  |
| MCRB046 | 6    | 7  | 38  | 20  | 11  | 6   | 26  | 4   | 31  | 1   | 150 | 29  | 33  | 4   | 1   | 121 | 9   | 574  |
| MCRB046 | 7    | 8  | 23  | 10  | 6   | 3   | 13  | 2   | 18  | 1   | 77  | 15  | 17  | 2   | 1   | 61  | 5   | 300  |
| MCRB046 | 8    | 9  | 24  | 10  | 6   | 3   | 12  | 2   | 17  | 1   | 64  | 12  | 14  | 2   | 1   | 65  | 5   | 280  |
| MCRB046 | 9    | 10 | 35  | 14  | 8   | 4   | 17  | 3   | 21  | 1   | 89  | 17  | 20  | 2   | 1   | 90  | 7   | 391  |
| MCRB046 | 10   | 11 | 40  | 8   | 4   | 3   | 10  | 1   | 20  | 1   | 61  | 12  | 13  | 1   | 1   | 44  | 4   | 262  |
| MCRB046 | 13   | 14 | 22  | 11  | 6   | 3   | 15  | 2   | 13  | 1   | 65  | 12  | 17  | 2   | 1   | 67  | 5   | 285  |
| MCRB046 | 14   | 15 | 40  | 38  | 24  | 6   | 36  | 8   | 16  | 3   | 85  | 14  | 26  | 6   | 3   | 422 | 19  | 910  |
| MCRB046 | 15   | 16 | 38  | 17  | 9   | 5   | 23  | 3   | 22  | 1   | 97  | 17  | 25  | 3   | 1   | 105 | 7   | 445  |
| MCRB046 | 16   | 17 | 54  | 17  | 8   | 5   | 24  | 3   | 29  | 1   | 108 | 19  | 27  | 3   | 1   | 88  | 7   | 469  |
| MCRB046 | 17   | 18 | 30  | 22  | 14  | 4   | 21  | 5   | 16  | 2   | 55  | 10  | 15  | 3   | 2   | 183 | 11  | 473  |
| MCRB046 | 18   | 19 | 19  | 11  | 6   | 2   | 12  | 2   | 10  | 1   | 31  | 5   | 9   | 2   | 1   | 106 | 5   | 269  |
| MCRB046 | 19   | 20 | 18  | 11  | 7   | 2   | 12  | 2   | 14  | 1   | 32  | 5   | 9   | 2   | 1   | 106 | 4   | 273  |
| MCRB046 | 22   | 23 | 15  | 14  | 8   | 2   | 13  | 3   | 7   | 1   | 18  | 3   | 6   | 2   | 1   | 117 | 6   | 263  |
| MCRB046 | 26   | 27 | 21  | 14  | 8   | 3   | 17  | 3   | 10  | 1   | 44  | 7   | 13  | 2   | 1   | 99  | 6   | 299  |
| MCRB046 | 28   | 29 | 29  | 20  | 11  | 4   | 22  | 4   | 13  | 1   | 45  | 7   | 14  | 3   | 1   | 166 | 8   | 422  |
| MCRB046 | 29   | 30 | 42  | 50  | 30  | 7   | 49  | 10  | 19  | 3   | 69  | 11  | 25  | 8   | 4   | 535 | 21  | 1082 |
| MCRB046 | 30   | 31 | 29  | 21  | 12  | 4   | 22  | 4   | 12  | 1   | 40  | 7   | 13  | 3   | 2   | 238 | 9   | 510  |
| MCRB046 | 31   | 32 | 19  | 11  | 6   | 3   | 12  | 2   | 9   | 1   | 30  | 5   | 9   | 2   | 1   | 105 | 5   | 267  |
| MCRB047 | 1    | 2  | 49  | 14  | 7   | 4   | 17  | 3   | 28  | 1   | 83  | 15  | 18  | 2   | 1   | 70  | 6   | 377  |
| MCRB047 | 2    | 3  | 55  | 20  | 11  | 5   | 23  | 4   | 30  | 1   | 93  | 17  | 22  | 3   | 1   | 98  | 9   | 465  |
| MCRB047 | 3    | 4  | 58  | 17  | 10  | 3   | 17  | 3   | 30  | 1   | 67  | 13  | 15  | 3   | 1   | 94  | 8   | 406  |
| MCRB047 | 4    | 5  | 41  | 16  | 9   | 3   | 17  | 3   | 22  | 1   | 63  | 12  | 16  | 3   | 1   | 89  | 7   | 360  |
| MCRB047 | 5    | 6  | 45  | 16  | 9   | 4   | 18  | 3   | 22  | 1   | 62  | 10  | 17  | 3   | 1   | 87  | 7   | 363  |
| MCRB047 | 6    | 7  | 48  | 25  | 13  | 6   | 28  | 5   | 25  | 2   | 89  | 14  | 25  | 4   | 2   | 132 | 11  | 511  |
| MCRB047 | 7    | 8  | 28  | 16  | 8   | 4   | 18  | 3   | 13  | 1   | 54  | 8   | 16  | 3   | 1   | 78  | 7   | 307  |
| MCRB047 | 8    | 9  | 65  | 25  | 13  | 6   | 31  | 5   | 30  | 1   | 96  | 16  | 26  | 4   | 2   | 127 | 10  | 544  |
| MCRB047 | 9    | 10 | 79  | 21  | 11  | 6   | 29  | 4   | 36  | 1   | 99  | 17  | 25  | 4   | 1   | 114 | 8   | 540  |
| MCRB047 | 10   | 11 | 68  | 21  | 11  | 5   | 26  | 4   | 30  | 1   | 71  | 12  | 19  | 4   | 1   | 123 | 8   | 481  |
| MCRB047 | 11   | 12 | 62  | 39  | 24  | 6   | 37  | 8   | 27  | 3   | 62  | 10  | 20  | 6   | 3   | 301 | 18  | 758  |
| MCRB047 | 12   | 13 | 38  | 19  | 11  | 3   | 20  | 4   | 17  | 1   | 39  | 7   | 13  | 3   | 1   | 129 | 9   | 379  |
| MCRB047 | 13   | 14 | 31  | 16  | 9   | 3   | 16  | 3   | 13  | 1   | 26  | 5   | 9   | 3   | 1   | 116 | 7   | 312  |
| MCRB048 | 1    | 2  | 67  | 4   | 2   | 1   | 5   | 1   | 57  | 0   | 54  | 16  | 7   | 1   | 0   | 20  | 2   | 279  |
| MCRB048 | 5    | 6  | 124 | 11  | 6   | 3   | 11  | 2   | 27  | 1   | 47  | 10  | 12  | 2   | 1   | 50  | 5   | 367  |
| MCRB048 | 6    | 7  | 151 | 19  | 10  | 4   | 21  | 4   | 57  | 1   | 91  | 19  | 22  | 3   | 1   | 97  | 9   | 606  |
| MCRB048 | 7    | 8  | 115 | 18  | 9   | 6   | 25  | 3   | 67  | 1   | 143 | 28  | 32  | 3   | 1   | 85  | 8   | 644  |
| MCRB048 | 8    | 9  | 106 | 18  | 9   | 5   | 22  | 3   | 65  | 1   | 116 | 24  | 26  | 3   | 1   | 85  | 8   | 583  |
| MCRB048 | 9    | 10 | 129 | 24  | 13  | 6   | 27  | 4   | 63  | 2   | 121 | 24  | 30  | 4   | 2   | 121 | 11  | 689  |
| MCRB048 | 10   | 11 | 108 | 17  | 9   | 5   | 24  | 3   | 62  | 1   | 121 | 24  | 29  | 3   | 1   | 78  | 8   | 583  |
| MCRB048 | 11   | 12 | 96  | 16  | 8   | 4   | 21  | 3   | 55  | 1   | 96  | 21  | 22  | 3   | 1   | 68  | 7   | 495  |
| MCRB048 | 12   | 13 | 89  | 23  | 13  | 5   | 26  | 4   | 44  | 1   | 87  | 17  | 23  | 4   | 2   | 127 | 10  | 566  |
| MCRB048 | 13   | 14 | 95  | 33  | 18  | 6   | 37  | 6   | 55  | 2   | 104 | 20  | 28  | 6   | 2   | 200 | 14  | 751  |
| MCRB048 | 14   | 15 | 91  | 34  | 19  | 6   | 37  | 6   | 49  | 2   | 89  | 17  | 26  | 6   | 2   | 215 | 14  | 735  |
| MCRB048 | 15   | 16 | 82  | 31  | 18  | 5   | 35  | 6   | 42  | 2   | 69  | 13  | 22  | 5   | 2   | 215 | 13  | 672  |
| MCRB048 | 16   | 17 | 76  | 27  | 15  | 5   | 31  | 5   | 39  | 2   | 62  | 12  | 20  | 5   | 2   | 189 | 11  | 601  |
| MCRB048 | 17   | 18 | 83  | 25  | 14  | 5   | 30  | 5   | 41  | 1   | 60  | 12  | 19  | 4   | 2   | 177 | 10  | 585  |
| MCRB048 | 18   | 19 | 81  | 12  | 6   | 3   | 16  | 2   | 37  | 1   | 49  | 10  | 13  | 2   | 1   | 75  | 5   | 371  |
| MCRB048 | 19   | 20 | 68  | 6   | 4   | 2   | 10  | 1   | 35  | 0   | 38  | 9   | 8   | 1   | 0   | 37  | 3   | 262  |
| MCRB049 | 20   | 21 | 141 | 17  | 9   | 4   | 17  | 3   | 85  | 1   | 104 | 27  | 22  | 3   | 1   | 82  | 9   | 621  |
| MCRB049 | 21   | 22 | 121 | 19  | 10  | 5   | 20  | 3   | 78  | 1   | 116 | 28  | 25  | 3   | 2   | 94  | 10  | 635  |
| MCRB049 | 22   | 23 | 90  | 30  | 16  | 7   | 29  | 5   | 45  | 2   | 127 | 26  | 34  | 5   | 2   | 140 | 16  | 682  |

