ASX ANNOUNCEMENT

20/10/2022

TARUGA

EXCEPTIONAL RARE EARTH DRILL RESULTS AT MORGANS CREEK

HIGHLIGHTS

- Exceptional clay-hosted REE grades of up to **9,082ppm (0.91%) TREO**[1] 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**[2] **(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[3], 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**

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".

[1]TREO refers to the sum of all 15 REEs in their respective oxide equivalent (see JORC table for conversion factors)

[2]MREO refers to the 4 high-value magnetic rare earth oxides (Nd_2O_3 Pr_2O_3 + Dy_2O_3 + Tb_2O_3) used in renewable technologies and permanent magnets

[3]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 the10/05/22.

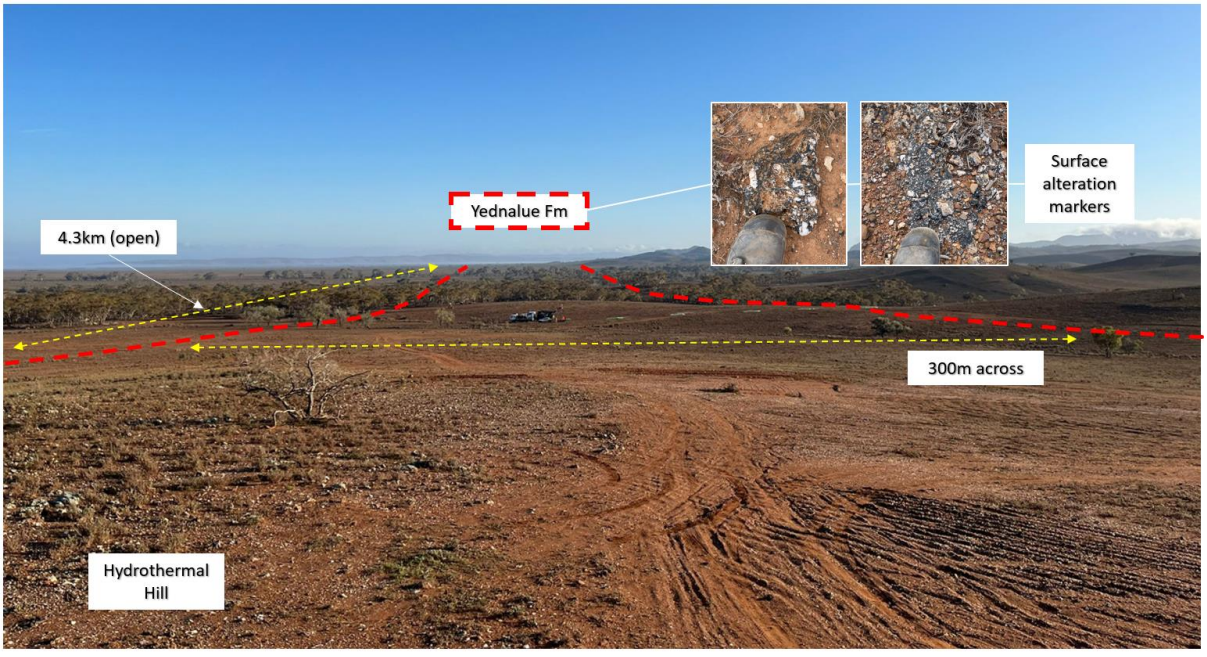

***Figure 1**. Mapped weathered Yednalue quartzite unit looking north from Hydrothermal Hill towards Hydro Hill North. The mapped Yednalue quartzite extends a further 4km to the south (total 5.5km strike). Examples of prospective alteration markers associated with the Yednalue and other REE mineralised 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^2 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)

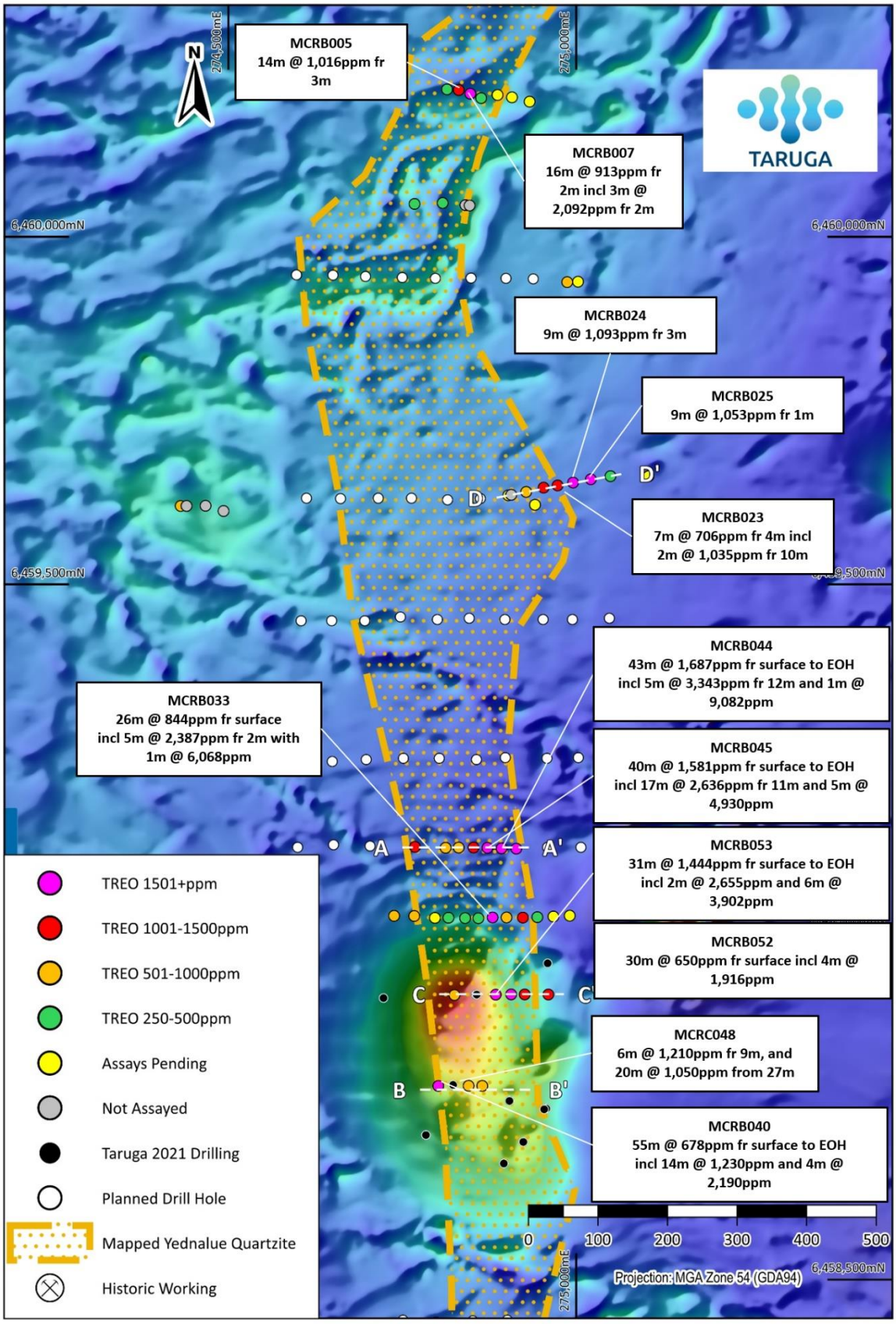

***Figure 2**. Morgans Creek RAB drilling showing significant intercepts and max TREO grades. Also, lab assay status, the mapped Yednalue quartzite unit, previous Taruga 2021 drilling, and high-resolution ground magnetics TMI image.*

