

8 January 2024

## Bencubbin high-grade clay REE discovery continues to grow with mineralisation extended over 22km and 2.8km wide

Latest assays include grades of up to 5,617ppm TREO with further wide intercepts returned; Metallurgical samples set to ANSTO for leachability test work

### Highlights

- Latest assays from the Bencubbin Rare Earths Project in WA reveal thick intersections up to 14km away from the discovery area, with grades of up to 5,617ppm TREO. New results include:
  - 25m @ 2,745ppm TREO from 52m, including 8m @ 5,617ppm TREO;
  - 51m @ 1,108ppm TREO from 39m, including 14m @ 2,032ppm TREO; and
  - 41m @ 1,219ppm TREO from 47m
- These assays are in addition to previously announced results of:
  - 79m @ 1,576ppm TREO from 32m, including 8m @ 7,243ppm TREO;
  - 40m @ 1,628ppm TREO from 8m; and
  - 19m @ 1,959ppm TREO from 4m, including 4m @ 4,743ppm TREO
- Drilling now covers 22km of strike, significantly increasing the scale of mineralisation with greater than 1,000ppm TREO received in all drill lines
- Samples have been collected in line with leading REE metallurgist ANSTO's recommendations for the Company to conduct initial metallurgical test work at Bencubbin
- Additional air core drilling has been designed to infill and extend the enriched area confirmed in this drilling once metallurgy results are received
- Bencubbin rare earths exploration is being conducted in parallel with Cygnus' extensive lithium exploration program in James Bay, Canada; Separate teams assigned to lithium and rare earths

*Cygnus Managing Director David Southam said: "These results highlight the size potential of this promising rare earths discovery at Bencubbin. Now that initial drilling has confirmed both the high-grade nature and substantial scale potential of the mineralisation, we have commenced metallurgical tests with the best in the business; the first program of its kind to be undertaken in this part of Western Australia.*

*"While our clear focus remains on lithium in James Bay, Quebec, we are going to complete the required work to unlock the full value of what Bencubbin could mean for our shareholders.*

*"Our small, dedicated Australian team will now focus on some follow-up value-adding work while samples are being completed for the very important metallurgical test work program".*

Cygnus Metals Limited (ASX:CY5) is pleased to announce more high grade assays from recently completed air-core drilling at its Bencubbin Rare Earths Project in WA.

During Q4 CY2023, the Company completed an additional 40 air-core drill holes in the north-east part of the Bencubbin Project (800km<sup>2</sup>) to expand drill coverage and test the scale of REE enrichment along the entire 22km strike length of a major granitic body.

Recently received assay results have indicated a thick clay profile which is mineralised in areas from close to surface and extends along the granite margin over widths of up to 2.8km within the body.

New assay results include:

- **25m @ 2,745ppm TREO from 52m, including 8m @ 5,617ppm TREO;**
- **51m @ 1,108ppm TREO from 39m, including 14m @ 2,032ppm TREO; and**
- **41m @ 1,219ppm TREO from 47m.**

These results are in addition to the previously reported assays (refer ASX release dated 22 September 2023), which include:

- **79m @ 1,576ppm TREO from 32m, including 8m @ 7,243ppm TREO;**
- **40m @ 1,628ppm TREO from 8m; and**
- **19m @ 1,959ppm TREO from 4m, including 4m @ 4,743ppm TREO.**

The latest results have significantly increased the scale of the mineralisation, extending it from a strike length of 4.5km to now greater than 22km and still open. Importantly, the mineralisation continues to demonstrate enrichment above the entire granite intrusion, believed to be the potential source of mineralisation.

The enrichment currently extends through all the drilling along all the drill lines completed to date, defining a mineralised zone that is more than 2.8km wide which remains open to the centre.

Samples have been selected for an initial metallurgy program to be conducted through industry leader ANSTO Minerals, the Australian Nuclear Science and Technology Organisation, which has extensive experience in REE processing.

Samples have been selected from numerous drill-holes over the entire project, with a focus on variation down-hole and regionally in line with best practice guidelines from ANSTO Minerals. This program has been developed through ANSTO to test the leachability of the rare earth and magnetic rare earth elements and is the first to be undertaken in the Bencubbin area.

Over the recent past, ANSTO Minerals has consulted for an increasing number of clay-hosted REE projects, including the Ionic Rare Earths (Uganda), Australian Rare Earths (South Australia) and Meteoric Resources (Brazil) projects. Work on these projects has included early leaching/desorption testing through to process modelling and mini-plant circuit operations.

### **Follow-Up Exploration**

Follow-up air-core drilling is planned at Bencubbin to in-fill the central area of the granite intrusion and to extend known mineralisation beyond the 22km long anomaly. This drilling will be undertaken on the return of positive metallurgy results for the project, to allow for the most prospective areas to be exploited. The regional program will enable Cygnus to test the potential scale of a REE resource at Bencubbin.

