



## **ANNOUNCEMENT**

**17 NOVEMBER 2025**

### **Sybella Rare Earth Project - Metallurgy Breakthrough Results from Ion Exchange Resin Trials**

Red Metal is very pleased to report successful trials on the use of Ion Exchange resins that enrich the rare earth content and separate impurities from Pregnant Leach Liquor derived from leaching of the Sybella REO mineralisation.

This breakthrough has the potential to further simplify the processing flowsheet and significantly lower the capital and processing costs.

#### **Summary and Implications:**

Results of Ion Exchange trials on Pregnant Leach Liquor have:

- Successfully separated a large proportion of impurities such as residual iron and aluminium from the rare earth elements (REE),
- Delivered a final Strip Liquor with very low impurities showing 9 times enrichment of the total rare earth oxide (TREO) content (Figure 1), and
- Outlined a further simplified impurity removal flowsheet that offers significant capital and operating cost advantages.

These trials show that replacing the standard two-stage impurity removal process with a simple Ion Exchange process offers significant advantages including:

- Higher REE recovery from Pregnant Leach Liquor to mixed rare earth carbonate (MREC) from approximately 93% to 99%,
- Scope to make a significantly higher purity MREC,
- Materially lower alkali costs,
- Reduced flowsheet complexity,
- Lower operating and capital costs for impurity removal and MREC precipitation.

Additional IX optimisation studies leading to the precipitation of a higher purity MREC are in preparation.

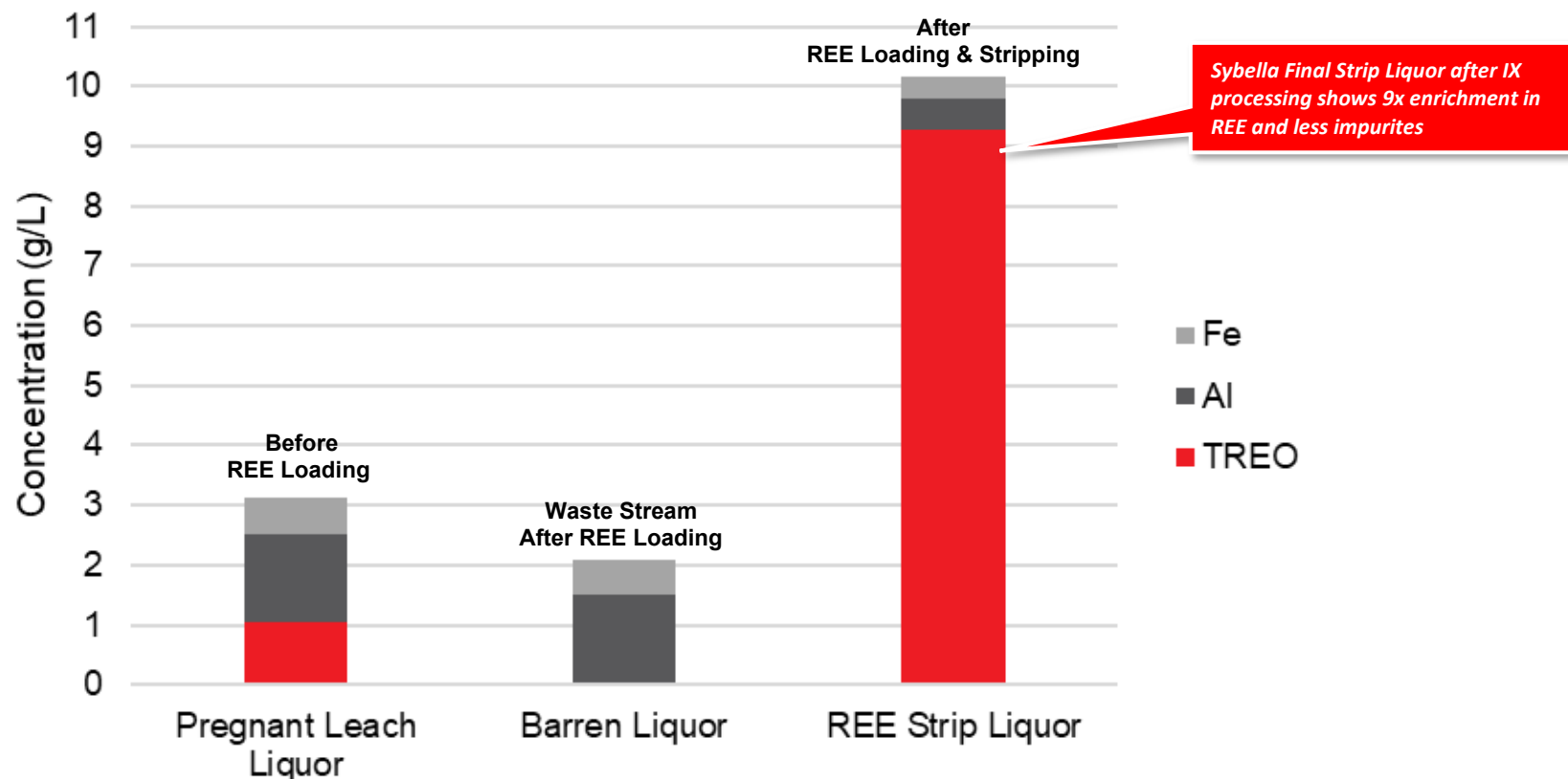
In parallel, advanced comminution studies on the large diameters drill cores are near completion and we look forward to commencing the weak-acid column heap leach tests on the various crushed ore types this month.

**Our highly soluble Sybella MREO discovery is granite-hosted which provides positive characteristics that stands it apart from both the clay-hosted and monazite dominated deposits. It offers very large tonnage potential and is well located just 20 kilometres south west of Mount Isa. Ongoing comminution and metallurgical studies have added to our confidence that heap leach processing may prove feasible as an economic development option.**

### Managing Director Rob Rutherford said:

*“To date, our metallurgical tests have indicated we can cost-effectively leach the rare earth elements from the Sybella granite delivering a REE-rich Pregnant Leach Liquor. This breakthrough research shows we can cheaply enrich the rare earth content of the Pregnant Leach Liquor and remove the bulk of the impurities using proven IX technology and readily available resins.*

*The simplicity of the IX processing will bring many cost benefits, and highlights opportunities to significantly reduce the projects break-even cost, perhaps by as much as 10-15 %.”*



[Figure 1] Key Results of Sybella IX Trials: Composition of original Pregnant Leach Liquor before IX loading (left), Barren Liquor after removal of REE by IX loading (centre), final REE Strip Liquor after stripping from the loaded resin (right). Note the 9x REE enrichment and reduced iron and aluminium in the final REE Strip Liquor. Refer Figure 3 and Terminology section of this report.

## WHAT IS ION EXCHANGE?

Ion Exchange (IX) is widely used in the hydrometallurgical industry for both primary recovery of metals and the selective removal of impurities using specialty resin beads. IX is carried out using a series of columns which hold beds of ion exchange resin (Figure 2).

