

## METALLURGICAL DRILLING CONFIRMS HISTORIC GRADES AT THE BYRO REE / LI PROJECT

### Highlights

- Assay results received from metallurgical drilling at the Byro REE & Li Project confirm historic REE / Li mineralisation intercepts.
- Intercepts of over 50m from surface with grades including 500ppm Total Rare Earth Oxides (TREO) with 20% magnetic REE's, 375ppm Lithium Oxide (Li<sub>2</sub>O) and 523ppm Vanadium Pentoxide (V<sub>2</sub>O<sub>5</sub>).
- Mineralisation has been intercepted in historic drilling over 30km of strike.
- The drilling was to provide fresh samples of the Byro black shale to undergo metallurgical extraction testwork.

Octava Minerals Ltd (ASX:OCT) ("Octava" or the "Company"), a Western Australia focused explorer of the new energy metals antimony, REE's, Lithium and gold, is pleased to report that laboratory assays have now been received from the two metallurgical core drillholes at the Byro REE's / Li Project in the Gascoyne Region of Western Australia.

Octava's Managing Director Bevan Wakelam stated;

*"Octava is investigating the potential for Australia's first, large scale, low cost sedimentary basin deposit of REE's, lithium and base metals. Metal extraction from black shales is a proven, low-cost technology used in other operations around the world. We will commence initial metallurgical testwork to determine the viability of extracting these metals from the black shale at Byro. We look forward to providing further updates as this work proceeds."*

The Byro Project is located on the Byro Plains of the Gascoyne Region, Western Australia, 220km south-east of Carnarvon and consists of two granted Exploration Licences – E 09/2673 and E 09/2674 – totalling 798 km<sup>2</sup>. The Byro Project also has Native Title agreements in place. Nearby infrastructure includes accessibility to a commercial port (Geraldton) and power from the NW gas pipeline and future potential access to Western Australian government proposed green energy sites.

Two metallurgical HQ3 coreholes were drilled for a total of 204m. The holes were drilled adjacent to previously drilled RC holes to confirm mineralisation and to provide fresh sample material for metallurgical testwork.

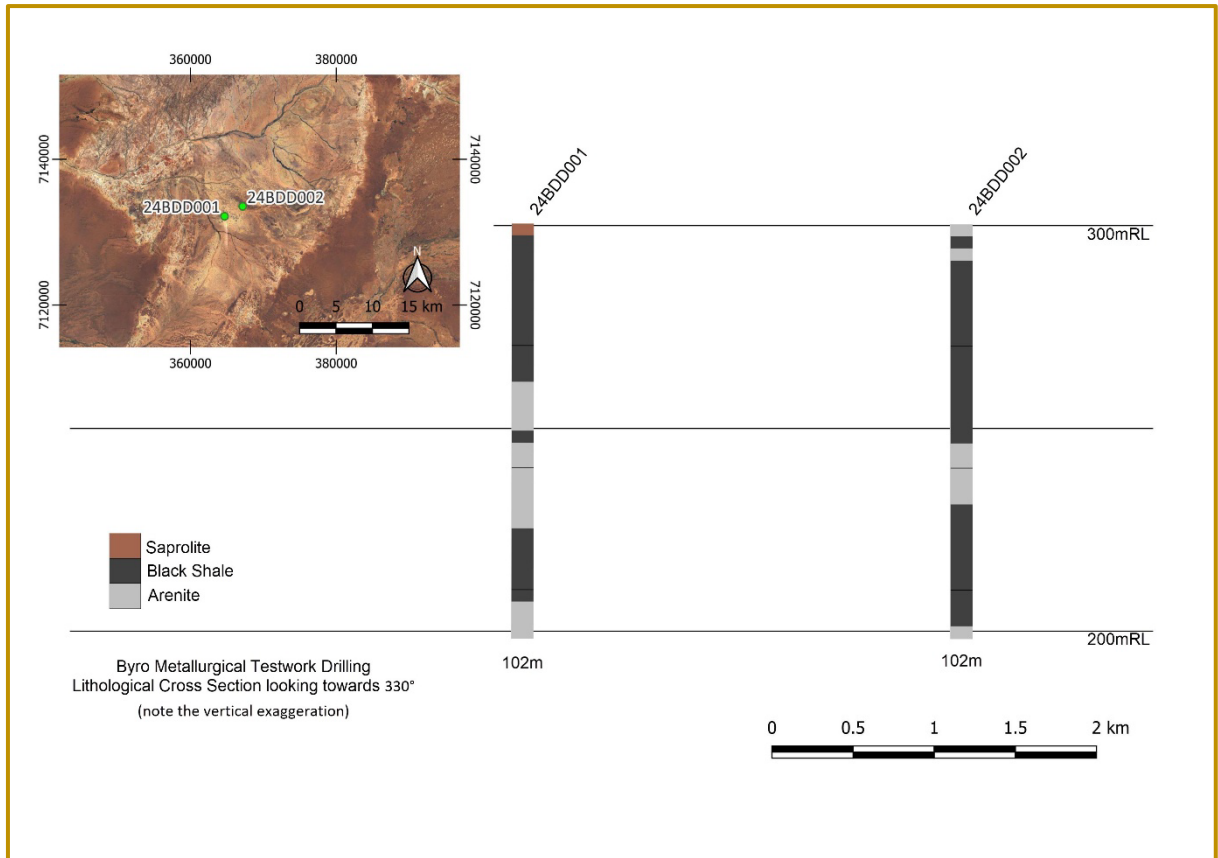


**Figure 1. Metallurgical Core Drilling at the Byro REE Project.**

The Byro project lies at the centre of the Permian Byro Sub-basin of the Carnarvon Basin. The Byro Group hosts sedimentary packages of sandstones, siltstones and mudstones, including black shales and coal seams. The dominant unit in the tenure is the Bulgadoo shale, which consists of banded carbonaceous shale and arenite, containing beds of enriched pyrite, bivalves and bryozoans.