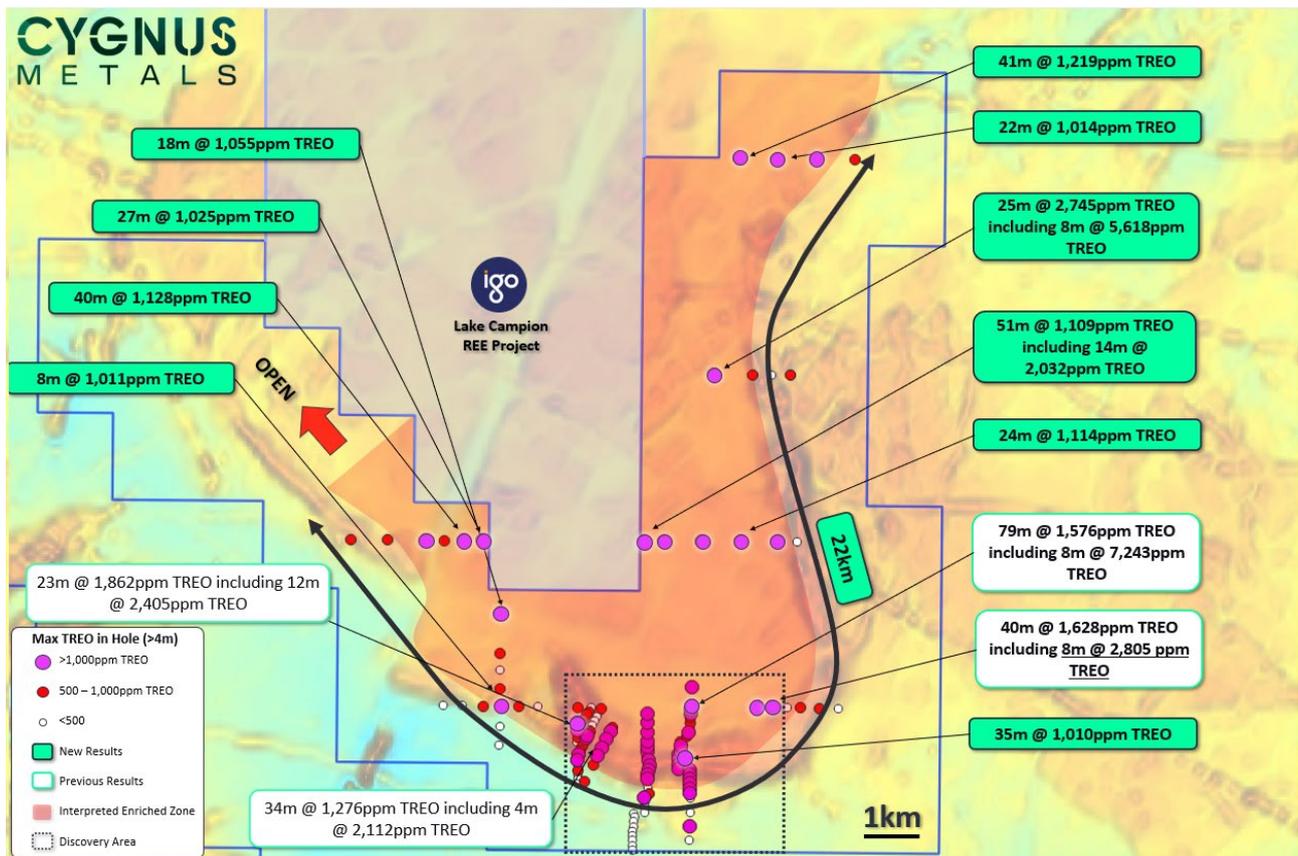


Figure 1: Location of collars highlighted by grades displaying an interpreted enriched zone over the distinct 22km long magnetic anomaly. Interpreted red target area showing greater than 5m of clay development over the granite. Dashed box highlights the initial discovery area, being the area previously announced with near surface TREO results >1000ppm over 4.6km of strike and 2km width.