The IX resins are regenerated through the loading-stripping process, converting from  $\text{Na}^+$  form to  $\text{REE}^{3+}$  form through loading, then back to  $\text{Na}^+$  form through stripping with  $\text{NaCl}$  (Figure 3).

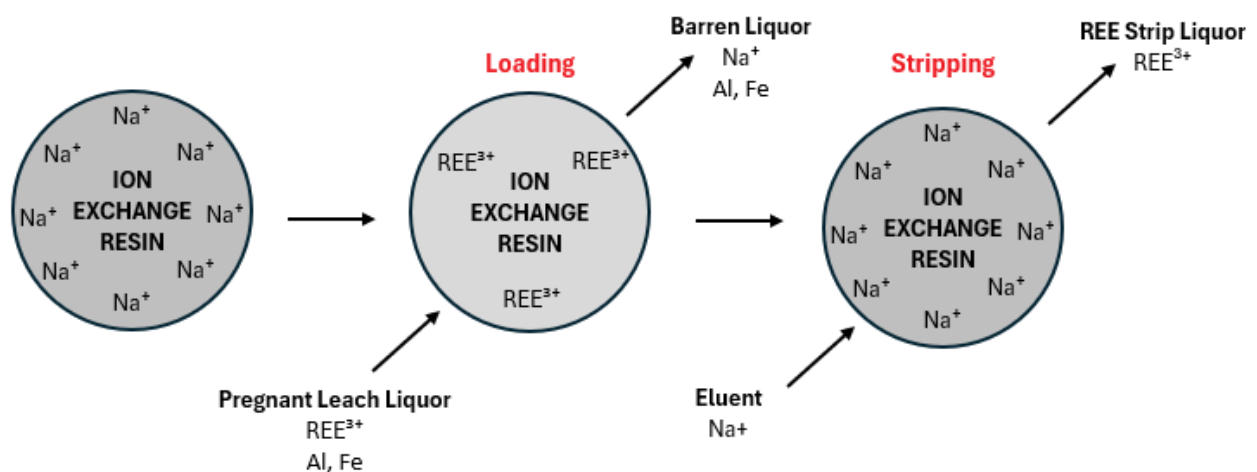
In the mining industry, the most common application for metal recovery using IX is the recovery of uranium from leach liquor and the recovery of nickel and cobalt. IX plants are also commonly used for water purification.

Key advantages of IX processing include:

- Selective removal of impurities such as iron, aluminium,
- Concentrates REE requiring a smaller MREC circuit,
- Reduces rare earth losses during the purification step,
- Low temperature and energy requirements,
- Scalable and widely used in existing commercial applications,
- Simpler processing route,
- Reduced capital and operating costs.



[Figure 2] Example IX plant designed, built and operated by Core IPEX.



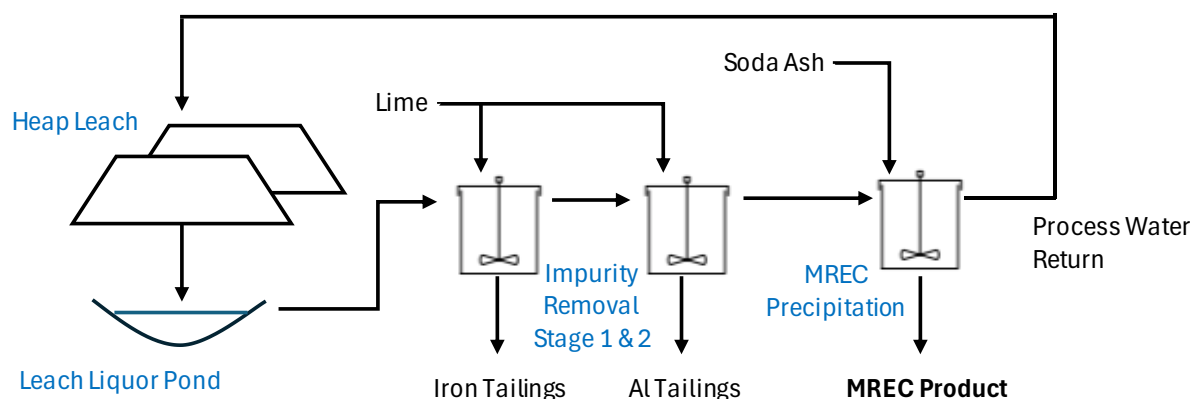
[Figure 3] Schematic of REE ion exchange loading and REE resin stripping process. Refer to Terminology section towards the back of this release.

## SYBELLA ION EXCHANGE RESIN TRIALS

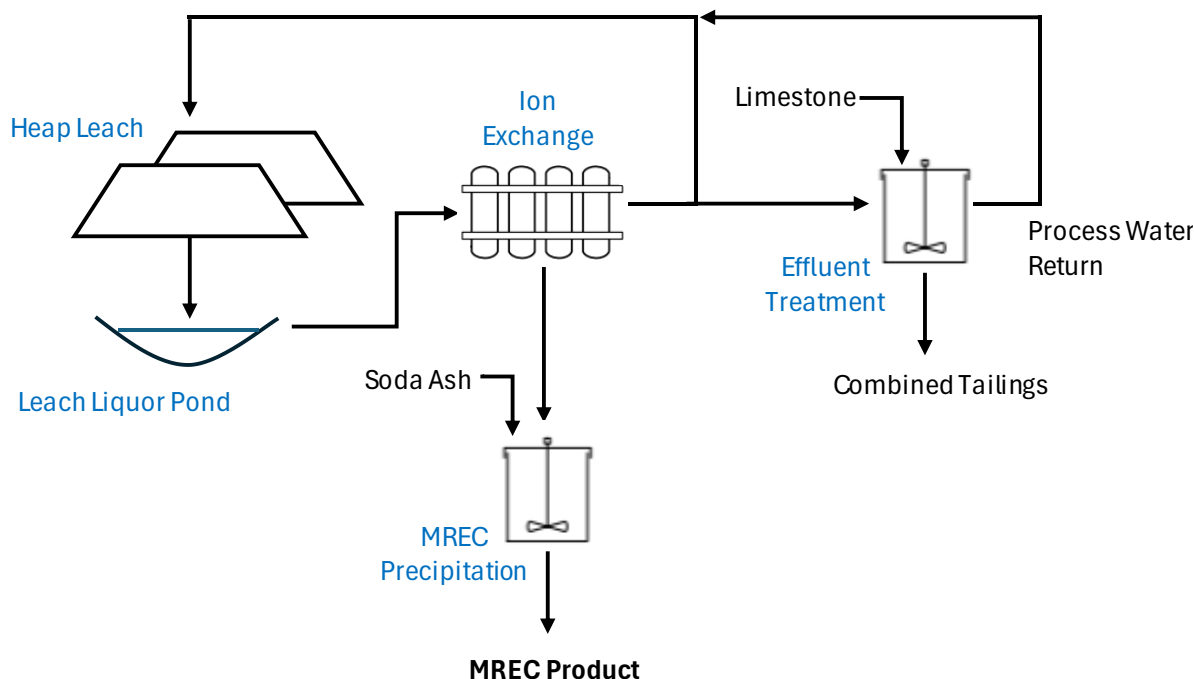
Metallurgical specialists Core Group have successfully trialled the application of IX resins to separate REE from impurities in Pregnant Leach Liquors derived from weak sulphuric acid leach tests on Sybella REO mineralisation.