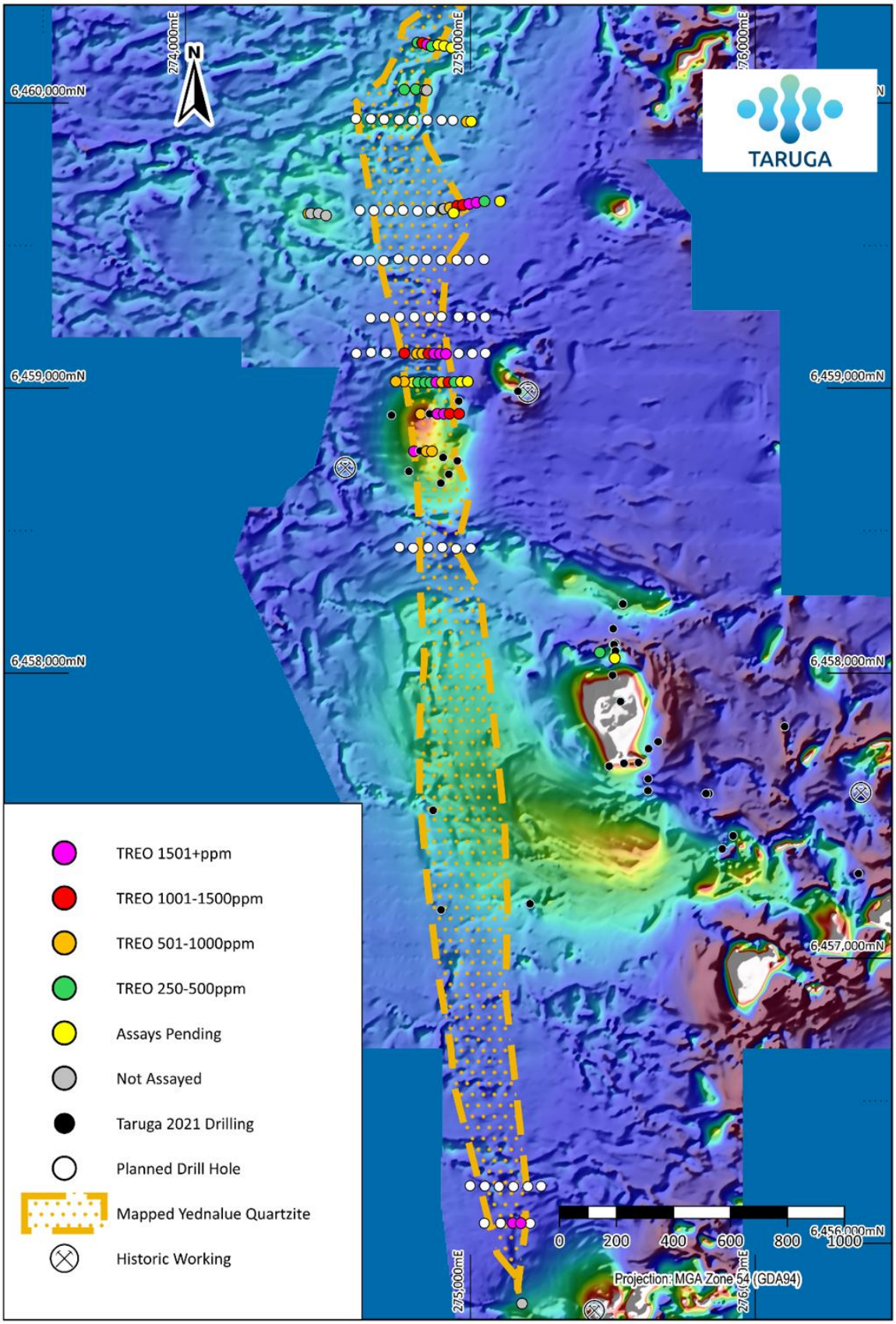

Figure 3. *Regional Morgans Creek RAB drilling showing significant intercepts and max TREO grades. Also, lab assay status, the mapped Yednalue quartzite unit, previous Taruga 2021 drilling, and high-resolution ground magnetics TMI image.*

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)