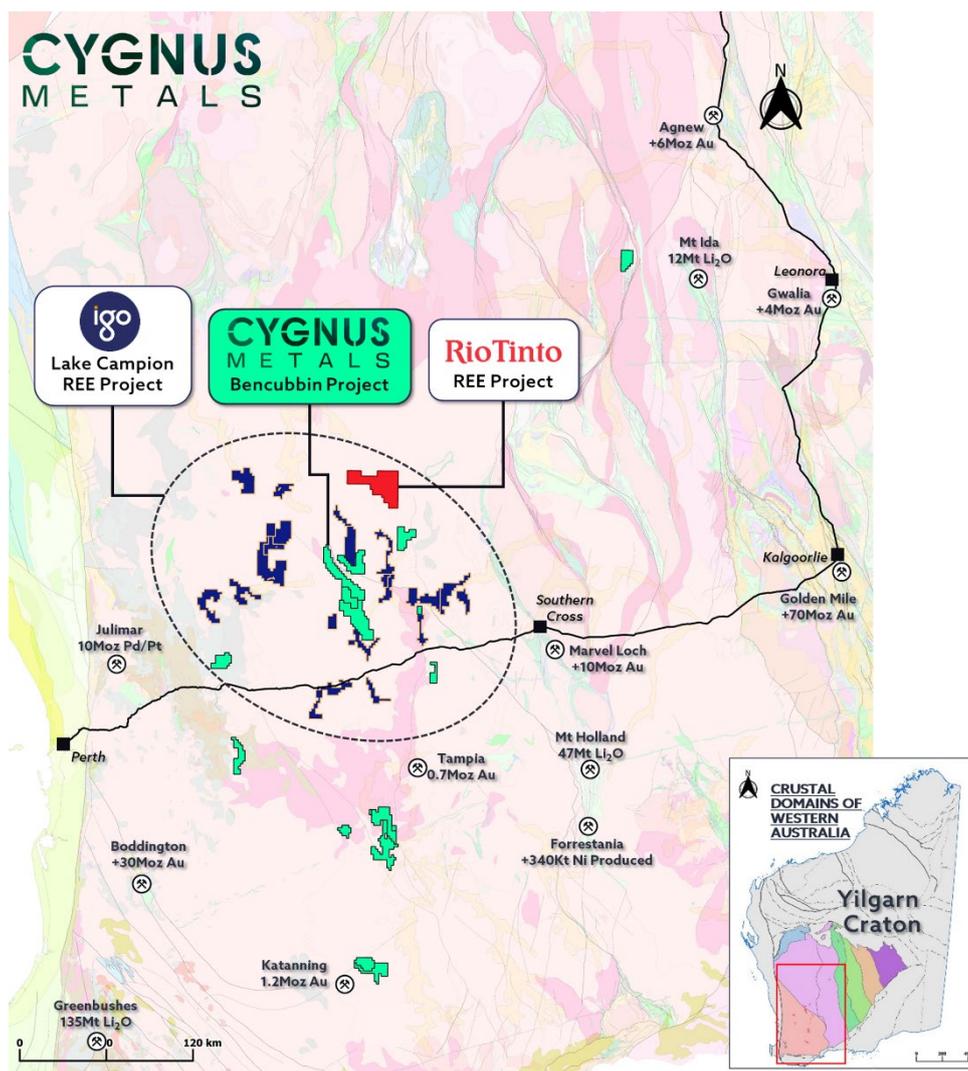


Figure 2: The location of the Bencubbin Project relative to IGO’s Lake Campion Project and Rio Tinto’s REE Project. This area is considered highly prospective for clay-hosted rare earths.

For and on behalf of the Board

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**About Cygnus Metals**

Cygnus Metals Limited (ASX: CY5) is an emerging exploration company focussed on advancing the Pontax Lithium Project (earning up to 70%), the Auclair Lithium Project and Sakami Lithium Project in the world class James Bay lithium district in Canada. In addition, the Company has REE and base metal projects at Bencubbin and Snake Rock in Western Australia. The Cygnus Board of Directors and Technical Management team have a proven track record of substantial exploration success and creating wealth for shareholders and all stakeholders in recent years. Cygnus Metals’ tenements range from early-stage exploration areas through to advanced drill-ready targets.

### **Competent Persons Statements**

The information in this announcement that relates to exploration results is based on and fairly represents information and supporting documentation compiled by Mr Duncan Grieve, a Competent Person who is a member of The Australasian Institute of Geoscientists. Mr Grieve is the Chief Geologist and a full-time employee of Cygnus Metals and holds shares in the Company. Mr Grieve has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Grieve consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to previously reported Exploration Results has been previously released by Cygnus Metals in its ASX Announcements dated 7 June 2023, 20 June 2023 and 22 September 2023. Cygnus Metals confirms that it is not aware of any new information or data that materially affects the information in the said announcements. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

**APPENDIX A –Details of Air Core Drill holes**

Coordinates given in GDA94 MGA Zone 50.

