

# NORTH STANMORE INITIAL MINERAL RESOURCE ESTIMATE

### High-Value Large-Scale Rare Earth Deposit Confirmed

### Highlights

- Initial Inferred Mineral Resource of 250Mt at 520ppm Total Rare Earth Oxide ('TREYO'), containing 130,000t of contained TREYO, estimated at Victory's North Stanmore Rare Earth Element ('REE') Project.
  - **Substantial (33%) heavy rare earth oxide ('HREO')** to TREYO percentage, positioning it as one of Australia's most enriched HREO deposits.
  - 54% critical metals as identified by the US Government 2022<sup>1</sup>.
  - Resource modelling was based on 1,161m of drill assays averaging 828ppm of TREYO above a 400-ppm cut-off.<sup>2</sup>
  - High percentage of critical magnet metals Dysprosium ('Dy') and Terbium ('Tb') totalling 3.6%, and Neodymium ('Nd') and Praseodymium ('Pr') combined totalling 21.5% TREYO.
  - Low cut-off grades were selected due to North Stanmore hosting valuable basket price and high percentages of HREO.
- Initial Inferred Mineral Resource Estimate covers only **18% of the area drilled** within confirmed REE mineralisation.
- Promising Metallurgical testwork conducted to date has achieved the following:
  - o identified a low cost REE metal recovery process.
  - potential to increase the recoverable TREYO grade through increased mining selectivity and implementation of proven beneficiation techniques to target enriched size fractions. Metallurgical beneficiation testwork on samples has suggested a potential to increase plant feed grades by up to 148%<sup>3</sup>.
- An Exploration Target has also been estimated representing the potential extension of North Stanmore.

\*The potential quantity and grade of this exploration target is conceptual in nature, there is currently insufficient exploration completed to support a mineral resource estimate of this size and it is uncertain whether continued exploration will result in the estimation of a JORC reprice. The Exploration Target has been prepared in accordance with the JORC Code (2012).

#### Victory's Chief Executive Officer and Executive Director Brendan Clark, commented:

"We are extremely proud to report one of Australia's largest heavy rare earth enriched ionic clay/regolith hosted Inferred Mineral Resource Estimates with imminent potential to rapidly





<sup>&</sup>lt;sup>1</sup><u>https://www.iea.org/policies/15271-final-list-of-critical-minerals-2022</u>, excluding (La) and (Ce).

<sup>&</sup>lt;sup>2</sup> For full details including JORC tables refer to ASX announcements dated: 15 May 2023, 17 April 2023, 13 February 2023, 15 November 2022, 11 October 2022. <sup>3</sup> First reported in announcement dated 6 July 2023 and titled "Rare Earth Feed Grades Increased By Up To 148%". The company confirms that it is not aware of any new information or data that materially affects the information included in the original announcement. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

increase these market-leading results with infill drilling over a large area of North Stanmore where previous drilling has identified rare earth element mineralisation."

"This significant milestone solidifies our position as a frontrunner in the Australian rare earth mining industry for ionic clay/regolith discoveries and underscores our commitment to unlocking the immense potential of our country's natural resources."

"No rare earth project can be looked at the same. Victory has proven North Stanmore to be a unique and premium system with outstanding grades of heavy rare earth elements that include Dysprosium and Terbium which are predicted to face a supply deficit of 70% by 2030<sup>4</sup>, creating a favourable product market conditions for Victory."

"Victory looks forward to innovatively leveraging this Mineral Resource Estimate to drive growth and value for our shareholders as the Company enters a new exciting phase."

**Victory Metals Limited (ASX:VTM) ('Victory' or 'the Company')** is pleased to announce the initial Inferred Mineral Resource Estimate at the North Stanmore Rare Earth Element Project (**'North Stanmore'** or the **'Project'**) in Cue, Western Australia. At a 400 ppm TREYO cut-off, the Inferred Mineral Resource stands at 250Mt at 520ppm TREYO and contains HREO/TREO ratios of 33%, and significant ratios of Dy and Tb (DyTb) totalling 3.6% TREYO. The size and quality of the North Stanmore REE Project positions Victory at the forefront of the ionic and regolith REE industry in Australia.

### **Project Summary**

The North Stanmore REE Project is located ~10 km from the Cue township in Western Australia, which is accessible by one of Australia's major arterial networks, the Great Northern Highway. The project is known for hosting exceptional grades of Dy and Tb, which are highly sought after in the current rare earth market. Additionally, the project has high heavy rare earth ratios, further adding to its economic potential. The proximity of the project to the Cue township provides convenient access to infrastructure and support services.

North Stanmore REE Project represents a premium discovery in Australia due to its logistical advantages, high metallurgical recoveries, high ratios of heavy rare earth elements (HREO/TREYO), feed grade beneficiation upside and favourable tenement holding conditions of being situated on Crown land.

### **Mineral Resource Estimate Summary**

A total Inferred Mineral Resource for the North Stanmore Project of ~250Mt of REE-bearing saprolite at 520ppm TREYO for 130,000t on contained TREYO has been estimated by RSC using a cut-off of 400ppm TREYO (Table 1 and Table 2).



<sup>&</sup>lt;sup>4</sup> https://www.mckinsey.com/industries/metals-and-mining/our-insights/the-net-zero-materials-transition-implications-for-global-supply-chains#/

Table 1: North Stanmore Inferred Mineral Resource summary for TREYO, MREO, HREO and NdPr.

	Cut-off (TREYO ppm)	Mt	TREYO (ppm)	MREO (ppm)	HREO (ppm)	NdPr (ppm)	TREYO (t)
Inferred	400	250	520	110	170	90	130,000

Notes:

1. Mineral Resource is classified in accordance with the JORC Code (2012).

2. Estimates are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting.

	La₂O₃	CeO₂	Pr₀O₁₁	Nd₂O₃	Sm₂O₃	Eu₂O₃	Gd₂O₃	Tb₄O⁊	Dy₂O₃	Ho₂O₃	Er₂O₃	Tm₂O₃	Yb₂O₃	Lu₂O₃	Y₂O₃
	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Inferred	80	160	20	70	10	5	10	2	20	3	10	1	9	1	110

Notes:

1. Reported above a 400 ppm TREYO cut-off. TREYO (Total Rare Earth Oxide including yttrium) =  $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Tm_2O_3 + Tb_2O_3 + Lu_2O_3 + Lu_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Sm_2O_3 + Sm_2$ 

2. Estimates are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting. Differences may occur in totals due to rounding.

**Table 3:** North Stanmore Inferred Mineral Resource summary for TREYO, MREO, HREO and NdPr presented at various

 TREYO cut-off grades.

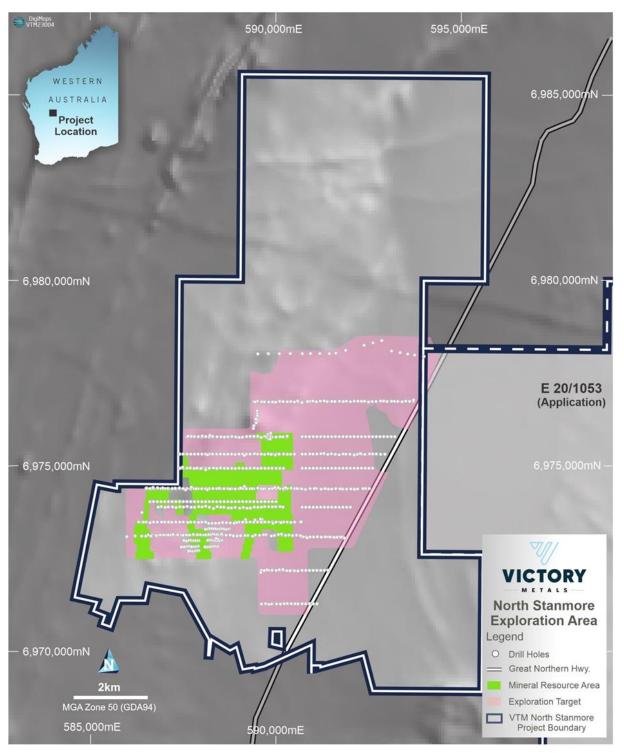
	Cut-off (TREYO ppm)	Mt	TREYO (ppm)	MREO (ppm)	HREO (ppm)	NdPr (ppm)	TREYO (t)
Inferred	300	306	490	100	160	85	150,000
Inferred	400	250	520	110	170	90	130,000
Inferred	500	127	590	130	200	105	75,000

Notes:

2. Estimates are rounded to reflect the level of confidence in the Mineral Resource at the time of reporting. Differences may occur in totals due to rounding.

<sup>1.</sup> Reported at various cut-off grades as specified.

<sup>&</sup>lt;sup>5</sup> Refer to ASX announcements dated 15 May 2023, 17 April 2023, 13 February 2023, 15 November 2022, 11 October 2022 for full details including JORC tables.



**Figure 1:** Map showing Victory Metals' 100% owned North Stanmore tenement package and pending tenements, with the MRE and exploration target areas highlighted.

### **Exploration Target**

An Exploration Target of 700–1,100Mt at a grade range of 300–500ppm TREYO, representing the potential extension of North Stanmore, has also been estimated by RSC (Table 4). The potential quantity and grade of the Exploration Target is conceptual in nature; there has been insufficient exploration completed to estimate a mineral resource estimate and it is uncertain if further exploration will result in the estimation of further Mineral Resources at North Stanmore.



The Exploration Target is based on Exploration Results that have been previously reported<sup>6</sup>, including assays from a mix of aircore ('AC') and reverse circulation ('RC') drillholes. Drill hole spacing varies, but the widest, regular spacing is 250 m x 1,250 m (Figure 1).

The Exploration Target was estimated within a 150 ppm TREYO grade shell, restricted within the saprolite layer. A density of 2 g/cm<sup>3</sup> was assumed for the density of the saprolite. Drill hole spacing varies across the Exploration Target and therefore weighted averages were used to estimate the TREYO grade.

	TREYO Grade (range) ppm	Tonnage (range) Mt
Exploration Target	300–500	700–1,100

#### Table 4: North Stanmore Exploration Target.

### **Planned Exploration**

As Victory unveil this Inferred Mineral Resource estimate and Exploration Target, it is essential to highlight the Company's commitment to advancing exploration activities. Victory is fully aware of the potential that lies within this Exploration Target and are eager to commence exploration within the next two quarters to test its validity by way of Aircore (AC) drilling.

Victory's dedicated team of experts has meticulously analysed and assessed the geological data available, allowing the Company to confidently plan for this upcoming exploration phase. Victory understands the importance of timely action and the value it brings to shareholders.

The commencement of exploration within the next two quarters demonstrates Victory's proactive approach to unlocking the full potential of rare earth element reserves. By initiating this exploration phase, the Company aims to further extend the mineral resource base, enhance the value of the Company, and solidify Victory's position in the market.

In compliance with ASX Listing Rule 5.8.1, the Company provides information on geology, sampling, drilling, analysis, estimation, cut-off grades and mining and metallurgical considerations material to understanding the Inferred Mineral Resource below.

### **Geology & Mineralisation**

### **Regional Geology**

Victory's tenements lie north of Cue, within the centre of the Murchison Province, which comprises the Archaean gneiss-granitoid-greenstone north-western Yilgarn Block. The Archean greenstone belts in the Murchison Province, the Warda Warra and Dalgaranga greenstone belts, the southern parts of the Meekatharra-Mount Magnet and Weld Range belts are dominated by metamorphosed supracrustal mafic volcanic rocks, as well as sedimentary and intrusive rocks. Thermo-tectonism resulted in development of large-scale fold structures that were subsequently disrupted by late faults. The greenstone belts were intruded by two suites of granitoids. The first, most voluminous suite, comprises granitoids that are recrystallised with foliated margins and massive cores, typically containing large enclaves of gneiss. The second suite consists of relatively small, post tectonic intrusions.

<sup>&</sup>lt;sup>6</sup> Refer to ASX announcements dated 15 May 2023, 17 April 2023, 13 February 2023, 15 November 2022 and 11 October 2022 for full details including JORC tables.

Two large Archaean gabbroid intrusions occur south of Cue. These are the Dalgaranga-Mount Farmer gabbroid complex in the southwest, and the layered Windimurra gabbroid complex in the southeast.