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB049 | 23   | 24 | 137 | 33  | 18  | 8   | 35  | 6   | 81  | 2   | 194 | 43  | 46  | 6   | 3   | 155 | 17  | 927  |
| MCRB049 | 24   | 25 | 109 | 27  | 15  | 7   | 29  | 5   | 76  | 2   | 161 | 36  | 37  | 5   | 2   | 132 | 15  | 779  |
| MCRB049 | 25   | 26 | 87  | 34  | 18  | 9   | 38  | 6   | 74  | 2   | 200 | 41  | 49  | 6   | 3   | 165 | 16  | 886  |
| MCRB049 | 26   | 27 | 94  | 35  | 18  | 10  | 43  | 6   | 86  | 2   | 244 | 50  | 57  | 6   | 3   | 166 | 17  | 990  |
| MCRB049 | 27   | 28 | 89  | 37  | 18  | 11  | 44  | 6   | 88  | 2   | 258 | 52  | 60  | 6   | 3   | 170 | 17  | 1019 |
| MCRB049 | 28   | 29 | 95  | 32  | 17  | 9   | 38  | 6   | 81  | 2   | 216 | 45  | 51  | 6   | 2   | 154 | 15  | 911  |
| MCRB049 | 29   | 30 | 96  | 33  | 17  | 9   | 38  | 6   | 80  | 2   | 208 | 43  | 49  | 6   | 2   | 159 | 16  | 905  |
| MCRB049 | 30   | 31 | 99  | 33  | 18  | 9   | 38  | 6   | 82  | 2   | 204 | 42  | 48  | 6   | 3   | 161 | 16  | 909  |
| MCRB049 | 31   | 32 | 96  | 29  | 15  | 8   | 33  | 5   | 77  | 2   | 180 | 38  | 42  | 5   | 2   | 143 | 14  | 817  |
| MCRB049 | 32   | 33 | 97  | 37  | 20  | 9   | 41  | 7   | 77  | 3   | 195 | 39  | 47  | 6   | 3   | 184 | 18  | 928  |
| MCRB049 | 33   | 34 | 102 | 36  | 19  | 9   | 40  | 7   | 77  | 2   | 185 | 38  | 45  | 6   | 3   | 173 | 17  | 901  |
| MCRB050 | 0    | 1  | 72  | 9   | 5   | 3   | 12  | 2   | 36  | 1   | 67  | 14  | 16  | 2   | 1   | 39  | 4   | 332  |
| MCRB050 | 1    | 2  | 55  | 13  | 6   | 4   | 16  | 2   | 33  | 1   | 69  | 14  | 19  | 2   | 1   | 47  | 6   | 339  |
| MCRB050 | 2    | 3  | 67  | 37  | 20  | 8   | 42  | 7   | 58  | 2   | 127 | 25  | 34  | 6   | 3   | 183 | 16  | 756  |
| MCRB050 | 3    | 4  | 79  | 54  | 28  | 13  | 69  | 10  | 63  | 3   | 215 | 36  | 58  | 10  | 4   | 266 | 22  | 1109 |
| MCRB050 | 4    | 5  | 80  | 33  | 18  | 7   | 41  | 6   | 46  | 2   | 114 | 20  | 31  | 6   | 2   | 178 | 14  | 716  |
| MCRB050 | 5    | 6  | 79  | 43  | 21  | 10  | 59  | 8   | 54  | 2   | 123 | 20  | 37  | 8   | 3   | 184 | 14  | 791  |
| MCRB050 | 6    | 7  | 88  | 7   | 4   | 2   | 9   | 1   | 46  | 1   | 41  | 11  | 8   | 1   | 1   | 39  | 4   | 308  |
| MCRB050 | 7    | 8  | 87  | 6   | 3   | 1   | 7   | 1   | 44  | 0   | 37  | 10  | 8   | 1   | 0   | 33  | 3   | 285  |
| MCRB051 | 1    | 2  | 31  | 23  | 13  | 5   | 25  | 5   | 27  | 1   | 80  | 16  | 21  | 4   | 2   | 139 | 10  | 480  |
| MCRB051 | 2    | 3  | 47  | 17  | 9   | 5   | 24  | 3   | 37  | 1   | 112 | 22  | 27  | 3   | 1   | 105 | 7   | 500  |
| MCRB051 | 3    | 4  | 67  | 21  | 10  | 8   | 32  | 4   | 44  | 1   | 178 | 35  | 44  | 4   | 1   | 83  | 8   | 639  |
| MCRB051 | 4    | 5  | 85  | 26  | 10  | 15  | 53  | 4   | 99  | 1   | 351 | 70  | 84  | 6   | 1   | 78  | 8   | 1046 |
| MCRB051 | 5    | 6  | 83  | 13  | 6   | 6   | 25  | 2   | 56  | 1   | 141 | 29  | 34  | 3   | 1   | 44  | 5   | 527  |
| MCRB051 | 6    | 7  | 70  | 9   | 4   | 3   | 12  | 2   | 38  | 1   | 61  | 13  | 14  | 2   | 1   | 36  | 4   | 319  |
| MCRB051 | 7    | 8  | 68  | 8   | 4   | 2   | 10  | 1   | 40  | 1   | 44  | 11  | 10  | 1   | 1   | 36  | 4   | 284  |
| MCRB051 | 8    | 9  | 83  | 6   | 4   | 2   | 9   | 1   | 45  | 0   | 47  | 12  | 10  | 1   | 0   | 33  | 3   | 303  |
| MCRB051 | 9    | 10 | 90  | 5   | 3   | 1   | 7   | 1   | 44  | 0   | 37  | 10  | 7   | 1   | 0   | 29  | 3   | 283  |
| MCRB052 | 0    | 1  | 203 | 3   | 2   | 1   | 3   | 1   | 28  | 0   | 23  | 7   | 4   | 0   | 0   | 13  | 2   | 339  |
| MCRB052 | 5    | 6  | 165 | 2   | 1   | 1   | 2   | 0   | 17  | 0   | 16  | 5   | 3   | 0   | 0   | 11  | 2   | 267  |
| MCRB052 | 6    | 7  | 577 | 3   | 2   | 1   | 4   | 1   | 16  | 0   | 29  | 7   | 6   | 1   | 0   | 10  | 2   | 771  |
| MCRB052 | 7    | 8  | 167 | 5   | 2   | 2   | 7   | 1   | 25  | 0   | 66  | 16  | 13  | 1   | 0   | 16  | 3   | 380  |
| MCRB052 | 8    | 9  | 193 | 5   | 3   | 2   | 7   | 1   | 29  | 1   | 54  | 14  | 11  | 1   | 0   | 19  | 3   | 402  |
| MCRB052 | 9    | 10 | 192 | 4   | 3   | 2   | 5   | 1   | 17  | 0   | 38  | 9   | 8   | 1   | 0   | 16  | 3   | 352  |
| MCRB052 | 10   | 11 | 537 | 9   | 5   | 3   | 12  | 2   | 50  | 1   | 95  | 24  | 20  | 2   | 1   | 34  | 5   | 940  |
| MCRB052 | 11   | 12 | 93  | 8   | 4   | 3   | 11  | 1   | 39  | 1   | 114 | 28  | 23  | 2   | 1   | 31  | 4   | 425  |
| MCRB052 | 12   | 13 | 103 | 6   | 3   | 2   | 8   | 1   | 37  | 0   | 79  | 21  | 15  | 1   | 0   | 30  | 3   | 368  |
| MCRB052 | 14   | 15 | 91  | 5   | 2   | 2   | 6   | 1   | 29  | 0   | 58  | 15  | 12  | 1   | 0   | 17  | 3   | 284  |
| MCRB052 | 15   | 16 | 98  | 8   | 4   | 4   | 14  | 1   | 46  | 0   | 142 | 34  | 29  | 2   | 1   | 26  | 4   | 482  |
| MCRB052 | 16   | 17 | 87  | 28  | 13  | 13  | 45  | 5   | 90  | 2   | 370 | 80  | 80  | 6   | 2   | 96  | 11  | 1088 |
| MCRB052 | 17   | 18 | 56  | 57  | 31  | 19  | 77  | 11  | 135 | 4   | 531 | 119 | 114 | 10  | 4   | 262 | 25  | 1720 |
| MCRB052 | 18   | 19 | 65  | 70  | 33  | 30  | 110 | 12  | 262 | 4   | 843 | 191 | 182 | 14  | 4   | 264 | 28  | 2486 |
| MCRB052 | 19   | 20 | 95  | 103 | 62  | 24  | 110 | 21  | 184 | 8   | 531 | 116 | 125 | 17  | 8   | 530 | 55  | 2367 |
| MCRB052 | 20   | 21 | 69  | 18  | 10  | 6   | 25  | 3   | 59  | 1   | 172 | 37  | 37  | 3   | 1   | 78  | 9   | 625  |
| MCRB052 | 21   | 22 | 90  | 15  | 8   | 5   | 20  | 3   | 57  | 1   | 143 | 32  | 31  | 3   | 1   | 62  | 7   | 562  |
| MCRB052 | 22   | 23 | 54  | 10  | 5   | 4   | 15  | 2   | 38  | 1   | 106 | 23  | 23  | 2   | 1   | 37  | 4   | 382  |
| MCRB052 | 23   | 24 | 70  | 39  | 20  | 14  | 54  | 7   | 94  | 2   | 340 | 70  | 79  | 7   | 3   | 159 | 18  | 1153 |
| MCRB052 | 24   | 25 | 154 | 19  | 10  | 7   | 27  | 3   | 58  | 1   | 175 | 38  | 39  | 4   | 1   | 75  | 9   | 730  |
| MCRB052 | 25   | 26 | 43  | 18  | 8   | 6   | 25  | 3   | 47  | 1   | 151 | 31  | 35  | 3   | 1   | 66  | 7   | 525  |
| MCRB052 | 26   | 27 | 44  | 27  | 14  | 9   | 39  | 5   | 60  | 2   | 193 | 37  | 47  | 5   | 2   | 112 | 11  | 718  |
| MCRB052 | 27   | 28 | 43  | 13  | 7   | 4   | 17  | 2   | 33  | 1   | 74  | 15  | 18  | 2   | 1   | 59  | 5   | 348  |
| MCRB052 | 28   | 29 | 104 | 11  | 6   | 4   | 15  | 2   | 39  | 1   | 92  | 20  | 21  | 2   | 1   | 48  | 5   | 438  |
| MCRB052 | 29   | 30 | 56  | 7   | 4   | 2   | 9   | 1   | 32  | 0   | 46  | 11  | 10  | 1   | 0   | 33  | 3   | 253  |
| MCRB053 | 0    | 1  | 79  | 11  | 5   | 3   | 13  | 2   | 43  | 1   | 72  | 17  | 15  | 2   | 1   | 47  | 5   | 371  |



| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd   | Pr  | Sm  | Tb  | Tm  | Y    | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  | ppm | ppm | ppm | ppm | ppm  | ppm | ppm  |
| MCRB053 | 1    | 2  | 64  | 7   | 4   | 2   | 8   | 1   | 35  | 0   | 47   | 12  | 10  | 1   | 0   | 31   | 3   | 266  |
| MCRB053 | 2    | 3  | 153 | 7   | 4   | 2   | 8   | 1   | 72  | 1   | 62   | 18  | 12  | 1   | 1   | 31   | 4   | 443  |
| MCRB053 | 3    | 4  | 204 | 7   | 4   | 2   | 8   | 1   | 68  | 1   | 67   | 19  | 12  | 1   | 1   | 30   | 5   | 505  |
| MCRB053 | 4    | 5  | 189 | 6   | 4   | 2   | 7   | 1   | 66  | 1   | 57   | 17  | 11  | 1   | 1   | 25   | 4   | 459  |
| MCRB053 | 5    | 6  | 185 | 6   | 3   | 2   | 7   | 1   | 50  | 1   | 67   | 18  | 14  | 1   | 1   | 24   | 4   | 451  |
| MCRB053 | 6    | 7  | 117 | 6   | 4   | 2   | 7   | 1   | 58  | 1   | 64   | 18  | 12  | 1   | 1   | 25   | 5   | 378  |
| MCRB053 | 7    | 8  | 139 | 8   | 5   | 3   | 10  | 2   | 85  | 1   | 104  | 29  | 18  | 1   | 1   | 34   | 6   | 524  |
| MCRB053 | 8    | 9  | 110 | 6   | 4   | 2   | 7   | 1   | 65  | 1   | 71   | 20  | 13  | 1   | 1   | 28   | 5   | 393  |
| MCRB053 | 9    | 10 | 113 | 6   | 4   | 2   | 8   | 1   | 108 | 1   | 81   | 25  | 14  | 1   | 1   | 27   | 4   | 465  |
| MCRB053 | 10   | 11 | 117 | 6   | 4   | 2   | 8   | 1   | 133 | 1   | 78   | 26  | 13  | 1   | 1   | 27   | 4   | 496  |
| MCRB053 | 11   | 12 | 99  | 5   | 3   | 2   | 6   | 1   | 91  | 0   | 57   | 19  | 11  | 1   | 0   | 19   | 3   | 373  |
| MCRB053 | 12   | 13 | 117 | 6   | 3   | 2   | 7   | 1   | 56  | 1   | 66   | 18  | 12  | 1   | 1   | 23   | 4   | 372  |
| MCRB053 | 13   | 14 | 274 | 5   | 3   | 2   | 7   | 1   | 50  | 1   | 81   | 22  | 15  | 1   | 0   | 20   | 4   | 569  |
| MCRB053 | 14   | 15 | 197 | 15  | 7   | 7   | 23  | 3   | 99  | 1   | 259  | 65  | 49  | 3   | 1   | 49   | 8   | 923  |
| MCRB053 | 15   | 16 | 155 | 25  | 12  | 11  | 38  | 4   | 115 | 1   | 359  | 87  | 73  | 5   | 2   | 120  | 10  | 1197 |
| MCRB053 | 16   | 17 | 108 | 56  | 22  | 34  | 117 | 9   | 369 | 2   | 1080 | 251 | 218 | 13  | 3   | 194  | 16  | 2924 |
| MCRB053 | 17   | 18 | 108 | 58  | 27  | 28  | 102 | 10  | 273 | 3   | 774  | 172 | 168 | 12  | 3   | 266  | 21  | 2387 |
| MCRB053 | 18   | 19 | 103 | 44  | 19  | 21  | 75  | 7   | 170 | 2   | 527  | 112 | 122 | 9   | 2   | 172  | 16  | 1652 |
| MCRB053 | 19   | 20 | 70  | 27  | 12  | 13  | 48  | 4   | 118 | 1   | 353  | 76  | 78  | 6   | 2   | 95   | 10  | 1072 |
| MCRB053 | 20   | 21 | 81  | 23  | 10  | 11  | 38  | 4   | 109 | 1   | 314  | 67  | 65  | 5   | 1   | 81   | 9   | 963  |
| MCRB053 | 21   | 22 | 88  | 34  | 16  | 14  | 52  | 6   | 131 | 2   | 376  | 84  | 82  | 7   | 2   | 125  | 15  | 1217 |
| MCRB053 | 22   | 23 | 76  | 81  | 36  | 39  | 136 | 13  | 295 | 4   | 1010 | 215 | 227 | 17  | 5   | 273  | 31  | 2890 |
| MCRB053 | 23   | 24 | 65  | 107 | 50  | 44  | 155 | 18  | 303 | 6   | 1040 | 219 | 243 | 22  | 7   | 379  | 45  | 3184 |
| MCRB053 | 24   | 25 | 69  | 276 | 130 | 94  | 399 | 49  | 598 | 16  | 1910 | 370 | 476 | 55  | 18  | 1060 | 118 | 6668 |
| MCRB053 | 25   | 26 | 80  | 248 | 135 | 61  | 288 | 48  | 347 | 17  | 1040 | 194 | 276 | 44  | 18  | 1160 | 118 | 4853 |
| MCRB053 | 26   | 27 | 45  | 133 | 69  | 39  | 172 | 24  | 214 | 8   | 746  | 142 | 193 | 25  | 9   | 585  | 60  | 2926 |
| MCRB053 | 27   | 28 | 83  | 123 | 63  | 39  | 170 | 23  | 202 | 7   | 764  | 142 | 194 | 23  | 8   | 546  | 53  | 2894 |
| MCRB053 | 28   | 29 | 34  | 43  | 20  | 15  | 66  | 7   | 79  | 2   | 301  | 54  | 74  | 8   | 3   | 172  | 16  | 1059 |
| MCRB053 | 29   | 30 | 36  | 48  | 22  | 17  | 76  | 8   | 83  | 2   | 323  | 58  | 83  | 10  | 3   | 192  | 18  | 1160 |
| MCRB053 | 30   | 31 | 29  | 30  | 14  | 10  | 45  | 5   | 58  | 2   | 207  | 37  | 51  | 6   | 2   | 120  | 11  | 741  |
| MCRB054 | 0    | 1  | 97  | 8   | 4   | 3   | 11  | 1   | 54  | 1   | 94   | 25  | 15  | 1   | 1   | 36   | 3   | 416  |
| MCRB054 | 1    | 2  | 114 | 6   | 3   | 2   | 9   | 1   | 55  | 0   | 91   | 26  | 13  | 1   | 0   | 28   | 3   | 414  |
| MCRB054 | 2    | 3  | 111 | 4   | 2   | 2   | 6   | 1   | 51  | 0   | 80   | 24  | 10  | 1   | 0   | 20   | 2   | 370  |
| MCRB054 | 3    | 4  | 142 | 8   | 4   | 3   | 10  | 2   | 80  | 1   | 127  | 37  | 17  | 1   | 1   | 42   | 4   | 562  |
| MCRB054 | 4    | 5  | 88  | 5   | 3   | 2   | 8   | 1   | 59  | 0   | 97   | 27  | 15  | 1   | 0   | 25   | 2   | 394  |
| MCRB054 | 5    | 6  | 112 | 7   | 4   | 2   | 9   | 1   | 61  | 1   | 96   | 28  | 13  | 1   | 1   | 37   | 4   | 445  |
| MCRB054 | 6    | 7  | 126 | 11  | 7   | 3   | 11  | 2   | 49  | 1   | 84   | 24  | 13  | 2   | 1   | 60   | 6   | 472  |
| MCRB054 | 7    | 8  | 211 | 26  | 15  | 6   | 29  | 5   | 90  | 2   | 161  | 40  | 31  | 4   | 2   | 139  | 12  | 916  |
| MCRB054 | 8    | 9  | 132 | 14  | 7   | 4   | 16  | 2   | 37  | 1   | 103  | 22  | 22  | 2   | 1   | 58   | 6   | 505  |
| MCRB054 | 9    | 10 | 93  | 12  | 6   | 4   | 15  | 2   | 39  | 1   | 99   | 22  | 21  | 2   | 1   | 51   | 5   | 440  |
| MCRB054 | 10   | 11 | 101 | 10  | 5   | 4   | 15  | 2   | 37  | 1   | 109  | 22  | 24  | 2   | 1   | 38   | 5   | 441  |
| MCRB054 | 11   | 12 | 82  | 22  | 11  | 8   | 30  | 4   | 37  | 1   | 169  | 31  | 42  | 4   | 1   | 87   | 9   | 636  |
| MCRB054 | 12   | 13 | 67  | 16  | 8   | 5   | 21  | 3   | 26  | 1   | 106  | 19  | 26  | 3   | 1   | 78   | 7   | 458  |
| MCRB054 | 14   | 15 | 54  | 10  | 5   | 4   | 15  | 2   | 20  | 1   | 89   | 16  | 23  | 2   | 1   | 42   | 4   | 339  |
| MCRB054 | 15   | 16 | 64  | 18  | 9   | 7   | 26  | 3   | 25  | 1   | 135  | 22  | 36  | 4   | 1   | 72   | 8   | 509  |
| MCRB054 | 16   | 17 | 51  | 14  | 6   | 6   | 22  | 2   | 26  | 1   | 116  | 20  | 30  | 3   | 1   | 45   | 5   | 407  |
| MCRB054 | 17   | 18 | 50  | 16  | 7   | 6   | 25  | 3   | 23  | 1   | 101  | 16  | 29  | 3   | 1   | 53   | 6   | 400  |
| MCRB054 | 18   | 19 | 60  | 33  | 18  | 9   | 42  | 6   | 26  | 2   | 136  | 20  | 42  | 6   | 2   | 171  | 14  | 701  |
| MCRB054 | 19   | 20 | 36  | 26  | 15  | 6   | 31  | 5   | 13  | 2   | 82   | 11  | 27  | 5   | 2   | 153  | 11  | 511  |
| MCRB054 | 20   | 21 | 24  | 15  | 8   | 4   | 20  | 3   | 12  | 1   | 63   | 9   | 19  | 3   | 1   | 75   | 6   | 314  |
| MCRB054 | 21   | 22 | 24  | 17  | 9   | 5   | 23  | 3   | 13  | 1   | 74   | 11  | 23  | 3   | 1   | 83   | 7   | 354  |
| MCRB054 | 22   | 23 | 23  | 22  | 11  | 6   | 28  | 4   | 14  | 1   | 79   | 11  | 24  | 4   | 1   | 96   | 9   | 398  |
| MCRB056 | 9    | 10 | 94  | 4   | 2   | 1   | 5   | 1   | 44  | 0   | 39   | 11  | 7   | 1   | 0   | 23   | 2   | 278  |
| MCRB056 | 10   | 11 | 84  | 4   | 2   | 1   | 5   | 1   | 40  | 0   | 35   | 10  | 7   | 1   | 0   | 23   | 2   | 254  |