| Hole ID  | East   | North   | RL  | Azimuth | Dip | EOH |
|----------|--------|---------|-----|---------|-----|-----|
| WBAC0099 | 595080 | 6582251 | 337 | 0       | -90 | 81  |
| WBAC0100 | 594974 | 6581182 | 358 | 0       | -90 | 75  |
| WBAC0101 | 597407 | 6582264 | 365 | 0       | -90 | 57  |
| WBAC0102 | 597814 | 6582261 | 360 | 0       | -90 | 51  |
| WBAC0103 | 598214 | 6582259 | 362 | 0       | -90 | 19  |
| WBAC0104 | 589860 | 6582314 | 333 | 0       | -90 | 61  |
| WBAC0105 | 590265 | 6582314 | 326 | 0       | -90 | 48  |
| WBAC0106 | 590714 | 6582310 | 326 | 0       | -90 | 25  |
| WBAC0107 | 591082 | 6582299 | 308 | 0       | -90 | 22  |
| WBAC0108 | 591454 | 6582306 | 315 | 0       | -90 | 7   |
| WBAC0109 | 591863 | 6582301 | 324 | 0       | -90 | 5   |
| WBAC0110 | 592692 | 6581887 | 338 | 0       | -90 | 8   |
| WBAC0111 | 592693 | 6581954 | 340 | 0       | -90 | 16  |
| WBAC0112 | 591044 | 6581487 | 330 | 0       | -90 | 52  |
| WBAC0113 | 591048 | 6581878 | 328 | 0       | -90 | 47  |
| WBAC0114 | 591053 | 6582686 | 317 | 0       | -90 | 52  |
| WBAC0115 | 591055 | 6583079 | 317 | 0       | -90 | 18  |
| WBAC0116 | 591056 | 6583424 | 322 | 0       | -90 | 120 |
| WBAC0117 | 591065 | 6584278 | 314 | 0       | -90 | 90  |
| WBAC0118 | 590690 | 6585833 | 317 | 0       | -90 | 87  |
| WBAC0119 | 590289 | 6585833 | 309 | 0       | -90 | 92  |
| WBAC0120 | 589880 | 6585836 | 313 | 0       | -90 | 107 |
| WBAC0121 | 589482 | 6585838 | 313 | 0       | -90 | 82  |
| WBAC0122 | 588687 | 6585839 | 314 | 0       | -90 | 76  |
| WBAC0123 | 587911 | 6585844 | 314 | 0       | -90 | 13  |
| WBAC0124 | 597332 | 6585801 | 352 | 0       | -90 | 13  |
| WBAC0125 | 596931 | 6585803 | 350 | 0       | -90 | 69  |
| WBAC0126 | 596136 | 6585806 | 343 | 0       | -90 | 100 |
| WBAC0127 | 595335 | 6585807 | 336 | 0       | -90 | 64  |
| WBAC0128 | 594516 | 6585811 | 336 | 0       | -90 | 111 |
| WBAC0129 | 594112 | 6585815 | 331 | 0       | -90 | 90  |
| WBAC0130 | 597188 | 6589353 | 355 | 0       | -90 | 37  |
| WBAC0131 | 596388 | 6589357 | 344 | 0       | -90 | 55  |
| WBAC0132 | 595578 | 6589364 | 341 | 0       | -90 | 77  |
| WBAC0133 | 598545 | 6593948 | 358 | 0       | -90 | 72  |
| WBAC0134 | 597734 | 6593953 | 348 | 0       | -90 | 58  |
| WBAC0135 | 596934 | 6593958 | 346 | 0       | -90 | 105 |
| WBAC0136 | 596131 | 6593966 | 347 | 0       | -90 | 88  |
| WBAC0137 | 596792 | 6589356 | 386 | 0       | -90 | 18  |

## APPENDIX B – Significant intercepts

A cut-off grade of 800ppm TREO was applied and a maximum of 4m of internal dilution was allowed. TREO and MREO are rounded to the nearest whole number and MREO assays are rounded to one decimal place. Significant intersections include all intervals greater than 800ppm TREO.

| Hole ID  | From | To  | Interval | TREO | 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> |
|----------|------|-----|----------|------|------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|
| WBAC0099 | 32   | 74  | 42       | 806  | 179  | 38.5                            | 126.0                          | 2.1                            | 11.9                           |
| WBAC0100 | 12   | 75  | 63       | 837  | 180  | 35.6                            | 126.7                          | 2.7                            | 15.2                           |
| incl     | 20   | 55  | 35       | 1009 | 218  | 42.5                            | 153.5                          | 3.4                            | 18.9                           |
| WBAC0107 | 12   | 20  | 8        | 1011 | 232  | 47.6                            | 169.1                          | 2.4                            | 13.0                           |
| WBAC0111 | 0    | 16  | 16       | 1156 | 258  | 54.4                            | 186.7                          | 2.6                            | 13.9                           |
| WBAC0116 | 0    | 4   | 4        | 805  | 202  | 42.8                            | 144.6                          | 2.3                            | 12.8                           |
| WBAC0117 | 72   | 90  | 18       | 1055 | 230  | 48.1                            | 162.5                          | 3.0                            | 16.8                           |
| WBAC0118 | 60   | 87  | 27       | 1025 | 196  | 42.3                            | 135.4                          | 2.6                            | 15.5                           |
| WBAC0119 | 52   | 92  | 40       | 1128 | 237  | 51.3                            | 171.1                          | 2.3                            | 12.6                           |
| WBAC0121 | 72   | 82  | 10       | 836  | 175  | 35.8                            | 123.1                          | 2.3                            | 13.4                           |
| WBAC0125 | 53   | 69  | 16       | 931  | 184  | 42.5                            | 128.3                          | 2.1                            | 10.7                           |
| WBAC0126 | 76   | 100 | 24       | 1114 | 278  | 51.4                            | 191.5                          | 5.1                            | 30.3                           |
| WBAC0127 | 30   | 64  | 34       | 830  | 173  | 39.7                            | 121.9                          | 1.8                            | 9.6                            |
| WBAC0128 | 87   | 103 | 16       | 1015 | 211  | 41.6                            | 146.8                          | 3.3                            | 19.5                           |
| WBAC0129 | 39   | 90  | 51       | 1108 | 215  | 49.1                            | 151.3                          | 2.3                            | 12.2                           |
| incl     | 76   | 90  | 14       | 2032 | 420  | 93.6                            | 297.7                          | 4.5                            | 24.7                           |
| WBAC0131 | 32   | 36  | 4        | 886  | 193  | 44.6                            | 135.8                          | 1.7                            | 10.7                           |
| WBAC0132 | 52   | 77  | 25       | 2745 | 606  | 121.7                           | 415.2                          | 10.4                           | 59.0                           |
| incl     | 64   | 72  | 8        | 5617 | 1228 | 243.1                           | 836.0                          | 22.1                           | 126.5                          |
| incl     | 68   | 72  | 4        | 5942 | 1386 | 268.2                           | 945.6                          | 25.2                           | 147.5                          |
| WBAC0133 | 64   | 73  | 9        | 837  | 161  | 36.7                            | 114.5                          | 1.7                            | 8.5                            |
| WBAC0134 | 40   | 58  | 18       | 850  | 165  | 40.3                            | 117.9                          | 1.2                            | 6.0                            |
| WBAC0135 | 48   | 96  | 48       | 1013 | 223  | 45.8                            | 155.2                          | 3.4                            | 19.0                           |
| WBAC0136 | 47   | 88  | 41       | 1219 | 252  | 51.3                            | 177.5                          | 3.4                            | 20.1                           |