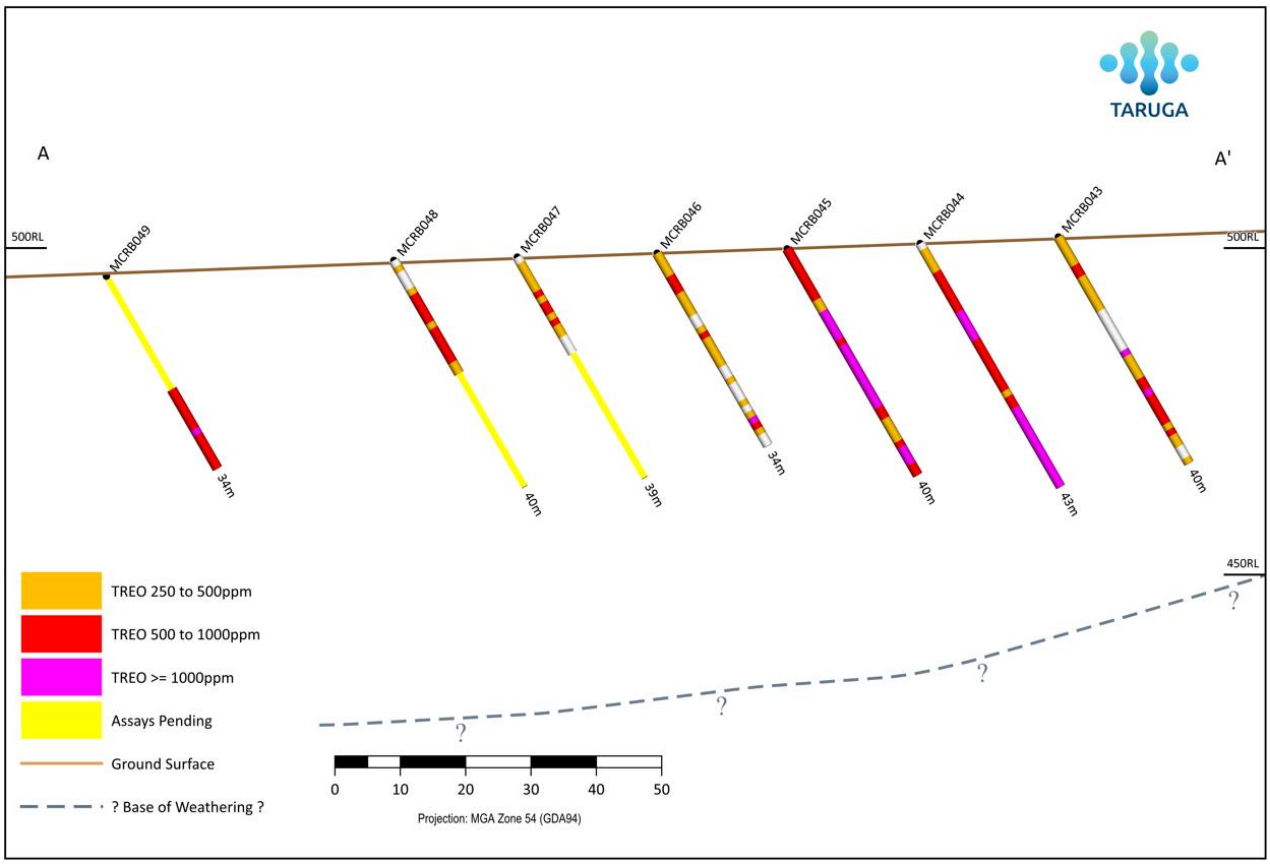

***Figure 4**. Cross Section A-A' colour coded by TREO grade. Note multiple holes on section either end in mineralisation or have assays pending. The base of mineralisation has not yet been found.*

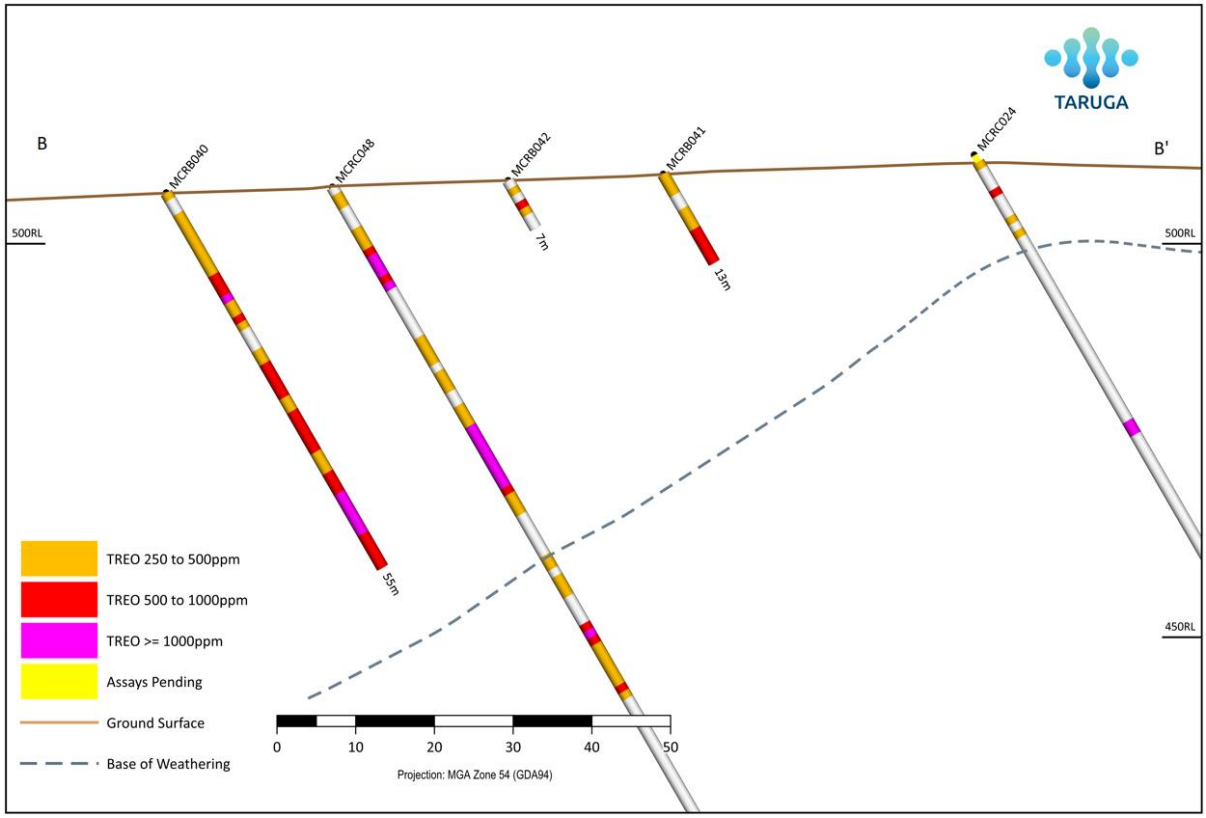

***Figure 5**. Cross Section B-B' colour coded by TREO grade. Note multiple holes on section either end in mineralisation.*