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB056 | 17   | 18 | 78  | 5   | 3   | 1   | 6   | 1   | 37  | 0   | 32  | 9   | 6   | 1   | 0   | 29  | 3   | 250  |
| MCRB056 | 21   | 22 | 80  | 6   | 3   | 1   | 7   | 1   | 37  | 0   | 34  | 9   | 7   | 1   | 0   | 30  | 3   | 260  |
| MCRB056 | 24   | 25 | 88  | 5   | 3   | 1   | 6   | 1   | 41  | 0   | 37  | 10  | 7   | 1   | 0   | 25  | 3   | 268  |
| MCRB056 | 27   | 28 | 95  | 5   | 3   | 1   | 6   | 1   | 44  | 0   | 40  | 11  | 7   | 1   | 0   | 26  | 3   | 286  |
| MCRB056 | 30   | 31 | 84  | 4   | 2   | 1   | 5   | 1   | 40  | 0   | 34  | 10  | 6   | 1   | 0   | 22  | 2   | 251  |
| MCRB056 | 31   | 32 | 89  | 4   | 3   | 1   | 5   | 1   | 42  | 0   | 37  | 10  | 7   | 1   | 0   | 23  | 3   | 266  |
| MCRB057 | 0    | 1  | 66  | 6   | 4   | 2   | 8   | 1   | 39  | 1   | 47  | 12  | 10  | 1   | 1   | 33  | 4   | 276  |
| MCRB057 | 1    | 2  | 75  | 11  | 7   | 3   | 11  | 2   | 65  | 1   | 70  | 19  | 14  | 2   | 1   | 66  | 8   | 420  |
| MCRB057 | 2    | 3  | 91  | 17  | 11  | 4   | 19  | 3   | 105 | 2   | 118 | 33  | 24  | 3   | 2   | 94  | 11  | 634  |
| MCRB057 | 3    | 4  | 107 | 17  | 12  | 3   | 16  | 4   | 96  | 2   | 105 | 30  | 21  | 3   | 2   | 98  | 12  | 622  |
| MCRB057 | 4    | 5  | 104 | 15  | 10  | 4   | 17  | 3   | 120 | 2   | 146 | 42  | 28  | 3   | 1   | 78  | 10  | 688  |
| MCRB057 | 5    | 6  | 121 | 16  | 10  | 5   | 20  | 3   | 140 | 2   | 170 | 48  | 33  | 3   | 1   | 75  | 11  | 775  |
| MCRB057 | 6    | 7  | 105 | 12  | 8   | 3   | 13  | 2   | 88  | 1   | 101 | 28  | 19  | 2   | 1   | 56  | 9   | 529  |
| MCRB057 | 7    | 8  | 111 | 17  | 9   | 6   | 25  | 3   | 157 | 1   | 205 | 56  | 40  | 3   | 1   | 61  | 10  | 830  |
| MCRB057 | 9    | 10 | 154 | 25  | 13  | 8   | 33  | 5   | 166 | 2   | 215 | 56  | 46  | 5   | 2   | 86  | 12  | 973  |
| MCRB057 | 10   | 11 | 80  | 17  | 9   | 5   | 23  | 3   | 129 | 1   | 159 | 43  | 31  | 3   | 1   | 62  | 8   | 675  |
| MCRB057 | 11   | 12 | 105 | 21  | 11  | 7   | 30  | 4   | 180 | 1   | 237 | 64  | 46  | 4   | 1   | 78  | 10  | 941  |
| MCRB057 | 12   | 13 | 109 | 17  | 9   | 6   | 24  | 3   | 146 | 1   | 196 | 53  | 38  | 3   | 1   | 67  | 9   | 804  |
| MCRB057 | 13   | 14 | 149 | 18  | 10  | 6   | 24  | 3   | 139 | 1   | 178 | 48  | 36  | 3   | 1   | 80  | 10  | 833  |
| MCRB057 | 14   | 15 | 93  | 16  | 9   | 6   | 23  | 3   | 133 | 1   | 168 | 44  | 34  | 3   | 1   | 69  | 8   | 719  |
| MCRB057 | 15   | 16 | 102 | 14  | 7   | 4   | 17  | 2   | 100 | 1   | 108 | 29  | 23  | 2   | 1   | 60  | 7   | 563  |
| MCRB057 | 16   | 17 | 89  | 14  | 7   | 5   | 20  | 2   | 121 | 1   | 142 | 38  | 29  | 3   | 1   | 57  | 7   | 628  |
| MCRB057 | 17   | 18 | 157 | 37  | 19  | 11  | 50  | 7   | 247 | 2   | 296 | 74  | 63  | 7   | 3   | 175 | 18  | 1378 |
| MCRB057 | 18   | 19 | 194 | 43  | 19  | 17  | 73  | 7   | 372 | 2   | 424 | 105 | 92  | 9   | 2   | 173 | 17  | 1826 |
| MCRB057 | 19   | 20 | 115 | 57  | 20  | 26  | 112 | 8   | 562 | 2   | 661 | 161 | 146 | 13  | 2   | 170 | 15  | 2432 |
| MCRB057 | 20   | 21 | 105 | 71  | 36  | 23  | 103 | 13  | 535 | 5   | 600 | 146 | 129 | 14  | 5   | 345 | 32  | 2553 |
| MCRB057 | 21   | 22 | 93  | 44  | 26  | 8   | 43  | 9   | 143 | 4   | 169 | 42  | 41  | 7   | 4   | 252 | 26  | 1087 |
| MCRB057 | 22   | 23 | 90  | 35  | 21  | 7   | 36  | 7   | 140 | 3   | 176 | 44  | 39  | 6   | 3   | 186 | 20  | 966  |
| MCRB057 | 23   | 24 | 74  | 12  | 6   | 4   | 17  | 2   | 93  | 1   | 101 | 26  | 21  | 2   | 1   | 49  | 7   | 490  |
| MCRB057 | 24   | 25 | 56  | 10  | 5   | 4   | 16  | 2   | 88  | 1   | 117 | 29  | 23  | 2   | 1   | 40  | 5   | 470  |
| MCRB057 | 25   | 26 | 64  | 11  | 5   | 4   | 18  | 2   | 97  | 1   | 125 | 31  | 25  | 2   | 1   | 44  | 5   | 512  |
| MCRB057 | 26   | 27 | 71  | 14  | 7   | 4   | 20  | 2   | 98  | 1   | 118 | 30  | 24  | 3   | 1   | 59  | 6   | 539  |
| MCRB057 | 27   | 28 | 91  | 23  | 14  | 5   | 25  | 5   | 90  | 2   | 108 | 27  | 24  | 4   | 2   | 123 | 13  | 658  |
| MCRB057 | 28   | 29 | 102 | 23  | 14  | 4   | 25  | 5   | 80  | 2   | 94  | 24  | 22  | 4   | 2   | 129 | 12  | 644  |
| MCRB057 | 29   | 30 | 76  | 19  | 11  | 4   | 20  | 4   | 74  | 2   | 81  | 21  | 18  | 3   | 2   | 103 | 11  | 534  |
| MCRB057 | 30   | 31 | 105 | 20  | 12  | 4   | 20  | 4   | 77  | 2   | 82  | 21  | 18  | 3   | 2   | 102 | 11  | 571  |
| MCRB057 | 31   | 32 | 86  | 14  | 8   | 3   | 17  | 3   | 80  | 1   | 87  | 22  | 18  | 2   | 1   | 65  | 7   | 490  |
| MCRB057 | 32   | 33 | 92  | 17  | 9   | 4   | 21  | 3   | 96  | 1   | 108 | 27  | 23  | 3   | 1   | 82  | 8   | 586  |
| MCRB057 | 33   | 34 | 114 | 23  | 13  | 5   | 26  | 4   | 109 | 2   | 120 | 30  | 26  | 4   | 2   | 122 | 12  | 723  |
| MCRB057 | 34   | 35 | 111 | 19  | 11  | 4   | 22  | 4   | 93  | 1   | 104 | 26  | 22  | 3   | 2   | 103 | 10  | 635  |
| MCRB057 | 35   | 36 | 91  | 13  | 7   | 4   | 17  | 2   | 75  | 1   | 87  | 21  | 18  | 2   | 1   | 57  | 6   | 474  |
| MCRB057 | 36   | 37 | 96  | 17  | 9   | 4   | 21  | 3   | 79  | 1   | 91  | 22  | 21  | 3   | 1   | 71  | 8   | 527  |
| MCRB057 | 37   | 38 | 62  | 10  | 6   | 2   | 12  | 2   | 65  | 1   | 55  | 14  | 11  | 2   | 1   | 45  | 5   | 345  |
| MCRB057 | 38   | 39 | 85  | 11  | 6   | 3   | 15  | 2   | 68  | 1   | 70  | 17  | 15  | 2   | 1   | 47  | 6   | 412  |
| MCRB057 | 39   | 40 | 70  | 9   | 5   | 2   | 12  | 2   | 43  | 1   | 41  | 10  | 10  | 2   | 1   | 38  | 4   | 294  |
| MCRB057 | 40   | 41 | 63  | 8   | 4   | 2   | 10  | 1   | 47  | 1   | 44  | 11  | 9   | 1   | 1   | 35  | 4   | 285  |
| MCRB057 | 41   | 42 | 78  | 9   | 5   | 2   | 11  | 2   | 60  | 1   | 55  | 14  | 11  | 2   | 1   | 40  | 5   | 348  |
| MCRB057 | 42   | 43 | 87  | 11  | 6   | 3   | 14  | 2   | 77  | 1   | 76  | 20  | 16  | 2   | 1   | 51  | 5   | 440  |
| MCRB057 | 43   | 44 | 88  | 10  | 6   | 3   | 13  | 2   | 80  | 1   | 71  | 19  | 14  | 2   | 1   | 47  | 5   | 425  |
| MCRB057 | 44   | 45 | 99  | 9   | 5   | 2   | 12  | 2   | 64  | 1   | 60  | 16  | 12  | 2   | 1   | 43  | 5   | 391  |
| MCRB057 | 45   | 46 | 112 | 12  | 7   | 3   | 14  | 2   | 72  | 1   | 71  | 18  | 14  | 2   | 1   | 57  | 6   | 463  |
| MCRB057 | 48   | 49 | 44  | 6   | 3   | 2   | 8   | 1   | 48  | 0   | 52  | 13  | 10  | 1   | 0   | 27  | 3   | 260  |
| MCRB058 | 23   | 24 | 88  | 6   | 4   | 1   | 6   | 1   | 45  | 1   | 38  | 10  | 7   | 1   | 1   | 34  | 5   | 294  |
| MCRB058 | 24   | 25 | 114 | 8   | 5   | 2   | 11  | 2   | 63  | 1   | 54  | 14  | 12  | 1   | 1   | 40  | 5   | 392  |

