

# EXCEPTIONAL RECOVERIES OF CRITICAL HEAVY RARE EARTH ELEMENTS

#### Highlights

- Outstanding metallurgical recoveries of Heavy Rare Earth Elements (REE) with up to 63.6% Lutetium (Lu), 60% Dysprosium (Dy) and 58% Terbium (Tb) which are very critical and valuable Rare Earth Elements (REE)
- Metal recoveries indicate a significant proportion of REE are ionically adsorbed onto clays, confirming North Stanmore as a deep "fossil" ionically adsorption clay mineral system that preserves an enrichment profile in the regolith
- High recoveries were achieved by leaching using low-cost combined ammonia sulphate (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> and weak sulphuric acid (H<sub>2</sub>SO<sub>4</sub>,) at 50°C with low leach times
- The presence of 20-50 micron grains of REE phosphate minerals could be relict from the REE rich source lithology
- Dy and Tb have a combined value of approximately US\$1,070 per/kg (REO) compared to critical light rare elements Praseodymium (Pr) and Neodymium (Nd) having a combined value of approximately US\$113 per/kg<sup>1</sup>
- HREE are considerably more valuable than the Light Rare Earth Elements (LREE) with LREE enriched systems being typically dominated by Lanthanum (La) and Cerium (Ce) which have a low combined value of approximately US\$3.34 per/kg<sup>2</sup>
- Initial metallurgical test work has maximised recovery of Dy and Tb, two of the most valuable critical REEs
- Potential to increase the excellent recoveries through further metallurgical testing and upgrading the ore prior to leaching
- Victory's recovery metallurgy utilises far more economical recovery techniques compared to environmentally challenging and expensive methods that use hydrochloric acid (HCI)
- Sulphuric acid  $({\rm H_2SO_4})$  costs approximately \$357 per tonne with HCl costing approximately \$1,250 per tonne  $^3$

Victory Metals Limited (ASX:VTM) ("Victory" or "the Company") is pleased to advise it has received initial leach test results from metallurgical test work on samples from the North Stanmore REE Project (North Stanmore or the Project), located approximately 10km north from the town of Cue, Western Australia and bordered to the east by the Great Northern Highway.

The maiden metallurgical results were received from a total of 6 representative samples collected from across the project (refer Figure 7) with results confirming exceptional HREE leachability at North Stanmore. Positive extraction of HREE was the focus over LREE from this maiden metallurgical study,



<sup>&</sup>lt;sup>1</sup>https://www.statista.com/statistics/449838/forecast-average-rare-earth-oxide-prices-globally/

<sup>&</sup>lt;sup>2</sup> https://www.statista.com/statistics/449838/forecast-average-rare-earth-oxide-prices-globally/

<sup>&</sup>lt;sup>3</sup> Refer to table 4 below

with significant recoveries reported of up to 63.6% Lu, 60% Dy and 58% Tb, being critical and very valuable REE. There is potential to increase these excellent recoveries with further metallurgical testing and possibly including upgrading ore material prior to leaching. The high recoveries were achieved economically by leaching using low-cost combined ammonia sulphate (NH4)2SO4 and weak sulphuric acid H<sub>2</sub>SO<sub>4</sub>, at 50°C and low leach times.

Importantly, the metal recoveries indicate a significant proportion of REE are ionically adsorbed clays, confirming North Stanmore as a deep "fossil" ionically adsorption clay mineral system that preserves an enrichment profile in the regolith. The presence of 20-50 micron size grains of REE phosphate minerals identified which could be relict from the REE rich source lithology and warrant further investigation.

The initial leach test results from metallurgical test work forms part of an ongoing metallurgical program being undertaken for Victory by Core Resources (Core). Core, an expert Metallurgical Project Development firm based in Brisbane Australia, provides services covering all aspects of metallurgical testing, process engineering, flowsheet development and site support services for the global mining industry.