The black shales in the Byro sub basin appear to have formed a metal sink that contains large volumes of anomalous REE, Li and base metals. The source of the metals at Byro is likely the Archean basement rocks of the Yilgarn Craton located ~40km to the east. The REE host rocks at Byro have been transported to their current location, unlike typical REE clay exploration targets in Australia which are formed in situ, from weathered granitic basement rocks.

Permian Black shales are known worldwide for their potential to host enriched poly-metallic deposits. These deposits contain considerable volumes of lower concentration resources of base metals, rare earths, lithium and other strategic minerals. They offer the opportunity for large-scale, low-cost mining operations capable of supplying the metals for a number of years. Octava is examining the black shales at the Byro project for the same potential.



**Figure 2 Byro Metallurgical Drillholes – Lithological Cross Section**

An initial study will involve characterisation of existing material, examining mineralogy and geochemistry, followed by studies looking at beneficiation and extraction pathways.



**Figure 3. Byro Core Tray (Drillhole 24BDD002 Depth 7.2 – 14.15m)**

This announcement has been authorised for release by the Managing Director/CEO.

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### **About Octava Minerals Ltd**

Octava Minerals Limited (ASX:OCT) is a Western Australian based new energy metals exploration and development company. The Company has 3 strategically located projects in geographically proven discovery areas in Western Australia.

### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on and fairly represents, information and supporting documentation compiled by Lyndal Money, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Ms. Money is a full-time employee of Octava Minerals Limited, who 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. Ms. Money consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Where the Company references exploration results previously released it confirms it is not aware of any new information or data that materially effects the information included in the relevant market announcement. The form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

### **Previously Released ASX Material References**

For further details relating to information in this announcement please refer to the following ASX announcements:

ASX:OCT 5 December 2024

ASX:OCT 24 January 2024



# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

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

| Criteria              | JORC Code explanation   | Commentary  |
|-----------------------|---|---|
| Sampling techniques   | <ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul style="list-style-type: none"> <li>Octava Minerals completed 2 x HQ3 diameter drillholes, each 102m deep, to collect samples for metallurgical testwork.</li> <li>A consistent sampling protocol for sample collection was followed, with samples collected following a set procedure to ensure representivity.</li> <li>Samples were collected from quarter cut core at intervals of 3m, to produce an up to 5kg sample collected into prenumbered calico bag.</li> <li>An Almonte core saw was used to quarter the core.</li> <li>Core samples were analysed for a complete rare earth suite of elements, along with other elements of interest at Intertek Genalysis, Perth WA.</li> <li>At the assay lab, samples are crushed to a nominal 10mm, from which a quarter is obtained using a riffle splitter. The split is pulverized to a minimum 85%, passing 75 microns.</li> </ul> |
| Drilling techniques   | <ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>   | <ul style="list-style-type: none"> <li>Diamond drilling was of HQ size (96mm hole diameter), with triple tube coring method utilised to optimise core recovery.</li> <li>Core was orientated using a Reflex orientation tool</li> <li>Coring of the holes was from surface</li> </ul>   |
| Drill sample recovery | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>  | <ul style="list-style-type: none"> <li>Coring was conducted using the triple tube method to minimize core loss through the friable parts of the sedimentary sequence.</li> <li>Sample recovery has not been recorded</li> <li>There is no relationship between recovery and grade.</li> </ul>   |
| Logging               | <ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>   | <ul style="list-style-type: none"> <li>The diamond core has been geologically and geotechnically logged.</li> <li>Logging was to a standard appropriate to the stage of exploration.</li> <li>Core has been photographed following mark-up and prior to cutting.</li> </ul>   |