| Hole ID | From | To | Ce  | Dy  | Er  | Eu  | Gd  | Ho  | La  | Lu  | Nd  | Pr  | Sm  | Tb  | Tm  | Y   | Yb  | TREO |
|---------|------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|         |      |    | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm  |
| MCRB058 | 25   | 26 | 105 | 7   | 5   | 1   | 7   | 1   | 54  | 1   | 46  | 13  | 8   | 1   | 1   | 39  | 5   | 348  |
| MCRB058 | 26   | 27 | 87  | 6   | 4   | 1   | 7   | 1   | 47  | 1   | 41  | 11  | 8   | 1   | 1   | 35  | 5   | 302  |
| MCRB058 | 27   | 28 | 96  | 7   | 5   | 1   | 8   | 1   | 52  | 1   | 46  | 12  | 9   | 1   | 1   | 40  | 6   | 338  |
| MCRB058 | 28   | 29 | 91  | 21  | 14  | 4   | 23  | 4   | 82  | 2   | 94  | 23  | 22  | 3   | 2   | 123 | 13  | 618  |
| MCRB058 | 29   | 30 | 145 | 26  | 18  | 4   | 25  | 6   | 91  | 2   | 102 | 26  | 23  | 4   | 2   | 180 | 16  | 798  |
| MCRB058 | 30   | 31 | 117 | 34  | 24  | 5   | 30  | 7   | 110 | 3   | 110 | 27  | 24  | 5   | 3   | 233 | 20  | 900  |
| MCRB058 | 31   | 32 | 132 | 31  | 21  | 4   | 27  | 7   | 77  | 3   | 82  | 20  | 19  | 5   | 3   | 214 | 18  | 794  |
| MCRB058 | 32   | 33 | 115 | 38  | 17  | 14  | 68  | 6   | 413 | 2   | 405 | 102 | 83  | 8   | 2   | 157 | 15  | 1703 |
| MCRB058 | 33   | 34 | 131 | 47  | 26  | 9   | 57  | 9   | 165 | 3   | 177 | 39  | 44  | 8   | 3   | 218 | 21  | 1137 |
| MCRB058 | 34   | 35 | 86  | 27  | 16  | 4   | 28  | 5   | 81  | 2   | 78  | 19  | 19  | 4   | 2   | 150 | 12  | 636  |
| MCRB058 | 35   | 36 | 137 | 20  | 12  | 3   | 23  | 4   | 88  | 1   | 78  | 19  | 17  | 3   | 2   | 120 | 10  | 640  |
| MCRB058 | 36   | 37 | 157 | 16  | 9   | 3   | 19  | 3   | 82  | 1   | 76  | 19  | 17  | 3   | 1   | 95  | 8   | 603  |
| MCRB058 | 37   | 38 | 374 | 17  | 10  | 3   | 19  | 3   | 71  | 1   | 63  | 16  | 14  | 3   | 1   | 105 | 9   | 839  |
| MCRB058 | 38   | 39 | 109 | 13  | 8   | 2   | 14  | 3   | 61  | 1   | 52  | 13  | 11  | 2   | 1   | 79  | 7   | 447  |
| MCRB058 | 39   | 40 | 93  | 12  | 7   | 2   | 14  | 2   | 62  | 1   | 55  | 14  | 11  | 2   | 1   | 75  | 6   | 424  |
| MCRB058 | 40   | 41 | 105 | 12  | 7   | 2   | 13  | 2   | 65  | 1   | 56  | 14  | 12  | 2   | 1   | 71  | 6   | 438  |
| MCRB058 | 41   | 42 | 88  | 10  | 7   | 2   | 11  | 2   | 55  | 1   | 48  | 12  | 10  | 2   | 1   | 64  | 5   | 376  |
| MCRB058 | 42   | 43 | 109 | 11  | 7   | 2   | 12  | 2   | 60  | 1   | 54  | 14  | 10  | 2   | 1   | 71  | 6   | 428  |
| MCRB058 | 43   | 44 | 70  | 8   | 5   | 2   | 9   | 2   | 42  | 1   | 37  | 9   | 8   | 1   | 1   | 48  | 4   | 290  |
| MCRB058 | 44   | 45 | 80  | 8   | 5   | 1   | 8   | 2   | 41  | 1   | 36  | 10  | 7   | 1   | 1   | 48  | 4   | 297  |
| MCRB058 | 45   | 46 | 112 | 9   | 6   | 2   | 10  | 2   | 56  | 1   | 49  | 13  | 10  | 2   | 1   | 65  | 5   | 407  |
| MCRB058 | 46   | 47 | 114 | 10  | 6   | 2   | 11  | 2   | 56  | 1   | 52  | 14  | 10  | 2   | 1   | 63  | 6   | 412  |
| MCRB058 | 47   | 48 | 98  | 8   | 5   | 2   | 9   | 2   | 49  | 1   | 44  | 12  | 9   | 1   | 1   | 51  | 5   | 350  |
| MCRB058 | 48   | 49 | 84  | 7   | 4   | 2   | 9   | 1   | 44  | 1   | 43  | 11  | 9   | 1   | 1   | 45  | 4   | 314  |