$$\text{MREO} = \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3$$

$$\text{TREO} = \text{La}_2\text{O}_3 + \text{CeO}_2 + \text{Pr}_6\text{O}_{11} + \text{Nd}_2\text{O}_3 + \text{Sm}_2\text{O}_3 + \text{Eu}_2\text{O}_3 + \text{Gd}_2\text{O}_3 + \text{Tb}_4\text{O}_7 + \text{Dy}_2\text{O}_3 + \text{Ho}_2\text{O}_3 + \text{Er}_2\text{O}_3 + \text{Tm}_2\text{O}_3 + \text{Yb}_2\text{O}_3 + \text{Y}_2\text{O}_3 + \text{Lu}_2\text{O}_3$$

APPENDIX C – Bencubbin AC Drilling- 2012 JORC Table 1

Section 1 Sampling Techniques and Data

| Criteria                   | JORC Code explanation  | Commentary  |
|----------------------------|--|---|
| <b>Sampling techniques</b> | <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>  | <ul style="list-style-type: none"> <li>• Samples from AC drilling were collected in one metre intervals in a bucket at the rig with a cyclone-mounted cone splitter, and placed on the ground in a pre-cleared area</li> <li>• Four metre composites were then collected by spear sampling individual AC samples and loaded into a numbered calico bag</li> <li>• QAQC samples consisting of standards inserted into the sample sequence at a rate of 1 in 25</li> <li>• Each AC sample (whether composite or individual split) weighed approximately one to three kilograms</li> <li>• All AC samples were sent to ALS Laboratories in Perth for crushing and pulverising to produce a 25 gram sample charge for analysis by fire assay. Multi-Element Ultra Trace method combining a four-acid digestion with ICP-MS instrumentation, performed with a combination of ICP-AES &amp; ICP-MS</li> <li>• 4m composite sample pulps were then tested for multielement including REE with ICP-AES &amp; ICP-MS at ALS utilising ME-MS61R and bottom of hole samples were tested with a borate fusion followed by ICP-MS utilising ICP-MS81r</li> <li>• Drill holes were logged and sampled by a qualified and experienced Cygnus Gold geologist</li> </ul> |
|                            | <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>   | <ul style="list-style-type: none"> <li>• Sampling, including QAQC, was done under Cygnus Metals' standard procedures of 1 in 25 insertation rate. The laboratory also applied their own internal QAQC protocols</li> </ul>  |
|                            | <i>Aspects of the determination of mineralisation that are Material to the Public Report.<br/>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> | <ul style="list-style-type: none"> <li>• AC holes were sampled over 1m intervals by cone-splitting</li> <li>• All samples are pulverised at the lab to 85% passing -75µm to produce a 25g charge for Fire Assay with an ICP-AES finish</li> <li>• Composite clay/weathered samples were Assayed for Multielement through a four acid digest and MEMS61r</li> <li>• Samples are analysed by ALS Laboratories in Perth</li> </ul>   |
| <b>Drilling techniques</b> | <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond</i>   | <ul style="list-style-type: none"> <li>• Air core drilling with a blade bit was completed to "refusal", giving 1-2m of fresh bedrock sample</li> <li>• Drill holes were vertical</li> <li>• The program was supervised by experienced Cygnus Metals geologists</li> </ul>   |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
|   | <i>tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>  |  |
| <b>Drill sample recovery</b>                          | <p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>  | <ul style="list-style-type: none"> <li>• One-metre samples were collected in buckets via a cyclone on the rig</li> <li>• Sample recovery was estimated visually and was generally around 80-90% but may be as low as 30-40% in some near surface samples</li> </ul>  |
| <b>Logging</b>  | <p><i>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></p>   | <ul style="list-style-type: none"> <li>• Samples were wet sieved and logged for colour, weathering, grain size, major lithology (where possible) along with any visible alteration, sulphides or other mineralisation</li> <li>• The entire hole is logged by experienced geologists employed by Cygnus Metals using Cygnus Metals' logging scheme</li> <li>• The level of detail is considered sufficient for early stage exploration of the type being undertaken here</li> </ul>  |