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
|  | <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>  |   |
| Sub-sampling techniques and sample preparation | <ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul style="list-style-type: none"> <li>No measures have been taken to ensure sampling is statistically representative of the in situ sampled material. The collection methodology is considered appropriate for this early-stage assessment of the project.</li> <li>The sample size is considered appropriate to the early stage of exploration carried out.</li> <li>Sample preparation of core samples by accredited laboratory. High quality and appropriate preparation technique for assay methods in use.</li> </ul>   |
| Quality of assay data and laboratory tests     | <ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>   | <ul style="list-style-type: none"> <li>Samples were analysed at Intertek Genalysis in Perth.</li> <li>Samples were crushed, sodium peroxide fusion in a nickel crucible and analysed by ICP-OES and ICP-MS.</li> <li>The 55-element suite analysed comprises Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Cr, Cs, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Nb, Nd, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zr</li> <li>Sodium peroxide fusions offer total dissolution of the sample and can be performed in either nickel or zirconium crucibles to preclude the presence of unwanted contaminant metals thus allowing different element suites to be tailored for various purposes. Sodium peroxide fusions are useful for samples in which the elements of interest are hosted in minerals that may resist acid digestions. These include, amongst others, minerals and ores containing rare earth elements (REE) and the high field strength elements (HFSE), Sn, W, Ti, Ta, Nb and V.</li> </ul> |
| Verification of sampling and assaying          | <ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data</li> </ul>   | <ul style="list-style-type: none"> <li>Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.</li> <li>Logging was completed in the field, with data stored in a third party managed SQL database.</li> </ul>   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | <p>verification, data storage (physical and electronic) protocols.</p> <ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>   | <ul style="list-style-type: none"> <li>Logging was checked by senior Octava staff prior to cutting of the core.</li> <li>The diamond holes were designed to twin previously drilled RC holes completed by Pioneer Resources in 2015. Results of the diamond drilling are comparable.</li> </ul>  |
| Location of data points                                 | <ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul style="list-style-type: none"> <li>Location of drillhole collars were recorded by handheld Garmin GPS, with an accuracy of ~ 3m.</li> <li>Elevation is estimated, the topography across the project area is relatively flat.</li> <li>Holes were downhole surveyed using a north seeking gyro tool.</li> <li>All current data has been reported in MGA94 (Zone 50).</li> </ul>   |
| Data spacing and distribution                           | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>                                 | <ul style="list-style-type: none"> <li>The drilling was designed to collect samples for metallurgical testwork, with holes positioned adjacent to previously drilled RC holes.</li> <li>No resources style drilling at specific drill spacing is considered here.</li> <li>There is insufficient data, and it is insufficiently close spaced to establish a reasonable geological interpretation in the area of interest.</li> <li>No compositing has been applied.</li> </ul> |
| Orientation of data in relation to geological structure | <ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul> | <ul style="list-style-type: none"> <li>The drill orientation is parallel to the bedding within the central part of the Southern Byro Basin.</li> <li>The holes were drilled at 87°, an appropriate orientation for the basinal nature of the area.</li> </ul>  |
| Sample security   | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>  | <ul style="list-style-type: none"> <li>Core was collected from the rig each day during the drilling and was processed and logged at a secure core processing facility.</li> <li>Core was transported to Perth under the supervision of the Project Geologist</li> <li>Core was cut and sampled in Perth by Octava staff.</li> <li>Samples were submitted to Intertek Genalysis by Octava staff at the completion of core sampling.</li> </ul>                                  |
| Audits or reviews                                       | <ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>  | <ul style="list-style-type: none"> <li>Given the early stage of the exploration activities, no audits or reviews of the data have been conducted at this stage.</li> </ul>   |

## Section 2 Reporting of Exploration Results

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

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <i>Mineral tenement and land tenure status</i> | <ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul> | <ul style="list-style-type: none"> <li>The Byro project includes two granted exploration licenses, E09/2673 and E09/2674, held 100% by Byro Mining Pty Ltd.</li> <li>The project, situated in the Gascoyne Mineral Field covers 798.6kmm<sup>2</sup></li> <li>A Heritage agreement is in place between Byro Mining Pty Ltd and Wajarri Yamaji Aboriginal Corporation</li> <li>There are no known impediments for operating in the project area</li> </ul>   |
| <i>Exploration done by other parties</i>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>Continental Oil Company of Australia Ltd drilled 4 coreholes during 1965 for the purpose of petroleum exploration. These holes are stored in the GSWA core library. The area was determined to be non-prospective for oil or gas. Minor intersections of coal were encountered within the sediments drilled. Basement was not intersected.</li> <li>During 1998 GSWA completed regolith mapping, lag and stream sediment sampling over the Glenburgh sheet area. Over 1,019 sites were sampled on a nominal one sample per 16km<sup>2</sup> basis. Each sample was analysed for 48 components including major and minor elements. Results are compiled in a report by Sanders et al. (1998).</li> <li>Between 2001 and 2002, reconnaissance and interpretation of satellite imagery undertaken by Dolphin Resources Pty Ltd (Mazzucchelli, 2001, 2002a, 2002b) highlighted a number of regionally ferruginous sedimentary domes, including the core of the Byro Syncline. Dolphin Resources conducted a large and systematic gridded soil sampling program further southwest along the axis of the Byro Sub-basin. Samples were sent to Genalysis and Ultratrace for partial leach analysis. There would appear to be a relationship between the easterly and northeasterly trending fault zones and values of 20 to 98.4 ppt</li> </ul> |