The North Stanmore alkaline intrusion<sup>7</sup>, north of Cue, was not recognised on regional geological maps. The petrological and geochemical data indicate that it is post-tectonic and thus post Archean in age.

Similar alkaline intrusions in the vicinity of Cue are interpreted to be related to the early Proterozoic plume track responsible for alkaline magmatism, that extends in a belt from Mt Weld through Leonora to Cue.

### **Project Geology & Mineralisation**

The regolith-hosted mineralisation overlies the North Stanmore alkaline intrusion. The REE mineralisation is regolith hosted. Assays report that REEs are enriched through the regolith profile and thus are not hosted in residual mineral phases from the source alkaline intrusion. MLA studies show that the REEs are mainly hosted by sub-20- $\mu$ m phases interpreted to be churchite (after xenotime) and rhabdophane (after monazite).

### **Drilling Techniques**

Air core (AC) and reverse circulation (RC) drilling was undertaken by Orlando Drilling (Perthbased) and Seismic Drilling (Wangara-based). A three-bladed steel or tungsten drill bit was used to penetrate and allow sampling of the regolith (weathered layer of loose soil and rock fragments) developed above the North Stanmore alkaline intrusion.

Victory completed two AC drill programmes at North Stanmore during the period May– December 2022 and one RC drill programme during December 2022.

The Mineral Resource Estimate includes a total of 238 shallow vertical to near-vertical AC drill holes (14,152 m) and 50 vertical RC drill holes (3,166 m), for a combined total of 17,318 m (Figure 1; Appendix 1)

### Sampling, Sub-Sampling and Analytical Techniques

Drill samples were collected as 1-m samples and placed on top of black plastic that was laid on the natural ground surface to prevent contamination. Samples were placed in separate piles and in orderly rows.

A handheld spade was used to collect 4-m composite samplers which were anlysed using a portable X-ray fluorescence (pXRF) analyser (Olympus Vanta) to determine the presence of anomalous (>200 ppm) REE (rare earth element) vector elements (La, Ce, Nd and Y).

Anomalous 1-m drill samples were assayed by ALS Perth using ME-MS81 (lithium tetraborate fusion digestion, and inductively coupled plasma mass spectrometry (ICP-MS) analysis) and ME-4ACD81 (four acid digestion and MS analysis) for transition elements and scandium (Sc). A selection of OREAS certified reference material (OREAS 147, 460, 20a, 505, 45h, and SY5) were blindly inserted into the sample stream to monitor the quality of the analytical process. Repeat analyses and sample blanks were regularly assayed by ALS.

<sup>&</sup>lt;sup>7</sup> Major Alkaline Igneous Complex Discovered – Nickel and Rare Earth Bearing Minerals Identified in the North Stanmore Intrusion ASX Release Victory Goldfields 10 August 2022

### **Estimation Methodology**

The North Stanmore Mineral Resource estimate (MRE) was undertaken by RSC and is based on exploration AC and RC drilling. Drilling was conducted by Victory from May to December 2022.

The data cut-off for the estimate was 21 June 2023. Victory provided the collar, survey, lithology and assay files to RSC.

Missing intervals for different rare earth oxides (REOs) and total rare earth oxides (TREYOs) were 'null' and omitted from the estimate due to being not sampled.

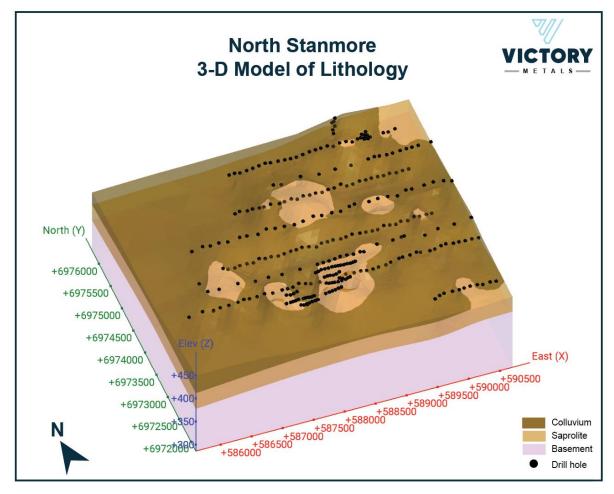
#### **Geological Domains**

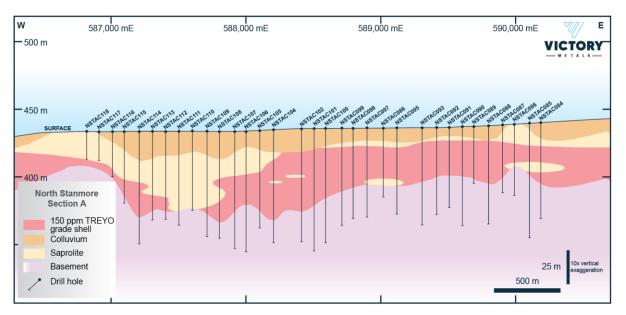
REE mineralisation at North Stanmore is hosted within a relatively flat-lying saprolite clay horizon that is covered by 0–36 m of unconsolidated colluvium. The basement consists of granitic rocks as well as mafic and ultramafic rocks. Lithological domains were created using implicit modelling workflows and based on the downhole geological logging. The saprolite domain was created from the different saprolite logging codes and lies between the base of the cover material and top of the hard rock basement. The saprolite geological domain provides a first-pass constraint of grade populations.

#### **Estimation Domains**

Estimation domains were modelled in 3-D based on a threshold of 150 ppm TREYO. Within the saprolite geological domain, intervals that did not contain TREYO grades were excluded from the mineralised estimation domains. No sub-domaining was used. Mineralisation remains open in all directions at North Stanmore. Estimation was extended to ~200 m, to approximately half the drill spacing beyond the lateral extent of drilling.







*Figure 2:* North Stanmore perspective 3-D view of the wire frame geological model (10 vertical exaggeration).

Figure 3: North Stanmore cross-section 6,973,000 mN outlining the geological and estimation domains.



**'THE FUTURE OF AUSTRALIAN RARE EARTHS'** 

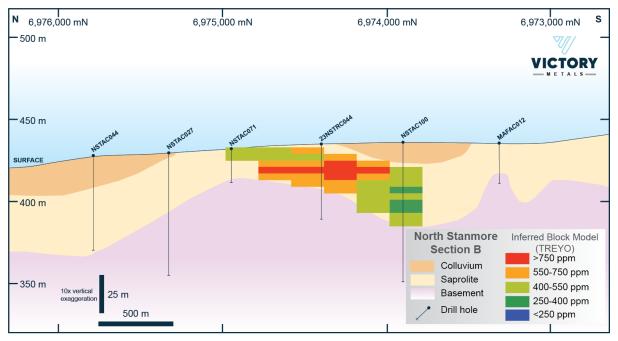


Figure 5: North Stanmore cross-section 588,610 mE outlining the geological and estimation domains.

#### **Resource Estimation**

Resource estimation was undertaken as follows:

- A block model was built using a block size of 50 m x 200 m x 4 m (x,y,z).
- Hard domain boundaries were used for the estimation of all variables following a review of contact analysis plots.
- Geostatistics, variography and kriging neighbourhood analysis (KNA) were undertaken to support the search and estimation parameters used.
- A composite length of 4 m was selected based on the dominant sample length.
- Variograms displayed satisfactory structure and an acceptable level of confidence for the estimation of Inferred Mineral Resources.
- TREYO, La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub> were estimated using Ordinary Kriging (OK). Estimation was completed using two passes and search neighbourhood parameters were supported by KNA.
- The resource model was validated visually by comparing input and output means, histograms and swath plots.

#### **Bulk Density**

While specific gravity analyses were completed on pulverised samples, ranging from 2.5–2.8 g/cm<sup>3</sup>, these did not represent the in-situ bulk density for the mineralised units as the results did not account for void spaces in situ. Therefore, an assumed in-situ bulk density of 2 g/cm<sup>3</sup> was selected for the MRE based on similar geological conditions and mineralisation styles reported in nearby deposits, which range from 1.3–2.0 g/cm<sup>3</sup>.



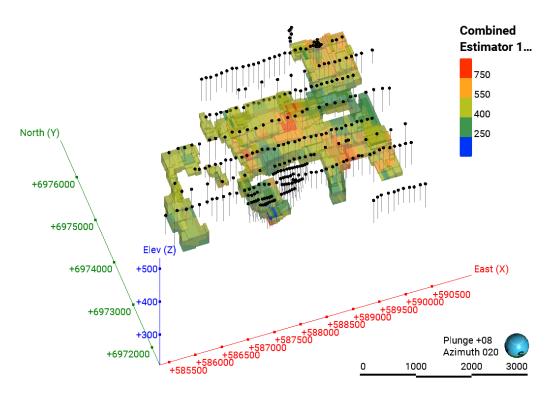


Figure 6: North Stanmore block model displaying estimated Mineral Resource TREYO block grades.

### **Resource Classification**

The Competent Person has classified the Mineral Resource in the Inferred category in accordance with the JORC Code (2012). Geological evidence is sufficient to imply but not verify geological and grade continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from drill holes.

It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Portions of the deposit that do not have reasonable prospects for eventual economic extraction (RPEEE) are not included in the Mineral Resource. In assessing the reasonable prospects for eventual economic extraction, the Competent Person has evaluated preliminary mining, metallurgical, economic, environmental, social and geotechnical parameters.

The Mineral Resource reported here is a realistic inventory of mineralisation which, under assumed and justifiable technical, economic and developmental conditions, may become economically extractable.

### **Cut-Off Grade**

The Competent Person has applied a perimeter buffer of approximately 200m around the drilled area as a first-pass constraint to the Mineral Resource. This approach was supported by a visual review of the kriging efficiencies and slope of regression for the estimate of TREYO.

A cut-off grade of 400 ppm TREYO was selected based on the Competent Person's preliminary evaluation of potential mining and processing costs, as well as the expectations in the market of a significant rise in the price of rare earths, especially that of Nd, Pr and Dy, Tb, which are by far the most significant value components in the deposit. A cut-off grade of 400ppm TREYO



presents a reasonable potential of providing the necessary head grade that would result in reasonable prospects of economic extraction, given the market expectations outlined above.

It is reasonably expected that the majority of the Inferred mineral mesources could be upgraded to Indicated mineral resources with continued exploration, which will allow mining studies to be performed. These studies will help characterise the response of the orebody to selectively constraints and increased recovered grades may be sought through potential selectivity gains.

### **Mining and Metallurgical Methods & Parameters**

Initial metallurgical testing was undertaken by Core Metallurgy in Brisbane over the months of February to April 2023<sup>8</sup>.

Testwork was initially carried out on a sample composite blend (VTM001) produced from six samples selected from the North Stanmore Project. A subsequent phase of testing was undertaken on two of these samples (#308490 and #312198).

The objective of the initial metallurgical testwork programme was to establish a set of leach parameters that would be applicable to broader range of samples from the North Stanmore Project.

The test results on the composite blend, targeting critical and valuable HREEs, achieved an initial extraction of up to 51%, including up to 44% Dy and 45% Tb extraction at pH 0.7.

60% 50% 40% 30% 20% 10% 0% rHe<sup>ft</sup> r, Pe<sup>ft</sup> + <sup>3</sup> c<sup>o</sup> e<sup>ft</sup> + <sup>3</sup> c<sup>o</sup> e

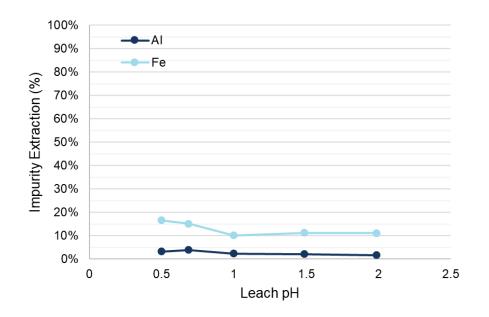
Increasing the pH to 1 resulted in marginal reductions in HREE extraction as shown in Figure 7.

**Figure 7:** Extraction of Rare Earth Elements from Composite VTM001 (ambient temperature, 4-hour residence time, 35% w/w solids, H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>).