**Appendix 3. Drill collar data table and assay status.**

| Hole ID | Hole Depth (metre) | Easting (GDA94/WGS54) | Northing (GDA94/WGS54) | Azimuth (True) | Dip | Assay Status              |
|---------|--------------------|-----------------------|------------------------|----------------|-----|---------------------------|
| MCRB001 | 31                 | 274493.04             | 6459605.53             | 90             | -60 | Not Assayed               |
| MCRB002 | 70                 | 274467.16             | 6459613.07             | 90             | -60 | Not Assayed               |
| MCRB003 | 42                 | 274439.89             | 6459612.87             | 360            | -90 | Not Assayed               |
| MCRB004 | 29                 | 274431.39             | 6459612.79             | 360            | -90 | Results Received          |
| MCRB005 | 25                 | 274831.16             | 6460210.95             | 92             | -60 | Results Received          |
| MCRB006 | 16                 | 274814.29             | 6460212                | 93             | -60 | Additional Assays Pending |
| MCRB007 | 19                 | 274847.78             | 6460205.76             | 301            | -60 | Results Received          |
| MCRB008 | 26                 | 274863.39             | 6460199.41             | 283            | -60 | Additional Assays Pending |
| MCRB009 | 22                 | 274887.03             | 6460203.93             | 280            | -60 | Assays Pending            |
| MCRB010 | 46                 | 274907.72             | 6460200.56             | 285            | -60 | Assays Pending            |
| MCRB011 | 28                 | 274933.03             | 6460194.31             | 286            | -60 | Assays Pending            |
| MCRB012 | 16                 | 274767.61             | 6460047.24             | 269            | -60 | Results Received          |
| MCRB013 | 25                 | 274808.06             | 6460048.58             | 275            | -60 | Results Received          |
| MCRB014 | 7                  | 274840.87             | 6460045.53             | 275            | -60 | Not Assayed               |
| MCRB015 | 27                 | 274846.76             | 6460045.02             | 275            | -60 | Not Assayed               |
| MCRB016 | 40                 | 274987.13             | 6459934.79             | 268            | -60 | Additional Assays Pending |
| MCRB017 | 38                 | 275002.64             | 6459935.35             | 268            | -60 | Assays Pending            |
| MCRB018 | 43                 | 274953.2              | 6459639.14             | 264            | -60 | Additional Assays Pending |
| MCRB019 | 30                 | 274928.1              | 6459633.02             | 80             | -60 | Results Received          |
| MCRB020 | 3                  | 274906.69             | 6459628.87             | 80             | -60 | Not Assayed               |



| Hole ID | Hole Depth (metre) | Easting (GDA94/WGS54) | Northing (GDA94/WGS54) | Azimuth (True) | Dip | Assay Status              |
|---------|--------------------|-----------------------|------------------------|----------------|-----|---------------------------|
| MCRB021 | 25                 | 274902.46             | 6459628.13             | 367            | -90 | Assays Pending            |
| MCRB022 | 42                 | 274940.84             | 6459614.48             | 82             | -60 | Assays Pending            |
| MCRB023 | 38                 | 274973.3              | 6459642.3              | 259            | -60 | Results Received          |
| MCRB024 | 31                 | 274995.58             | 6459646.42             | 260            | -60 | Results Received          |
| MCRB025 | 33                 | 275021.07             | 6459651.16             | 260            | -60 | Additional Assays Pending |
| MCRB026 | 39                 | 275049.3              | 6459655.6              | 261            | -60 | Additional Assays Pending |
| MCRB027 | 52                 | 275104.04             | 6459655.56             | 91             | -60 | Assays Pending            |
| MCRB028 | 96                 | 274990.72             | 6459023.43             | 88             | -60 | Assays Pending            |
| MCRB029 | 40                 | 274967.29             | 6459022.22             | 89             | -60 | Assays Pending            |
| MCRB030 | 40                 | 274944.17             | 6459021.37             | 88             | -60 | Additional Assays Pending |
| MCRB031 | 40                 | 274923.4              | 6459020.73             | 89             | -60 | Additional Assays Pending |
| MCRB032 | 37                 | 274899.87             | 6459020.95             | 89             | -60 | Additional Assays Pending |
| MCRB033 | 40                 | 274879.84             | 6459020.93             | 89             | -60 | Results Received          |
| MCRB034 | 33                 | 274859.4              | 6459019.85             | 90             | -60 | Additional Assays Pending |
| MCRB035 | 33                 | 274840.3              | 6459020.06             | 90             | -60 | Additional Assays Pending |
| MCRB036 | 52                 | 274816.44             | 6459020.55             | 90             | -60 | Results Received          |
| MCRB037 | 31                 | 274796.95             | 6459020.32             | 90             | -60 | Assays Pending            |
| MCRB038 | 43                 | 274767.26             | 6459023.01             | 92             | -60 | Additional Assays Pending |
| MCRB039 | 40                 | 274738.21             | 6459023.23             | 91             | -60 | Results Received          |
| MCRB040 | 55                 | 274801.855            | 6458778.571            | 90             | -60 | Results Received          |
| MCRB041 | 13                 | 274864.999            | 6458778.634            | 90             | -60 | Results Received          |
| MCRB042 | 7                  | 274845.302            | 6458778.791            | 89             | -60 | Results Received          |
| MCRB043 | 40                 | 274913.895            | 6459119.864            | 91             | -60 | Results Received          |
| MCRB044 | 43                 | 274892.746            | 6459120.367            | 91             | -60 | Results Received          |
| MCRB045 | 40                 | 274872.392            | 6459121.103            | 91             | -60 | Results Received          |
| MCRB046 | 34                 | 274852.496            | 6459121.465            | 92             | -60 | Results Received          |
| MCRB047 | 39                 | 274831.107            | 6459121.426            | 89             | -60 | Additional Assays Pending |
| MCRB048 | 40                 | 274812.224            | 6459121.133            | 90             | -60 | Additional Assays Pending |
| MCRB049 | 34                 | 274768.243            | 6459122.443            | 90             | -60 | Additional Assays Pending |
| MCRB050 | 34                 | 274960.027            | 6458910.084            | 91             | -60 | Additional Assays Pending |
| MCRB051 | 40                 | 274926.014            | 6458910.204            | 90             | -60 | Additional Assays Pending |
| MCRB052 | 49                 | 274906.529            | 6458910.256            | 90             | -60 | Additional Assays Pending |
| MCRB053 | 31                 | 274884.327            | 6458909.905            | 90             | -60 | Results Received          |
| MCRB054 | 30                 | 274825.012            | 6458909.383            | 90             | -60 | Results Received          |
| MCRB055 | 58                 | 275506.513            | 6458052.317            | 181            | -60 | Assays Pending            |
| MCRB056 | 46                 | 275454.241            | 6458073.018            | 179            | -60 | Additional Assays Pending |
| MCRB057 | 51                 | 275176.824            | 6456071.029            | 90             | -60 | Results Received          |
| MCRB058 | 51                 | 275148.598            | 6456071.782            | 91             | -60 | Results Received          |
| MCRB059 | 53                 | 275181.04             | 6455788.94             | 77             | -60 | Not Assayed               |

For personal use only



## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

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

| Criteria                   | JORC Code explanation   | Commentary  |
|----------------------------|---|---|
| <b>Sampling techniques</b> | <ul style="list-style-type: none"> <li><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul> | <ul style="list-style-type: none"> <li>Rotary Air Blast (RAB) drill sampling was completed with drill sample collected at 1m intervals with sample collected from an onboard cyclone as a bulk sample that is later sub sampled using conventional spear sampling techniques for a representative sample. B samples were also collected for statistical comparison for assessing sampling repeatability. RAB drilling can have some limitations including depth, unstable ground and blocked sampled return which can lead to holes ended earlier than full target depth.</li> <li>2021 Reverse Circulation (RC) drill sampling completed at 1m intervals with sample returned through an on-board static cone splitter generating a bulk reference sample and 2 representative A and B samples for analysis and QAQC.</li> <li>A and B sample weights were on average &gt;3kg.</li> <li>Samples were analysed at Bureau Veritas, Adelaide for broad suite multi-element analysis using 4-acid digest ICP-MS. Gold and PGE analysis was by Fire Assay ICP-OES. REE specific analysis from RAB samples were not analysed for Gold or PGE.</li> <li>Each metre is geologically logged including a pXRF and magsus reading.</li> <li>2021 HQ Core is sampled after geological and structural logging. Core is cut to ½ core through a standardised procedure that includes consistent sampling of the same side of the cut core. Core is sampled to lithological, structural and mineralised boundaries with sample intervals between 30cm and 1m in length to allow sufficient sample for representative analysis. Intervals selected for laboratory analysis are identified through visual logging by a geologist and utilises a handheld XRF to confirm the presence of mineralisation. Each geological interval identified was logged separately including selective pXRF readings to support mineral identification or regular 5cm spaced readings for indicative mineralisation trends over select intervals.</li> <li>Selective rock-chip samples were collected as in-situ, surface lag and float samples. Both visibly mineralised and un-mineralised samples were collected with the aim of obtaining representation of all rock types in the target area. Rock sample size is greater than 1kg per sample.</li> </ul> |