| Criteria               | JORC Code explanation  | Commentary  |
|------------------------|--|---|
|                        |  | <p>silver.</p> <ul style="list-style-type: none"> <li>During 2018, Pioneer Resources completed 5 reverse circulation drillholes to test the potential for the Byro Sub-basin to host a large volume, low grade lithium resource</li> <li>Together with government data provided by GSWA, this past information has allowed recognition of the project's potential.</li> </ul>   |
| Geology                | <ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>   | <ul style="list-style-type: none"> <li>Lithium and rare earth elements are being targeted within enriched shales of the Byro Sub-basin.</li> </ul>  |
| Drill hole Information | <ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><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></li> </ul> | <ul style="list-style-type: none"> <li>Drillhole details can be found in Appendix 1 of the announcement.</li> <li>REO and LiO<sub>2</sub> results are found in Appendix 2 of the announcement</li> <li>Conversion of Li to LiO<sub>2</sub> has been made</li> <li>Conversion of elemental analysis (REE parts per million to oxide REO parts per million) was using the below element to oxide conversion factors.</li> </ul> <p style="text-align: right;">Element - Conversion Factor - Oxide Form</p> <p style="text-align: right;">Ce 1.2284 CeO<sub>2</sub></p> <p style="text-align: right;">Dy 1.1477 Dy<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Er 1.1435 Er<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Eu 1.1579 Eu<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Gd 1.1526 Gd<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Ho 1.1455 Ho<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">La 1.1728 La<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Lu 1.1371 Lu<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Nd 1.1664 Nd<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Pr 1.2083 Pr<sub>6</sub>O<sub>11</sub></p> <p style="text-align: right;">Sm 1.1596 Sm<sub>2</sub>O<sub>3</sub></p> <p style="text-align: right;">Tb 1.1762 Tb<sub>4</sub>O<sub>7</sub></p> |

| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
|  |   | <p>Tm 1.1421 Tm<sub>2</sub>O<sub>3</sub></p> <p>Y 1.2699 Y<sub>2</sub>O<sub>3</sub></p> <p>Yb 1.1387 Yb<sub>2</sub>O<sub>3</sub></p>   |
| Data aggregation methods   | <ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | <ul style="list-style-type: none"> <li>The reported results are uncut, as the nature of the mineralisation is not yet well defined</li> <li>No metal equivalent values used</li> </ul>   |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>   | <ul style="list-style-type: none"> <li>The orientation of mineralisation and hence true widths and strike potential of the host units is not yet known.</li> <li>The geometry is currently unknown, however drilling appears to be orientated perpendicular to lithology.</li> </ul> |
| Diagrams   | <ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>   | <ul style="list-style-type: none"> <li>See diagrams within this announcement.</li> </ul>   |
| Balanced reporting   | <ul style="list-style-type: none"> <li>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.</li> </ul>   | <ul style="list-style-type: none"> <li>Exploration results have been reported without cut grades</li> <li>The REO and LiO<sub>2</sub> results from the program can be found in their entirety in Appendix 2 of the announcement</li> </ul>   |
| Other substantive exploration data                               | <ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>   | <ul style="list-style-type: none"> <li>The exploration reported herein is at a very early stage, however results are consistent with geological and geophysical data</li> </ul>  |
| Further work   | <ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>  | <ul style="list-style-type: none"> <li>Studies to characterise existing material, examining mineralogy and geochemistry.</li> </ul>  |

| Criteria | JORC Code explanation  | Commentary   |
|----------|--|--|
|          | <ul style="list-style-type: none"> <li><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></li> </ul> | <ul style="list-style-type: none"> <li>Drilling is planned define the extent of the prospective host rocks.</li> </ul> |

Appendix 1  
Byro Metallurgical Drilling

| Hole ID  | Northing<br>(GDA94, Z50) | Easting (GDA94,<br>Z50) | RL (m) | Depth (m) | Dip  | Azimuth<br>(mag) | Comments             |
|----------|--------------------------|-------------------------|--------|-----------|------|------------------|----------------------|
| 24BDD001 | 7132190                  | 364676                  | 300    | 102       | -87° | 60°              | Twinning hole BORC06 |
| 24BDD002 | 7133551                  | 367164                  | 300    | 102       | -87° | 60°              | Twinning hole BORC05 |