Test work clearly shows the proven IX technology, using readily available resins, can provide a low-cost process to enrich the rare earth content of the Pregnant Leach Liquor and remove the bulk of the residual impurities (Figure 1).

This breakthrough research has identified scope to lower the capital and processing costs for the project by replacing the standard two-stage impurity removal process (Figure 4) with a simple IX process (Figure 5).



[Figure 4] Industry standard REE processing flowsheet for impurity removal. Note the two-stage process and use of lime which is more expensive than limestone.



[Figure 5] REE processing flowsheet using IX impurity removal. Note the lower capital and simpler one-stage impurity removal process and use of cheaper limestone.

## IX Test Work

The feed liquor for the IX resin test work used actual Pregnant Leach Liquor derived from bottle roll leach tests on weathered composites SMN12 and SMS12 from the Kary Zone, leached with 2.5 g/L H<sub>2</sub>SO<sub>4</sub> (refer to Red Metal ASX release dated 19 May 2025). This feed represents a worst-case loading of impurities compared to milder leaching proposed for transitional and fresh ores. I

IX tests were conducted using commercially available resin at ambient temperature, with leach liquor passed through the resin bed via pump at a fixed rate. The loaded resin was then stripped by passing a weak acid solution followed by a NaCl solution through the resin bed in the same procedure as the leach liquor. Samples of liquor exiting the column in both loading and stripping were collected at set volumetric intervals (represented as bed volumes – BV) to generate loading curves (Figure 6) and stripping curves (Figure 9).

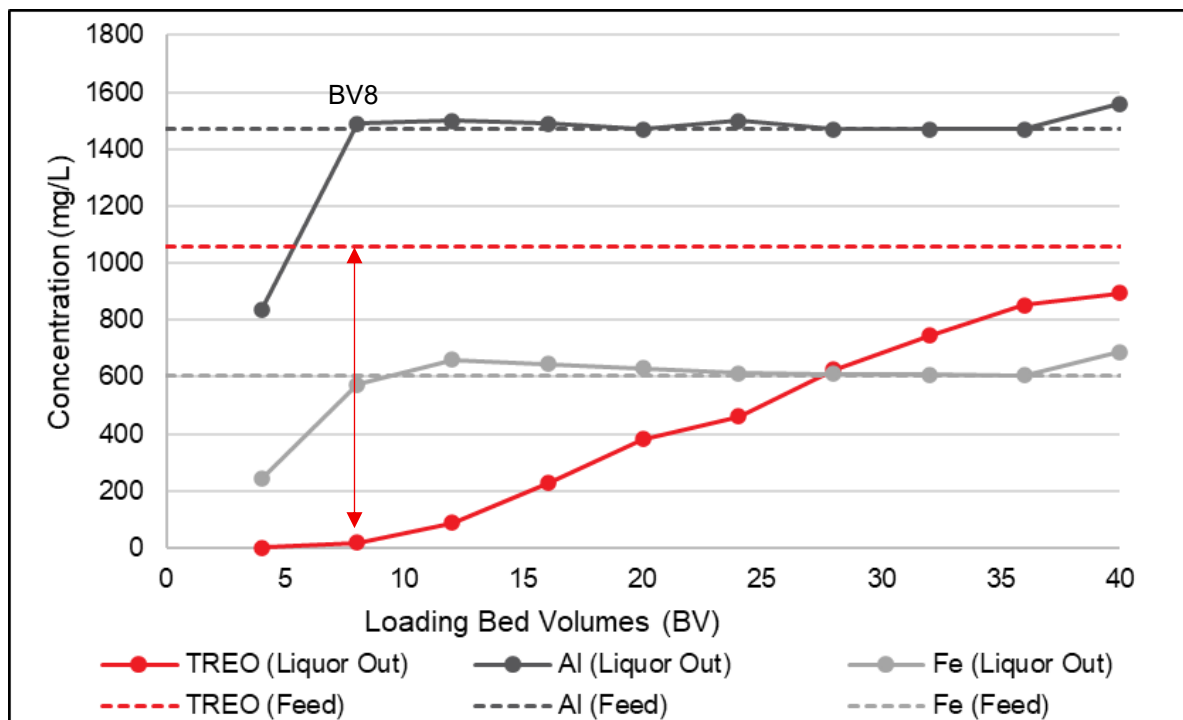
Results outlining the efficiency of loading the resin with REE from the Pregnant Leach Liquor, then stripping REE from the resin using an eluent solution (Figure 2) are described separately below.

## Loading Results

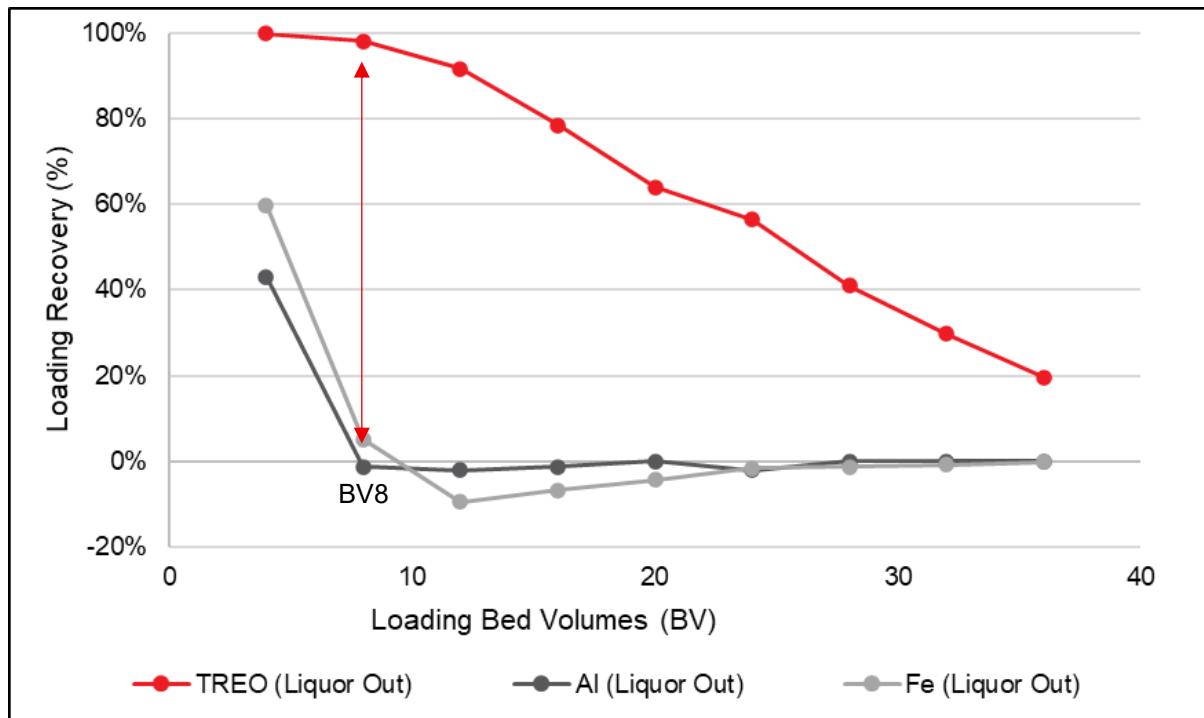
The IX loading test successfully demonstrated **selective recovery of REE** from the Pregnant Leach Liquor over a large feed volume (Figures 6 and 7) with **greater than 99% REE recovery** achieved over the first 8 bed volumes (BV, refer Terminology section of this release).