| Criteria                     | JORC Code explanation  | Commentary  |
|------------------------------|--|---|
| <b>Drilling techniques</b>   | <ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>  | <ul style="list-style-type: none"> <li>Drilling methods included RAB with a 4" diameter bit, RC drilling with a 5 ½" diameter bit with sample returned through a cone splitter generating a bulk reference sample and 2 representative A and B samples for analysis and QAQC.</li> <li>The drill rigs used include onboard air and for RC an auxillary compressor. The RAB drill rig is capable of depths of 120m in perfect conditions, the RC drill rig was capable of drilling to a maximum depth of 350m.</li> <li>Drilling methods included Diamond Core HQ size drilled from surface with a nominal 63.5mm core diameter. Where possible core was orientated to allow for structural measurements.</li> <li>Downhole surveys were not taken for RAB drill holes whilst RC and Diamond Core drill holes had downhole surveys taken at 6m (collar), 30m and every subsequent 30m drilled with a final survey at end of hole depth.</li> </ul>   |
| <b>Drill sample recovery</b> | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results asses</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul> | <ul style="list-style-type: none"> <li>RAB drill sampling was completed with drill sample collected at 1m intervals with sample collected from an onboard cyclone as a bulk sample that is later sub sampled using conventional spear sampling techniques for a representative sample. Duplicate spear samples were taken and laboratory analysed with comparable results obtained indicating minimal sample bias. RC drill sample was collected as 1 metre intervals downhole from a cone splitter in pre-numbered sample bags.</li> <li>A bulk sample was used for logging rock type and field recordings whilst 2 representative samples of 3-4kg each were collected simultaneously for primary analysis and QAQC as well as secondary B sample reference. Sample validity included comparison of sample weights to ensure sample recovery was within acceptable limits, with intervals of poor recovery and possible causes such as groundwater intercepts being recorded. The cone splitter was regularly cleaned and assessed to minimise potential sample contamination.</li> <li>Core recovery was assessed through measurement of core in relation drilled depths and core blocks. Core recoveries were above acceptable industry standard limitations with &gt;98% core recovery.</li> <li>No sample quality issues are expected outside of the standard variances between drilling and sampling methods.</li> </ul> |
| <b>Logging</b>               | <ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource</li> </ul>  | <ul style="list-style-type: none"> <li>All drill chips were field logged per metre and representative reference material retained in chip trays which were photographed for a digital reference. Subsequent review of chips and field logging was conducted to ensure records are consistent</li> </ul>   |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | <p>estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>   | <p>and accurate. Each metre included a magsus reading from the bulk sample bag and a corresponding pXRF reading to guide drilling and sampling decisions.</p> <ul style="list-style-type: none"> <li>Core drill holes were geologically logged by industry standard methods, including lithology, structure, alteration and mineralisation. All core trays were photographed wet and dry.</li> <li>The logging is qualitative in nature and of sufficient detail supporting the current interpretations and is used to develop representative sections.</li> <li>Rock chip samples were field logged with the assistance of historical mapping and petrology work. Samples are reviewed for petrology using a hand lens or microscope.</li> <li>Review of logging is conducted following the return of geochemical results.</li> </ul>  |
| <b>Sub-sampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul style="list-style-type: none"> <li>Rotary Air Blast (RAB) drill sampling was completed with drill sample collected at 1m intervals with sample collected from an onboard cyclone as a bulk sample that is later sub sampled using conventional spear sampling techniques for a representative sample. RC drill sample taken from a cone splitter per metre downhole is to industry standard and appropriate for the lithologies being intercepted. The simultaneous collection of bulk sample and 2 representative A and B samples of 3-4kg each maximises the sample quality and ensures samples are representative.</li> <li>All samples were dry before sending for analysis. Any wet sample was still collected by the same method to ensure consistency with excess moisture sun dried prior to laboratory submission. No sample bias through lost material is likely in this process. Additional cleaning was completed on the cone splitter after introduction of wet sample.</li> <li>Core is cut to ½ core through a standardised procedure that includes consistent sampling of the same side of the cut core. Core is sampled to lithological, structural and mineralised boundaries with sample intervals between 30cm and 1m in length to allow sufficient sample for representative analysis. Intervals selected for laboratory analysis are identified through visual logging by a geologist and utilises a handheld XRF to confirm the presence of mineralisation.</li> <li>A Vanta pXRF was used with reference standards (CRM) to ensure accuracy of readings. No results reported are from pXRF sampling.</li> </ul> |
| <b>Quality of assay data</b>                          | <ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and</li> </ul>   | <ul style="list-style-type: none"> <li>Samples are analysed at Bureau Veritas, Adelaide for broad suite multi-element analysis using 4-acid digest ICP-MS. Gold and PGE analysis was by Fire Assay</li> </ul>   |

| Criteria                                     | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>and laboratory tests</b>                  | <p><i>whether the technique is considered partial or total.</i></p> <ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul> | <p>ICP-OES. REE specific analysis from RAB samples were not analysed for Gold or PGE via Fire Assay.</p> <ul style="list-style-type: none"> <li>Sampling relating to recent assays being reported included QA/QC controls including standards (4 different CRM to cover low mid and higher-grade material of various elements including but not limited to copper, zinc, cobalt, scandium, vanadium, niobium, cerium, lanthanum, yttrium, praseodymium and neodymium) and blind duplicates were included in each sample despatch and reported in the laboratory results. QA/QC samples included Company selected CRM material including blank material and duplicate samples. Laboratory QAQC has additional checks including standards, blanks and repeat samples that were conducted regularly on every batch. Company standards are included every 25<sup>th</sup> sample and a duplicate every 30<sup>th</sup>.</li> <li>New data being reported relates to an additional 603 sample assay results received with a total sampling QAQC (standards and duplicates) of 7.6% added to assess contamination and bias in the analysis and sampling process. All 28 standards submitted were within acceptable limits. All 18 duplicates submitted were within acceptable limits of variance.</li> </ul> |
| <b>Verification of sampling and assaying</b> | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>  | <ul style="list-style-type: none"> <li>No independent verification has been completed.</li> <li>Taruga's geologists have sufficient experience to carry out geological sampling and logging and have experienced senior geologists and technical consultants available for verification and validation of results and measurements.</li> <li>Significant intercepts are reported by Company representatives based on best practice and available information.</li> <li>All significant intercepts are reported as downhole lengths and are not necessarily indicative of true thickness unless stated.</li> <li>Logs and measurements were all recorded in hard copy on paper before digital data entry. All data is stored securely with digital backups. All data entry procedures include data validation.</li> </ul>   |
| <b>Location of data points</b>               | <ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul style="list-style-type: none"> <li>All RAB drillholes were surveyed using a DGPS for accurate collar locations. All prior drillhole collars were surveyed after drilling using a handheld GPS. Datum used is GDA94 Zone 54.</li> <li>Downhole surveys were not taken for RAB drill holes. RC and Diamond Core downhole surveys were taken at 6m (collar), 30m and every subsequent 30m</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>                        | <p>drilled with a final survey at end of hole depth. Downhole surveys were taken with a reflex single shot or gyroscopic hole survey tool when available.</p> <ul style="list-style-type: none"> <li>• Data is insufficient to be used in a Mineral Resource Estimate. The drilling is designed to explore mineralisation extents with data collected sufficient to guide and define further mineralisation definition and exploration activities.</li> <li>• RAB and RC sample intervals and analysis are single metre interval samples; no sample compositing has been used.</li> <li>• Core sample intervals are based on lithological, structural and mineralised boundaries.</li> <li>• Rock sample samples are to be considered as being collected on a selective basis.</li> </ul>  |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul> | <ul style="list-style-type: none"> <li>• The previous and current drilling being reported has identified and defined a variable sedimentary package within the Worumba diapir mega breccia including various rafted blocks in differing orientation. Outcrop of the dolomite metasediments on the margin of the Worumba Diapir and rafted sediments within the diapir assist in drillhole design to best intercept the stratigraphy.</li> <li>• Where possible drillholes are angled towards the interpreted stratigraphic horizon so intercepts are generally reflective of true thickness although some holes drilled in a deliberate orientation to gain perspective of stratigraphic or structural orientation will not be a direct reflection of true thickness. All reported lengths are to be considered downhole lengths unless stated as calculated true thickness.</li> <li>• Rock sample samples are to be considered as being collected on a selective basis.</li> </ul> |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• The samples are collected, processed and despatched by the Supervising Geologist before being sent by courier to Bureau Veritas, Adelaide.</li> </ul>   |
| <b>Audits or reviews</b>                                       | <ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• No audits completed. Internal processes routinely review the appropriate application of sampling techniques in relation to current knowledge of stratigraphy and mineralisation style.</li> </ul>   |





## Section 2 Reporting of Exploration Results

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

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul> | <ul style="list-style-type: none"> <li>Exploration Licence EL6541 (Mt Craig/MCCP) is 100% owned by Strikeline Resources Pty Ltd a fully owned subsidiary of Taruga Minerals Ltd. The tenement is in good standing with no known impediments to operate in the area.</li> </ul>  |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>Historical Exploration: Mt Craig<br/>Extensive small-scale historic mining for base metals occurred throughout the area. This occurred most prominently at the Wyacca Mine and Wirrawilka workings. Further historic shafts at Iron King are presumed to have mined Silver and Gold. From the 1960's onwards numerous companies have explored the region with soil, stream, rock chip &amp; channel sampling, geophysics and drilling campaigns. The most prominent prior exploration was conducted by Cams Leases Pty Ltd., Copper Range (SA) Pty Ltd., Gold Copper Exploration Ltd., SAEI Triassic Coal Exploration &amp; Utah Development Company Ltd.</li> </ul>   |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <ul style="list-style-type: none"> <li>Mt Craig: The Morgan Creek prospect is dominated by the Worumba diapir which include large rafted blocks of sediments including those of the Tapley Hill Fm, also within the diapir are mafics of variable origin. The western margin includes a target contact between the dolomite metasediments and the Worumba Diapir. Dolomite is a common reactive rock type within the diapir related deposits, trapping mineralisation close to the diapir margins. Dissolved metalliferous brines from the diapir travel along structural conduits to sites of suitable reactive deposition. Exploration has identified skarn exposures at Morgan Creek, including recently drilled Hydrothermal Hill prospect intercepting a mafic-ultramafic skarn system with magnetite-pyrite skarn that includes PGE, REE and cobalt mineralisation. The Yednalue Quartzite contains layers of reactive sediments including sandstone, siltstone and quartzite which have undergone intense oxidation, alteration and</li> </ul> |