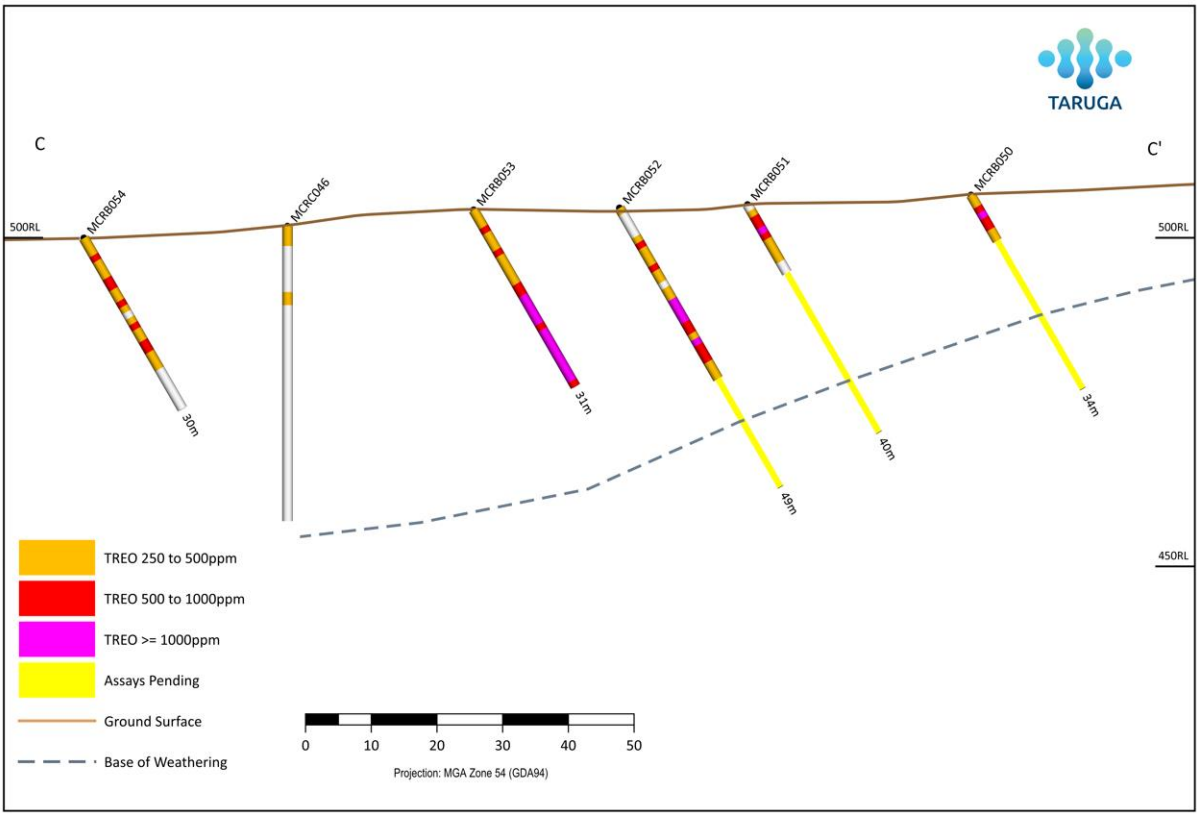

***Figure 6**. Cross Section C-C' colour coded by TREO grade. Note multiple holes on section either end in mineralisation or have assays pending.*

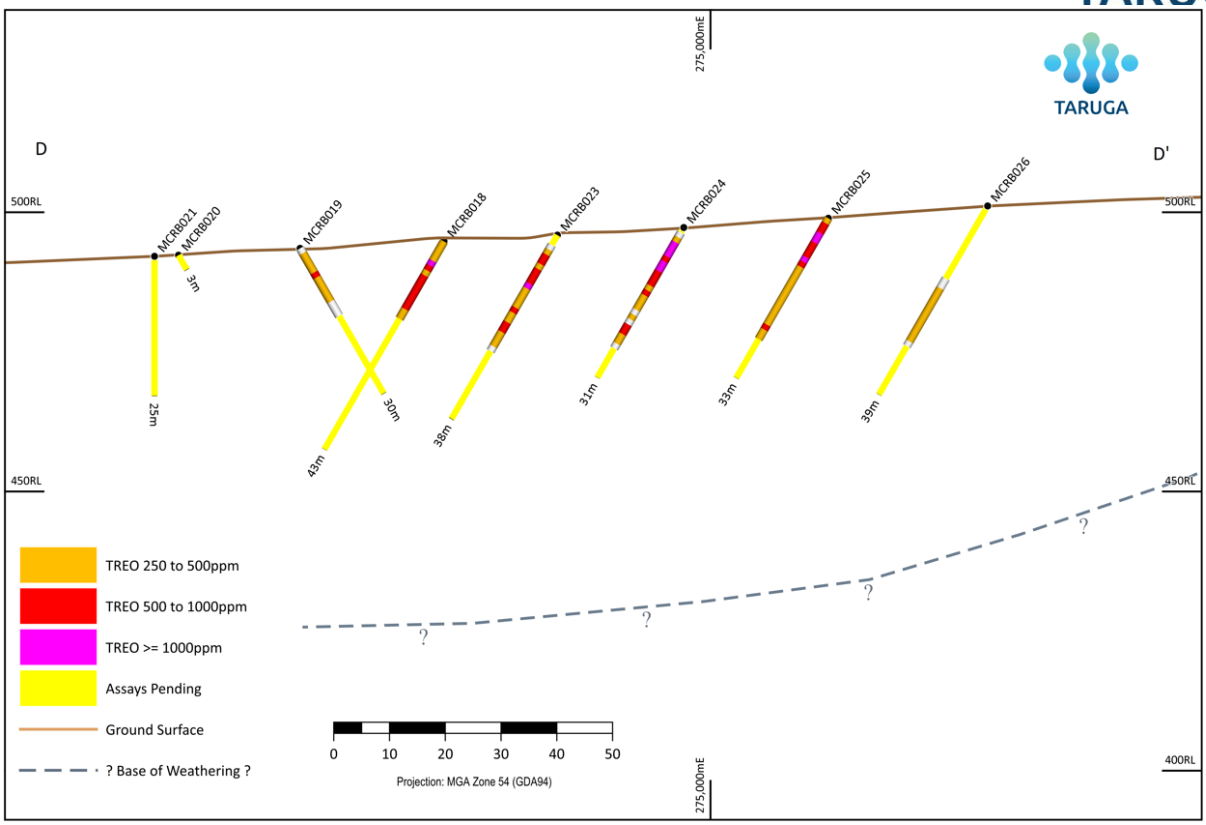

***Figure 7**. Cross Section D-D'' colour coded by TREO grade. Note all holes have assays pending at bottom of hole, which could change the reported intercepts.*

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 $CaCO_3$ 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.