Victory's Chief Executive Officer and Executive Director Brendan Clark commented: "This is an instrumental moment for Victory and provides confirmation that the Company's North Stanmore Rare Earth discovery has significantly recovered REE and more importantly high levels of

"Rare Earth Element projects across Australia and the world are diverse with emerging opportunities in an ever-changing market."

"It is important for the market to fully understand the Rare Earth Element sector and that's why Victory's technical team ensures that complete REE assay data is reported to facilitate analysts and investors in making informed investment decisions."

"It is also crucial to understand that not all REE's are "rare" like La and Ce which have a low current combined value of approximately US3.34 per kg (REO)<sup>4</sup>."

Victory's North Stanmore REE Project'key advantages include:

- Excellent grades of REE with an average assay grade of 1010 ppm<sup>5</sup> •
- High recoveries of critical and valuable HREE including Dy and Tb •
- Low acid consumption usage from initial metallurgical test work •
- Non-aggressive recovery method •
- Minimal recovery levels of gangue material e.g. Al and Fe
- Low levels of radioactive elements Uranium (U) and Thorium (Th)
- Scandium (Sc) and potential alluvial gold (Au) credits
- Shallow deposit with potentially low mining costs •
- Solid geopolitical stability •

recoverable Dy and Tb."

Project location advantages

"REE recoveries can be complex and once the metals are recovered gangue materials like Iron (Fe) and Aluminium (AI) are also recovered in the process and can be costly to remove and in some cases make projects uneconomic. Victory is delighted to confirm that its initial metallurgical recoveries confirm low ratios of these gangue metals."

"It is also important to understand that extended leaching times results in larger processing plants to achieve the same result as the recovery process requires less leaching time.



<sup>&</sup>lt;sup>4</sup> https://www.statista.com/statistics/449838/forecast-average-rare-earth-oxide-prices-globally/

<sup>&</sup>lt;sup>5</sup> Refer to Company ASX announcement "RC Drilling Confirms HREE Mineralisation" on 17 April 2023

## **Initial Metallurgical Test Work Program**

Metallurgical testing was undertaken by Core Metallurgy in Brisbane over the months of February to April 2023.

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).

Hole locations are given in Table 1 and identified on Figure 7. Assays of the individual samples are given in Table 2. Head grades of these samples ranged from 423 to 1671 ppm TREY. Maximum DyTb and NdPr yields are given in Table 3.

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

Table 1. Drill collar information with depths of samples used to produce the composite.

Element	309339	311738	308490	312176	312177	312198	VTM001 Blend
La	85	128	82	119	117	359	161
Ce	38	70	28	63	56	69	55
Pr	20.9	26.3	13.7	28.1	20	76	34
Nd	90.3	112.5	54.3	108.5	81	287	131
Sm	19	25	16	23	15	60	29
Eu	5	8	7	6	5	21	9
Gd	17	34	35	20	16	76	35
Tb	3	6	8	3	2	12	7
Dy	18	39	61	20	15	80	45
Ho	4	8	15	4	3	16	11
Er	11	25	45	13	9	53	31
Tm	2	3	6	2	1	8	5
Yb	10	21	41	13	9	50	28
Lu	1	3	6	2	1	7	4
Y	90.9	259	497	120	73	485	301
Hf	4	3	5	5	6	5	5
Nb	4	3	5	7	7	6	7
Ta	0.3	0.3	0.4	0.5	0.5	0.5	0.5
14	0.0	0.0	0.4	0.0	0.0	0.0	0.0
TREY	415	768	914	544	422	1659	883
HREE <sup>1</sup>	162	407	721	202	134	808	474
LREE <sup>2</sup>	253	361	193	341	289	851	409
1 - Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Y							
	Pr, Nd, Sn						

Table 2. Head grades of samples used to produce the composite (VTM-1). Concentrations in ppm.