Appendix 2  
Byro Metallurgical Drilling

| Hole ID | From | To  | CeO2 (ppm) | Dy2O3 (ppm) | Er2O3 (ppm) | Eu2O3 (ppm) | Gd2O3 (ppm) | Ho2O3 (ppm) | La2O3 (ppm) | LiO2 (ppm) | Lu2O3 (ppm) | Nd2O3 (ppm) | Pr6O11 (ppm) | Sm2O3 (ppm) | Tb2O3 (ppm) | Tm2O3 (ppm) | V (ppm) | Y2O3 (ppm) | Yb2O3 (ppm) | TREO (ppm) |
|---------|------|-----|------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|--------------|-------------|-------------|-------------|---------|------------|-------------|------------|
| 24BD001 | 0    | 3   | 92.13      | 5.28        | 2.97        | 1.16        | 5.76        | 0.92        | 41.75       | 182.98     | 0.45        | 36.39       | 10.15        | 6.73        | 0.81        | 0.46        | 130.00  | 31.87      | 3.07        | 239.90     |
| 24BD001 | 3    | 6   | 137.83     | 7.69        | 4.69        | 1.74        | 8.64        | 1.49        | 61.45       | 294.92     | 0.68        | 54.12       | 15.22        | 10.32       | 1.27        | 0.69        | 162.00  | 45.21      | 4.44        | 355.48     |
| 24BD001 | 6    | 9   | 135.12     | 7.35        | 3.89        | 1.62        | 8.53        | 1.37        | 60.63       | 245.41     | 0.57        | 50.39       | 14.50        | 9.62        | 1.27        | 0.57        | 155.00  | 41.40      | 3.87        | 340.70     |
| 24BD001 | 9    | 12  | 124.81     | 6.66        | 3.54        | 1.51        | 7.72        | 1.26        | 52.66       | 238.95     | 0.57        | 45.84       | 12.93        | 8.47        | 1.04        | 0.57        | 166.00  | 38.35      | 4.21        | 310.13     |
| 24BD001 | 12   | 15  | 164.97     | 9.18        | 4.69        | 1.97        | 9.91        | 1.72        | 67.79       | 335.82     | 0.68        | 59.84       | 16.91        | 11.71       | 1.50        | 0.69        | 241.00  | 49.53      | 4.10        | 405.18     |
| 24BD001 | 15   | 18  | 201.21     | 11.48       | 5.95        | 2.43        | 12.68       | 2.06        | 80.10       | 368.11     | 0.80        | 71.27       | 19.69        | 13.68       | 1.84        | 0.91        | 214.00  | 68.70      | 5.24        | 498.04     |
| 24BD001 | 18   | 21  | 160.31     | 7.69        | 3.89        | 1.85        | 9.34        | 1.37        | 62.63       | 344.43     | 0.57        | 54.70       | 15.34        | 10.67       | 1.27        | 0.69        | 226.00  | 42.67      | 3.64        | 376.62     |
| 24BD001 | 21   | 24  | 124.68     | 6.77        | 3.54        | 1.51        | 7.49        | 1.26        | 48.67       | 249.71     | 0.45        | 42.81       | 11.84        | 8.00        | 1.04        | 0.57        | 189.00  | 41.40      | 2.85        | 302.88     |
| 24BD001 | 24   | 27  | 153.80     | 7.35        | 3.66        | 1.85        | 8.88        | 1.49        | 58.64       | 288.46     | 0.57        | 51.90       | 14.50        | 9.28        | 1.27        | 0.57        | 246.00  | 41.78      | 3.87        | 359.39     |
| 24BD001 | 27   | 30  | 157.73     | 7.57        | 4.23        | 1.85        | 8.88        | 1.37        | 57.70       | 290.61     | 0.57        | 53.19       | 14.50        | 9.74        | 1.27        | 0.69        | 293.00  | 43.68      | 3.99        | 366.95     |
| 24BD001 | 30   | 33  | 131.07     | 5.85        | 3.09        | 1.51        | 7.38        | 1.03        | 50.31       | 232.49     | 0.45        | 43.39       | 11.96        | 8.12        | 0.92        | 0.46        | 202.00  | 34.29      | 3.30        | 303.13     |
| 24BD001 | 33   | 36  | 107.36     | 5.05        | 3.09        | 1.39        | 6.22        | 1.03        | 44.68       | 217.42     | 0.45        | 36.74       | 10.39        | 7.42        | 0.81        | 0.34        | 163.00  | 31.87      | 3.19        | 260.05     |
| 24BD001 | 36   | 39  | 140.65     | 6.20        | 3.54        | 1.74        | 7.49        | 1.15        | 53.48       | 275.55     | 0.45        | 46.07       | 13.17        | 8.58        | 1.04        | 0.57        | 170.00  | 34.92      | 3.53        | 322.59     |
| 24BD001 | 39   | 42  | 101.10     | 4.71        | 2.29        | 1.39        | 5.99        | 0.92        | 40.34       | 189.44     | 0.34        | 33.59       | 9.42         | 6.49        | 0.81        | 0.34        | 164.00  | 27.30      | 2.51        | 237.54     |
| 24BD001 | 42   | 45  | 70.51      | 2.87        | 1.72        | 1.04        | 3.80        | 0.57        | 32.02       | 66.73      | 0.34        | 24.61       | 7.25         | 4.29        | 0.46        | 0.23        | 70.00   | 16.25      | 1.82        | 167.79     |
| 24BD001 | 45   | 48  | 66.09      | 2.75        | 1.49        | 0.93        | 3.34        | 0.57        | 30.02       | 64.58      | 0.23        | 23.68       | 6.77         | 4.29        | 0.46        | 0.23        | 77.00   | 16.38      | 1.59        | 158.82     |