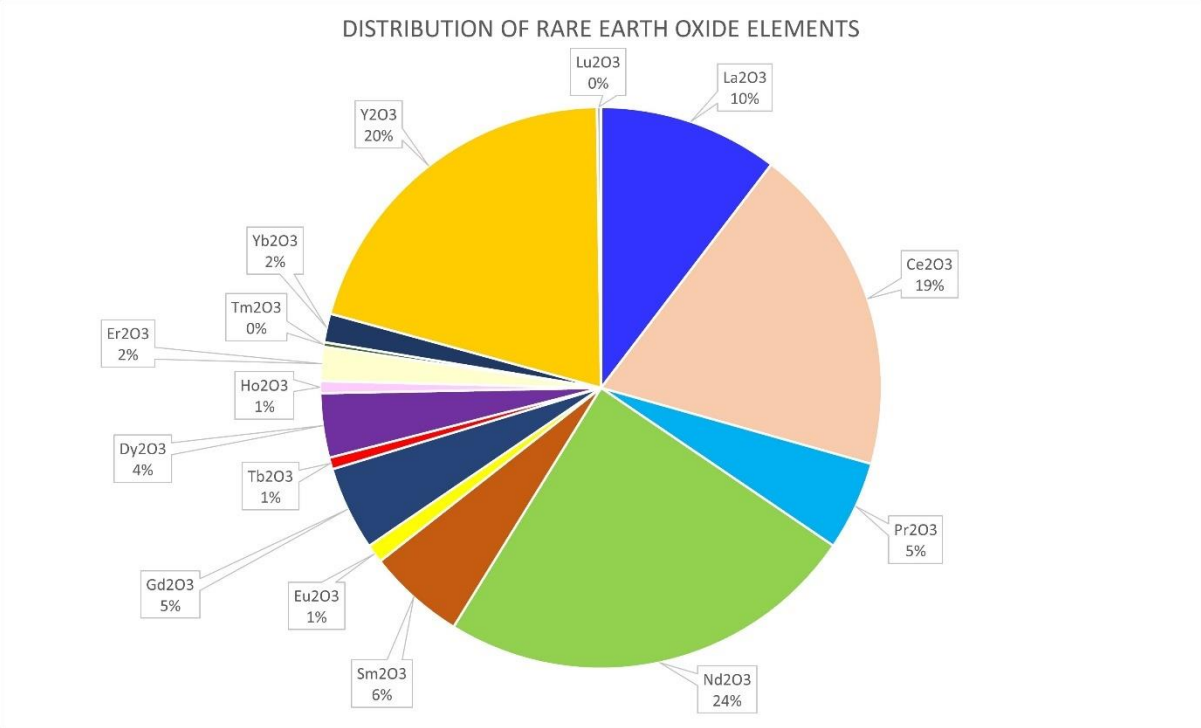

***Figure 9**. Pie chart showing percentages of individual rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.*

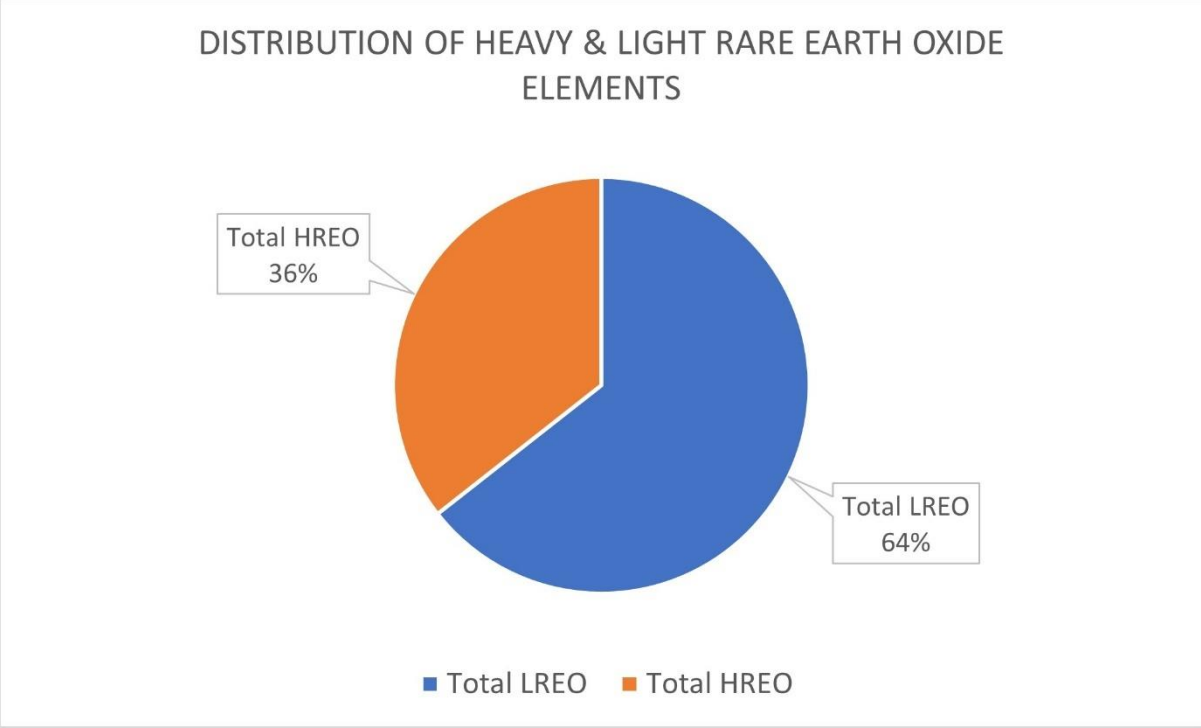

***Figure 10**. Pie chart showing percentages of heavy and light rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.*

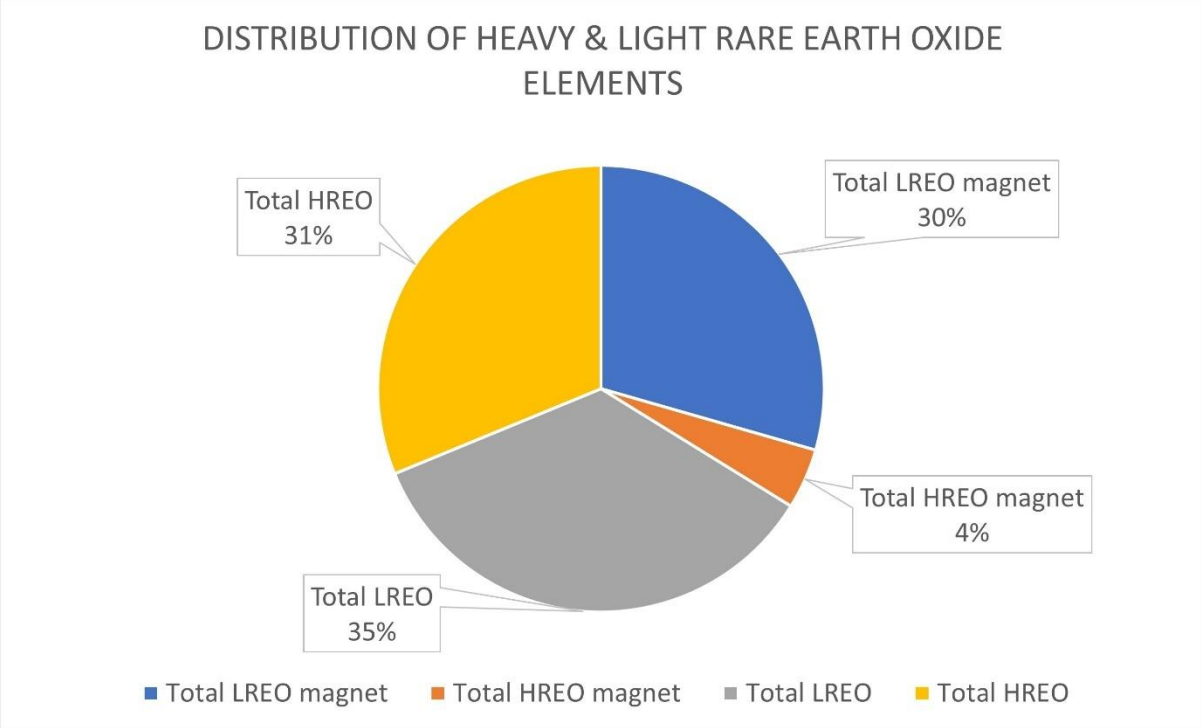

***Figure 11**. Pie chart showing percentages of heavy and light rare earth element oxides, along with the percentages of heavy and light magnet rare earth element oxides for all 2022 RAB drilling over 250ppm TREO.*