Element	308490	312198	VTM001 Blend
La	82	359	161
Ce	28	69	55
Pr	13.7	76	34
Nd	54.3	287	131
Sm	16	60	29
Eu	7	21	9
Gd	35	76	35
Тb	8	12	7
Dy	61	80	45
Но	15	16	11
Er	45	53	31
Tm	6	8	5
Yb	41	50	28
Lu	6	7	4
Υ	497	485	301
TREY	915	1659	883
HREE <sup>1</sup>	721	808	474
LREE <sup>2</sup>	194	851	409
Ce/Ce*	0.18	0.10	0.21
	Leach Te	st Yields	
%Dy	60	45	44
%Tb	58	38	45
%Nd	20	9	11
%Pr	16	11	11
1 – Heavy REEs Eu	, Gd, Tb, Dy, Ho, Er,	Tm, Yb, Lu plus Y	
2 – Light REEs La, Ce, Pr, Nd and Sm			

Table 3. Head grades of test samples and maximum REE (DyTb) and (NdPr) recoveries. Concentrations in ppm.

The objective of the initial metallurgical testwork program was to establish a set of leach parameters that would be applicable to a 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. On sample 308490 the HREE extraction was up to 62% with 60% Dy and 58% Tb extraction.

Increasing the pH to 1 resulted in slight reductions in HREE extraction as shown below in Figure 1.



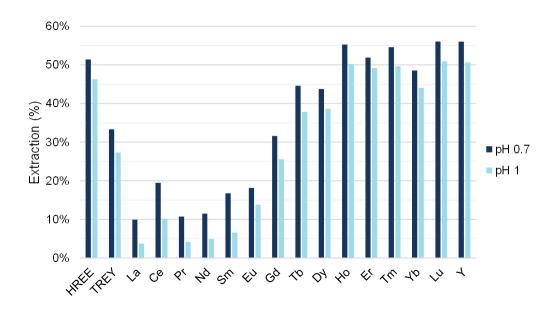


Figure 1: Extraction of REE from Composite VTM001 (ambient temperature, 4-hour residence time, 35% w/w solids, H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>)

Impurity gangue extraction of, for example, Iron and Aluminium, from composite VTM001 was shown to be relatively low in the leach testwork. Only a small increase in impurity extraction with reduction in leach pH below 1, whilst comparable Iron and Aluminium extraction was demonstrated between pH 2 and 1 (Figure 2).

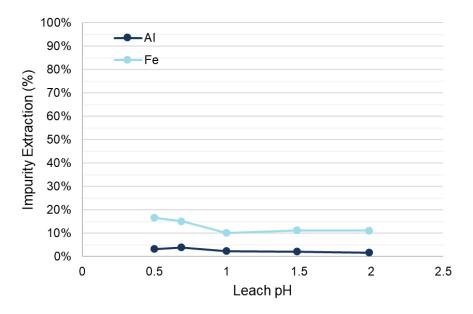


Figure 2: Extraction of Impurity Elements (Iron, Aluminium) from Composite VTM001 with pH (ambient temperature, 4-hour residence time, 35% w/w solids, H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>)

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 3).



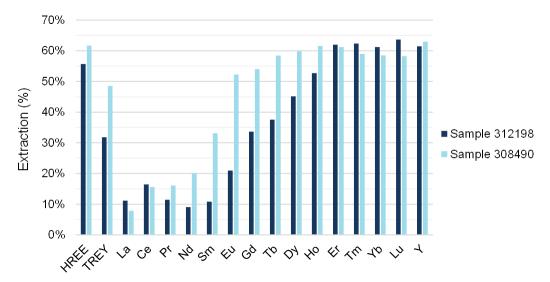


Figure 3: Extraction of REE from Individual Samples (50°C temperature, 4-hour residence time, 25% w/w solids, pH 0.6 with H<sub>2</sub>SO<sub>4</sub> as lixiviant, 0.5M (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>)

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 (Table 4).