Key impurities of **iron and aluminium pass through the resin** at 8 BV while 99% of the REE are loaded to the resin (Figure 7). This demonstrates the resin's affinity for REE over these impurities. After 8 BV, residual iron and aluminium are rejected from the resin in favour of incoming REE. The REE were still being loaded onto the resin at test end (40 BV).

By comparison, Red Metal's maiden attempt to precipitate a MREC (refer to Red Metal ASX release dated 8 July 2024) applied metallurgical methods appropriate for using the industry standard flowsheet to extract impurities (Figure 4) and achieved approximately 93% REE recovery from Pregnant Leach Liquor to MREC product precipitation.



[Figure 6] Sybella: IX loading curve.



[Figure 7] Sybella: IX loading recovery % being  $[1 - (\text{liquor out/feed})] \times 100$ . Note 99% TREO recovery between incoming pregnant leach liquor feed and liquor out at BV8. Note negligible recovery for incoming feed and outgoing effluent for both iron and aluminium from BV8 onwards. The large separation at BV8 demonstrating the resin's affinity for REE over iron and aluminium impurities.

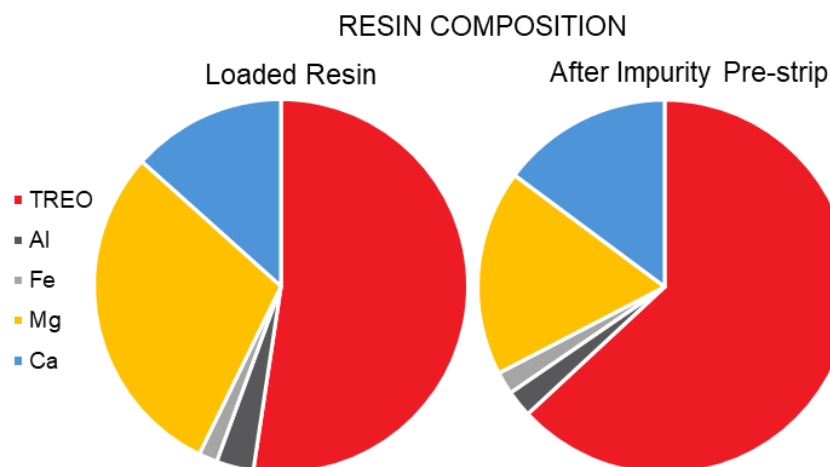
## Stripping Results

Stripping of loaded resin was trialled using a 2-stage approach involving:

1. an impurity pre-strip with weak acid eluent to remove weakly bound impurities, followed by
2. REE stripping using a NaCl eluent.

### Impurity Pre-Strip

Application of the first impurity pre-strip step was effective at selectively removing just the impurities from the resin. Applying a small quantity of weak acid removed 50% of magnesium and 40% of the aluminium with only 0.4% of the REE stripped (Figure 8). The resulting waste liquor, which is acidic with a very small amount of REE, would be recycled back to the heap leach.



[Figure 8] Sybella: Results of impurity pre-strip with weak acid to remove weakly bound impurities prior to REE elution. Un-optimised proof of concept results.

### REE Stripping

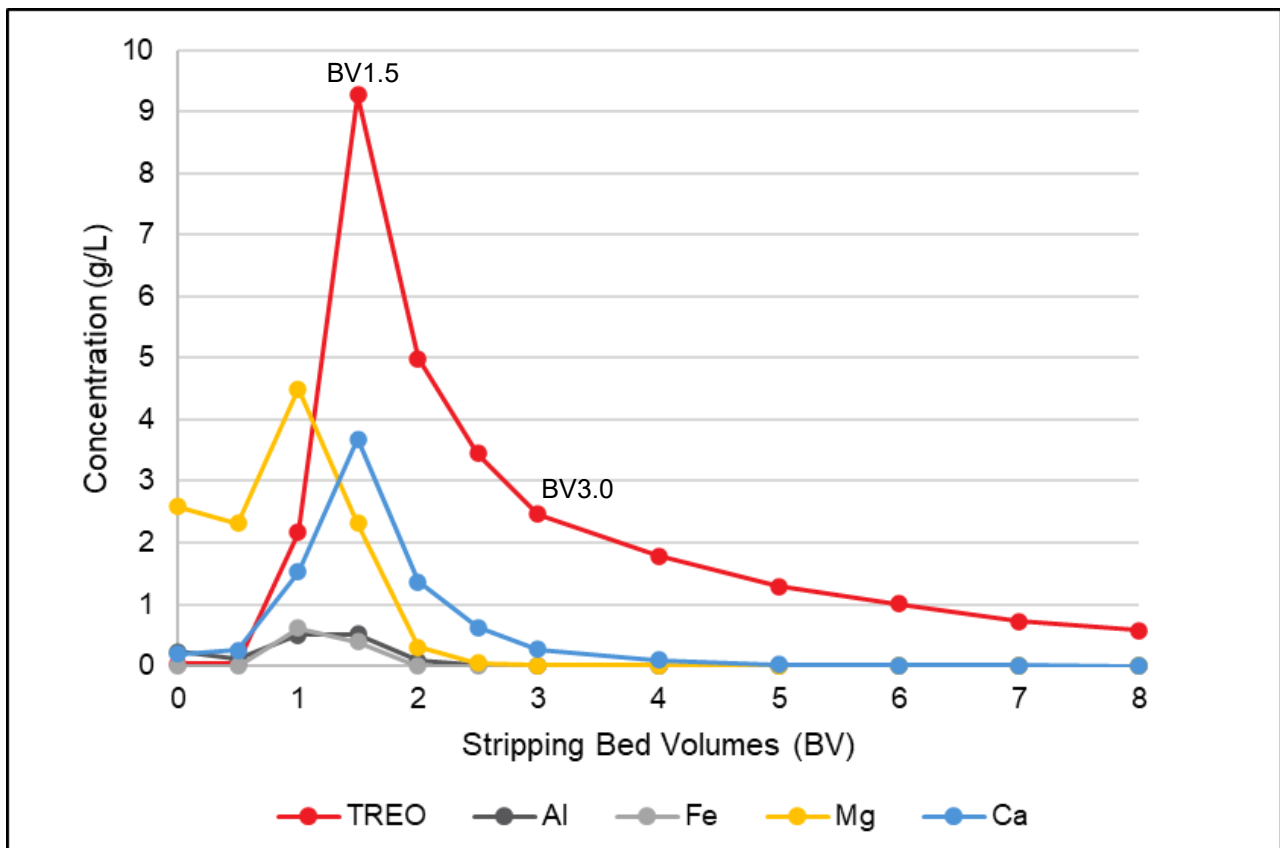
With application of the NaCl eluant, approximately 85% of the REE were stripped from the resin over 8 BV (Figures 9). The remaining 15% of REE on the resin are recycled back to the loading phase, so overall **no rare earths are lost**.