|   | <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>   | <ul style="list-style-type: none"> <li>• Geological logging of core is qualitative and descriptive in nature</li> <li>• All chip trays are photographed</li> </ul>   |
|   | <i>The total length and percentage of the relevant intersections logged.</i>  | <ul style="list-style-type: none"> <li>• All holes are logged over their entire length</li> </ul>  |
| <b>Sub-sampling techniques and sample preparation</b> | <p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><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></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p> | <ul style="list-style-type: none"> <li>• Samples were composited over 4m intervals</li> <li>• Samples were generally dry</li> <li>• All samples were prepared at the ALS Laboratory in Perth. All samples were dried and pulverised to 85% passing 75µm and a sub sample of approximately 200g retained. A nominal 25g charge was used for the fire assay analysis. The procedure is industry standard for this type of sample and analysis</li> <li>• Sample sizes are considered appropriate given the particle size and the need to keep 4m samples below a targeted 3kg weight which meet the targeted grind size using LMS mills used in sample preparation by ALS</li> </ul> |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
| <b>Quality of assay data and laboratory tests</b> | <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>   | <ul style="list-style-type: none"> <li>Samples were analysed using ALS Geochemistry Perth using a lithium borate fusion at 1025 deg C followed by nitric + hydrochloric + hydrofluoric acid digestion of the melt and ICP-MS finish for a 32 element suite including the REEs and Y (ALS method ME-MS81)</li> </ul>  |
|   | <i>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.</i> | <ul style="list-style-type: none"> <li>None used</li> </ul>  |
|   | <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>                   | <ul style="list-style-type: none"> <li>Laboratory QC procedures involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates</li> <li>Cygnus has submitted a mix of Certified Reference Materials (CRMs) and blanks at a rate of five per 100 samples</li> <li>Umpire checks are not required for early stage exploration projects</li> </ul> |
| <b>Verification of sampling and assaying</b>      | <i>The verification of significant intersections by either independent or alternative company personnel.</i>  | <ul style="list-style-type: none"> <li>Significant results are checked by the Project Geologist and Exploration Manager</li> </ul>   |
|   | <i>The use of twinned holes.</i>  | <ul style="list-style-type: none"> <li>No drill holes were twinned</li> </ul>  |
|   | <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>   | <ul style="list-style-type: none"> <li>All field logging is carried out on a laptop digital software. Logging data is submitted electronically to the Database Manager based in Perth. Assay files are received from the lab electronically and all data is stored in the Company's SQL database managed by Expedio Ltd in Perth</li> </ul>  |
|   | <i>Discuss any adjustment to assay data.</i>  | <ul style="list-style-type: none"> <li>There were no adjustments to the assay data</li> </ul>  |
| <b>Location of data points</b>                    | <i>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>  | <ul style="list-style-type: none"> <li>AC collars were located by handheld GPS, which are considered accurate to <math>\pm 3</math>m in Northing and Easting</li> </ul>  |
|   | <i>Specification of the grid system used.</i>   | <ul style="list-style-type: none"> <li>The grid system used is MGA94 Zone 50 (GDA94)</li> </ul>  |
|   | <i>Quality and adequacy of topographic control.</i>   | <ul style="list-style-type: none"> <li>Drill hole locations were determined by handheld GPS with a nominal accuracy of +/- 5 metres</li> </ul>   |
| <b>Data spacing and distribution</b>              | <i>Data spacing for reporting of Exploration Results.</i>   | <ul style="list-style-type: none"> <li>Drill hole spacing is varied for each hole initially at 800m with some areas reduced to 400m</li> <li>Spacing between lines is 3,500m to 4,600m</li> <li>The spacing is considered appropriate for this type of early exploration</li> </ul>  |

| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
|  | <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> | <ul style="list-style-type: none"> <li>No resource estimation is made</li> </ul>   |
|  | <i>Whether sample compositing has been applied.</i>   | <ul style="list-style-type: none"> <li>Samples were composited over 4m intervals</li> </ul>  |
| <b>Orientation of data in relation to geological structure</b> | <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>   | <ul style="list-style-type: none"> <li>Drilling was vertical due to no known dip of stratigraphy. Clay horizons are horizontal and therefore vertical drill holes would provide the most unbiased sample</li> </ul>  |
|  | <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>                   | <ul style="list-style-type: none"> <li>Clay horizons are interpreted to be horizontal, no bias is considered to have been introduced by the drilling orientation</li> </ul>  |
| <b>Sample security</b>   | <i>The measures taken to ensure sample security.</i>  | <ul style="list-style-type: none"> <li>Samples are placed in calico bags which are placed in larger polyweave bags and transport to the laboratory in Perth by the supervising Cygnus geologist. Sample dispatches are accompanied by supporting documentation, signed by the site project geologist, which outline the submission number, number of samples and preparation/analysis instructions</li> <li>Drill holes are logged prior to being sampled</li> <li>ALS maintains the chain of custody once the samples are received at the preparation facility, with a full audit trail available via the ALS Webtrieve site</li> </ul> |
| <b>Audits or reviews</b>                                       | <i>The results of any audits or reviews of sampling techniques and data.</i>  | <ul style="list-style-type: none"> <li>Sampling and assaying techniques are considered to be industry standard. At this stage of exploration, no external audits or reviews have been undertaken</li> </ul>  |

## Section 2 Reporting of Exploration Results

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

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>Mineral tenement and land tenure status</b> | <p>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.</p> <hr/> <p>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.</p>  | <ul style="list-style-type: none"> <li>The drill holes reported here were all drilled within E70/5617 (Welbungin) which is owned 100% by Cygnus</li> <li>The landownership within E70/5617 is mostly freehold with the exception of small reserves set aside by the government for infrastructure or nature conservation</li> <li>Cygnus has Land Access Agreements according to the <i>Mining Act 1978 (WA)</i> with the underlying landowners that own the ground</li> <li>Cygnus has signed a standard Indigenous Land Use Agreement (ILUA) for E70/5169</li> </ul> <hr/> <ul style="list-style-type: none"> <li>The Welbungin tenement (E70/5617) is in good standing with the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS). Cygnus is unaware of any impediments for exploration on this licence</li> </ul>    |
| <b>Exploration done by other parties</b>       | Acknowledgment and appraisal of exploration by other parties.  | <ul style="list-style-type: none"> <li>No historical exploration has been completed on the tenement for REE deposits</li> </ul>   |
| <b>Geology</b>                                 | Deposit type, geological setting and style of mineralisation.  | <ul style="list-style-type: none"> <li>The Welbungin REE Project is located within granitic basement of the western Yilgarn Craton. Numerous pegmatite occurrences are known within the Mukinbudin district and the GSWA maps show pegmatite zones in the adjacent tenure on the Bencubbin (SH50-11) 1:250,000 geological map sheet. Recent geological interpretation from GSWA indicates numerous types of granites are present in the region. Cygnus Metals is exploring for ionic clay hosted REE enriched deposit</li> <li>Several large pegmatite bodies have been mapped and, in many instances, quarried for either quartz or feldspar; these include the Mukinbudin pegmatite, Karloning pegmatite, Gillet's (Couper's) pegmatite and Cosh's (Whyte's North) pegmatite. These pegmatites are all intruding a quartz-monzonite host</li> </ul> |
| <b>Drill hole Information</b>                  | <p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul> | <ul style="list-style-type: none"> <li>All requisite drill hole information is tabulated elsewhere in this release (refer Appendix A)</li> </ul>  |