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

Parameter	Sulphuric Acid	Hydrochloric Acid
OPEX	Moderate ~\$360/t 100% H <sub>2</sub> SO <sub>4</sub> 1	High ~\$1,250/t 100% HCl¹
CAPEX	Moderate Wetted materials of construction typically Grade 316 Stainless Steel <sup>2</sup>	High Wetted materials of construction requires specialty alloys such as Alloy 200, Alloy 400 <sup>3</sup>

Table 4: Cost comparison of Sulphuric and Hydrochloric Acid as a Leach Lixiviant

1 - Indicative chemical distributor reagent pricing April 2023, ex Perth, ex GST delivered via bulk tanker

2 - 5% w/w H<sub>2</sub>SO<sub>4</sub> at ambient temperature - NI Publication No. 10057, "Alloy selection for service in sulphuric acid", The Nickel Institute, Toronto, Ontario, Canada (2019)

3 - 2.5% w/w HCl at ambient temperature - NI Publication No. 10020, "Alloy selection for service in chlorine, hydrogen

chloride and hydrochloric acid", The Nickel Institute, Toronto, Ontario, Canada (2022)

4 - Pricing provided from Redox as at 18 April 2023

Further ongoing test work at Core Metallurgy will focus on optimisation of leach parameters, as well as diagnostic leach testing of individual samples. This diagnostic leach test work will inform geometallurgical variability across the North Stanmore project.

Leach conditions under consideration are as follows:

- Ambient Temperature (typically 25°C) to moderate temperature (50°C)
- pH 0.75-1, adjusted with sulphuric acid
- 0.5 M ammonium sulphate
- 2 to 4-hour residence time, possibly further increasing the residence time to be trialed
- 20-40% w/w solids

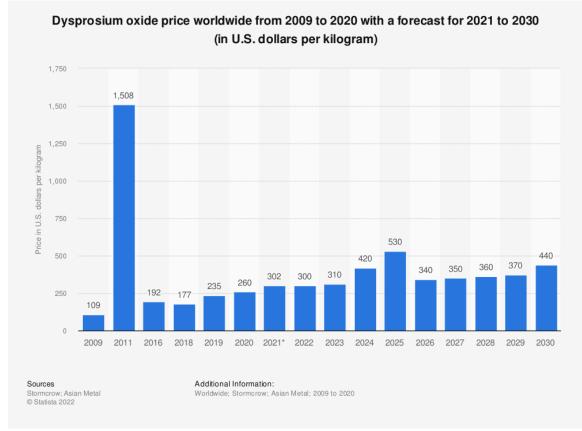
## Comments by Victory's technical advisor Professor Ken Collerson

"These initial metallurgical results are extremely positive. They have shown that the extensive regolith hosted REE deposit surrounding the North Stanmore mafic to ultramafic alkaline intrusion contains leachable quantities HREEs. Importantly, these include the high value rare earths dysprosium and terbium".

"In addition, this highly oxidized deposit exhibits many of the geochemical features characteristic of ionically adsorbed clay REE deposit. For example, the regolith is highly oxidized with Ce/Ce\* <1. It also shows REE concentrations gradients with depth ranging from ~20 to 70 m, indicating that REEs were mobile and concentrated by weathering".

"Additional metallurgical studies are in progress and are expected to increase yields particularly of NdPr".

"QEMSCAN and X-ray diffraction studies are also ongoing that will clarify the REE host mineral species and the distribution and grain size of these phases".



### **Dysprosium, Terbium and Rare Earth Elements Outlook**

Figure 4: Predicted price variation for Dysprosium Oxide in US\$/kg 2009 to 2030 projected. Source Statistica



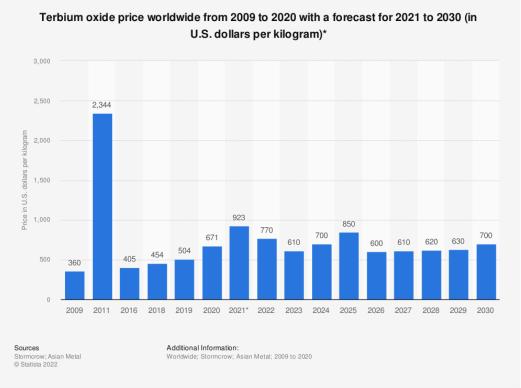


Figure 5: Predicted price variation for Terbium Oxide in US\$/kg 2009 to 2030 projected. Source Statistica