Importantly, the TREO concentration achieved in the **final REE Strip Liquor was 9 g/L, approximately 9x the concentration of the original Pregnant Leach Liquor** (Figure 1). This outcome will result in a proportionally smaller downstream MREC circuit, reducing the projects capital cost and operating costs.

In addition to the rejection of the residual iron and aluminium impurities, minor metal impurities present in the maiden MREC (refer to Red Metal ASX release dated 8 July 2024) have been rejected through the IX process. Comparing the maiden MREC to the IX Strip Liquor compositions, the following reductions in metal impurities relative to TREO were observed:

- copper – 97% reduction,
- zinc – 98% reduction,
- tellurium – 73% reduction,
- nickel – 99% reduction.

These results suggest a **significantly higher purity MREC could be achieved** through the application of IX.



[Figure 9] Sybella: IX REE stripping curve showing strong REE stripping at BV 1.5 and low overall iron and aluminium stripping producing a high purity REE Strip Liquor in preparation for MREC precipitation.

## Future Work Programs

Future IX work will concentrate on optimisation of the IX process to incrementally improve the purity of the MREC product to further reduce costs and maximise the quality of feed to the MREC precipitation circuit.

Advanced comminution studies on the large diameters drill cores are near completion and the weak-acid column heap leach tests on the various crushed ore types is set to commence this month.

The comprehensive comminution research, ongoing column heap leach and IX studies, together with planned infill drilling to an Indicated resource level, will provide key data for a mine scoping study in 2026.

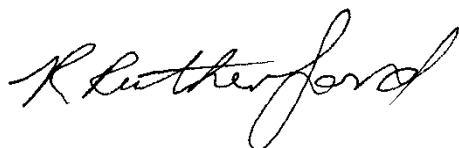
## Terminology

Key terms (refer Figure 3):

- **Loading** – passing the **Pregnant Leach Liquor** containing target metals through the resin. The pregnant liquor in is commonly referred to as the **influent**, and the discharge liquor as **effluent**.
- **Stripping** – passing an **eluent (or stripping liquor)** through a loaded resin bed to remove the target metals off the resin into solution, regenerating the resin. The final outflow is referred to as **REE Strip Liquor**.
- **Bed Volume (BV)** – is a measure of volume relative to the volume of the resin bed. This unit is used for measuring the quantity of the feed liquor or strip liquor passed through the resin. Using this terminology allows the data to be relatable to any scale test.

This announcement was authorised by the Board of Red Metal. For further information concerning Red Metal's operations and plans for the future please refer to the recently updated web site or contact Rob Rutherford, Managing Director at:

Phone +61 (0)2 9281-1805  
www.redmetal.com.au



Rob Rutherford  
Managing Director



Russell Barwick  
Chairman

## Competent Persons Statement

The information in this report that relates to Exploration Results that underpin the Mineral Resource Estimate is based on and fairly represents information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration.