Corresponding impurity extraction, namely Fe and Al, from composite VTM001 was reported to be relatively low in the leach testwork. A reduction in leach pH below 1, reported a small

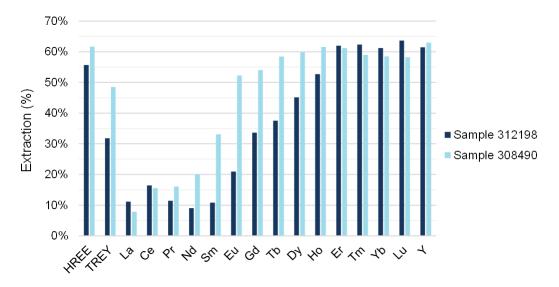
<sup>&</sup>lt;sup>8</sup> Refer to ASX announcement dated 1 May 2023 titled "EXCEPTIONAL RECOVERIES OF CRITICAL HEAVY RARE ELEMENTS"

increase in impurity extraction, comparable Fe and Al extraction was demonstrated between pH 2 and 1.



**Figure 8:** Extraction of Impurity Elements (Iron, Aluminium) from Composite VTM001 with pH (ambient temperature, 4-hour residence time, 35% w/w solids, H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>).

Subsequent testwork on individual samples with adjusted leach conditions demonstrated improved HREE extraction of up to 62%, including up to 60% Dy and 58% Tb extraction in Sample #308490.



**Figure 9:** Extraction of Rare Earth Elements from Individual Samples (50°C temperature, 4-hour residence time, 25% w/w solids, pH 0.6 with H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>).

Leach testwork focussed on the use of sulphuric acid for pH adjustment, which has key economic benefits in both operating and capital costs over hydrochloric acid.

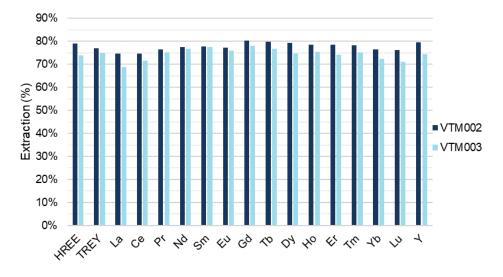
Testing utilising hydrochloric acid at pH 1, with otherwise identical standard conditions, failed to demonstrate any significant improvement to REE recovery compared with sulphuric acid, at otherwise the same leach conditions.



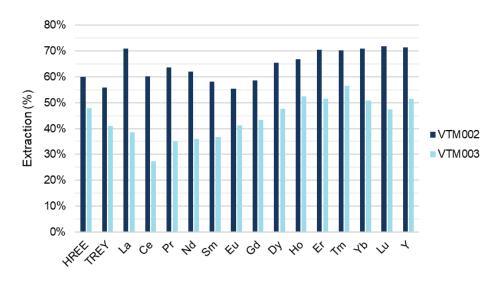
Follow up diagnostic metallurgical testing was undertaken by Core Metallurgy in Brisbane over May 2023<sup>9</sup>.

Diagnostic leach testwork was carried out on two sample composite blends, VTM002 and VTM003, produced from 16 samples selected from the North Stanmore Project.

The objective of the successful initial metallurgical testwork programme was to establish a set of typical REE clay leach parameters, while this follow up programme was to further understand REE mineralisation through diagnostic leach tests, representative of alternative processing technologies. Results of diagnostic leaching via acid baking and caustic cracking technologies on composite samples are displayed below in Figure 10 and Figure 111.



**Figure 10:** Extraction of Rare Earth Elements from Composites VTM002 and VTM003 (200°C Acid Bake, 2-hour, 300 kg/t H<sub>2</sub>SO<sub>4</sub> addition followed with 2-hour water leach at 25% w/w solids and ambient temperature).



**Figure 11:** Extraction of Rare Earth Elements from Composites VTM002 and VTM003 (140°C Caustic Cracking with 70% w/w NaOH, 2-hour, followed with 2-hour pH 3 HCl leach at 25% w/w solids and ambient temperature).



<sup>&</sup>lt;sup>9</sup> Refer to ASX announcement dated 6 July 2023 titled "RARE EARTH FEED GRADES INCREASED BY UP TO 148%

### **Acid Baking Leach Process**

The sulphuric acid bake has historically been, and is also currently, one of the major processes used for chemical decomposition of REE ore minerals, such as monazite, to release contained REE. Current sulfuric acid bake processes for the Bayan Obo deposit in China and the Mt. Weld deposit in Australia together account for more than half of the world's rare earth production<sup>10</sup>. In the sulfuric acid bake, the rare earth elements are converted to rare earth sulphates which are dissolved in a subsequent water leach. The conditions required to achieve mineral decomposition vary widely for different rare earth minerals. Typically, the sulphuric acid bake step may utilise elevated temperature of ~200–800°C, with a 1–4-hour residence time and an upfront addition of concentrated sulphuric acid. The REE elements are then released from the mineral phase and available to solubilise in the subsequent water leach step.

### **Caustic Cracking Process**

The caustic (or alkaline) cracking process is an alternative to the sulphuric acid bake and is preferred for processing of high-grade monazite sands. The caustic cracking process decomposes the REE minerals to produce REE hydroxides which are insoluble. The REE hydroxides are then solubilised in a subsequent weak acid leach. Typically, the caustic cracking step may utilise elevated temperatures of ~120–150°C and sodium hydroxide concentration of 50–70%. with a 1–4-hour residence time. The REE elements are then solubilised in a weak acid leach at pH 3–4 using an inorganic acid<sup>11</sup>.

### **Beneficiation**

Beneficiation metallurgical testing, as part of the Stage 2 metallurgical testwork programme, was undertaken by Core Metallurgy in Brisbane in June 2023. The aim of beneficiation testwork was to determine if REE can be upgraded by classification, with either screens or hydrocyclones, to reject a coarse low-grade fraction. This would be implemented upstream of REE leaching as shown below in a typical REE clay processing flowsheet (Figure 12). The rejection of low-grade ore and subsequent increase in downstream REE feed grade is likely to reduce downstream reagent consumption and equipment sizing, thereby significantly reducing operating and capital costs for the overall circuit.

The beneficiation testwork was carried out on ten sample composite blends, VTM010 to VTM019, produced from 31 AC drill samples. Samples were selected from the North Stanmore Project and aligned with the resource modelling presented in this announcement. The samples, with drill collar information, used to generate composite blends are given in Appendix 2.



<sup>&</sup>lt;sup>10</sup> Demol, J., Ho, E., Soldenhoff, K., Senanayake, G. (2019). The sulfuric acid bake and leach route for processing of rare earth ores and concentrates: A review. *Hydrometallurgy*, 188, 123–139. https://doi.org/10.1016/j.hydromet.2019.05.015

<sup>&</sup>lt;sup>11</sup> Refer to ASX announcement dated 6 July 2023 titled "FOLLOW UP MET TESTWORK PROVIDES EXCELLENT RECOVERIES"

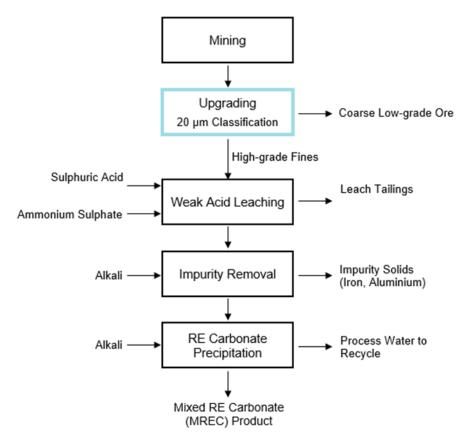


Figure 12: General proposed flowsheet for REE clay processing.

The impact of grain size was tested by analysing ten composites is summarised in Table 5 and has returned the following.

- 58.2% of the rare earths on average report to the target size fraction of -20  $\mu$ m, with a range of 46.5–70.3%.
- The -20 μm size fraction only accounts for 34.7% of the total sample mass on average, with a range of 28.3–41.3%. This equates to a rejection of 65.3% on average of the feed ore to the coarse +20 μm fraction, with a rejection range of 58.2–71.7%.
- The rare earth concentration in the -20 μm fraction is 68% on average higher in grade compared to the beneficiation head grade, resulting in an average grade increase from 1,308–2,192 ppm TREYO with rejection of the +20 μm fraction (Figure 13). This upgrading ranged from 42–148%.



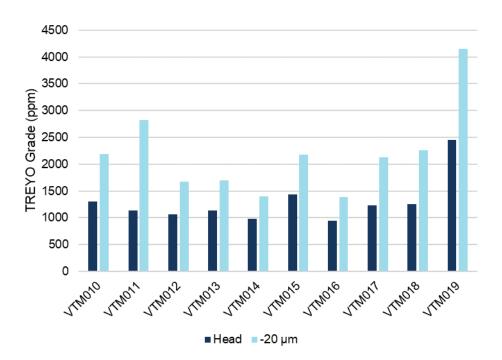
		-20 μm Fraction									
<b>O</b> a mar a star		Ass	ays	Distribution		Upgrade Ratio					
Composite	Mass %	TREYO	HREO <sup>1</sup>	TREYO	HREO	TREYO	HREO				
		ppm	ppm	%	%						
VTM010 - Master Composite	34.7	2192	896	58.2	57.5	1.68	1.65				
VTM011 - 0.14 Ce/Ce* Blend	28.3	2820	1193	70.3	69.0	2.48	2.44				
VTM012 - 0.37 Ce/Ce* Blend	41.8	1679	618	66.1	67.0	1.58	1.60				
VTM013 - 0.51 Ce/Ce* Blend	31.0	1701	645	46.5	48.3	1.50	1.56				
VTM014 - 0.65 Ce/Ce* Blend	36.7	1396	519	52.3	55.7	1.42	1.52				
VTM015 - 0.83 Ce/Ce* Blend	35.9	2173	969	54.3	57.6	1.51	1.60				
VTM016 - 0.24 HREO Ratio Blend	37.9	1386	355	55.5	54.2	1.46	1.43				
VTM017 - 0.41 HREO Ratio Blend	38.8	2134	925	67.2	69.6	1.73	1.80				
VTM018 - 0.52 HREO Ratio Blend	29.3	2260	1129	52.9	55.0	1.80	1.87				
VTM019 - >1500 ppm TREYO Blend	31.7	4156	2015	53.7	53.3	1.69	1.68				

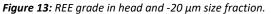
#### Table 5: Summary size by assay analysis for target -20 $\mu m$ fraction.

Notes:

1.  $HREO - Eu_2O_3$ ,  $Gd_2O_3$ ,  $Tb_4O_7$ ,  $Dy_2O_3$ ,  $Ho_2O_3$ ,  $Er_2O_3$ ,  $Tm_2O_3$ ,  $Yb_2O_3$ ,  $Lu_2O_3$  and  $Y_2O_3$ .

2.  $Ce/Ce^* = (2^*(Ce_N)/(La_N+Pr_N))$  where  $Ce_N$ ,  $La_N$  and  $Pr_N$  are chondrite normalised values.







**'THE FUTURE OF AUSTRALIAN RARE EARTHS'** 

## **Rare Earth Element REE/TREO Distribution**

Proportions of rare earth oxides (REOs) calculated for the North Stanmore MRE. Importantly, the regolith deposit is highly enriched in high value HREEs (33%) containing a significant percentage of high value magnet REOs, with 3.63% DyTb and 17.88% NdPr.

### **Proximity to Markets and General Product Marketability**

North Stanmore is geographically well-positioned to supply REEs to major global markets. Western Australia has established infrastructure and efficient transportation networks, including ports, railways and roads, facilitating the export of minerals. Australia's proximity to Asian markets, particularly China, which is the largest consumer of REEs, provides a strategic advantage in terms of reduced transportation costs and shorter shipping times. The USA is currently developing a REE refinery and India and South Korea already have existing refinery plants.

The global demand for REEs is primarily driven by the manufacturing of electronics, renewable energy technologies, electric vehicles and advanced defence systems. Australia's REE deposits are highly sought after due to the increasing demand for these critical minerals. The demand for REEs, especially those used in the manufacture of critical components in electric vehicles (EVs) and alternative energy supply, is forecasted to rise significantly in the light of legislation mandating the transition to EVs in many countries, such as Canada and the European Union, as well as the demand for a general transition to sustainable energy supply.

The marketability of Australian REEs is typically strong due to several factors.