| 24BD001 | 48   | 51  | 57.98      | 2.52        | 1.37        | 0.93        | 3.23        | 0.46        | 26.27       | 58.12      | 0.23        | 20.76       | 5.80         | 3.48        | 0.46        | 0.23        | 60.00   | 14.98      | 1.59        | 140.30     |
| 24BD001 | 51   | 54  | 118.91     | 5.05        | 2.97        | 1.74        | 6.57        | 1.03        | 59.81       | 232.49     | 0.45        | 44.91       | 12.44        | 8.00        | 0.92        | 0.34        | 118.00  | 32.51      | 2.73        | 298.40     |
| 24BD001 | 54   | 57  | 68.67      | 3.33        | 1.83        | 0.93        | 3.80        | 0.57        | 35.77       | 101.18     | 0.23        | 27.06       | 7.61         | 4.52        | 0.58        | 0.23        | 77.00   | 18.92      | 2.05        | 176.10     |
| 24BD001 | 57   | 60  | 85.50      | 3.79        | 2.17        | 1.16        | 4.73        | 0.69        | 45.50       | 150.69     | 0.34        | 33.59       | 9.42         | 5.45        | 0.69        | 0.34        | 91.00   | 23.75      | 2.28        | 219.40     |
| 24BD001 | 60   | 63  | 64.61      | 3.21        | 1.60        | 1.04        | 3.92        | 0.57        | 33.19       | 77.50      | 0.23        | 26.01       | 7.01         | 4.17        | 0.58        | 0.23        | 63.00   | 18.29      | 1.82        | 166.48     |
| 24BD001 | 63   | 66  | 48.52      | 2.18        | 1.26        | 0.93        | 3.00        | 0.46        | 26.27       | 58.12      | 0.23        | 19.60       | 5.56         | 3.48        | 0.46        | 0.11        | 68.00   | 13.71      | 1.48        | 127.24     |
| 24BD001 | 66   | 69  | 51.96      | 2.52        | 1.37        | 0.93        | 3.11        | 0.46        | 26.62       | 49.51      | 0.23        | 21.00       | 5.92         | 3.48        | 0.46        | 0.23        | 64.00   | 15.37      | 1.71        | 135.36     |
| 24BD001 | 69   | 72  | 64.12      | 3.90        | 2.06        | 1.16        | 4.26        | 0.69        | 32.84       | 66.73      | 0.34        | 25.43       | 7.01         | 4.64        | 0.58        | 0.23        | 72.00   | 25.14      | 2.16        | 174.56     |
| 24BD001 | 72   | 75  | 42.01      | 2.30        | 1.37        | 0.69        | 2.54        | 0.46        | 22.28       | 107.64     | 0.11        | 16.91       | 4.71         | 3.01        | 0.35        | 0.11        | 58.00   | 13.33      | 1.02        | 111.22     |
| 24BD001 | 75   | 78  | 93.48      | 4.59        | 2.52        | 1.51        | 5.53        | 0.80        | 49.02       | 234.64     | 0.45        | 36.86       | 10.75        | 5.91        | 0.81        | 0.34        | < 50    | 26.29      | 3.19        | 242.05     |
| 24BD001 | 78   | 81  | 137.70     | 6.20        | 3.09        | 1.85        | 7.49        | 1.15        | 70.84       | 279.85     | 0.45        | 51.79       | 14.74        | 8.47        | 1.04        | 0.46        | 122.00  | 34.29      | 3.30        | 342.85     |
| 24BD001 | 81   | 84  | 125.67     | 5.74        | 3.20        | 1.74        | 7.15        | 1.15        | 63.80       | 277.70     | 0.45        | 48.29       | 13.77        | 8.58        | 1.04        | 0.46        | 121.00  | 33.27      | 3.07        | 317.37     |
| 24BD001 | 84   | 87  | 157.85     | 7.00        | 3.77        | 1.85        | 9.11        | 1.37        | 78.93       | 307.84     | 0.57        | 59.02       | 16.79        | 10.20       | 1.15        | 0.46        | 141.00  | 40.64      | 3.64        | 392.36     |
| 24BD001 | 87   | 90  | 189.66     | 8.72        | 4.46        | 2.32        | 10.72       | 1.60        | 92.89       | 372.42     | 0.57        | 69.28       | 19.81        | 11.83       | 1.38        | 0.69        | 113.00  | 50.67      | 4.67        | 469.27     |
| 24BD001 | 90   | 93  | 155.27     | 7.46        | 4.00        | 1.97        | 8.64        | 1.37        | 76.94       | 279.85     | 0.45        | 56.57       | 16.31        | 9.51        | 1.27        | 0.46        | 144.00  | 40.76      | 3.64        | 384.63     |
| 24BD001 | 93   | 96  | 63.63      | 2.98        | 1.72        | 0.93        | 3.57        | 0.57        | 34.01       | 127.01     | 0.23        | 25.08       | 7.13         | 4.29        | 0.58        | 0.23        | 90.00   | 18.16      | 1.94        | 165.04     |
| 24BD001 | 96   | 99  | 18.55      | 0.80        | 0.46        | 0.23        | 1.04        | 0.23        | 10.79       | 36.60      | 0.00        | 7.00        | 1.93         | 1.39        | 0.12        | 0.00        | < 50    | 4.95       | 0.68        | 48.17      |
| 24BD001 | 99   | 102 | 18.92      | 0.80        | 0.57        | 0.23        | 1.04        | 0.11        | 10.44       | 32.29      | 0.00        | 6.88        | 2.05         | 1.16        | 0.12        | 0.00        | < 50    | 5.33       | 0.68        | 48.34      |
| 24BD002 | 0    | 3   | 78.37      | 4.59        | 2.74        | 1.04        | 5.42        | 0.92        | 35.18       | 204.51     | 0.45        | 31.49       | 8.46         | 5.45        | 0.81        | 0.46        | 125.00  | 26.79      | 2.62        | 204.80     |