## Appendix 1: Table 1 Sybella Project - JORC 2012 metallurgical sampling techniques and data.

| Criteria            | JORC 2012 Explanation                                                                                                                            | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sampling Techniques | Nature and quality of sampling                                                                                                                   | <p><i>The Core Group, a Queensland-based hydrometallurgical specialist, have trialled the application of Ion Exchange (IX) resins to separate rare earth elements (REE) from impurities in Pregnant Leach Liquors derived recent weak sulphuric acid leach tests on Sybella REO mineralisation.</i></p> <p><i>IX tests used actual Pregnant Leach Liquors derived from bottle roll leaching of SMN12 and SMS12 composites at 2.5 g/L H<sub>2</sub>SO<sub>4</sub>. IX tests were conducted using commercially available resin at ambient temperature, with leach liquor passed through the resin bed via pump at a fixed rate. The loaded resin was then stripped by passing a weak acid solution followed by a NaCl solution through the resin bed in the same procedure as the leach liquor. Samples of liquor exiting the column in both loading and stripping were collected at set volumetric intervals (represented as bed volumes – BV) to generate loading and stripping curves.</i></p> <p><i>The trial used a combination of bottle roll liquor from 1497C BR20 (SMN12, 2.5 g/L H<sub>2</sub>SO<sub>4</sub>) and BR32 (SMS12, 2.5 g/L H<sub>2</sub>SO<sub>4</sub>) as outlined in Red Metal ASX release dated 19 May 2025.</i></p> <p><i>The IX columns were carried out using a 25 mL burette as the ion exchange column, which had a 9.1 mm ID. The resin volume used was 25 mL, which was necessitated by the limited feed volume available. At 40 bed volumes (BV) the test required 1 L of feed liquor.</i></p> <p><i>The feed liquor was passed through the column via pump over two days at a flowrate of 2 BV/h. The liquor exiting the column (effluent) was collected by number of bed volumes. Each sample was then assayed to generate a loading curve. Following loading with feed liquor, the column was washed with 2 BV of DI water. Weak acid pre-strip liquor, was passed through the column at 1 BV/h and collected in a single sample. Strip liquor, consisting of NaCl, was then passed through the column, with the strip liquor out collected in 0.5 BV increments to generate a stripping curve with sufficient resolution.</i></p>  |
|                     | Include reference to measures taken to ensure representativity samples and the appropriate calibration of any measurement tools or systems used. | <p><i>The IX column tests utilised Pregnant Leach Liquor derived from strongly representative Large Area Composite (LAC) samples central to the Kary Zone. These Pregnant Leach Liquor feeds represent worst-case loading of impurities compared to milder leaching proposed for transitional and fresh ores.</i></p> <p><i>Each LAC contains multiple 6 metre composite samples from multiple holes and is representative of weathered granite ore types over a large area of the Kary Zone to a depth of 24 metres (refer to Red Metal ASX release dated 19 May 2025).</i></p> <p><i>The four LAC samples numbered SMN12, SMN24, SMS12, SMS24 were generated from 17 holes across the northern area of the Kary Zone (SMN) and 12 holes across the southern area (SMS). Sampling included two depth profiles for each composite area being weathered granite from 0-12 metres and transitional, partially weathered, granite from 12-24 metres.</i></p> <p><i>The LAC samples contain multiple holes, reducing the potential for sample bias, and are considered a good average representation of how the weathered granite ore may leach when mined in bulk over a large area.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                     | Aspects of the determination of mineralisation that are Material to the Public Report.                                                           | <p><i>IX column tests are used to simulate the effectiveness the IX resins at removing impurities and enriching the rare earth content from the Pregnant Leach Liquor derived from weak-acid leaching of the Sybella REO ore types.</i></p> <p><i>Red Metals IX trials on Pregnant Leach Liquor from Sybella have:</i></p> <ul style="list-style-type: none"> <li><i>Successfully separated the rare earth elements (REE) from impurities such as iron and aluminium,</i></li> <li><i>Delivered a final Strip Liquor with very low impurities showing 8 times enrichment of the total rare earth oxide (TREO) content, and</i></li> <li><i>Outlined a simplified and cheaper impurity removal flowsheet that offers significant capital and operating cost advantages.</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Criteria                                              | JORC 2012 Explanation                                                                                                                                                                                                                                                                     | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Drilling Technique</b>                             | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). | <i>IX columns work utilised Pregnant Leach Liquors derived from leaching on multi-hole LAC samples derived from AC and RC drilling. The AC and RC drilling used a truck mounted, conventional AC and RC rig with a face sampling bit collecting samples from surface to end of hole.</i>                                                                                                                                                                                                              |
| <b>Drill Sample Recovery</b>                          | Method of recording and assessing core and chip sample recoveries and results assessed.                                                                                                                                                                                                   | <i>Sample recoveries were visually estimated and recorded for each metre of AC and RC drilling.</i><br><br><i>RC chip recovery overall was very good with most intervals logged as 100% recovery with local areas reduced to 60%.</i>                                                                                                                                                                                                                                                                 |
|                                                       | Measures taken to maximise sample recovery and ensure representative nature of the samples.                                                                                                                                                                                               | <i>Depths are checked against depths marked on the sample bags and rod counts are routinely performed by the drillers.</i>                                                                                                                                                                                                                                                                                                                                                                            |
|                                                       | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.                                                                                                                          | <i>For AC and RC chip assays no sample recovery bias is observed due to homogenous distribution of the REO mineralisation in the granite, however size fraction assays show more rare earths in the finer-grained material.</i>                                                                                                                                                                                                                                                                       |
| <b>Logging</b>                                        | 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.                                                                                         | <i>Qualitative codes and descriptions were used to record geological data such as lithology, weathering and hardness prior to sampling.</i>                                                                                                                                                                                                                                                                                                                                                           |
|                                                       | Whether logging is qualitative or quantitative in nature.                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                       | Core photography                                                                                                                                                                                                                                                                          | <i>Chip trays are photographed.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                       | The total length and percentage of the relevant intersections logged.                                                                                                                                                                                                                     | <i>The total lengths of all holes have been geologically logged.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Sub-sampling techniques and sample preparation</b> | If core, whether cut or sawn and whether quarter, half or all core taken.                                                                                                                                                                                                                 | <i>LAC samples were utilised (as outlined above)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                       | For all sample types, the nature, quality and appropriateness of the sample preparation technique.                                                                                                                                                                                        | <i>IX columns work utilised multi-hole LAC samples. These were compiled from 6 metres composite samples derived from cyclone split, non-pulverised RC and AC chip samples collected for each metre.</i><br><br><i>The LAC samples contain multiple holes, reducing the potential for sample bias, and are considered a good average representation of how the weathered granite ore may leach when mined in bulk over a large area (Figure 3).</i>                                                    |
|                                                       | Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.                                                                                                                                                                                   | <i>For LAC samples, head assay grade results were compared against the average of all 6 metre assayed composite that make up the LAC samples. These showed remarkable representativity with the LAC samples head grade within plus or minus 10% of the average grade of all its 6 metres composites.</i>                                                                                                                                                                                              |
|                                                       | Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.                                                                                                                  | <i>No duplicate or repeat LAC composite sampling for IBRT pH optimisation work has been run at this stage, however IBRT on 3 sub-composites (C06, C07 and C08) making up SMN12 are planned (refer Table 1).</i>                                                                                                                                                                                                                                                                                       |
|                                                       | Whether sample sizes are appropriate to the grain size of the material being sampled.                                                                                                                                                                                                     | <i>As-received, non-pulverised RC and AC sample for IBRT work are considered appropriate for REE minerals &lt;2mm grainsize evenly distributed throughout the granite.</i>                                                                                                                                                                                                                                                                                                                            |
| <b>Quality of assay data and laboratory tests</b>     | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.                                                                                                                                          | <i>All solid samples were analysed using the following assay methods:</i> <ul style="list-style-type: none"> <li>39 elements via four acid digestion followed by OES-ICP analysis at Core's internal laboratory, including key impurity elements Al and Fe.</li> <li>ALS method ME-MS81 – Lithium borate fusion prior acid dissolution and ICP-MS analysis for Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tm, U, V, W, Y, Yb, Zr.</li> </ul> |