| Criteria                        | JORC Code explanation   | Commentary  |
|---------------------------------|---|---|
| <b>Drill hole Information</b>   | <ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul> | <p>weathering. The unit appears to contain ideal qualities for scavenging metals including rare earth elements, lithium, cobalt, nickel and zinc.</p> <ul style="list-style-type: none"> <li>All completed drillhole collar information is included in the report, appendices or has been previously released.</li> <li>If applicable all rock chip samples are included with relevant analysis results in the appendices or has been previously released.</li> <li>All available and relevant assay data is included in this report or has previously been reported.</li> </ul>  |
| <b>Data aggregation methods</b> | <ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>   | <ul style="list-style-type: none"> <li>Where applicable when significant intercepts and aggregate data is are reported they are weighted average grades considering variable sampling lengths. Some significant intercepts are significant because of multiple anomalous elements.</li> <li>Standard element to stoichiometric oxide conversion factors are used in calculating and reporting oxide equivalent elements.</li> <li>Rare Earth Elements (REE) converted to oxide equivalents were aggregated as total rare earth elements TREE or Total Rare Earth Oxide elements TREO and combined as Heavy Rare Earth Elements (HREE/HREO), Light Rare Earth Elements (LREE/LREO), (CREE/CREO) Critical Rare Earth Elements or Magnetic Rare Earth Oxide (MREO) using industry standards. HREO, CREO and MREO as a percentage of TREO may also be reported.</li> <li>Element-to-stoichiometric oxide conversion factors shown in table below: multiply wt% element by numerical value below for equivalent expressed as an oxide.</li> <li>TREO refers to the sum of all 15 REE's in their respective oxide equivalent</li> <li>MREO refers to the 4 Magnetic Rare Earth Oxides (Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>2</sub>O<sub>3</sub>+Dy<sub>2</sub>O<sub>3</sub>+Tb<sub>2</sub>O<sub>3</sub>)</li> <li>HREO refers to the Heavy Rare Earth Oxides (Eu<sub>2</sub>O<sub>3</sub>+Gd<sub>2</sub>O<sub>3</sub>+Tb<sub>2</sub>O<sub>3</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>+Y<sub>2</sub>O<sub>3</sub>+Lu<sub>2</sub>O<sub>3</sub>)</li> </ul> |

| Criteria  | JORC Code explanation  | Commentary  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
|---|--|---|---------|-------|--------|--------|--------------------------------|--------|------------|--------------------------------|--------|--------|--------------------------------|--------|----------|--------------------------------|--------|------------|--------------------------------|--------|---------|--------------------------------|--------|-----------|--------------------------------|--------|----------|--------------------------------|--------|-----------|--------------------------------|--------|--------------|--------------------------------|--------|----------|--------------------------------|--------|---------|--------------------------------|-------|---------|--------------------------------|--------|---------|-------------------------------|--------|-----------|--------------------------------|--------|
|   |  | <ul style="list-style-type: none"> <li>LREO refers to the Light Rare Earth Oxides (La<sub>2</sub>O<sub>3</sub>+Ce<sub>2</sub>O<sub>3</sub>+Pr<sub>2</sub>O<sub>3</sub>+Nd<sub>2</sub>O<sub>3</sub>+Sm<sub>2</sub>O<sub>3</sub>)</li> <li>CREO refers to Critical Rare Earth Oxides, a set of oxides defined as critical due to their importance to clean energy requirements and their supply risk (Nd<sub>2</sub>O<sub>3</sub>+Tb<sub>2</sub>O<sub>3</sub>+Dy<sub>2</sub>O<sub>3</sub>+Er<sub>2</sub>O<sub>3</sub>+Y<sub>2</sub>O<sub>3</sub>)</li> </ul> <table border="1"> <thead> <tr> <th>Element</th><th>Oxide</th><th>Factor</th></tr> </thead> <tbody> <tr><td>Cerium</td><td>Ce<sub>2</sub>O<sub>3</sub></td><td>1.1713</td></tr> <tr><td>Dysprosium</td><td>Dy<sub>2</sub>O<sub>3</sub></td><td>1.1477</td></tr> <tr><td>Erbium</td><td>Er<sub>2</sub>O<sub>3</sub></td><td>1.1435</td></tr> <tr><td>Europium</td><td>Eu<sub>2</sub>O<sub>3</sub></td><td>1.1579</td></tr> <tr><td>Gadolinium</td><td>Gd<sub>2</sub>O<sub>3</sub></td><td>1.1526</td></tr> <tr><td>Holmium</td><td>Ho<sub>2</sub>O<sub>3</sub></td><td>1.1455</td></tr> <tr><td>Lanthanum</td><td>La<sub>2</sub>O<sub>3</sub></td><td>1.1728</td></tr> <tr><td>Lutetium</td><td>Lu<sub>2</sub>O<sub>3</sub></td><td>1.1371</td></tr> <tr><td>Neodymium</td><td>Nd<sub>2</sub>O<sub>3</sub></td><td>1.1664</td></tr> <tr><td>Praseodymium</td><td>Pr<sub>2</sub>O<sub>3</sub></td><td>1.1703</td></tr> <tr><td>Samarium</td><td>Sm<sub>2</sub>O<sub>3</sub></td><td>1.1596</td></tr> <tr><td>Terbium</td><td>Tb<sub>2</sub>O<sub>3</sub></td><td>1.151</td></tr> <tr><td>Thulium</td><td>Tm<sub>2</sub>O<sub>3</sub></td><td>1.1421</td></tr> <tr><td>Yttrium</td><td>Y<sub>2</sub>O<sub>3</sub></td><td>1.2699</td></tr> <tr><td>Ytterbium</td><td>Yb<sub>2</sub>O<sub>3</sub></td><td>1.1387</td></tr> </tbody> </table> | Element | Oxide | Factor | Cerium | Ce <sub>2</sub> O <sub>3</sub> | 1.1713 | Dysprosium | Dy <sub>2</sub> O <sub>3</sub> | 1.1477 | Erbium | Er <sub>2</sub> O <sub>3</sub> | 1.1435 | Europium | Eu <sub>2</sub> O <sub>3</sub> | 1.1579 | Gadolinium | Gd <sub>2</sub> O <sub>3</sub> | 1.1526 | Holmium | Ho <sub>2</sub> O <sub>3</sub> | 1.1455 | Lanthanum | La <sub>2</sub> O <sub>3</sub> | 1.1728 | Lutetium | Lu <sub>2</sub> O <sub>3</sub> | 1.1371 | Neodymium | Nd <sub>2</sub> O <sub>3</sub> | 1.1664 | Praseodymium | Pr <sub>2</sub> O <sub>3</sub> | 1.1703 | Samarium | Sm <sub>2</sub> O <sub>3</sub> | 1.1596 | Terbium | Tb <sub>2</sub> O <sub>3</sub> | 1.151 | Thulium | Tm <sub>2</sub> O <sub>3</sub> | 1.1421 | Yttrium | Y <sub>2</sub> O <sub>3</sub> | 1.2699 | Ytterbium | Yb <sub>2</sub> O <sub>3</sub> | 1.1387 |
| Element   | Oxide  | Factor  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Cerium  | Ce <sub>2</sub> O <sub>3</sub>   | 1.1713  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Dysprosium  | Dy <sub>2</sub> O <sub>3</sub>   | 1.1477  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Erbium  | Er <sub>2</sub> O <sub>3</sub>   | 1.1435  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Europium  | Eu <sub>2</sub> O <sub>3</sub>   | 1.1579  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Gadolinium  | Gd <sub>2</sub> O <sub>3</sub>   | 1.1526  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Holmium   | Ho <sub>2</sub> O <sub>3</sub>   | 1.1455  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Lanthanum   | La <sub>2</sub> O <sub>3</sub>   | 1.1728  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Lutetium  | Lu <sub>2</sub> O <sub>3</sub>   | 1.1371  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Neodymium   | Nd <sub>2</sub> O <sub>3</sub>   | 1.1664  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Praseodymium  | Pr <sub>2</sub> O <sub>3</sub>   | 1.1703  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Samarium  | Sm <sub>2</sub> O <sub>3</sub>   | 1.1596  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Terbium   | Tb <sub>2</sub> O <sub>3</sub>   | 1.151   |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Thulium   | Tm <sub>2</sub> O <sub>3</sub>   | 1.1421  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Yttrium   | Y <sub>2</sub> O <sub>3</sub>  | 1.2699  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| Ytterbium   | Yb <sub>2</sub> O <sub>3</sub>   | 1.1387  |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not</li> </ul> | <ul style="list-style-type: none"> <li>Sections show identified mineralisation downhole. Some holes drilled in a deliberate orientation to gain perspective of structural or stratigraphic orientation and as such will not be a direct reflection of true thickness. All reported lengths are to be considered downhole lengths unless stated as calculated true thickness.</li> </ul>   |         |       |        |        |                                |        |            |                                |        |        |                                |        |          |                                |        |            |                                |        |         |                                |        |           |                                |        |          |                                |        |           |                                |        |              |                                |        |          |                                |        |         |                                |       |         |                                |        |         |                               |        |           |                                |        |

| Criteria                                  | JORC Code explanation   | Commentary  |
|---|---|---|
|   | known').  |   |
| <b>Diagrams</b>                           | <ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>  | <ul style="list-style-type: none"> <li>Appropriate plan diagrams of collar location, surface features and location of results are provided in the report. Appropriate sections are provided in the report showing mineralisation and interpreted geological boundaries.</li> </ul>  |
| <b>Balanced reporting</b>                 | <ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>   | <ul style="list-style-type: none"> <li>All relevant information is reported within the document or included in the appendices if not reported previously.</li> </ul>  |
| <b>Other substantive exploration data</b> | <ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> | <ul style="list-style-type: none"> <li>All relevant and meaningful recent exploration or known historical exploration data is included in this report or has been previously released.</li> </ul>   |
| <b>Further work</b>                       | <ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>                                     | <ul style="list-style-type: none"> <li>Follow up exploration activities including further drilling will be guided by the improved data set and initial metallurgical assessments. Follow up exploration would focus on using drilling techniques to extend to base of weathering those current holes that failed to reach required depth whilst ending in mineralisation and further section extensions stepped out from mineralised areas.</li> <li>Extended exploration using available drill information and geophysical data are being used for reconnaissance style exploration targeting similar geological settings for further potential REE accumulations like those currently being drilled.</li> </ul> |