| Criteria                        | JORC Code explanation   | Commentary  |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
|---------------------------------|---|---|--------------------------------|-------|------------------|-------|---------------------------------|-------|--------------------------------|-------|--------------------------------|------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|--------------------------------|-------|-------------------------------|------|
|                                 | <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>        |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| <b>Data aggregation methods</b> | <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>   | <ul style="list-style-type: none"> <li>Significant intersections given in Appendix B are weighted averages and a cut off grade of 800ppm TREO was applied with a maximum internal dilution of 4m allowed</li> <li>Metal equivalents have not been applied</li> <li>Standard conversion factors for elements have been used and are tabulated below</li> </ul> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>La<sub>2</sub>O<sub>3</sub></td><td>1.173</td></tr> <tr><td>CeO<sub>2</sub></td><td>1.228</td></tr> <tr><td>Pr<sub>6</sub>O<sub>11</sub></td><td>1.208</td></tr> <tr><td>Nd<sub>2</sub>O<sub>3</sub></td><td>1.166</td></tr> <tr><td>Sm<sub>2</sub>O<sub>3</sub></td><td>1.16</td></tr> <tr><td>Eu<sub>2</sub>O<sub>3</sub></td><td>1.158</td></tr> <tr><td>Gd<sub>2</sub>O<sub>3</sub></td><td>1.153</td></tr> </table> <table border="1" style="display: inline-table;"> <tr><td>Tb<sub>4</sub>O<sub>7</sub></td><td>1.176</td></tr> <tr><td>Dy<sub>2</sub>O<sub>3</sub></td><td>1.148</td></tr> <tr><td>Ho<sub>2</sub>O<sub>3</sub></td><td>1.146</td></tr> <tr><td>Er<sub>2</sub>O<sub>3</sub></td><td>1.143</td></tr> <tr><td>Tm<sub>2</sub>O<sub>3</sub></td><td>1.142</td></tr> <tr><td>Yb<sub>2</sub>O<sub>3</sub></td><td>1.139</td></tr> <tr><td>Lu<sub>2</sub>O<sub>3</sub></td><td>1.137</td></tr> <tr><td>Y<sub>2</sub>O<sub>3</sub></td><td>1.27</td></tr> </table> <ul style="list-style-type: none"> <li><b>MREO</b> = 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></li> <li><b>TREO</b> = 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> + Y<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub></li> </ul> | La <sub>2</sub> O <sub>3</sub> | 1.173 | CeO <sub>2</sub> | 1.228 | Pr <sub>6</sub> O <sub>11</sub> | 1.208 | Nd <sub>2</sub> O <sub>3</sub> | 1.166 | Sm <sub>2</sub> O <sub>3</sub> | 1.16 | Eu <sub>2</sub> O <sub>3</sub> | 1.158 | Gd <sub>2</sub> O <sub>3</sub> | 1.153 | Tb <sub>4</sub> O <sub>7</sub> | 1.176 | Dy <sub>2</sub> O <sub>3</sub> | 1.148 | Ho <sub>2</sub> O <sub>3</sub> | 1.146 | Er <sub>2</sub> O <sub>3</sub> | 1.143 | Tm <sub>2</sub> O <sub>3</sub> | 1.142 | Yb <sub>2</sub> O <sub>3</sub> | 1.139 | Lu <sub>2</sub> O <sub>3</sub> | 1.137 | Y <sub>2</sub> O <sub>3</sub> | 1.27 |
| La <sub>2</sub> O <sub>3</sub>  | 1.173   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| CeO <sub>2</sub>                | 1.228   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Pr <sub>6</sub> O <sub>11</sub> | 1.208   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Nd <sub>2</sub> O <sub>3</sub>  | 1.166   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Sm <sub>2</sub> O <sub>3</sub>  | 1.16  |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Eu <sub>2</sub> O <sub>3</sub>  | 1.158   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Gd <sub>2</sub> O <sub>3</sub>  | 1.153   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Tb <sub>4</sub> O <sub>7</sub>  | 1.176   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Dy <sub>2</sub> O <sub>3</sub>  | 1.148   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Ho <sub>2</sub> O <sub>3</sub>  | 1.146   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Er <sub>2</sub> O <sub>3</sub>  | 1.143   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Tm <sub>2</sub> O <sub>3</sub>  | 1.142   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Yb <sub>2</sub> O <sub>3</sub>  | 1.139   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Lu <sub>2</sub> O <sub>3</sub>  | 1.137   |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
| Y <sub>2</sub> O <sub>3</sub>   | 1.27  |   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
|                                 | <i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> | <ul style="list-style-type: none"> <li>Intersection lengths and grades for all holes are reported as a down-hole, length weighted average of grades above a cut-off 800 TREO and may include 'internal waste' below that cut-off</li> <li>TREO: sum of CeO<sub>2</sub>, Dy<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Pr<sub>6</sub>O<sub>11</sub>, Sm<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Tm<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub></li> <li>MREO = sum of 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></li> </ul>   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |
|                                 | <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>  | <ul style="list-style-type: none"> <li>No metal equivalents are reported</li> </ul>   |                                |       |                  |       |                                 |       |                                |       |                                |      |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                                |       |                               |      |

| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| <b>Relationship between mineralisation widths and intercept lengths</b> | <p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></p> | <ul style="list-style-type: none"> <li>The geometry of the clay layers is interpreted from the limited data as flat and these intersections are interpreted as true thickness</li> <li>Mineralised intercepts are assumed to be true width with drill holes drilled vertically</li> </ul>   |
| <b>Diagrams</b>   | <p><i>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></p>   | <ul style="list-style-type: none"> <li>Included elsewhere in this release. Refer figures in the body text</li> <li>These images are deemed appropriate for the level of exploration completed</li> </ul>  |
| <b>Balanced reporting</b>   | <p><i>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></p>   | <ul style="list-style-type: none"> <li>All results with total assays are reported. A cut-off grade of 800ppm TREO was applied and a maximum of 4m of internal dilution was allowed. Significant intersections include all intervals greater than 800ppm TREO</li> </ul>   |
| <b>Other substantive exploration data</b>                               | <p><i>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.</i></p>                   | <ul style="list-style-type: none"> <li>None</li> </ul>  |
| <b>Further work</b>   | <p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>  | <ul style="list-style-type: none"> <li>Cygnus Metals intends to effectively test the extent of this REE clay enrichment once required government approvals are completed</li> <li>As outlined in this report, Metallurgy is being completed by ANSTO</li> <li>Further work is likely to include additional air core drilling</li> </ul> |