The huge spike in both Figures 4 and 5 in 2011, was caused by China's rare earth export ban.<sup>6</sup>

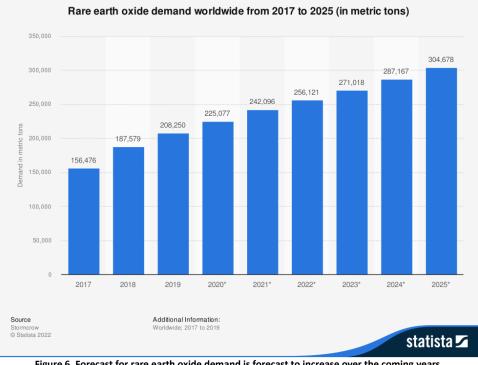


Figure 6. Forecast for rare earth oxide demand is forecast to increase over the coming years.

 $^{6}\ https://asia.nikkei.com/Spotlight/Supply-Chain/China-weighs-export-ban-for-rare-earth-magnet-tech$ 



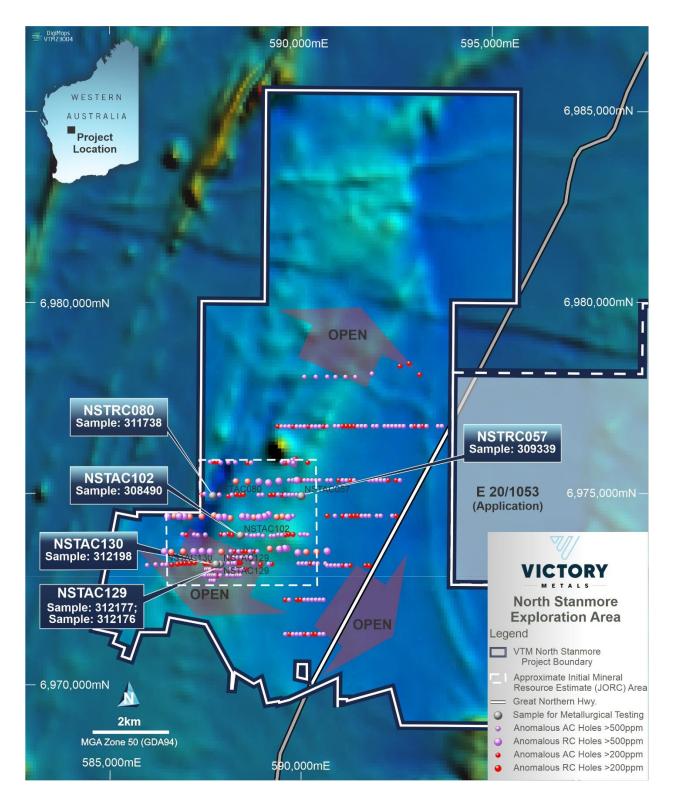


Figure 7. Victory's North Stanmore REE discovery map showing the location of the samples used for the initial metallurgical test work.

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

#### For further information please contact:

### Brendan Clark CEO and Executive Director b.clark@victorymetalsaustralia.com

Lexi O'Halloran Investor and Media Relations lexi@janemorganmanagement.com.au





## Victory Metals Limited: Company Profile

Victory is focused upon the exploration and development of its Rare Earth Element (REE) and Scandium Discovery in the Cue Region of Western Australia. Victory's key assets include a portfolio of assets located in the Midwest region of Western Australia, approximately 665 km from Perth. Victory's lonic clay REE discovery is rapidly evolving with the system demonstrating high ratios of Heavy Rare Earth Oxides and Critical Magnet Metals NdPr + DyTb.

#### **Competent Person Statement**

#### **Professor Ken Collerson**

Statements contained in this report relating to exploration results, scientific evaluation, and potential, are based on information compiled and evaluated by Professor Ken Collerson. Professor Collerson (PhD) Principal of KDC Geo Consulting, and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), 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 Australian Code for Reporting of Identified Mineral resources and Ore reserves (JORC Code 2012). Professor Collerson consents to the use of this information in this report 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 have not been materially modified from the original announcement.