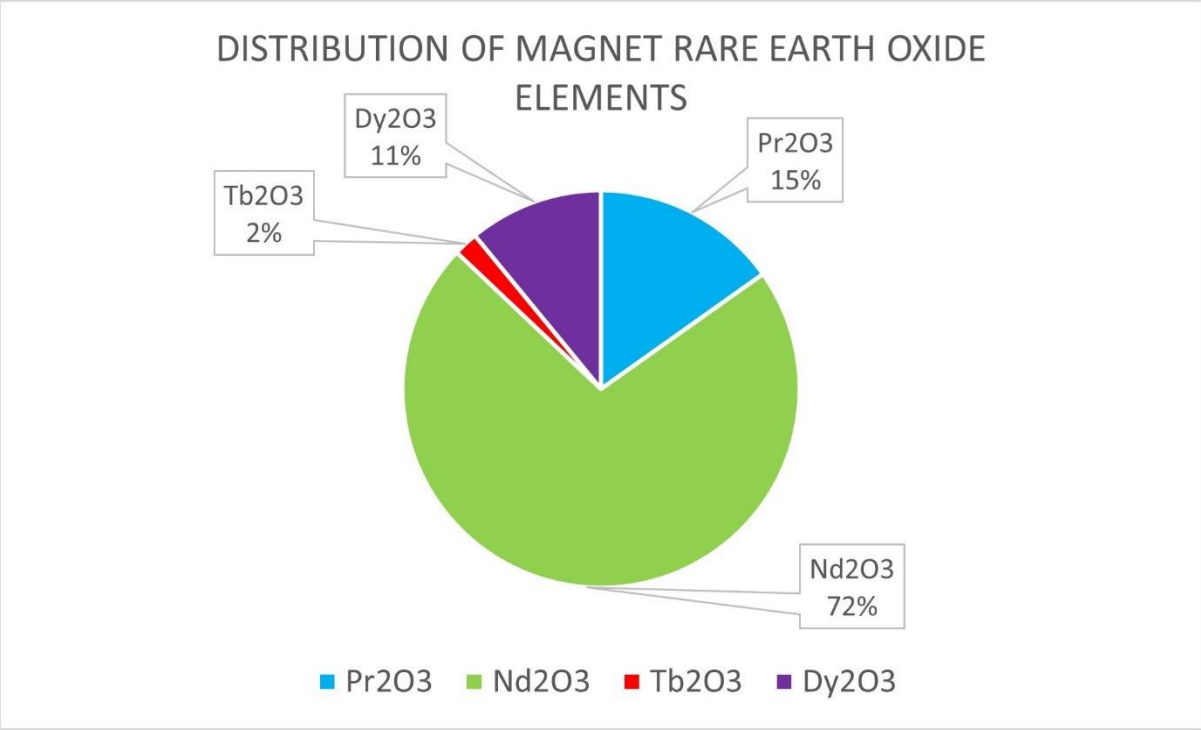

***Figure 12**. Pie chart showing percentages of each of the four-magnet rare earth element oxides (Nd + Pr + Dy + Tb) for all 2022 RAB drilling over 250ppm TREO.*

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 rations 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** **Elevated HREO/CREO product content**	**Hard rock:** **Bastnaeslte and Monazite (LREO dominant):** **Xenotime (HREO dominant)**
Mining	**Low relative operating costs:** **Surface mining (~0-20m)** **Minimal stripping of waste material** **Progressive rehabilitation of mined areas**	**High relative operating costs:** **Blasting required** **Could have high strip ratios**
Processing Mining Site	**No/limited crushing or milling** **Simple process plant** **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** **Solution treatment and reagent recovery requirements**	**Tailings often radioactive (complex and costly disposal)** **Legacy tailing management**
Processing - Refinery (Typically not on Mining site)	**Simple acid solubilisation followed by conventional REE separation** **Complex recycling of reagents and water** **Lower Capex (~$100-$200m)**	**High temperature mineral 'cracking' using strong reagents to solubilise the refractory REE minerals** **Complex capital-intensive plant (~$500m-$1B) 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

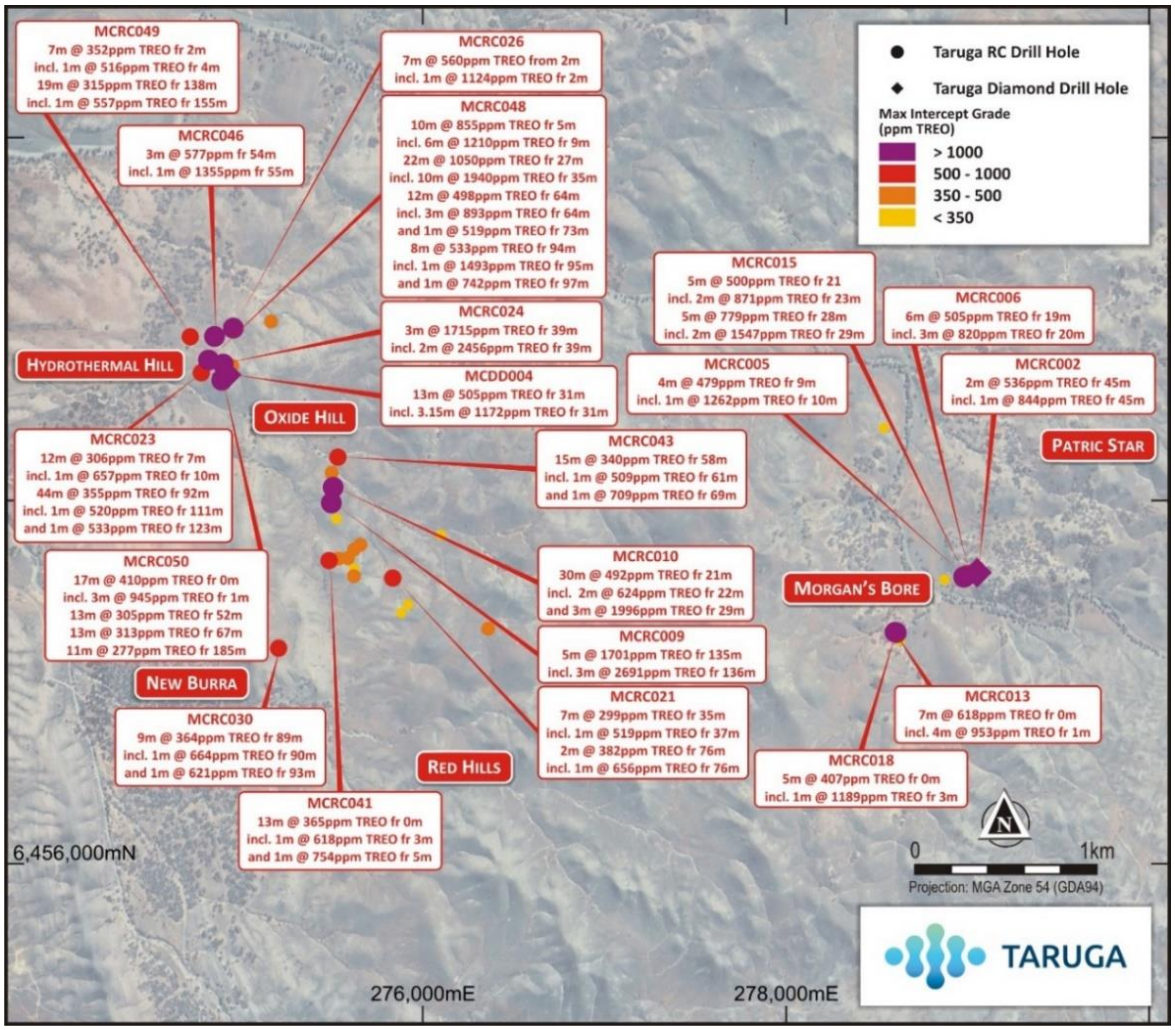

***Figure 13**. REE Drill results from Taruga's 2021 drilling at Morgans Creek with collars colour coded by maximum TREO grade (purple represents >1000ppm TREO).Note this excludes current 2022 RAB drilling results.*

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.