- Quality and purity Australia's REE deposits are known for their high-quality ores, which contain a diverse range of rare earth elements. The ores extracted can be processed to yield high-purity REEs, making them desirable for various industries that require specific elemental compositions.
- Sustainable mining practices Australia has stringent environmental regulations and sustainable mining practices, ensuring responsible extraction and minimising environmental impact. This commitment to sustainability enhances the marketability of Australian REEs, as consumers increasingly prioritise ethical and environmentally friendly sourcing.
- Supply security With growing concerns over the concentration of REE production in China, many countries are seeking to diversify their supply chains. Australia's reliable and stable mining industry offers a secure source of REEs, which is an attractive proposition for consumers looking to reduce their dependence on a single supplier.
- Export agreements Australia has established trade agreements with various countries, facilitating the export of REEs. Additionally, the Australian government actively supports the development of the REE industry and encourages foreign investments, further enhancing marketability.

Overall, Australia's proximity to markets, coupled with its high-quality REE deposits, sustainable mining practices and secure supply chain, positions it favourably in the global REE market. As the demand for REEs continues to grow, Australian REEs are likely to find strong market acceptance and marketability.

This announcement has been authorised by the Board of Victory Metals Limited.



#### For further information please contact:

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### Victory Metals Limited: Company Profile

Victory is dedicated to exploring and developing its rare earth element (REE) and scandium Discovery in the Cue Region of Western Australia. Our valuable assets are situated in the Midwest region, approximately 665 km from Perth. The ongoing evolution of Victory's ionic clay REE discovery is significant, as it boasts high ratios of Heavy Rare Earth Oxides and Critical Magnet Metals (NdPr + DyTb).



Regional map of Victory Metals tenement package and pending tenements.



#### **Competent Person Statements**

#### **Mr Louis Fourie**

The information in this ASX release that relates to Exploration Targets and Mineral Resources is based on information compiled under the supervision of Mr Louis Fourie. Mr Fourie is a licenced Professional Geoscientist registered with APEGS (Association of Professional Engineers and Geoscientists of Saskatchewan) in the Province of Saskatchewan, a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX website from time to time. Mr Fourie is Owner and Principal of Terra Modelling Services, and a Principal Resource Consultant at RSC. The full nature of the relationship between Mr Fourie and Victory Metals Ltd has been disclosed. Mr Fourie has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity of resource estimation and exploration targeting to qualify as a Competent Person, as defined in the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fourie consents to the inclusion in the release of the matters based on this information in the form and context in which it appears.

### **Professor Ken Collerson**

The information in this ASX announcement that relates to Exploration Results are based on information compiled and evaluated by Professor Ken Collerson. Professor Collerson (PhD) is Owner and Principal of KDC Geo Consulting and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). The full nature of the relationship between Prof Collerson and Victory Metals Ltd has been disclosed. Professor Collerson is a geochemist/geologist with sufficient relevant experience in relation to rare earth element geochemistry, critical metal mineralisation and REE systematics given in core metallurgical data summaries, that are being reported on, to qualify as a Competent Person, as defined in the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Professor Collerson consents to the inclusion in the release of matters based on this information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements in relation to the Exploration Results. The Company confirms that the form and context in which the competent persons findings are presented have not been materially modified from the original announcements.



# **Appendix 1: Drill hole Collars**

Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSTAC012	587900	6972850	438	-60	90	79	AC
NSTAC013	587855	6972840	438	-60	90	90	AC
NSTAC014	587810	6972837	439	-60	90	86	AC
NSTAC015	587761	6972834	440	-60	90	79	AC
NSTAC016	587720	6972831	440	-60	90	86	AC
NSTAC017	587650	6972850	439	-60	90	75	AC
NSTAC018	587606	6972840	439	-60	90	74	AC
NSTAC019	587562	6972836	439	-60	90	75	AC
NSTAC020	587518	6972832	439	-60	90	69	AC
NSTAC021	587448	6972828	439	-60	90	70	AC
NSTAC024	587740	6972710	438	-60	90	40	AC
NSTAC025	587690	6972718	438	-60	90	60	AC
NSTAC026	587647	6972726	439	-60	90	66	AC
NSTAC001	587920	6972734	440	-60	90	77	AC
NSTAC002	587879	6972730	440	-60	90	75	AC
NSTAC003	587827	6972726	440	-60	90	88	AC
NSTAC004	587780	6972722	439	-60	90	89	AC
NSTAC005	587739	6972718	439	-60	90	90	AC
NSTAC006	587686	6973012	439	-60	90	88	AC
NSTAC007	587629	6973000	438	-60	90	84	AC
NSTAC008	587572	6972988	438	-60	90	79	AC
NSTAC009	587515	6973008	438	-60	90	76	AC
MAFAC038	588430	6973036	439	-60	90	40	AC
MAFAC039	588386	6973060	439	-60	90	42	AC
MAFAC040	588342	6972851	441	-60	90	33	AC
MAFAC041	588290	6972844	441	-60	90	62	AC
MAFAC042	588238	6972837	440	-60	90	66	AC
MAFAC043	588186	6972830	440	-60	90	73	AC
MAFAC044	588134	6972823	440	-60	90	53	AC
MAFAC045	588082	6972832	438	-60	90	45	AC
MAFAC029	588540	6973008	441	-60	90	35	AC
MAFAC030	588500	6973000	441	-60	90	45	AC
MAFAC031	588460	6972992	440	-60	90	68	AC
MAFAC032	588403	6972997	439	-60	90	68	AC
MAFAC033	588346	6973002	438	-60	90	57	AC
MAFAC034	588289	6973007	438	-60	90	42	AC
MAFAC035	588252	6973012	438	-60	90	38	AC
MAFAC036	588205	6973017	438	-60	90	40	AC
MAFAC037	588158	6973010	441	-60	90	70	AC
MAFAC023	588425	6973165	440.8	-60	90	80	AC

#### Table 4: Drill holes collars.



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
MAFAC024	588377	6973169	437.4	-60	90	65	AC
MAFAC025	588329	6973173	436	-60	90	64	AC
MAFAC026	588281	6973177	437.1	-60	90	66	AC
MAFAC027	588233	6973161	439.1	-60	90	63	AC
MAFAC028	588185	6973165	438	-60	90	53	AC
MAFAC001	588870	6973470	439	-60	90	33	AC
MAFAC002	588766	6973477	437	-60	90	55	AC
MAFAC003	588662	6973484	438	-60	90	74	AC
MAFAC004	588558	6973491	438	-60	90	74	AC
MAFAC005	588464	6973473	438	-60	90	61	AC
MAFAC006	588370	6973470	437	-60	90	42	AC
MAFAC007	588276	6973467	437	-60	90	81	AC
MAFAC008	588182	6973464	437	-60	90	78	AC
MAFAC009	588738	6973316	438	-60	90	62	AC
MAFAC010	588700	6973310	438	-60	90	55	AC
MAFAC011	588652	6973304	438	-60	90	55	AC
MAFAC012	588604	6973311	438	-60	90	31	AC
MAFAC013	588556	6973318	437	-60	90	40	AC
MAFAC014	588508	6973325	437	-60	90	78	AC
MAFAC015	588460	6973310	439	-60	90	78	AC
MAFAC016	588412	6973315	439	-60	90	84	AC
MAFAC017	588364	6973320	439	-60	90	84	AC
MAFAC018	588306	6973323	438	-60	90	81	AC
MAFAC019	588248	6973326	438	-60	90	74	AC
MAFAC020	588194	6973329	438	-60	90	89	AC
MAFAC021	588140	6973310	438	-60	90	80	AC
MAFAC022	588096	6973307	437	-60	90	69	AC
NSTAC027	590300	6975815	429	-90	0	36	AC
NSTAC028	590185	6975795	428	-90	0	54	AC
NSTAC029	590105	6975798	429	-90	0	52	AC
NSTAC030	589795	6975805	428	-90	0	58	AC
NSTAC031	589891	6975790	428	-90	0	56	AC
NSTAC032	589809	6975787	428	-90	0	58	AC
NSTAC033	589695	6975808	429	-90	0	61	AC
NSTAC034	589599	6975779	429	-90	0	36	AC
NSTAC035	589508	6975810	430	-90	0	38	AC
NSTAC036	589405	6975809	431	-90	0	40	AC
NSTAC037	589304	6975807	427	-90	0	37	AC
NSTAC038	589205	6975803	432	-90	0	64	AC
NSTAC039	589095	6975785	433	-90	0	62	AC
NSTAC040	589005	6975780	433	-90	0	60	AC
NSTAC041	588912	6975790	431	-90	0	62	AC
NSTAC042	588810	6975805	427	-90	0	81	AC
NSTAC043	588704	6975795	426	-90	0	80	AC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSTAC044	588608	6975788	427	-90	0	57	AC
NSTAC045	588517	6975795	427	-90	0	65	AC
NSTAC046	588410	6975797	428	-90	0	60	AC
NSTAC047	588290	6975805	428	-90	0	82	AC
NSTAC048	588216	6975833	427	-90	0	73	AC
NSTAC049	588105	6975805	428	-90	0	65	AC
NSTAC050	588008	6975815	425	-90	0	46	AC
NSTAC051	587905	6975800	425	-90	0	53	AC
NSTAC052	587798	6975805	423	-90	0	71	AC
NSTAC053	587713	6975809	425	-90	0	72	AC
NSTAC054	587628	6975813	424	-90	0	68	AC
NSTAC055	590200	6974948	429	-90	0	63	AC
NSTAC056	590100	6974948	429	-90	0	48	AC
NSTAC057	590000	6974948	428	-90	0	69	AC
NSTAC058	589893	6974950	430	-90	0	70	AC
NSTAC059	589797	6974949	429	-90	0	86	AC
NSTAC060	589701	6974948	430	-90	0	63	AC
NSTAC061	589600	6974952	430	-90	0	86	AC
NSTAC062	589506	6974943	430	-90	0	75	AC
NSTAC063	589411	6974955	430	-90	0	73	AC
NSTAC064	589300	6974949	428	-90	0	74	AC
NSTAC065	589201	6974944	428	-90	0	64	AC
NSTAC066	589104	6974947	435	-90	0	81	AC
NSTAC067	589002	6974951	430	-90	0	68	AC
NSTAC068	588900	6974944	431	-90	0	36	AC
NSTAC069	588804	6974946	428	-90	0	21	AC
NSTAC070	588700	6974947	430	-90	0	35	AC
NSTAC071	588606	6974948	429	-90	0	18	AC
NSE010	591608	6978050	427	-90	0	30	AC
NSE011	591436	6978035	427	-90	0	50	AC
NSE012	591176	6978038	427	-90	0	63	AC
NSE013	590927	6978037	427	-90	0	74	AC
NSE014	593705	6976787	435	-90	0	50	AC
NSE015	593595	6976751	439	-90	0	34	AC
NSE016	593494	6976757	438	-90	0	30	AC
NSE017	593395	6976740	438	-90	0	44	AC
NSE018	593276	6976746	438	-90	0	55	AC
NSE019	593188	6976751	438	-90	0	54	AC
NSE020	593110	6976754	438	-90	0	48	AC
NSE021	592989	6976747	438	-90	0	71	AC
NSE022	592899	6976757	436	-90	0	80	AC
NSE023	592815	6976758	437	-90	0	77	AC
NSE024	592689	6976746	436	-90	0	72	AC
NSE025	592588	6976746	436	-90	0	78	AC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSE026	592490	6976732	436	-90	0	63	AC
NSE027	592377	6976753	435	-90	0	80	AC
NSE028	592297	6976752	433	-90	0	79	AC
NSE029	592203	6976755	435	-90	0	76	AC
NSE030	592103	6976757	427	-90	0	45	AC
NSE031	592003	6976742	435	-90	0	57	AC
NSE032	591893	6976756	434	-90	0	70	AC
NSE033	591811	6976746	434	-90	0	75	AC
NSE034	591709	6976753	430	-90	0	68	AC
NSE035	591588	6976745	430	-90	0	66	AC
NSE036	591500	6976750	431	-90	0	64	AC
NSE037	591377	6976743	431	-90	0	66	AC
NSTAC072	588504	6974958	430	-90	0	16	AC
NSTAC073	588404	6974941	428	-90	0	19	AC
NSTAC074	588314	6974960	430	-90	0	47	AC
NSTAC075	588200	6974950	429	-90	0	52	AC
NSTAC076	588105	6974911	432	-90	0	42	AC
NSTAC077	587973	6974944	432	-90	0	19	AC
NSTAC078	587868	6974952	429	-90	0	42	AC
NSTAC079	587795	6974945	430	-90	0	34	AC
NSTAC080	587687	6974955	431	-90	0	56	AC
NSTAC081	587603	6974952	430	-90	0	41	AC
NSTAC082	587484	6974973	431	-90	0	80	AC
NSTAC083	587403	6974948	431	-90	0	59	AC
NSTAC084	590186	6973903	434	-90	0	65	AC
NSTAC085	590103	6973915	433	-90	0	78	AC
NSTAC086	589991	6973914	433	-90	0	47	AC
NSTAC087	589902	6973908	436	-90	0	48	AC
NSTAC088	589801	6973912	431	-90	0	66	AC
NSTAC089	589691	6973915	433	-90	0	38	AC
NSTAC090	589606	6973899	431	-90	0	67	AC
NSTAC091	589509	6973899	433	-90	0	56	AC
NSTAC092	589414	6973903	435	-90	0	63	AC
NSTAC093	589306	6973879	432	-90	0	68	AC
NSTAC094	589217	6973873	433	-90	0	67	AC
NSTAC095	589120	6973893	432	-90	0	60	AC
NSTAC096	589018	6973876	435	-90	0	50	AC
NSTAC097	588899	6973897	435	-90	0	65	AC
NSTAC098	588797	6973883	434	-90	0	65	AC
NSTAC099	588713	6973882	433	-90	0	69	AC
NSTAC100	588593	6973900	433	-90	0	82	AC
NSTAC101	588506	6973902	432	-90	0	87	AC
NSTAC102	588413	6973916	431	-90	0	79	AC
NSTAC103	588315	6973866	431	-90	0	72	AC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSTAC104	588204	6973901	432	-90	0	81	AC
NSTAC105	588102	6973925	432	-90	0	70	AC
NSTAC106	588005	6973908	432	-90	0	88	AC
NSTAC107	587917	6973915	431	-90	0	84	AC
NSTAC108	587805	6973898	431	-90	0	77	AC
NSTAC109	587712	6973899	430	-90	0	74	AC
NSTAC110	587604	6973920	430	-90	0	56	AC
NSTAC111	587504	6973906	431	-90	0	66	AC
NSTAC112	587406	6973910	434	-90	0	66	AC
NSTAC113	587309	6973893	430	-90	0	62	AC
NSTAC114	587210	6973907	430	-90	0	80	AC
NSTAC115	587096	6973908	430	-90	0	49	AC
NSTAC116	587012	6973898	429	-90	0	29	AC
NSTAC117	586908	6973915	428	-90	0	16	AC
NSTAC118	586823	6973904	434	-90	0	21	AC
NSTAC119	589242	6973139	435	-90	0	50	AC
NSTAC120	589165	6973139	432	-90	0	39	AC
NSTAC121	589042	6973133	432	-90	0	51	AC
NSTAC122	588951	6973123	432	-90	0	41	AC
NSTAC123	588849	6973127	432	-90	0	51	AC
NSTAC124	588764	6973151	432	-90	0	49	AC
NSTAC125	588656	6973147	432	-90	0	30	AC
NSTAC126	588533	6973178	431	-90	0	52	AC
NSTAC127	588106	6973155	431	-90	0	50	AC
NSTAC128	587962	6973157	432	-90	0	75	AC
NSTAC129	587877	6973160	435	-90	0	86	AC
NSTAC130	587771	6973165	439	-90	0	84	AC
NSTAC131	587671	6973150	436	-90	0	69	AC
NSTAC132	587586	6973153	435	-90	0	61	AC
NSTAC133	587496	6973148	436	-90	0	40	AC
NSTAC134	587347	6973154	434	-90	0	33	AC
NSTAC135	587220	6973166	436	-90	0	69	AC
NSTAC136	587096	6973155	435	-90	0	75	AC
NSTAC137	586971	6973154	435	-90	0	72	AC
NSTAC138	586881	6973153	437	-90	0	52	AC
NSTAC139	586778	6973133	436	-90	0	10	AC
NSTAC140	586628	6973122	436	-90	0	39	AC
NSTAC141	586489	6973121	436	-90	0	56	AC
NSTAC142	586381	6973121	434	-90	0	50	AC
NSTAC143	586379	6973123	433	-90	0	42	AC
NSTAC144	586205	6973127	437	-90	0	47	AC
NSTAC145	585981	6973106	435	-90	0	58	AC
NSTAC146	589488	6976495	430	-90	0	17	AC
NSTAC147	589492	6976409	436	-90	0	16	AC





Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSTAC148	589495	6976357	429	-90	0	26	AC
NSTAC149	589490	6976290	428	-90	0	22	AC
NSTAC150	589493	6976249	439	-90	0	26	AC
NSTAC151	589464	6976173	430	-90	0	36	AC
NSTAC152	589404	6976097	431	-90	0	31	AC
NSTAC153	589388	6976023	431	-90	0	26	AC
NSTAC154	589456	6976274	428	-90	0	16	AC
NSTAC155	590705	6978036	430	-90	0	78	AC
NSTAC156	590382	6978036	429	-90	0	72	AC
NSTAC157	590089	6978035	428	-90	0	72	AC
NSTAC158	589792	6978035	428	-90	0	45	AC
NSTAC159	589508	6978028	426	-90	0	37	AC
NSTAC160	590698	6976716	428	-90	0	42	AC
NSTAC161	590577	6976762	427	-90	0	37	AC
NSTAC162	590493	6976734	428	-90	0	57	AC
NSTAC163	590392	6976745	427	-90	0	34	AC
NSTAC164	590301	6976740	428	-90	0	44	AC
NSTAC165	590190	6976744	428	-90	0	56	AC
NSTAC166	590094	6976751	429	-90	0	78	AC
NSTAC167	589985	6976726	429	-90	0	75	AC
NSTAC168	589904	6976733	428	-90	0	83	AC
NSTAC169	589802	6976732	429	-90	0	63	AC
NSTAC170	589681	6976734	429	-90	0	62	AC
NSTAC171	589609	6976740	429	-90	0	63	AC
NSTAC172	589494	6976757	427	-90	0	48	AC
NSTAC173	589436	6976734	426	-90	0	43	AC
NSTAC174	590495	6975329	433	-90	0	61	AC
NSTAC175	590391	6975325	433	-90	0	59	AC
NSTAC176	590303	6975325	433	-90	0	44	AC
NSTAC177	590204	6975330	432	-90	0	54	AC
NSTAC178	590080	6975328	431	-90	0	72	AC
NSTAC179	589981	6975309	433	-90	0	64	AC
NSTAC180	589868	6975322	433	-90	0	66	AC
NSTAC181	589791	6975336	433	-90	0	45	AC
NSTAC182	589688	6975322	433	-90	0	77	AC
NSTAC214	589814	6974392	438	-90	0	70	AC
NSTAC284	590656	6973133	438	-90	0	68	AC
NSTAC285	590552	6973147	438	-90	0	75	AC
NSTAC286	590442	6973137	439	-90	0	66	AC
NSTAC287	590344	6973148	439	-90	0	49	AC
NSTAC288	590253	6973141	440	-90	0	52	AC
NSTAC289	590145	6973178	439	-90	0	72	AC
NSTAC290	590063	6973165	439	-90	0	66	AC
NSTAC291	589953	6973140	438	-90	0	89	AC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSTAC292	589869	6973125	439	-90	0	62	AC
NSTAC293	589730	6973160	437	-90	0	60	AC
NSTAC294	589664	6973158	440	-90	0	44	AC
NSTAC295	589555	6973145	439	-90	0	57	AC
NSTAC296	589437	6973151	438	-90	0	54	AC
NSTAC297	589367	6973117	441	-90	0	56	AC
NSTAC298	590588	6972184	438	-90	0	72	AC
NSTAC299	590493	6972191	439	-90	0	49	AC
NSTAC300	590374	6972187	438	-90	0	48	AC
NSTAC301	590288	6972193	440	-90	0	48	AC
NSTAC302	590183	6972222	438	-90	0	45	AC
NSTAC303	590084	6972216	438	-90	0	45	AC
NSTAC304	590000	6972198	439	-90	0	60	AC
NSTAC305	589892	6972204	439	-90	0	63	AC
NSTAC306	589760	6972216	438	-90	0	52	AC
NSTAC307	589683	6972196	438	-90	0	66	AC
NSTAC308	589589	6972143	439	-90	0	69	AC
NSTAC309	590588	6971298	438	-90	0	51	AC
NSTAC310	590508	6971301	437	-90	0	60	AC
NSTAC311	590406	6971303	436	-90	0	44	AC
NSTAC312	590303	6971307	431	-90	0	49	AC
NSTAC313	590217	6971303	431	-90	0	54	AC
NSTAC314	590114	6971291	431	-90	0	57	AC
NSTAC315	590013	6971296	431	-90	0	41	AC
NSTAC316	589879	6971295	430	-90	0	46	AC
NSTAC317	589809	6971283	431	-90	0	66	AC
NSTAC318	589717	6971303	431	-90	0	75	AC
NSTAC319	589606	6971295	431	-90	0	69	AC
NSTAC320	589781	6975860	431	-90	0	60	AC
NSTAC321	589821	6975837	431	-90	0	66	AC
NSTAC322	589851	6975820	431	-90	0	66	AC
NSTAC323	589740	6975788	432	-90	0	57	AC
NSTAC324	589840	6975783	431	-90	0	68	AC
NSTAC325	589779	6975748	432	-90	0	63	AC
NSTAC326	589803	6975747	432	-90	0	56	AC
NSTAC327	589837	6975734	432	-90	0	59	AC
NSTAC328	589856	6975895	431	-90	0	60	AC
NSE001	593978	6977958	425	-90	0	15	AC
NSE002	593731	6977996	429	-90	0	72	AC
NSE003	593545	6978025	426	-90	0	69	AC
NSE004	593341	6978061	427	-90	0	86	AC
NSE005	593109	6978105	426	-90	0	99	AC
NSE006	592848	6978388	426	-90	0	66	AC
NSE007	592611	6978324	428	-90	0	63	AC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSE008	592371	6978260	427	-90	0	100	AC
NSE009	591874	6978123	427	-90	0	67	AC
NSE038	591292	6976763	430	-90	0	66	AC
NSE039	591189	6976756	430	-90	0	58	AC
NSE040	591084	6976739	429	-90	0	58	AC
NSE041	590992	6976757	430	-90	0	54	AC
NSE042	590843	6976746	429	-90	0	60	AC
NSE043	592929	6975328	432	-90	0	13	AC
NSE044	592816	6975325	431	-90	0	15	AC
NSE045	592698	6975333	431	-90	0	22	AC
NSE046	592604	6975333	431	-90	0	41	AC
NSE047	592517	6975337	431	-90	0	46	AC
NSE048	592391	6975323	431	-90	0	33	AC
NSE049	592267	6975345	432	-90	0	56	AC
NSE050	592189	6975325	433	-90	0	59	AC
NSE051	592103	6975306	431	-90	0	63	AC
NSE052	591989	6975327	432	-90	0	44	AC
NSE053	591880	6975329	432	-90	0	50	AC
NSE054	591802	6975334	433	-90	0	30	AC
NSE055	591699	6975312	432	-90	0	22	AC
NSE056	591596	6975325	432	-90	0	39	AC
NSE057	591487	6975339	432	-90	0	45	AC
NSE058	591393	6975323	432	-90	0	33	AC
NSE059	591288	6975347	432	-90	0	43	AC
NSE060	591206	6975342	433	-90	0	42	AC
NSE061	591098	6975334	433	-90	0	35	AC
NSE062	590996	6975332	434	-90	0	36	AC
NSE063	590907	6975334	433	-90	0	42	AC
NSE064	590792	6975329	433	-90	0	47	AC
NSE065	590700	6975331	433	-90	0	41	AC
NSE066	592505	6974404	434	-90	0	49	AC
NSE067	592408	6974402	435	-90	0	55	AC
NSE068	592339	6974402	435	-90	0	67	AC
NSE069	592197	6974391	435	-90	0	41	AC
NSE070	592112	6974383	435	-90	0	43	AC
NSE071	592015	6974391	435	-90	0	33	AC
NSE072	591900	6974387	435	-90	0	52	AC
NSE073	591793	6974388	436	-90	0	49	AC
NSE074	591726	6974395	436	-90	0	58	AC
NSE075	591604	6974401	436	-90	0	50	AC
NSE076	591500	6974387	437	-90	0	45	AC
NSE077	591409	6974389	436	-90	0	60	AC
NSE078	591326	6974401	437	-90	0	66	AC
NSE079	591214	6974386	438	-90	0	48	AC





Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
NSE080	591083	6974404	437	-90	0	68	AC
NSE081	591030	6974403	438	-90	0	54	AC
NSE082	590920	6974402	438	-90	0	51	AC
NSE083	590793	6974379	438	-90	0	48	AC
NSE084	590692	6974393	439	-90	0	53	AC
NSE085	591840	6973066	439	-90	0	21	AC
NSE086	591758	6973096	438	-90	0	9	AC
NSE087	591643	6973090	437	-90	0	32	AC
NSE088	591563	6973086	440	-90	0	17	AC
NSE089	591454	6973096	439	-90	0	44	AC
NSE090	591331	6973102	439	-90	0	48	AC
NSE091	591216	6973096	439	-90	0	48	AC
NSE092	591114	6973105	439	-90	0	75	AC
NSE093	591011	6973098	440	-90	0	46	AC
NSE094	590915	6973100	440	-90	0	53	AC
NSE095	590834	6973076	440	-90	0	84	AC
NSE096	590722	6973103	442	-90	0	64	AC
23NSTRC019	588154	6975311	432	-90	0	29	RC
23NSTRC020	588289	6975331	426	-90	0	29	RC
23NSTRC021	588598	6975328	433	-90	0	78	RC
23NSTRC022	588895	6975321	428	-90	0	72	RC
23NSTRC023	589143	6975293	433	-90	0	71	RC
23NSTRC024	589417	6975339	427	-90	0	86	RC
23NSTRC030	586509	6974411	433	-90	0	96	RC
23NSTRC031	586686	6974425	436	-90	0	36	RC
23NSTRC032	586807	6974416	434	-90	0	36	RC
23NSTRC033	586944	6974412	436	-90	0	30	RC
23NSTRC034	587084	6974403	434	-90	0	41	RC
23NSTRC035	587277	6974406	437	-90	0	77	RC
23NSTRC036	587396	6974414	435	-90	0	65	RC
23NSTRC037	587560	6974370	437	-90	0	54	RC
23NSTRC038	587720	6974441	436	-90	0	48	RC
23NSTRC039	587845	6974396	437	-90	0	55	RC
23NSTRC040	587994	6974398	436	-90	0	55	RC
23NSTRC041	588145	6974371	437	-90	0	24	RC
23NSTRC042	588298	6974402	436	-90	0	42	RC
23NSTRC043	588463	6974411	440	-90	0	54	RC
23NSTRC044	588595	6974399	438	-90	0	49	RC
23NSTRC045	588757	6974391	439	-90	0	72	RC
23NSTRC046	588898	6974391	437	-90	0	54	RC
23NSTRC047	589046	6974416	440	-90	0	66	RC
23NSTRC048	589148	6974463	437	-90	0	66	RC
23NSTRC049	589360	6974400	441	-90	0	60	RC
23NSTRC050	589506	6974415	441	-90	0	31	RC



Hole ID	MGA East	MGA North	RL	Dip	Azi	EOH (m)	Hole Type
23NSTRC051	589658	6974392	442	-90	0	43	RC
23NSTRC053	589963	6974428	442	-90	0	60	RC
23NSTRC054	590056	6974426	441	-90	0	72	RC
23NSTRC055	590257	6974428	442	-90	0	78	RC
23NSTRC056	590400	6974415	445	-90	0	84	RC
23NSTRC057	590562	6974403	443	-90	0	72	RC
23NSTRC058	586427	6973498	437	-90	0	85	RC
23NSTRC059	586605	6973484	437	-90	0	43	RC
23NSTRC060	586914	6973499	437	-90	0	54	RC
23NSTRC061	587195	6973495	432	-90	0	60	RC
23NSTRC062	587405	6973500	433	-90	0	61	RC
23NSTRC063	587622	6973491	432	-90	0	55	RC
23NSTRC064	587910	6973492	433	-90	0	73	RC
23NSTRC068	588938	6973487	435	-90	0	30	RC
23NSTRC069	589179	6973569	435	-90	0	48	RC
23NSTRC070	589431	6973558	436	-90	0	61	RC
23NSTRC071	589620	6973571	437	-90	0	66	RC
23NSTRC072	589914	6973466	438	-90	0	60	RC
23NSTRC073	590130	6973485	443	-90	0	43	RC
23NSTRC074	590396	6973489	443	-90	0	78	RC
23NSTRC075	590676	6973505	446	-90	0	90	RC
23NSTRC076	589577	6973580	435	-90	0	152	RC
23NSTRC077	586385	6973758	430	-90	0	222	RC

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Page 29

# **Appendix 2: Composite Samples for Head Analysis**

Sample ID	Hole ID	MGA East	MGA North	To (m)	From (m)
309339	NSTAC057	6974948	590000	63	64
311738	NSTAC080	6974955	587687	35	36
308490	NSTAC102	6973916	588413	57	58
312176	NSTAC129	6973160	587877	69	71
312177	NSTAC129	6973160	587877	70	71
312198	NSTAC130	6973165	587771	70	71

 Table 7: Samples used to form composite sample for head analysis.



# **Appendix 3: Specific Gravity Data**

Sample ID	Hole ID	MGA East	MGA North	To (m)	From (m)	SG
310705	NSTAC062	6974943	589506	42	43	2.79
310706	NSTAC062	6974943	589506	45	46	2.76
310708	NSTAC062	6974943	589506	49	50	2.79
312023	NSTAC114	6973907	587210	33	34	2.81
312024	NSTAC114	6973907	587210	34	35	2.72
312025	NSTAC114	6973907	587210	35	36	2.7
311142	NSTAC138	6973153	586881	20	21	2.8
311143	NSTAC138	6973153	586881	21	22	2.6
311144	NSTAC138	6973153	586881	22	23	2.58
311145	NSTAC138	6973153	586881	23	24	2.72
311146	NSTAC138	6973153	586881	24	25	2.65
310837	NSTAC138	6973153	586881	17	18	2.6
310838	NSTAC138	6973153	586881	18	19	2.56
310839	NSTAC138	6973153	586881	19	20	2.63
311046	NSTAC144	6973127	586205	42	43	2.59
311047	NSTAC144	6973127	586205	43	44	2.68
311048	NSTAC144	6973127	586205	44	45	2.65
311049	NSTAC144	6973127	586205	45	46	2.65
311050	NSTAC144	6973127	586205	46	47	2.66
311355	NSTAC160	6976716	590698	29	30	2.79
311356	NSTAC160	6976716	590698	30	31	2.73
311357	NSTAC160	6976716	590698	31	32	2.74
311358	NSTAC160	6976716	590698	32	33	2.75
313769	NSTAC182	6975322	589688	42	43	2.73
313770	NSTAC182	6975322	589688	43	44	2.68
313771	NSTAC182	6975322	589688	44	45	2.68
313772	NSTAC182	6975322	589688	45	46	2.68

Table 5: Specific gravity (SG) results.



Sample ID	Hole ID	MGA East	MGA North	To (m)	From (m)	SG
313773	NSTAC182	6975322	589688	46	47	2.67
313774	NSTAC182	6975322	589688	47	48	2.65
313775	NSTAC182	6975322	589688	48	49	2.66
313776	NSTAC182	6975322	589688	49	50	2.65
313777	NSTAC182	6975322	589688	50	51	2.68
313778	NSTAC182	6975322	589688	51	52	2.68
313779	NSTAC182	6975322	589688	52	53	2.65
313780	NSTAC182	6975322	589688	53	54	2.58
313781	NSTAC182	6975322	589688	54	55	2.67
313782	NSTAC182	6975322	589688	55	56	2.69
313783	NSTAC182	6975322	589688	64	65	2.68
313784	NSTAC182	6975322	589688	65	66	2.67
312026	NSTAC318	6971303	589717	26	27	2.59
308319	NSTAC092	6973903	589414	21	22	2.64
308320	NSTAC092	6973903	589414	22	23	2.61
308321	NSTAC092	6973903	589414	23	24	2.96
308322	NSTAC092	6973903	589414	24	25	2.63
308323	NSTAC092	6973903	589414	25	26	2.65
311489	NSTAC067	6974951	589002	24	25	2.71
311490	NSTAC067	6974951	589002	25	26	2.69
311491	NSTAC322	6975820	589851	32	33	2.72
311492	NSTAC322	6975820	589851	33	34	2.71
311648	NSTAC075	6974950	588200	50	51	2.73
311649	NSTAC075	6974950	588200	51	52	2.76
311651	NSTAC323	6975788	589740	35	36	2.66
311652	NSTAC076	6974911	588105	0	1	2.57
311735	NSTAC080	6974955	587687	32	33	2.65
311736	NSTAC080	6974955	587687	33	34	2.65
311737	NSTAC080	6974955	587687	34	35	2.6
311739	NSTAC080	6974955	587687	36	37	2.62



Sample ID	Hole ID	MGA East	MGA North	To (m)	From (m)	SG
311740	NSTAC080	6974955	587687	37	38	2.63
311774	NSTAC082	6974973	587484	0	1	2.51
311775	NSTAC082	6974973	587484	1	2	2.55
311776	NSTAC082	6974973	587484	2	3	2.52
311777	NSTAC082	6974973	587484	3	4	2.54
311778	NSTAC082	6974973	587484	8	9	2.62
311779	NSTAC082	6974973	587484	9	10	2.62
311780	NSTAC082	6974973	587484	10	11	2.63
311781	NSTAC082	6974973	587484	11	12	2.58
311782	NSTAC082	6974973	587484	12	13	2.65
311783	NSTAC082	6974973	587484	13	14	2.64
311784	NSTAC082	6974973	587484	14	15	2.56
311812	NSTAC083	6974948	587403	40	41	2.82
311813	NSTAC083	6974948	587403	41	42	2.81
311814	NSTAC083	6974948	587403	42	43	2.89
311815	NSTAC083	6974948	587403	43	44	2.8
311816	NSTAC291	6973899	589509	49	50	2.55
311817	NSTAC291	6973899	589509	50	51	2.63
311818	NSTAC291	6973899	589509	51	52	2.59
311819	NSTAC291	6973899	589509	52	53	2.57
311927	NSTAC303	6972216	590084	21	22	2.92
311928	NSTAC106	6973908	588005	39	40	2.67
311929	NSTAC106	6973908	588005	40	41	2.84
311930	NSTAC106	6973908	588005	41	42	2.69
311931	NSTAC106	6973908	588005	42	43	2.68



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Page 33

# Appendix 4: Specific Gravity Composite Samples

Sample ID	Hole ID	MGA East	MGA North	To (m)	From (m)
308412	NSTAC098	6973883	588797	28	29
308413	NSTAC098	6973883	588797	29	30
308408	NSTAC098	6973883	588797	24	25
308410	NSTAC098	6973883	588797	26	27
308409	NSTAC098	6973883	588797	25	26
308406	NSTAC098	6973883	588797	22	23
313268	NSTAC170	6976734	589681	29	30
313267	NSTAC170	6976734	589681	28	29
313269	NSTAC170	6976734	589681	30	31
313270	NSTAC170	6976734	589681	31	32
313271	NSTAC170	6976734	589681	32	33
313273	NSTAC170	6976734	589681	34	35
314382	23NSTRC030	6974411	586509	33	34
314585	23NSTRC040	6974398	587994	30	31
314586	23NSTRC040	6974398	587994	31	32
314625	23NSTRC044	6974399	588595	20	21
314624	23NSTRC044	6974399	588595	19	20
314623	23NSTRC044	6974399	588595	18	19
314659	23NSTRC046	6974391	588898	28	29
314767	23NSTRC053	6974428	589963	53	54
314842	23NSTRC056	6974415	590400	76	77
314841	23NSTRC056	6974415	590400	75	76
314984	23NSTRC056	6974415	590400	65	66
314089	23NSTRC063	6973491	587622	49	50
314086	23NSTRC063	6973491	587622	46	47
314085	23NSTRC063	6973491	587622	45	46
314011	23NSTRC070	6973558	589431	33	34
313992	23NSTRC071	6973571	589620	38	39