| 24BD002 | 3    | 6   | 99.75      | 6.08        | 3.66        | 1.39        | 6.80        | 1.15        | 45.62       | 236.80     | 0.57        | 38.84       | 11.24        | 7.31        | 0.92        | 0.57        | 129.00  | 35.05      | 3.64        | 262.58     |
| 24BD002 | 6    | 9   | 114.86     | 5.85        | 3.20        | 1.27        | 6.45        | 1.15        | 53.25       | 187.28     | 0.57        | 40.71       | 11.60        | 7.54        | 0.92        | 0.57        | 137.00  | 33.78      | 3.64        | 285.36     |
| 24BD002 | 9    | 12  | 113.01     | 6.43        | 3.66        | 1.39        | 7.26        | 1.26        | 52.42       | 256.17     | 0.57        | 44.32       | 12.44        | 8.12        | 1.15        | 0.57        | 125.00  | 38.86      | 3.76        | 295.23     |
| 24BD002 | 12   | 15  | 128.24     | 7.80        | 4.46        | 1.62        | 8.64        | 1.37        | 59.46       | 294.92     | 0.57        | 50.27       | 14.02        | 9.51        | 1.27        | 0.57        | 149.00  | 42.92      | 4.67        | 335.40     |
| 24BD002 | 15   | 18  | 132.67     | 8.15        | 4.69        | 1.74        | 9.22        | 1.60        | 61.45       | 297.07     | 0.68        | 52.25       | 14.50        | 9.86        | 1.38        | 0.69        | 155.00  | 47.49      | 4.55        | 350.93     |
| 24BD002 | 18   | 21  | 134.02     | 7.92        | 4.57        | 1.62        | 8.88        | 1.60        | 59.81       | 284.16     | 0.80        | 51.32       | 14.74        | 9.62        | 1.27        | 0.80        | 151.00  | 44.95      | 4.33        | 346.25     |
| 24BD002 | 21   | 24  | 113.14     | 6.77        | 4.12        | 1.74        | 7.84        | 1.37        | 53.36       | 318.60     | 0.57        | 46.07       | 12.69        | 8.35        | 1.15        | 0.57        | 139.00  | 39.87      | 3.99        | 301.59     |
| 24BD002 | 24   | 27  | 131.93     | 8.15        | 4.80        | 1.85        | 9.34        | 1.60        | 61.22       | 374.57     | 0.68        | 55.05       | 15.10        | 10.44       | 1.38        | 0.80        | 162.00  | 48.13      | 4.67        | 355.15     |
| 24BD002 | 27   | 30  | 140.16     | 8.26        | 4.57        | 1.85        | 9.22        | 1.60        | 61.92       | 346.58     | 0.68        | 53.54       | 14.98        | 10.32       | 1.38        | 0.69        | 165.00  | 46.99      | 4.10        | 360.27     |
| 24BD002 | 30   | 33  | 121.00     | 6.89        | 3.89        | 1.62        | 7.95        | 1.37        | 56.41       | 333.67     | 0.57        | 47.59       | 13.41        | 9.04        | 1.15        | 0.57        | 145.00  | 40.26      | 3.76        | 315.48     |
| 24BD002 | 33   | 36  | 110.19     | 6.31        | 3.54        | 1.62        | 7.61        | 1.26        | 52.89       | 337.97     | 0.57        | 46.19       | 12.69        | 8.58        | 1.04        | 0.46        | 141.00  | 39.62      | 3.76        | 296.32     |
| 24BD002 | 36   | 39  | 130.82     | 7.80        | 4.35        | 1.85        | 8.30        | 1.49        | 61.10       | 365.96     | 0.68        | 52.25       | 14.62        | 9.62        | 1.27        | 0.57        | 165.00  | 42.67      | 4.10        | 341.50     |
| 24BD002 | 39   | 42  | 138.69     | 6.66        | 3.77        | 1.74        | 8.18        | 1.37        | 58.76       | 320.75     | 0.57        | 49.81       | 14.26        | 9.16        | 1.15        | 0.69        | 198.00  | 38.35      | 4.10        | 337.25     |
| 24BD002 | 42   | 45  | 161.29     | 7.69        | 3.89        | 1.85        | 8.76        | 1.37        | 57.23       | 275.55     | 0.57        | 51.67       | 14.14        | 9.97        | 1.27        | 0.57        | 279.00  | 41.40      | 4.33        | 366.00     |
| 24BD002 | 45   | 48  | 131.32     | 5.97        | 3.43        | 1.51        | 7.38        | 1.15        | 50.20       | 232.49     | 0.45        | 42.11       | 12.08        | 7.65        | 1.04        | 0.57        | 204.00  | 37.08      | 3.42        | 305.34     |
| 24BD002 | 48   | 51  | 136.97     | 5.74        | 3.20        | 1.62        | 7.26        | 1.15        | 50.90       | 271.24     | 0.45        | 44.79       | 12.57        | 8.23        | 1.04        | 0.46        | 222.00  | 30.48      | 3.30        | 308.15     |
| 24BD002 | 51   | 54  | 118.29     | 5.39        | 3.20        | 1.39        | 6.57        | 1.03        | 46.44       | 208.81     | 0.45        | 41.41       | 11.72        | 8.12        | 0.92        | 0.46        | 187.00  | 32.26      | 2.85        | 280.50     |
| 24BD002 | 54   | 57  | 104.05     | 4.82        | 2.74        | 1.27        | 5.65        | 0.92        | 40.70       | 213.12     | 0.34        | 34.18       | 9.42         | 6.61        | 0.81        | 0.34        | 178.00  | 26.92      | 2.73        | 241.50     |