Figure 8. Regional Map showing Victory Metals tenement package and pending tenements.







# 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</li> </ul>	<ul> <li>Victory Metals Australia (ASX:VTM) completed three aircore drilling campaigns at North Stammore during the period May-December 2022.</li> <li>Aircore (AC) drilling 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>Using a hand-held trowel, 4m composite samples were collected from the one-meter piles.</li> <li>These composite samples weighed between 2 and 3 kgms.</li> <li>A handheld pXRF analyzer (Olympus Vanta) was used to determine anomalous REE (Rare earth element) geochemistry from the on ground 1-m sample piles.</li> <li>pXRF reading times were 45 secs over 3 cycles for multielement and REE assays.</li> <li>These results are not considered reliable without calibration using chemical analysis from an accredited laboratory.</li> <li>The pXRF is used as a guide to the relative presence or absence of certain elements, including REEs to help direct the sampling program.</li> <li>Anomalous Samples were collected using a handheld trowel and placed into calico bag weighing 2-3 kgms, ready for transporting to the assay lab for analysis.</li> <li>REE anomalism thresholds are determined by Victory Metals geologists based on historical data analysis.</li> </ul>





Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul> <li>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> <li>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</li> </ul>	<ul> <li>Air core 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>Air core drilling uses small compressors (750 cfm/250 psi) to drill holes into the weathered layer of loose soil and fragments of rock.</li> <li>After drilling is complete, an injection of compressed air is unleashed into the space between the inner tube</li> </ul>
	tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>and the drill rod's inside wall, which flushes the cuttings up and out of the drill hole through the rod's inner tube, causing Less chance of cross-contamination.</li> <li>Air core drill rigs are lighter in weight than other rigs, meaning they're quicker and more manoeuvrable in the bush.</li> <li>AC Drilling was performed by Seismic Drilling of Wangara and Orlando Drilling from Perth.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing 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</li> </ul>	<ul> <li>Representative air core samples collected as 2-meter intervals, with corresponding chips placed into chip trays and kept for reference at VG's facilities.</li> <li>Most samples were dry and sample recovery was very good.</li> <li>VG does not anticipate any sample bias from loss/gain of material from the cyclone.</li> <li>No defined 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> <li>VG does not anticipate any sample bias from loss/gain of material from the cyclone.</li> </ul>



Page 12

Criteria	JORC Code explanation	Commentary
	of fine/coarse grained material.	
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 aircore samples were lithologically logged using standard industry logging software on a notebook computer.</li> <li>All AC samples have been logged for lithology, alteration, quartz veins, colour, fabrics.</li> <li>Representative AC samples collected as 2-meter intervals, with corresponding chips placed into chip trays and kept for reference at VG's facilities.</li> <li>Logging is qualitative in nature.</li> <li>Samples have not been photographed.</li> <li>All geological information noted above has been completed by a competent person as recognized by JORC.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the</li> </ul>	<ul> <li>Air core sampling was undertaken on 1m intervals using a Meztke Static Cone splitter.</li> <li>Most 1-meter samples were dry and weighed between 2 and 3 kgms.</li> <li>Samples from the cyclone were laid out in orderly rows on the ground.</li> <li>Using a hand-held trowel, 4m composite samples were collected from the one-meter piles.</li> <li>These composite samples weighed between 2 and 3 kgms.</li> <li>For any anomalous (&gt;0.1 g/t Au) 4m composite sample assays, the corresponding one-meter samples are also collected and assayed.</li> <li>Quality control of the assaying comprised the collection of a duplicate sample every hole, along with the regular insertion of industry (OREAS) standards (certified reference material) every 30 samples and blanks (beach sand) every 50 samples.</li> </ul>