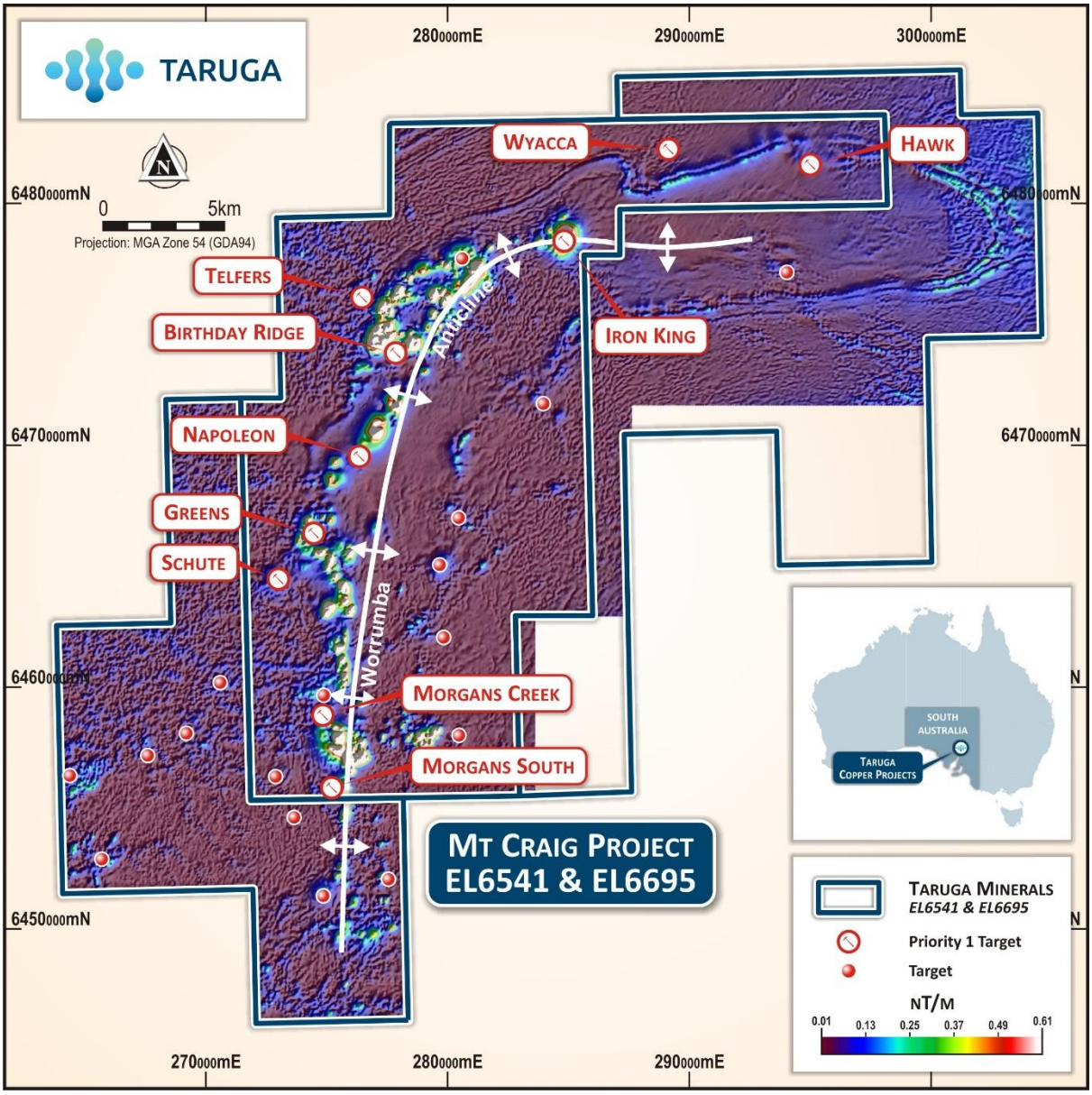

Figure 14. *MCP Project outline showing priority exploration targets, the main structural feature being the Worrumba Anticline, and the Analytical Signal magnetics image.*