**Table 6:** Samples blended to form composite sample for specific gravity test.



314255	23NSTRC076	6973580	589577	35	36
314254	23NSTRC076	6973580	589577	34	35
314257	23NSTRC076	6973580	589577	37	38
VTM010 blend					



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### Appendix 5: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Victory Metals Australia (ASX:VTM) completed three aircore (AC) drilling campaigns at North Stanmore during the period May–December 2022 and a reverse circulation (RC) drilling programme from January–March 2023.</li> <li>AC and RC drill samples were collected as 1-m samples from the rig cyclone and placed on top of black plastic, that was laid on the natural ground surface to prevent contamination, in separate piles and in orderly rows.</li> <li>A hand-held trowel was used to collect 4-m composite samples from the 1-m piles. Compositing did not account for lithology changes.</li> <li>These composite samples weighed between 2 and 3 kg.</li> <li>A handheld pXRF analyser (Olympus Vanta VMR with a 4 W, 50 kV rhodium anode tube and a large-area, silicon-drift detector) was used to determine anomalous REE geochemistry (La, Ce, Nd and Y) from the 4-m composites.</li> <li>The pXRF was operated using 3- beam Geochem mode, where an analysis time of 45 s for each beam was used.</li> <li>The pXRF results are not considered reliable without calibration using chemical analysis from an accredited laboratory. However, the integrity of the pXRF results was checked by analysing duplicate samples,sample blanks and two different certified reference</li> </ul>



Criteria	JORC Code explanation	Commentary
		materials (CRMs).
		<ul> <li>The pXRF data were used as a guide to the relative presence or absence of certain elements, including REEs vectors (La, Ce, Nd and Y) to help direct the selection of samples for laboratory analysis. The pXRF data have not been used in the MRE.</li> </ul>
		<ul> <li>1-m samples from anomalous composite samples (TREYO &gt;200 ppm) were submitted to ALS Perth further analysis.</li> </ul>
		<ul> <li>REE anomalism thresholds were determined by VTM's technical lead based on historical assay data.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	<ul> <li>AC drilling uses a three-bladed steel or tungsten drill bit to penetrate the weathered layer of loose soil and rock fragments. The drill rods are hollow and feature an inner tube with an outer barrel (similar to RC drilling).</li> <li>The AC drill programme used small compressors (750 cfm/250 pai) to drill holog into the</li> </ul>
		psi) to drill holes into the weathered layer of loose soil and rock fragments.
		<ul> <li>After drilling was complete, an injection of compressed air was unleashed into the space between the inner tube and the drill rod's inside wall, which flushed the cuttings up and out of the drillhole through the rod's inner tube, decreasing the chance of cross-contamination.</li> </ul>
		<ul> <li>The AC drill campaigns were performed by Seismic Drilling of Wangara and Orlando Drilling from Perth.</li> </ul>
		<ul> <li>The RC drill programme was conducted by Orlando Drilling Pty Ltd of Perth, WA. Reverse</li> </ul>



Criteria	JORC Code explanation	Commentary
Drill sample	Method of recording and assessing	<ul> <li>circulation is a compressed air drilling method that uses a 5.5- inch drill bit face hammer with 6 m rods. The rig was mounted on a Mercedes 8 x 8 truck with a Schramm 685 using a 1,350 cfm/500 psi onboard compressor. A Hurricane 2,100 cfm/1,000 psi compressor (booster) was occasionally used.</li> <li>As required by VTM's WHS system, the drill rigs were regularly inspected by VTM's onsite geologist. The rigs were equipped with automatic rod handlers, fire and dust suppression systems, mobile and radio communications, and were operated by qualified and ticketed safety trained operators and offsiders.</li> <li>The majority of the samples</li> </ul>
recovery	<ul> <li>core and chip sample recoveries and results assessed.</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 grained material.</li> </ul>	<ul> <li>The majority of the samples were recovered dry.</li> <li>Sample recovery was visually monitored and qualitatively assessed to be good.</li> <li>There is no evidence of any sample bias from loss/gain of material from the cyclone.</li> <li>No statistical relationship exists between sample recovery and grade. Sample bias due to preferential loss or gain of fine or coarse material has not been noted.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <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>	<ul> <li>All AC and RC samples were logged for lithology, alteration, quartz veins, colour and fabrics using industry standard logging software on a notebook computer.</li> <li>Representative AC and RC samples collected from 2-m intervals were retained in chip trays and kept for reference at VTM's facilities. All chip trays were photographed.</li> <li>Logging is qualitative in nature.</li> </ul>

'THE FUTURE OF AUSTRALIAN RARE EARTHS'

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>4-m composite samples were analysed in the field with a handheld Olympus Vanta XRF using 3-beam Geochem mode, where an analysis time of 45 s for each beam was used. The integrity of the pXRF results was checked by analysing duplicate samples, sample blanks and two different CRMs. The results were used to inform the relative presence or absence of certain elements, including REEs, and to aid the selection of 1-m composite samples for further analysis. The pXRF data have not been used in the MRE.</li> <li>Anomalous 1-m samples were analysed by ALS Perth using ME-MS81 (lithium tetraborate fusion digestion, and inductively coupled plasma mass spectrometry (ICP-MS) analysis) and ME-4ACD81 (four acid digestion and MS analysis) for transition elements and scandium (Sc). ME analysis by ICP-MS is appropriate for analysing rare earth elements, trace element and whole rock geochemistry. The analysis is a total technique that analyses resistive minerals as well.</li> <li>Quality control of the assaying comprised the regular insertion of CRMs (1:30) and blanks (beach sand; 1:50).</li> <li>Internal lab CRMs report low biases is some of the REEs. Acceptable levels of accuracy</li> </ul>
		and precision have been established.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <li>Verification of significant intersections was undertaken by VTM's independent consultant Prof Kenneth Collerson (PhD, FAusIMM).</li> </ul>
	Documentation of primary data, data	No twin holes have been drilled.



Criteria	JORC Code explanation	Commentary
	entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	<ul> <li>Primary logging data (collar information, lithology etc) were logged directly into an electronic logging sheet to avoid transcription errors.</li> <li>ALS labs routinely re-assayed anomalous assays as part of their normal QAQC procedures.</li> </ul>
Location of data points	<ul> <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> <li>All drillhole coordinates are in GDA94 Zone 50.</li> <li>All holes were located by handheld GPS with an accuracy of ±5 m.</li> <li>No downhole surveys have been conducted due to the shallow nature of the drillholes.</li> <li>No digital elevation model is available. Only handheld GPS drillhole collar elevations are available; hence, the topographic control is of low quality.</li> <li>Considering the sub-horizontal nature of the ore body and the relatively flat topography, the Competent Person considers the topographic control adequate to support an Inferred Mineral Resource.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drilling at Stanmore and Mafeking Bore was on 100 m drillhole spacing and 400 m line spacing.</li> <li>The drillhole spacing is appropriate to imply geological and grade continuity, as required for estimating Inferred Mineral Resources.</li> <li>.</li> <li>Sample compositing (4-m) has been applied as discussed above.</li> </ul>
Orientation of data in relation to geological	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to	<ul> <li>Mineralisation occurs in sub- horizontal saprolitic clay horizons. Vertical drilling was.</li> </ul>



Criteria	JORC Code explanation	Commentary
structure	<ul> <li>which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>used to intersect mineralisation near perpendicular.</li> <li>The application of a semi-regular drilling grid over a laterally extensive, locally variable, mineralised regolith, combined with the horizontal nature of the mineralisation and vertical hole dip is unlikely to have yielded a sampling bias.</li> <li>Drilling orientation is considered appropriate with no obvious bias.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <li>All samples were packaged and managed by VTM personnel.</li> <li>Larger packages of samples were couriered to ALS Perth, from Cue, by professional transport companies in sealed bulka bags.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>RSC reviewed and validated the drill data when it was uploaded into Microsoft Access via a series of validation queries.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <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> <li>North Stanmore Mineral Resource and Exploration Target are located within E 20/871.</li> <li>North Stanmore forms part of a broader tenement package of exploration tenements located in the Cue Goldfields, in the Murchison region of Western Australia.</li> <li>Native Title claim no. WC2004/010 (Wajarri Yamatji #1) was registered by the Yamatji Marlpa Aboriginal Corp in 2004 and covers the entire project area, including Coodardy and Emily Wells.</li> <li>E 20/871 is held 100% by Victory Metals. All tenements are</li> </ul>



Criteria	JORC Code explanation	Commentary
		secured by the DMIRS (WA Government). All tenements are granted, in a state of good standing and have no impediments.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The area has been previously explored by Harmony Gold (2007–2010) in JV with Big Bell Ops, Mt Kersey (1994–1996) and Westgold (2011) and Metals Ex (2013).</li> </ul>
		<ul> <li>Harmony Gold intersected 3 m</li> <li>@ 2.5 g/t Au and 2 m @ 8.85 g/t</li> <li>Au in the Mafeking Bore area, but did not follow up these intersections.</li> </ul>
		<ul> <li>Other historical drillholes in the area commonly intersected &gt;100 ppb Au.</li> </ul>
		<ul> <li>Exploration by these companies has been piecemeal and not regionally systematic.</li> </ul>
		<ul> <li>There has been no historical exploration for REEs in the tenement.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>North Stanmore lies within the Meekatharra-Mount Magnet greenstone belt. The belt comprises metamorphosed volcanic, sedimentary and intrusive rocks. Mafic and ultramafic sills are abundant in all areas of the Cue greenstones. Gabbro sills are often differentiated with basal pyroxenite and/or peridotite and upper leucogabboric units.</li> </ul>
		<ul> <li>The greenstones are deformed by large scale fold structures which are dissected by major faults and shear zones, which can be mineralised. Two large suites of granitoids intrude the greenstone belts.</li> </ul>
		E20/871 occurs within the Cue granite, host to many small but uneconomic gold mines in the



Criteria	JORC Code explanation	Commentary
		Cue area.
		<ul> <li>The productive gold deposits in the region can be classified into six categories:</li> </ul>
		<ul> <li>Shear zones and/or quartz veins within units of alternating banded iron formation and mafic volcanics, e.g. Tuckanarra and Break of Day.</li> </ul>
		<ul> <li>Shear zones and/or quartz veins within mafic or ultramafic rocks, locally intruded by felsic porphyry, e.g. Cuddingwarra and Great Fingall.</li> </ul>
		<ul> <li>Banded jaspilite and associated clastic sedimentary rocks and mafics, typically sheared and veined by quartz, e.g. Tuckabianna.</li> </ul>
		<ul> <li>Quartz veins in granitic rocks, close to greenstone contacts, e.g. Buttercup.</li> </ul>
		Hydrothermally altered clastic sedimentary rocks, e.g. Big Bell.
		<ul> <li>Eluvial and colluvial deposits e.g. Lake Austin, Mainland.</li> </ul>
		<ul> <li>A post tectonic differentiated alkaline mafic to ultramafic intrusion (North Stanmore Intrusion) cuts the Archaean greenstone belt lithologies.</li> </ul>
Drill hole Information	<ul> <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:</li> <li>easting and northing of the drill hole</li> </ul>	The documentation for completed drillhole locations at the North Stanmore are provided in Appendix 1 of this announcement. Downhole intercepts have been provided in VTM's previous announcements and are not repeated here.
	<ul> <li>collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	• dip and azimuth of the hole	