| Criteria                                     | JORC 2012 Explanation                                                                                                                                                                                                             | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
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|                                              |                                                                                                                                                                                                                                   | <p>ME-MS81 is the most common method for analysing for REE in clay samples.</p> <p>All liquid samples were analysed using the following assay methods:</p> <ul style="list-style-type: none"> <li>58 elements via OES-ICP analysis at Core's internal laboratory, including 15 REE (not including Lu).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
|                                              | 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. | No geophysical tools were used to report element concentrations at Sybella.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
|                                              | Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.                  | Core Group and ALS included standard and blank materials to monitor the performance of the laboratory in keeping with NATA accreditation. The standards and blanks used displayed acceptable levels of accuracy and precision.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| <b>Verification of sampling and assaying</b> | The verification of significant intersections by either independent or alternative company personnel.                                                                                                                             | <p>Result reviewed by the Company's Exploration Manager, Database Manager and the Managing Director, and metallurgical specialists at Core Group.</p> <p>Independent checks are planned on future IX column leach test work.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
|                                              | The use of twinned holes.                                                                                                                                                                                                         | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
|                                              | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.                                                                                                        | Primary data is stored both in its source electronic form, and, where applicable, on paper. Assay data is retained in both the original certificate (.pdf) form, where available, and the text files received from the laboratory. Primary data was entered in the field into a portable logging device using standard drop-down codes. At this early stage, text data files are exported and stored in Excel and an Access database. MapInfo software is used to check and validate drill-hole data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
|                                              | Discuss any adjustment to assay data.                                                                                                                                                                                             | <p>Rare earth elements are reported from both ME-MS81 and Core Group's internal liquor OES-ICP method as the elemental concentration. The rare earth elements were converted to the industry standard rare earth oxide format using the conversion factors available below which are based on the molar mass of each rare earth oxide.</p> <table border="1"> <thead> <tr> <th>Element</th><th>Conversion Factor</th><th>Oxide</th></tr> </thead> <tbody> <tr><td>La</td><td>1.1728</td><td>La<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Ce</td><td>1.2284</td><td>CeO<sub>2</sub></td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr<sub>6</sub>O<sub>11</sub></td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb<sub>4</sub>O<sub>7</sub></td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Er</td><td>1.1435</td><td>Er<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Y</td><td>1.2699</td><td>Y<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Sc</td><td>1.5337</td><td>Sc<sub>2</sub>O<sub>3</sub></td></tr> </tbody> </table> <p>Rare earth abbreviations typically used in industry reporting and throughout this report were in accordance with IUPAC guidelines, and were as follows:</p> <p>REE - Rare Earth Elements, value presented as elemental assay.</p> <p>REO - Rare Earth Oxides, value presented as oxide assay.</p> <p>TREE - La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu plus Y and Sc.</p> <p>MREE - Pr, Nd, Tb, Dy.</p> <p>LREE - La, Ce, Pr, Nd and Sm.</p> <p>HREE - Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu plus Y.</p> <p>TREO - La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, 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> plus Y<sub>2</sub>O<sub>3</sub> and Sc<sub>2</sub>O<sub>3</sub></p> <p>MREO - Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub></p> <p>LREO - 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></p> <p>HREO - 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> plus Y<sub>2</sub>O<sub>3</sub></p> <p>NdPr - is the sum of the oxide values for neodymium and praseodymium.</p> | Element | Conversion Factor | Oxide | La | 1.1728 | La <sub>2</sub> O <sub>3</sub> | Ce | 1.2284 | CeO <sub>2</sub> | Pr | 1.2082 | Pr <sub>6</sub> O <sub>11</sub> | Nd | 1.1664 | Nd <sub>2</sub> O <sub>3</sub> | Sm | 1.1596 | Sm <sub>2</sub> O <sub>3</sub> | Eu | 1.1579 | Eu <sub>2</sub> O <sub>3</sub> | Gd | 1.1526 | Gd <sub>2</sub> O <sub>3</sub> | Tb | 1.1762 | Tb <sub>4</sub> O <sub>7</sub> | Dy | 1.1477 | Dy <sub>2</sub> O <sub>3</sub> | Ho | 1.1455 | Ho <sub>2</sub> O <sub>3</sub> | Er | 1.1435 | Er <sub>2</sub> O <sub>3</sub> | Tm | 1.1421 | Tm <sub>2</sub> O <sub>3</sub> | Yb | 1.1387 | Yb <sub>2</sub> O <sub>3</sub> | Lu | 1.1371 | Lu <sub>2</sub> O <sub>3</sub> | Y | 1.2699 | Y <sub>2</sub> O <sub>3</sub> | Sc | 1.5337 | Sc <sub>2</sub> O <sub>3</sub> |
| Element                                      | Conversion Factor                                                                                                                                                                                                                 | Oxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| La                                           | 1.1728                                                                                                                                                                                                                            | La <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Ce                                           | 1.2284                                                                                                                                                                                                                            | CeO <sub>2</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Pr                                           | 1.2082                                                                                                                                                                                                                            | Pr <sub>6</sub> O <sub>11</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Nd                                           | 1.1664                                                                                                                                                                                                                            | Nd <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Sm                                           | 1.1596                                                                                                                                                                                                                            | Sm <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Eu                                           | 1.1579                                                                                                                                                                                                                            | Eu <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Gd                                           | 1.1526                                                                                                                                                                                                                            | Gd <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Tb                                           | 1.1762                                                                                                                                                                                                                            | Tb <sub>4</sub> O <sub>7</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Dy                                           | 1.1477                                                                                                                                                                                                                            | Dy <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Ho                                           | 1.1455                                                                                                                                                                                                                            | Ho <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Er                                           | 1.1435                                                                                                                                                                                                                            | Er <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Tm                                           | 1.1421                                                                                                                                                                                                                            | Tm <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Yb                                           | 1.1387                                                                                                                                                                                                                            | Yb <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Lu                                           | 1.1371                                                                                                                                                                                                                            | Lu <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Y                                            | 1.2699                                                                                                                                                                                                                            | Y <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |
| Sc                                           | 1.5337                                                                                                                                                                                                                            | Sc <sub>2</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |         |                   |       |    |        |                                |    |        |                  |    |        |                                 |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |    |        |                                |   |        |                               |    |        |                                |

| Criteria                                                       | JORC 2012 Explanation                                                                                                                                                                                                        | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location of data points</b>                                 | 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.                                                  | <i>The collar positions of all LAC holes were surveyed by handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                | Specification of the grid system used.                                                                                                                                                                                       | <i>GDA94_Zone54 datum.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                | Quality and adequacy of topographic control.                                                                                                                                                                                 | <i>Topographic relief has been extracted using the ELVIS digital terrain information at Geoscience Australia.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Data spacing and distribution</b>                           | Data spacing for reporting of Exploration Results.                                                                                                                                                                           | <i>The successful IX trial used a combination of bottle roll liquor from 1497C BR20 (SMN12, 2.5 g/L H2SO4) and BR32 (SMS12, 2.5 g/L H2SO4) as outlined in Red Metal ASX release dated 19 May 2025.</i>                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                | Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. | <i>Refer Red Metal ASX announcement dated 21 October 2024 for Sybella Inferred Mineral Resource.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                | Whether sample compositing has been applied.                                                                                                                                                                                 | <i>Two separate cyclone split samples were collected for each metre with one stored on site for subsequent use and analysis while the second was sent to ALS for compositing.</i><br><br><i>The individual metres samples were dried and pulverised (methods SPL-21 / PUL-23). ALS composited 50g from each 1 metre pulped sample over a 6 metre interval establishing a 300g composite pulp sample for analysis.</i><br><br><i>The multi-hole LAC samples (SMN12, SMN24, SMS12, SMS24) utilised the 6 metres assayed composites, which were sub-composited and composited again as shown in Table 1.</i> |
| <b>Orientation of data in relation to geological structure</b> | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.                                                                   | <i>The granite displays a deformation foliation that varies from steep west dipping to sub-vertical. Where access permitted, the drilling was oriented 60 degrees to the east across the dominant fabric.</i>                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                | If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.                   | <i>Most drill holes are drilled towards the east however some recent infill drill holes have been drilled towards the west (refer Red Metal release dated 10 February 2025), and no bias was recognised when drilling either west or east.</i>                                                                                                                                                                                                                                                                                                                                                            |
| <b>Sample security</b>                                         | The measures taken to ensure sample security.                                                                                                                                                                                | <i>AC and RC chips were logged and sampled in the field with chip tray records and two split one metre samples collected and stored at Red Metal's Cloncurry base for future reference. 6 metres composite samples were transported directly to ALS Mt Isa for preparation and analysis.</i><br><br><i>Pregnant Leach Liquors are stored at Core Group's Brisbane laboratory</i>                                                                                                                                                                                                                          |
| <b>Audits or reviews</b>                                       | The results of any audits or reviews of sampling techniques and data.                                                                                                                                                        | <i>Regular fortnightly technical meetings were held with Core Group during the testing period. The Core Groups interim report was reviewed by Red Metal's experienced Managing Director and Exploration Manager.</i>                                                                                                                                                                                                                                                                                                                                                                                      |