Criteria	JORC Code explanation	Commentary
	sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	
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</li> </ul>	<ul> <li>Samples to be submitted for sample preparation and geochemical analysis by ALS Perth.</li> <li>In the field spot checks were completed on selected samples using a hand held Olympus Vanta XRF unit. These results are not considered reliable without calibration using chemical analysis. They were used as a guide to the relative presence or absence of certain elements, including REEs to help guide the drill program</li> </ul>
	<ul> <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</li> </ul>	

Criteria	JORC Code explanation	Commentary
	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> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay</li> </ul>	<ul> <li>No verification of significant intersections undertaken by independent personnel, only the VG project geologist.</li> <li>Validation of 4m composite assay data was undertaken to compare duplicate assays, standard assays and blank assays.</li> <li>Comparison of assaying between the composite samples (aqua regia digest) and the 1-meter samples (4 acid digest) will be made.</li> <li>ALS labs routinely re-assayed anomalous assays (greater than 0.3 g/t Au) as part of their normal QAQC procedures.</li> </ul>
Location of data points	<ul> <li>data.</li> <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 aircore drill hole coordinates are in GDA94 Zone 50</li> <li>All aircore holes were located by handheld GPS with an accuracy of +/- 5 m.</li> <li>There is no detailed documentation regarding the accuracy of the topographic control.</li> <li>No elevation values (Z) were recorded for collars. An elevation of 450 mRL was assigned by VG.</li> <li>There were no Down-hole surveys completed as aircore drill holes were not drilled deep enough to warrant downhole surveying.</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</li> </ul>	<ul> <li>Aircore drilling at Stanmore and Mafeking Bore was on 100 metre line spacing and 900 metres between drill holes.</li> <li>Given the first pass nature of the exploration programs, the spacing of the exploration drilling is appropriate for understanding the exploration potential and the identification of structural controls on the mineralisation.</li> <li>Four- meter sample compositing has been applied.</li> </ul>



Criteria	JORC Code explanation	Commentary
Orientation of	<ul> <li>continuity</li> <li>appropriate for the</li> <li>Mineral Resource and</li> <li>Ore Reserve</li> <li>estimation</li> <li>procedure(s) and</li> <li>classifications</li> <li>applied.</li> <li>Whether sample</li> <li>compositing has been</li> <li>applied.</li> <li>Whether the</li> </ul>	<ul> <li>The relationship between drill orientation and the</li> </ul>
data in relation to geological structure	orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<ul> <li>mineralised structures is not known at this stage as the prospects are covered by a 2-10m blanket of transported cover.</li> <li>It is concluded from aerial magnetics that any mineralisation trends 010-030. Dips are unknown as the area is covered by a thin (1-5m) blanket of transported cover.</li> <li>Azimuths and dips of aircore drilling was aimed to intersect the strike of the rocks at right angles.</li> </ul>
	<ul> <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>	Downhole widths of mineralisation are not accurately known with aircore drilling methods.
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>All samples packaged and managed by VG personnel</li> <li>Larger packages of samples will be couriered to ALS 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>No sampling techniques or data have been independently audited.</li> </ul>



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 and Mafeking Well Exploration Targets are located within E 20/871.</li> <li>They form 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 Yaatji Marlpa Aboriginal Corp in 2004 and covers the entire project area, including Coodardy and Emily Wells.</li> <li>E20/871 is held 100% by Victory Metals. All tenements are secured by the DMIRS (WA Government). All tenements are granted, in a state of good standing and have no impediments.</li> </ul>
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> <li>Harmony Gold intersected 3m @ 2.5 g/t Au and 2m @ 8.85 g/t Au in the Mafeking Bore area but did not follow up these intersections.</li> <li>Other historical drill holes in the area commonly intersected &gt; 100 ppb Au.</li> <li>Exploration by these companies has been piecemeal and not regionally systematic.</li> <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>Both areas, lie 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 and have pyroxenitic and/or peridotite bases and leucogabbro tops.</li> <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>