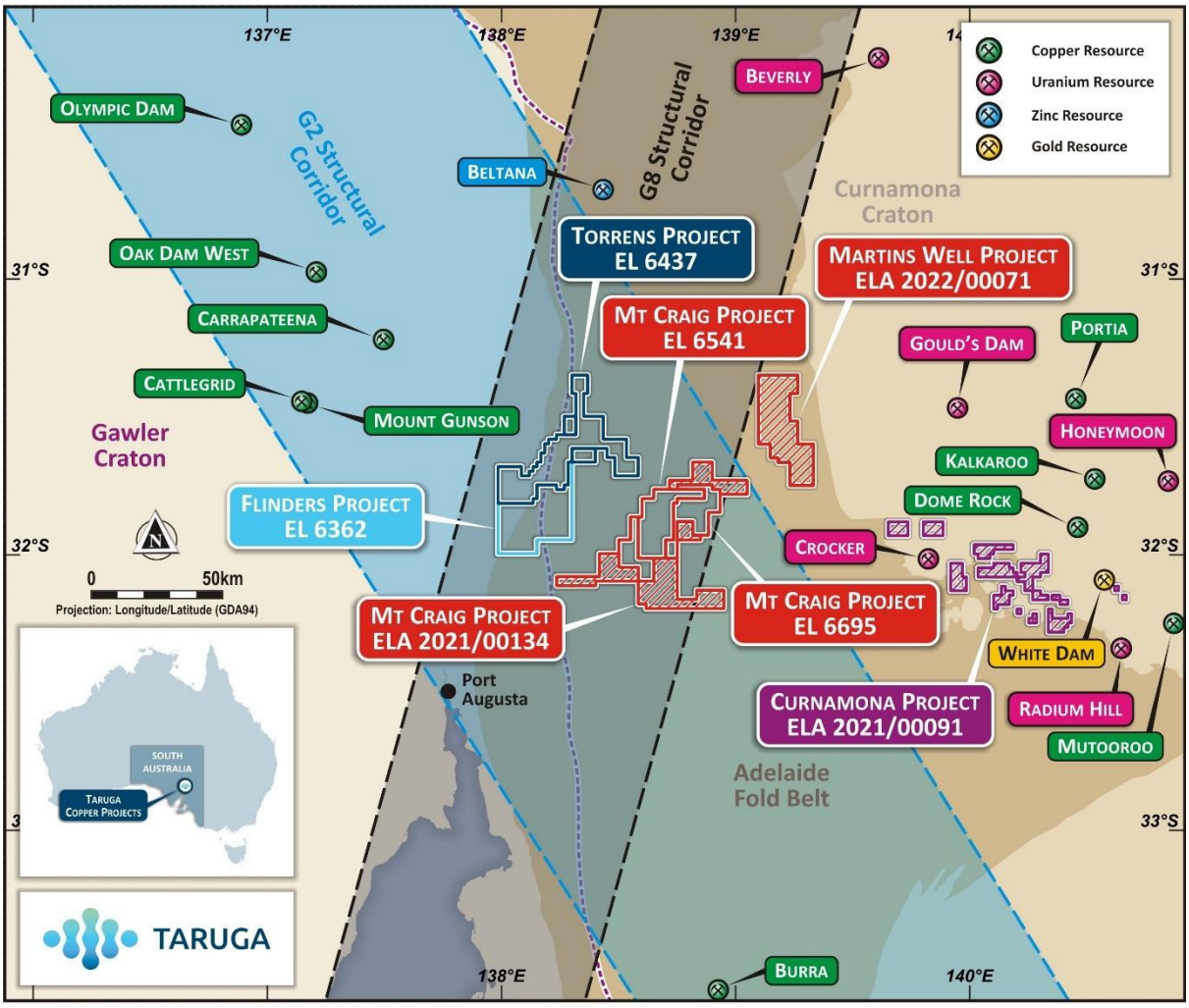

Figure 15. *Tenement Map showing Taruga's South Australian projects.*

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

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Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	• 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. • 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. • A and B sample weights were on average >3kg. • 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. • Each metre is geologically logged including a pXRF and magsus reading. • 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 mineralisaton. 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. • 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.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *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).*	• 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. • 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. • 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. • 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.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results asses* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• 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. • 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. • Core recovery was assessed through measurement of core in relation drilled depths and core blocks. Core recoveries were above acceptable industry standard limitations with >98% core recovery. • No sample quality issues are expected outside of the standard variances between drilling and sampling methods.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	• 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

Criteria	JORC Code explanation	Commentary
	estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	and accurate. Each metre included a magsus reading from the bulk sample bag and a corresponding pXRF reading to guide drilling and sampling decisions. • Core drill holes were geologically logged by industry standard methods, including lithology, structure, alteration and mineralisation. All core trays were photographed wet and dry. • The logging is qualitative in nature and of sufficient detail supporting the current interpretations and is used to develop representative sections. • 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. • Review of logging is conducted following the return of geochemical results.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• 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. • 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. • 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 mineralisaton. • A Vanta pXRF was used with reference standards (CRM) to ensure accuracy of readings. No results reported are from pXRF sampling.
Quality of assay data	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and*	• 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

Criteria	JORC Code explanation	Commentary
and laboratory tests	*whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	ICP-OES. REE specific analysis from RAB samples were not analysed for Gold or PGE via Fire Assay. • 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 25th sample and a duplicate every 30th. • 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No independent verification has been completed. • 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. • Significant intercepts are reported by Company representatives based on best practice and available information. • All significant intercepts are reported as downhole lengths and are not necessarily indicative of true thickness unless stated. • 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.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• 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. • 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

Criteria	JORC Code explanation	Commentary
		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.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• 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. • RAB and RC sample intervals and analysis are single metre interval samples; no sample compositing has been used. • Core sample intervals are based on lithological, structural and mineralised boundaries. • Rock sample samples are to be considered as being collected on a selective basis.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• 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. • 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. • Rock sample samples are to be considered as being collected on a selective basis.
Sample security	• *The measures taken to ensure sample security.*	• The samples are collected, processed and despatched by the Supervising Geologist before being sent by courier to Bureau Veritas, Adelaide.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits completed. Internal processes routinely review the appropriate application of sampling techniques in relation to current knowledge of stratigraphy and mineralisation style.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Exploration 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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical Exploration: Mt Craig 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 & 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 & Utah Development Company Ltd.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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

Criteria	JORC Code explanation	Commentary
		weathering. The unit appears to contain ideal qualities for scavenging metals including rare earth elements, lithium, cobalt, nickel and zinc.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• All completed drillhole collar information is included in the report, appendices or has been previously released.
		• If applicable all rock chip samples are included with relevant analysis results in the appendices or has been previously released.
		• All available and relevant assay data is included in this report or has previously been reported.

Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• 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. • Standard element to stoichiometric oxide conversion factors are used in calculating and reporting oxide equivalent elements. • 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. • Element-to-stoichiometric oxide conversion factors shown in table below: multiply wt% element by numerical value below for equivalent expressed as an oxide. • TREO refers to the sum of all 15 REE's in their respective oxide equivalent • MREO refers to the 4 Magnetic Rare Earth Oxides ($Nd_2O_3+Pr_2O_3+Dy_2O_3+Tb_2O_3$) • HREO refers to the Heavy Rare Earth Oxides ($Eu_2O_3+Gd_2O_3+Tb_2O_3+Dy_2O_3+Ho_2O_3+Er_2O_3+Tm_2O_3+Yb_2O_3+Y_2O_3+Lu_2O_3$)

Criteria	JORC Code explanation	Commentary
		• LREO refers to the Light Rare Earth Oxides (La2O3+Ce2O3+Pr2O3+Nd2O3+Sm2O3) • 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 (Nd2O3+Tb2O3+Dy2O3+Er2O3+Y2O3)
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not*	• 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.

Element	Oxide	Factor
Cerium	Ce_2O_3	1.1713
Dysprosium	Dy_2O_3	1.1477
Erbium	Er_2O_3	1.1435
Europium	Eu_2O_3	1.1579
Gadolinium	Gd_2O_3	1.1526
Holmium	Ho_2O_3	1.1455
Lanthanum	La_2O_3	1.1728
Lutetium	Lu_2O_3	1.1371
Neodymium	Nd_2O_3	1.1664
Praseodymium	Pr_2O_3	1.1703
Samarium	Sm_2O_3	1.1596
Terbium	Tb_2O_3	1.151
Thulium	Tm_2O_3	1.1421
Yttrium	Y_2O_3	1.2699
Ytterbium	Yb_2O_3	1.1387

Criteria	JORC Code explanation	Commentary
	known').	
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• 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.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All relevant information is reported within the document or included in the appendices if not reported previously.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All relevant and meaningful recent exploration or known historical exploration data is included in this report or has been previously released.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• 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. • 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.