| Hole ID | From | To  | CeO2<br>(ppm) | Dy2O3<br>(ppm) | Er2O3<br>(ppm) | Eu2O3<br>(ppm) | Gd2O3<br>(ppm) | Ho2O3<br>(ppm) | La2O3<br>(ppm) | LiO2<br>(ppm) | Lu2O3<br>(ppm) | Nd2O3<br>(ppm) | Pr6O11<br>(ppm) | Sm2O3<br>(ppm) | Tb2O3<br>(ppm) | Tm2O3<br>(ppm) | V (ppm) | Y2O3<br>(ppm) | Yb2O3<br>(ppm) | TREO<br>(ppm) |
|---------|------|-----|---------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|-----------------|----------------|----------------|----------------|---------|---------------|----------------|---------------|
| 24BD002 | 57   | 60  | 99.38         | 4.36           | 2.29           | 1.16           | 4.96           | 0.92           | 37.30          | 92.57         | 0.34           | 29.74          | 8.46            | 5.45           | 0.69           | 0.34           | 120.00  | 25.78         | 2.05           | 223.21        |
| 24BD002 | 60   | 63  | 95.82         | 4.02           | 2.40           | 1.16           | 4.84           | 0.69           | 42.22          | 83.96         | 0.34           | 33.71          | 9.54            | 6.15           | 0.69           | 0.34           | 97.00   | 23.87         | 2.39           | 228.18        |
| 24BD002 | 63   | 66  | 97.41         | 3.79           | 2.52           | 1.16           | 4.96           | 0.80           | 46.09          | 64.58         | 0.45           | 36.86          | 10.27           | 6.38           | 0.69           | 0.34           | 73.00   | 23.37         | 2.39           | 237.47        |
| 24BD002 | 66   | 69  | 56.51         | 2.87           | 1.49           | 0.93           | 3.11           | 0.57           | 24.98          | 73.19         | 0.23           | 20.18          | 5.80            | 3.83           | 0.46           | 0.23           | 82.00   | 15.62         | 1.82           | 138.62        |
| 24BD002 | 69   | 72  | 58.47         | 2.52           | 1.37           | 0.93           | 3.23           | 0.57           | 27.33          | 75.34         | 0.23           | 21.23          | 5.92            | 3.71           | 0.46           | 0.23           | 86.00   | 14.10         | 1.71           | 142.00        |
| 24BD002 | 72   | 75  | 125.54        | 6.20           | 3.09           | 1.62           | 7.38           | 1.15           | 57.00          | 213.12        | 0.45           | 45.84          | 12.93           | 8.23           | 1.04           | 0.46           | 107.00  | 34.29         | 2.85           | 308.05        |
| 24BD002 | 75   | 78  | 107.85        | 5.39           | 2.97           | 1.51           | 6.45           | 1.03           | 54.65          | 303.53        | 0.45           | 43.04          | 11.96           | 7.42           | 0.92           | 0.46           | 110.00  | 30.73         | 2.51           | 277.36        |
| 24BD002 | 78   | 81  | 99.25         | 4.82           | 2.74           | 1.39           | 5.88           | 0.92           | 49.37          | 266.93        | 0.34           | 38.26          | 11.12           | 6.49           | 0.81           | 0.46           | 102.00  | 28.83         | 2.96           | 253.64        |
| 24BD002 | 81   | 84  | 96.43         | 4.82           | 2.63           | 1.39           | 6.11           | 0.92           | 48.20          | 251.87        | 0.45           | 37.21          | 10.87           | 6.84           | 0.81           | 0.46           | 95.00   | 31.11         | 2.62           | 250.87        |
| 24BD002 | 84   | 87  | 135.49        | 6.20           | 3.54           | 1.74           | 8.07           | 1.15           | 67.08          | 286.31        | 0.45           | 52.02          | 14.74           | 8.58           | 1.04           | 0.46           | 122.00  | 33.78         | 3.07           | 337.41        |
| 24BD002 | 87   | 90  | 124.81        | 5.74           | 3.09           | 1.62           | 6.92           | 1.15           | 62.74          | 277.70        | 0.45           | 47.36          | 13.29           | 8.12           | 0.92           | 0.46           | 124.00  | 34.67         | 2.73           | 314.06        |
| 24BD002 | 90   | 93  | 133.16        | 6.54           | 3.32           | 1.74           | 7.38           | 1.26           | 63.57          | 271.24        | 0.45           | 49.34          | 14.26           | 8.47           | 1.04           | 0.57           | 132.00  | 35.94         | 3.07           | 330.09        |
| 24BD002 | 93   | 96  | 152.94        | 6.66           | 3.77           | 1.97           | 8.41           | 1.26           | 73.77          | 318.60        | 0.57           | 57.85          | 16.31           | 9.16           | 1.15           | 0.46           | 152.00  | 40.26         | 3.07           | 377.61        |
| 24BD002 | 96   | 99  | 176.40        | 7.92           | 4.57           | 2.20           | 10.03          | 1.60           | 81.86          | 318.60        | 0.57           | 64.85          | 18.24           | 11.13          | 1.38           | 0.69           | 173.00  | 50.67         | 4.21           | 436.33        |
| 24BD002 | 99   | 102 | 76.78         | 3.21           | 1.83           | 1.04           | 4.15           | 0.69           | 34.95          | 111.94        | 0.23           | 28.69          | 7.97            | 5.33           | 0.58           | 0.23           | 97.00   | 18.03         | 1.94           | 185.65        |