Criteria	JORC Code explanation	Commentary
	<ul> <li>down hole length and interception depth</li> <li>hole length.</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>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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> <li>Raw composited sample intervals have been reported and aggregated where appropriate in VTM's previous announcements.</li> <li>Weighted averaging of results completed for air core drilling and reverse circulation drilling.</li> <li>There has been no cutting of high grades.</li> <li>Reporting has included grades &gt;200 ppm.</li> <li>Multielement results (REE) are converted to oxide (REO) using element-to-oxide stoichiometric conversion factors.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Drilling is considered to have been predominantly carried out at right angles to the horizontally oriented saprolitic clay horizons.where possible.</li> <li>AC and RC drill intervals and intersections have been reported in previous announcements as downhole widths. Insufficient information is available at this stage to report true widths.</li> </ul>
Diagrams	<ul> <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</li> </ul>	<ul> <li>VTM has included various maps, figures and sections in the body of its announcements that display the sample results in geological context. Maps and sections of the MRE are provided in this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	a plan view of drill hole collar locations and appropriate sectional views.	
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.	<ul> <li>All material drillhole results have been reported in VTM's previous announcement. The drillholes used in the MRE are specified in Appendix 1.</li> </ul>
Other substantive exploration data	<ul> <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> <li>Summary of the sighter 2023 Core Resources Testwork</li> <li>During 2023, VTM engaged Core Resources to undertake Initial bench scale testwork on various composite samples.</li> <li>The objective of the testwork programme was to develop a suitable set of leach parameters to further advance extensive diagnostic leach testwork, across a broader range of samples, from the North Stanmore Project</li> <li>A composite sample was prepared comprising of six samples. Analysis was completed on the composite sample and a number of individual core samples. Analysis Included:         <ul> <li>ICP- MS analysis (fusion for solids)</li> <li>QXRD</li> </ul> </li> <li>Testwork conditions were Initially based on typical conditions for ionic clay-based rare earth systems. During the testwork programme, lower pH leaching conditions were trialled using both sulphuric acid and hydrochloric acid.</li> <li>Final test conditions used ammonium sulphate at a concentration of 0.5 M to extract</li> </ul>





Criteria	JORC Code explanation	Commentary
		extract REEs from fine grained colloidal minerals aggregated within the samples.
		<ul> <li>The test results on the composite blend demonstrated target HREE extraction of up to 51%, including up to 44% Dy and 45% Tb extraction at pH 0.7. Increase of pH to 1 resulted in marginal reductions in HREE extraction.</li> </ul>
		<ul> <li>Corresponding impurity extraction, namely iron and aluminium, from the composite sample was reported to be relatively low in the leach testwork. A small increase in impurity extraction was evident with reduction in leach pH below 1, while comparable iron and aluminium extraction was demonstrated between pH 2 and 1.</li> </ul>
		Summary of the Bulk Density testwork
		<ul> <li>VTM carried out two sets of bulk density testwork based on pulp material and solid material.</li> </ul>
		<ul> <li>The testwork on the pulverised material was conducted by ALS laboratory in Malaga, in May 2023, from 81 samples across North Stanmore and 19 holes, with the tests carried out with the use of a pycnometer.</li> </ul>
		<ul> <li>The pulps were recovered from storage, which were used from previous analytical testwork, with the collection method referred in Sampling Techniques referred above.</li> </ul>
		The average specific gravity ratio from the 81 samples was 2.67.
		<ul> <li>Testwork on the solid material was conducted by HRL testing in Brisbane during June 2023, from a composite blend of 33 drill</li> </ul>



Page 47

Criteria	JORC Code explanation	Commentary
		samples known as Sample ID VTM010, which were collected across North Stanmore from 31 holes, with the test carried out with the use of a pycnometer.
		<ul> <li>The pulps were collected in May 2023 from the drill site locations by the VTM exploration team, with the collection of samples being carried out utilising the method referred to in Sampling Techniques above.</li> </ul>
		The average specific gravity ratio reported from the composite blend of 33 samples was 2.50.
Further work	<ul> <li>The nature and scale of planned further work (eg 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</li> </ul>	Further testwork will focus on upgrading of REEs via beneficiation, optimisation of leach parameters, as well as variability leach testing of individual samples. Variability leach testwork will inform geo- metallurgical variability across the North Stanmore Project.
	not commercially sensitive.	<ul> <li>Further drilling will target gold, scandium, base metals and rare earth elements.</li> </ul>
		<ul> <li>Further drilling to test the validity of the Exploration Target.</li> </ul>
		<ul> <li>Detailed low-level regional aerial magnetic surveys have been completed over the priority target areas, as identified by VTM.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>All relevant drill data have been entered into an Access database by RSC, where various validation checks were performed including duplicate entries, sample overlap and missing sample intervals.</li> <li>RSC has undertaken an independent review of the drill</li> </ul>



Criteria	JORC Code explanation	Commentary
		data, including examination of original drilling logs and sampling data, original assay data and chip-tray photographs.
		<ul> <li>Assessment of the data confirms that it is fit for purpose of resource estimation and classification in a suitable category.</li> </ul>
Site Visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>No site visit has been conducted by RSC due to the early-stage nature of the project.</li> </ul>
Geological interpretation	<ul> <li>Case.</li> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The REE mineralisation at North Stanmore is contained within a flat-lying saprolite clay horizon, which is covered with 0–36 m of unconsolidated colluvium. The saprolite thickness ranges from 14–58 m, and overlies a basement of granite, mafic rocks, and other felsic rocks.</li> <li>Geological logging and assay data were used in the development of the current geological model. Lithological domains were created using implicit 3-D modelling software and based on downhole geological logging.</li> <li>Assumptions are not considered to have major implications on the overall geometries of the various geological domains. Geological continuity is relatively simple to establish from hole to hole and the deposit is not structurally complex.</li> <li>In the Competent Person's opinion, alternative interpretations of the geology are not likely to deviate much</li> </ul>



Criteria	JORC Code explanation	Commentary
		from the current model, and will have limited impact on the Mineral Resource.
Dimensions	<ul> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul> <li>The current extent of the North Stanmore Mineral Resource spans ~3.3 km north-south and ~4.5 km east-west.</li> <li>The mineralised unit ranges in thickness from 14–58 m.</li> </ul>
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control</li> </ul>	<ul> <li>Resource estimation was undertaken as follows.</li> <li>A block model was built using a parent cell of 50 m x 200 m x 4 m (x,y,z).</li> <li>Lithological domains were created using implicit modelling workflows and based on the downhole geological logging. The saprolite geological domain lies between the base of the cover material and top of the hard rock basement. Estimation domains were established using a grade threshold of 150 ppm TREYO within the saprolite geological domain. Intervals that did not contain TREYO grades were excluded from the estimation domains. No sub-domaining was used. The risk of extrapolation was addressed by applying a perimeter buffer of approximately 200 m areas of denser drill spacing as a first-pass constraint to the resource model. This approach was supported by a visual review of the kriging efficiencies and slope of regression for the estimate of TREYO.</li> <li>Hard domain boundaries were utilised for the estimation of all variables following the review</li> </ul>
	<ul><li>the resource estimates.</li><li>Discussion of basis for using or not using grade cutting or capping.</li></ul>	<ul><li>of contact analysis plots.</li><li>Geostatistics, variography and KNA was undertaken in</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill</li> </ul>	various geostatistical softwares to support the search and estimation parameters used.
	hole data, and use of reconciliation data if available.	<ul> <li>A composite length of 4 m was selected based on the dominant sample length.</li> </ul>
		A top-cut of 3,000 ppm was used to remove outliers.
		<ul> <li>All variograms display satisfactory structure and an acceptable level of confidence for the estimation of Inferred Mineral Resources.</li> </ul>
		<ul> <li>TREYO and all individual REOs were estimated using Ordinary Kriging (OK).</li> <li>Estimation was completed using two passes and search neighbourhood parameters supported by KNA. The grade of each block was estimated using a minimum of 10 and a maximum of 40 samples, a maximum of five samples per drillhole and discretisation of 10 x 10 x 2 (x-y-z).</li> </ul>
		<ul> <li>The OK estimate was validated visually by comparing input and output means, histograms and using swath plots.</li> </ul>
Moisture	Whether the tonnages are     estimated on a dry basis or with	<ul> <li>Tonnages are estimated on an in-situ dry-weight basis.</li> </ul>
	natural moisture, and the method of determination of the moisture content.	<ul> <li>No moisture data has been reviewed.</li> </ul>
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul> <li>A cut-off of 3,000 TREYO was applied.</li> </ul>
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the</li> </ul>	<ul> <li>The Competent Person considers that the deposit may be mined via a conventional open pit method.</li> <li>The Competent Person is not aware of any major topographical, geotechnical or hydrological constraints that would impact the potential for</li> </ul>



Criteria	JORC Code explanation	Commentary
	assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. • The basis for assumptions or	eventual economic extraction.
Metallurgical factors or assumptions	The basis for assumptions of predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>Metallurgical testwork has been completed on a composite sample created from six unique samples distributed across the deposit.</li> <li>Test conditions were selected based on the conditions used for ionic clay-hosted rare earth mineralisation, and included 50–60°C and low pH (0.75–1). Both sulphuric acid and hydrochloric acid were tested, and a final test was conducted using ammonium sulphate, at a concentration of 0.5 M to extract the ionic bound REE, and sulphuric acid to extract colloidal REE.</li> <li>Corresponding impurity extraction, namely Fe and Al, from the composite sample was reported to be relatively low in the leach testwork. A small increase in impurity extraction was evident with a reduction in leach pH (below pH 1), while comparable Fe and Al extraction was demonstrated using a pH of 1 and 2.</li> </ul>
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of</li> </ul>	<ul> <li>No assumptions regarding possible waste and process residue disposal options have been made.</li> </ul>
	determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the	<ul> <li>Land is used for pastoral grazing suitable for cattle and sheep.</li> <li>Several large drainage systems pass through the deposit including Nallan Creek</li> </ul>



Criteria	JORC Code explanation	Commentary
Bulk density	<ul> <li>determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> <li>Whether assumed or determined. If</li> </ul>	<ul> <li>and Beringarra Creek. All creeks drain into Lake Austin, south of Cue.</li> <li>The Competent Person is not aware of any environmental constraints that would negatively impact the potential for economic extraction.</li> <li>A global assumed bulk density</li> </ul>
	<ul> <li>assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> </ul>	<ul> <li>value of 2.0 g/cm<sup>3</sup> was assigned to the Mineral Resource (saprolite unit which hosts the REE mineralisation).</li> <li>In-situ dry bulk densities was not estimated from the available specific gravity data as the data do not represent in situ bulk density values.</li> <li>Specific gravity from 74 pulp samples and a composite sample returned densities of 2.5–2.8 g/cm<sup>3</sup>.</li> </ul>
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	<ul> <li>The specific gravity results do not represent the in situ bulk density, as it does not account for void spaces due to the sample material being pulverised. Therefore, an assumed in situ dry bulk density value of 2.0 g/cm<sup>3</sup> was selected based on similar geological conditions and mineralisation styles reported in nearby deposits.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal</li> </ul>	<ul> <li>The Competent Person has classified the Mineral Resource in the Inferred category. There is no material classified as Indicated or Measured.</li> <li>The variable drill spacing (often &gt;500 m) and issues relating to the confidence in the data quality including poor topographic control, limited QC</li> </ul>





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	<ul> <li>values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	data and lack of representative bulk density data have limited the Mineral Resource from being classified at a higher level of confidence at the time of reporting.
		<ul> <li>In the Competent Person's opinion, appropriate account has been taken of all relevant factors that affect resource classification.</li> </ul>
		<ul> <li>Portions of the deposit that do not have reasonable prospects for eventual economic extraction are not included in the Mineral Resource. In assessing the reasonable prospects, the Competent Person has evaluated preliminary mining, metallurgical, economic and geotechnical parameters.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resource has     been internally peer reviewed.
Discussion of relative accuracy/confidence	<ul> <li>of Mineral Resource estimates.</li> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be</li> </ul>	<ul> <li>been internally peer reviewed.</li> <li>The expected accuracy of the Mineral Resource is appropriately reflected in the Inferred classification</li> <li>The Competent Person considers the block model to be appropriately estimated based on validation of input and estimated grades through visual assessment, domain grade mean comparisons, and a review of swath plots.</li> <li>The Mineral Resource statement is related to a global estimate of in-situ tonnes and grade. There is potential for uncertainty in local estimation of block grades due to potential subtle variations in the deposit that are not captured in the density of available data.</li> <li>No production data are</li> </ul>
	relevant to technical and economic evaluation. Documentation should include assumptions made and the	available for comparison.





Criteria	JORC Code explanation	Commentary
	<ul> <li>procedures used.</li> <li>These statements of relative accuracy and confidence of the</li> </ul>	
	estimate should be compared with production data, where available.	