# Section 2 Reporting of Exploration Results



Criteria	JORC Code explanation	Commentary
		<ul> <li>E20/871 occurs within the Cue granite, host to many small but uneconomic gold mines in the Cue area.</li> </ul>
		<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. 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. Great Fingall.</li> </ul>
		<ul> <li>Banded jaspilite and associated clastic sedimentary rocks and mafics, generally 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>
		<ul> <li>Hydrothermally altered clastic sedimentary rocks, e.g. Big Bell.</li> </ul>
		<ul> <li>Eluvial and colluvial deposits e.g. Lake Austin, Mainland.</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 collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information</li> </ul>	<ul> <li>The documentation for completed drill hole locations at the North Stanmore are located in Appendix 1 of this announcement and is considered acceptable by VG.</li> <li>Consequently, the use of any data obtained is suitable for presentation and analysis.</li> <li>Given the early stages of the exploration programs at the North Project, the data quality is acceptable for reporting purposes.</li> <li>Future drilling programs will be dependent on the assays received.</li> <li>The exploration results are considered indicative and material to the reader.</li> </ul>



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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> <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.</li> <li>Weighted averaging of results completed for air core drilling.</li> <li>There has been no cutting of high grades.</li> <li>Significant assays in reporting have included grades above 0.5 % TREO. There has only been reporting of REEs and base metal assays.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	<ul> <li>NA</li> <li>Further drilling is required to understand the full extent of the REE mineralization encountered.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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 a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Diagrams are used in the compilation of the air core drilling plans and sections for North Stanmore. Also used to show distrubution of drill hole geochemistry.</li> </ul>
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>Exploration results that may create biased reporting has been omitted from these documents.</li> <li>Data received for this announcement is located in:</li> <li>Appendix 1 – Aircore drill hole collar coordinates and specifications.</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;</li> </ul>	<ul> <li>Summary of the 2023 Core Resources Testwork</li> <li>During 2023 Victory Metals engaged Core Resources to undertake Initial bench scale testwork on various composite samples.</li> </ul>



The Future of Australian Rare Earths



Criteria	JORC Code explanation	Commentary							
	bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>The objective of the testwork program was to develop a suitable set of leach parameters to advance further 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. Head 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> </ul>							
		Fro							
		Sample ID	Hole ID		MGA North	m	To m		
		309339	NSTAC057	6974948	590000	63	64		
		311738	NSTAC080	6974955	587687	35	36		
		308490	NSTAC102	6973916	588413	57	58		
		312176	NSTAC129	6973160	587877	69	70		
		312177 312198	NSTAC129 NSTAC130	6973160 6973165	587877 587771	70 70	71		
Further work	The nature and scale of	<ul> <li>for lonic Clay based rare earth systems. During the testwork programme lower pH leaching conditions were trialed using both sulphuric acid and hydrochloric acid.</li> <li>Final test conditions used ammonium sulphate at a concentration of 0.5 M to extract the ionic bound REE, whilst sulphuric acid was utilised to extract colloidal REE within the samples.</li> <li>On sample 308490 the HREE extraction was up to 62% with 60% Dy and 58% Tb extraction.</li> <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> <li>Corresponding impurity extraction, namely iron and aluminium, from the composite sample was shown to be relatively low in the leach testwork. A small increase in impurity extraction was evident with reduction in leach pH below 1, whilst comparable iron and aluminium extraction was demonstrated between pH 2 and 1</li> <li>Further testwork will focus on optimisation of leach</li> </ul>							
	<ul> <li>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 not commercially sensitive.</li> </ul>	<ul> <li>parameters, as well as diagnostic leach testing of individual samples. Diagnostic leach testwork will inform geometallurgical variability across the North Stanmore project.</li> <li>Further exploration for REE minerilisation at North Stanmore</li> <li>A initial JORC compliant Mineral ResourceEstimate at North Stanmore is in progress.</li> </ul>							



ACN: 124 279 750 E: info@victorymetalsaustralia.com D: +61 (08) 6555 2950 A: Suite 1, 295 Rokeby Road, Subiaco, WA, 6008