## Appendix 1: Table 2 Sybella Project - JORC 2012 reporting of exploration results

| Criteria                                       | JORC 2012 Explanation                                                                                                                                                                                                                                                        | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mineral tenement and land tenure status</b> | 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. | <i>The Sybella drilling is located within EPM 28001 situated in the Mount Isa region of north-west Queensland. EPM 28001 is owned 100% by Red Metal Limited subsidiary Sybella Minerals Pty Ltd. A conduct and compensation agreement has been established with the pastoral lease holder at May Down however, Ardmore stations is due for renewal and Mount Guides is pending further discussions. An ancillary exploration access agreement has been established with the Kalkadoon native title party.</i> |

| Criteria                                 | JORC 2012 Explanation                                                                                                                                                                                  | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                          | 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.                                                               | <i>The tenement is in good standing.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Exploration done by other parties</b> | Acknowledgment and appraisal of exploration by other parties.                                                                                                                                          | <i>No previous drilling by other parties has been directed towards REE, however the granite of interest was drilled and sampled as part of a regional seismic traverse by Geoscience Australia in 1994 (line L138_94MTI_01). End of hole assays from this drill traverse provide regularly spaced (nominally 250 metres) REE analyses across the granite, highlighting its grade in fresh rock (refer Red Metal: ASX: RDM Release 26 July 2023). A total of 16 shallow holes intersected the targeted granite with many holes ending in greater than 300ppm neodymium plus praseodymium (NdPr) oxide.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Geology</b>                           | Deposit type, geological setting and style of mineralisation.                                                                                                                                          | <p><i>The rare earth mineralisation at Sybella is classified as granite-hosted. Red Metal speculate the potential for a new granite-hosted, weak-acid soluble REO deposit style that can be broadly compared with other granite-hosted, weak-acid soluble mineral deposit types such as the giant Rossing and Husab soluble uranium deposits or the Morenci soluble copper deposits. These large tonnage deposit types are characterised by low-grades of soluble ore minerals hosted in low-acid consuming granite rock and can be bulk mined and then extracted using simple coarse grind and low-acid leach processing.</i></p> <p><i>The Sybella Granite Suite is a polyphase granitic intrusive complex comprising multiple granitic plutons. The granite pluton that hosts the rare earth oxide mineralisation has highly deformed margins and shows a distinct biotite schlieren foliation with a steep westerly dip (of about 70 degrees) and a gentle south plunging mineral lineation defined by biotite clusters. The deformed pluton is wedged between two ovoid-shaped, less deformed, granite plutons which suggests it may be an earlier phase of the Sybella Granite Suite.</i></p> <p><i>The rare earth mineralisation occurs primarily as the REE fluoro-carbonates minerals bastnasite and synchysite and variably degraded allanite, evenly disseminated throughout the granite pluton. The continuity of both grade and geology appears to be controlled by the primary magmatic distribution of disseminated rare earth minerals within the granite and to a lesser extent by the overprinting west dipping foliation imposed on the granite.</i></p> <p><i>The contacts between the REO enriched granite with the adjacent meta-sedimentary and amphibolite units have been drilled across in several places and locally drilled through (refer to cross sections in Red Metal ASX announcement dated 11 September 2024). Magnetic imagery clearly maps the granite/amphibolite contact.</i></p> <p><i>There is no obvious evidence of faulting causing significant offset, although minor local dislocation is possible.</i></p> <p><i>The Sybella Granite is affected by weathering with strong weathering to an average depth of about 16 metres and partial weathering to an average depth of about 24 metres. These boundaries can be visually logged using colour and mineral changes.</i></p> |
| <b>Drill hole Information</b>            | A summary of all information material to the understanding of the exploration results including a tabulation of survey information for all Material drill holes:                                       | <p><i>Key results from the IX columns tests and implications from this study are summarised in this report and presented in Figures 1,6,7,8,9.</i></p> <p><i>Refer to Red Metal releases dated 21 August 2023, 11 September 2024, 10 February 2025 for AC and RC drill hole collar coordinates, assays and JORC tables.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Data aggregation methods</b>          | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. | <i>No data aggregation methods have been applied</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                          | The assumptions used for any reporting of metal equivalent values should be clearly stated.                                                                                                            | <i>No metal equivalents are reported</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Relationship between</b>              | These relationships are particularly important in the reporting of Exploration Results. If the geometry of the                                                                                         | <i>At this stage of exploration insufficient data exists to confidently estimate true widths.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Criteria                                           | JORC 2012 Explanation                                                                                                                                                                                                                                                                                                                                                                 | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>mineralisation widths and intercept lengths</b> | mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Diagrams</b>                                    | 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.                                                                                                                    | <i>Refer to Figures 1, 6, 7, 8, 9.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Balanced reporting</b>                          | 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.                                                                                                                                                             | <i>See text to this announcement Figures 1 to 10.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Other substantive exploration data</b>          | 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. | <p><i>A mineralogical study undertaken for Red Metal by ANSTO Minerals (ANSTO), show most of the rare earth elements within a typical fresh surface sample of the granite occur within the highly soluble fluoro-carbonate minerals bastnasite and synchysite.</i></p> <p><i>Although subject to further detailed metallurgical studies, proof of concept leach test work confirmed strong REO extractions can be achieved using low levels of ambient temperature sulphuric acid on coarse fractions of both weathered and fresh granite. Lowering the acid strength and increasing the residence time have significantly improved the reduction of iron and aluminium contaminants and significantly reduced the acid consumption rate (refer to Red Metal ASX releases dated 1 February 2024, 18 March 2024, 3 June 2024).</i></p> <p><i>In addition, purification experiments on the pregnant leach solutions derived from the bottle roll test work successfully precipitated our first potentially saleable mixed rare earth carbonate (MREC) product (refer to Red Metal ASX release dated 8 July 2024).</i></p> <p><i>Comminution test work shows the coarsely crushed granite is classified as "Very Soft" when weathered and "Soft" when fresh which should translate into very competitive capital and operating costs for both mining and crushing product (refer to Red Metal ASX release dated 8 July 2024).</i></p> <p><i>A maiden mineral resource estimate has quantified the Magnet Rare Earth Oxide (MREO) resource potential at Sybella defining huge Inferred Mineral Resources for a range of neodymium and praseodymium (NdPr) cut-off grades, underlining its global significance (refer to Red Metal ASX release dated 21 October 2024).</i></p> <p><i>IX tests used actual Pregnant Leach Liquors derived from bottle roll leaching of SMN12 and SMS12 composites at 2.5 g/L H<sub>2</sub>SO<sub>4</sub>. IX tests were conducted using commercially available resin at ambient temperature, with leach liquor passed through the resin bed via pump at a fixed rate. The loaded resin was then stripped by passing a weak acid solution followed by a NaCl solution through the resin bed in the same procedure as the leach liquor. Samples of liquor exiting the column in both loading and stripping were collected at set volumetric intervals (represented as bed volumes – BV) to generate loading and stripping curves.</i></p> |
| <b>Further work</b>                                | The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).                                                                                                                                                                                                                                                | <p><i>Future IX work will concentrate on optimisation of the IX process to incrementally improve the purity of the MREC product to further reduce costs and maximise the quality of feed to the MREC precipitation circuit.</i></p> <p><i>Advanced comminution studies on the large diameters drill cores are near completion and the weak-acid column heap leach tests on the various crushed ore types is set to commence this month.</i></p> <p><i>The comprehensive comminution research, ongoing column heap leach and IX studies, together with planned infill drilling to an Indicated resource level, will provide key data for a mine scoping study in 2026.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |