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Cobra Resources PLC
28 August 2024

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Cobra Resources plc
("Cobra" or the "Company")

ISR Bench Scale Study Update

Exceptionally high recoveries with low impurities and low acid consumption; on path to disrupt global supply of heavy rare earths

Cobra (LSE: COBR), the mineral exploration and development company advancing a potentially world-class ionic Rare Earth Elements ("REEs") discovery at its Boland Project in South Australia, is pleased to announce the following results from ongoing metallurgical studies:

- Exceptionally high recoveries of high value rare earths of up to 82%
- High recoveries achieved with low levels of impurities (deleterious elements) and low levels of acid consumption
- Positive progress supports low impact, low cost In Situ Recovery ("ISR") mining

Cobra has made a regionally scalable ionic rare earth discovery where high grades of valuable Heavy Rare Earths ("HREOs") and Magnet Rare Earths ("MREOs") occur concentrated in a permeable horizon confined by impermeable clays. This unique geology is amenable to ISR which has been successfully used for decades to recover uranium from geologically similar systems in South Australia. Cobra is working to demonstrate that, with modification, ISR techniques will enable non-invasive and low-cost production of critical REEs from its Boland discovery.

The Australian Nuclear Scientific and Technical Organisation ("ANSTO") is conducting diagnostic and bench scale ISR trials on core samples from Boland. The results from this testing will form the basis of engineering and economic evaluation for the ISR recovery of REEs from Boland. Highlights include:

- **High Grade**: Diagnostic sample grade **5,230 ppm** Total Rare Earth Oxide ("TREO") where valuable MREOs total: **1,046 ppm** NdPr and **152ppm** DyTb[1]
- **High Recoveries**: **78%** Pr, **75%** Nd, **77%** Dy and **82%** Tb using a pH 1.5 lixiviant
- **Low Acid Consumption:** Total sulphuric acid consumption of 18.2 kg per tonne of ore treated
- **Low Impurity Levels:** Low levels of impurities (deleterious elements) compared to recovered rare earths, support a low cost, single step process for purification
- **Bench Scale Progress:** ANSTO is currently conducting a bench scale ISR study on core from Boland. Key progress includes:
    - A pH 3 solution of ammonium sulphate is being introduced under low pressure to a column of Boland mineralised sand
    - Fluid which has passed through the column 'leachate' is being collected at the column outlet
    - At the commencement of the study the leachate pH was above **7**
    - The leachate pH is now below **4.4** and dropping
    - Diagnostic testwork indicates that REEs will be liberated to solution at faster rates as the lixiviant continues to drop towards pH 3
    - Rare earth concentrations in leachate are being monitored and used to construct an initial engineering and cost/benefit model of ISR for using a lixiviant pH of 3

- Further results anticipated over the coming weeks

Follow this link to watch a short video of CEO Rupert Verco explaining the results released in this announcement: https://investors.cobraplc.com/link/0y5GQr. Make sure to submit any questions you might have via the Cobra investor hub.

Rupert Verco, CEO of Cobra, commented:

"High recoveries from high grade ore coupled with low acid consumption and low cost ISR mining are standout factors for the Boland Project. We are defining a scalable, high grade ionic rare earth project whose unique geology supports an ISR process, a point of difference to conventional ionic REE projects.

These metallurgy results indicate that improved recoveries can be achieved through further optimising the lixiviant used in the ISR process. By achieving high recoveries with low impurities and at low levels of acid consumption we expect to optimise metallurgical and cost parameters for the in situ recovery of REEs.

ISR has reduced the cost of uranium production around the world. We hope to be the first to use the method to reduce the cost of REE production."

Further information relating to metallurgical results are presented in the appendices.

[1] NdPr = Nd_2O_3 + Pr_6O_{11}, DyTb = Dy_2O_3 + Tb_2O_3

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The person who arranged for the release of this announcement was Rupert Verco, Managing Director of the Company.

Information in this announcement relates to exploration results that have been reported in the following announcements:

- Wudinna Project Update: "ISR bench scale update -Further metallurgical success at world leading ISR rare earth project", dated 11 July 2024
- Wudinna Project Update: "ISR bench scale update - Exceptional head grades revealed", dated 18 June 2024
- Wudinna Project Update: "Re-Assay Results Confirm High Grades Over Exceptional Scale at Boland", dated 26 April 2024
- Wudinna Project Update: "Drilling results from Boland Prospect", dated 25 March 2024
- Wudinna Project Update: "Historical Drillhole Re-Assay Results", dated 27 February 2024
- Wudinna Project Update: "Ionic Rare Earth Mineralisation at Boland Prospect", dated 11 September 2023
- Wudinna Project Update: "Exceptional REE Results Defined at Boland", dated 20 June 2023

Competent Persons Statement

The information in this report that relates to metallurgical results is based on information compiled by Cobra Resources and reviewed by Mr James Davidson who is the Director of Process Engineering at Wallbridge Gilbert Aztec and a Fellow of the Australian Institute of Mining and Metallurgy (F AusIMM). Mr Davidson has sufficient experience that is relevant to the metallurgical testing which was 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 Davidson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

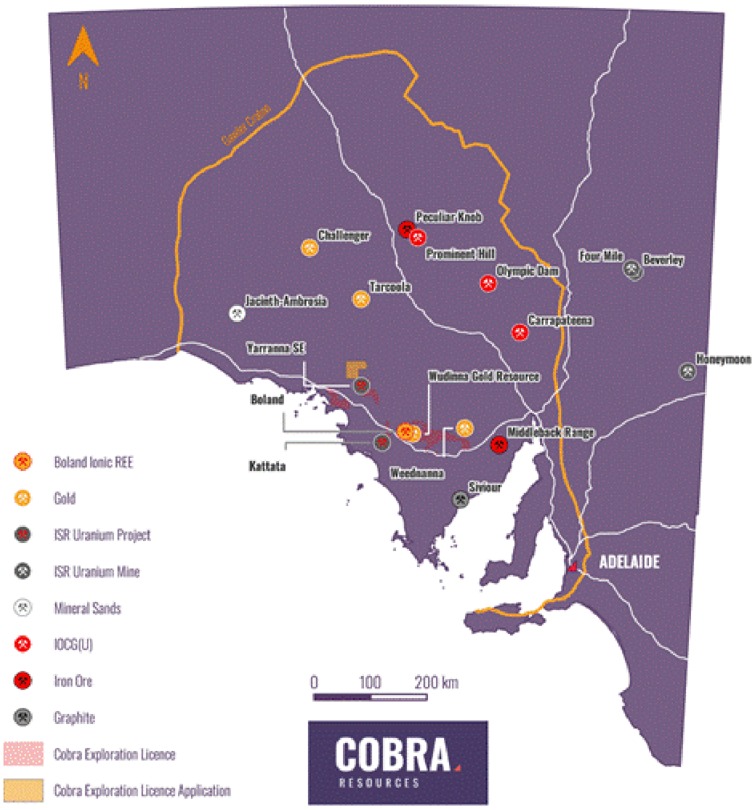
Information in this announcement has been assessed by Mr Rupert Verco, a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Verco is an employee of Cobra and has more than 16 years' industry experience which is relevant to the style of mineralisation, deposit type, and activity which he is undertaking experience which is relevant to the style of mineralisation, deposit type, and activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves of JORC. This includes 12 years of Mining, Resource Estimation and Exploration.

About Cobra

In 2023, Cobra discovered a rare earth deposit with the potential to re-define the cost of rare earth production. The highly scalable Boland ionic rare earth discovery at Cobra's Wudinna Project in South Australia's Gawler Craton is Australia's only rare earth project amenable for in situ recovery (ISR) mining - a low cost, low disturbance method. Cobra is focused on de-risking the investment value of the discovery by proving ISR as the preferred mining method which would eliminate challenges associated with processing clays and provide Cobra with the opportunity to define a low-cost pathway to production.

Cobra's Wudinna tenements also contain extensive orogenic gold mineralisation, including a 279,000 Oz gold JORC Mineral Resource Estimate, characterised by potentially open-pitable, high-grade gold intersections.

Regional map showing Cobra's tenements in the heart of the Gawler Craton



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Appendix 1: Background information - the Boland Project and ISR

- The Boland prospect was discovered by Cobra in 2023. Mineralisation is ionically bound to clays and organics within palaeochannel sands within the Narlaby Palaeochannel
- Mineralisation occurs within a permeable sand within an aquifer that is saltier than sea water and is confined by impermeable clays
- ISR is executed through engineered drillhole arrays that allow the injection of mildly acidic ammonium sulphate lixiviants, using the confining nature of the geology to direct and lower the acidity of the orebody
- Once REEs are mobile in solution in groundwater, it is also possible, from an engineering standpoint, to recover the solution to surface via extraction drillholes, **without any need for excavation or ground disturbance**

- The capital costs of ISR mining are low as they involve no material movements and do not require traditional infrastructure to process ore **- i.e metals are recovered in solution**

- Ionic mineralisation is highly desirable owing to its high weighting of valuable heavy REEs and the cost-effective method in which REEs can be desorbed. Initial desorption testing indicated high recoveries >65% HREO at pH3

- Ionic Rare Earth mineralisation in China is mined in an insitu manner that relies on gravity to permeate mineralisation. The style of ISR process is unconfined and cannot be controlled increasing the risk for environmental degradation

- Confined aquifer ISR is successfully executed globally within the uranium industry, accounting for more than 60% of the world uranium production. This style of ISR has temporary ground disturbance, and the ground waters are regenerated over time

- Cobra is aiming to demonstrate the economic and environmental benefit of recovering ionic HREOs through the more environmentally aquifer controlled ISR - a world first

Appendix 2: Metallurgical results

ANSTO, a globally leading laboratory in ionic REE desorption and ISR uranium mining is assisting Cobra with ongoing ISR and flowsheet development. Core from the Boland Project is currently subject to a bench scale ISR study. Testwork aims to use the permeability of the orebody to replicate the ISR mining process.

As an integral part of the ongoing studies is to optimise the ISR conditions, diagnostic metallurgical tests are being performed to define key economic parameters that include REE recovery, acid consumption and levels of gangue impurities.

Preliminary desorption recoveries have previously been reported at pH 3. To determine the potential to achieve higher recoveries a diagnostic test was run at pH 1.5, aiming to maximise the recovery of REEs that could be achieved through ISR whilst balancing the cost of acid consumption and the liberation of unwanted impurities.

Results indicate:

- Recoveries materially increase with greater acidities with MREO recoveries doubling from 38% at pH 3 to 76% at pH 1.5

- Acid consumption increases from 8.8kg/t at pH 3 to 18.2 kg/t at pH 1.5

- Impurity levels increase but are offset by the increased REE recoveries with impurity ratios remaining highly favourable supporting a simple, single step for purification

The parameters of the diagnostic leach test performed at pH 1.5:

- Reagent: 0.5M ammonium sulphate
- Sulphuric acid addition to maintain pH 1.5
- Sample quantity 0.44 kg
- Slurry weight: 25%
- Ambient temperature
- Duration: 7 hours

The two subsamples have been taken from the bulk core sample and been subject to diagnostic leach tests. The results of which are summarised in the schematic below.

Figure 1: Sample and subsequent sub-sample leach results

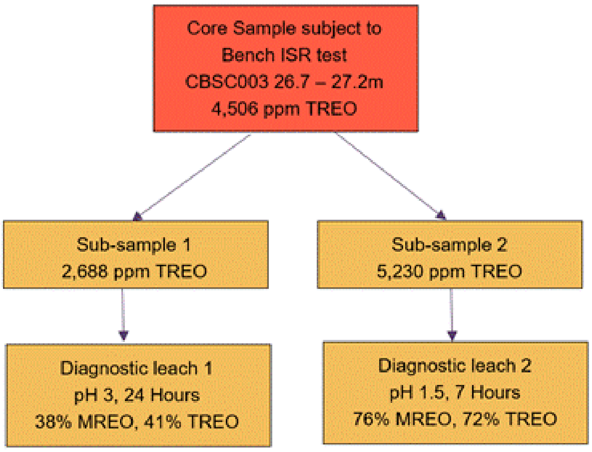


Figure 2: Recoveries of individual REEs at 30 mins, 2 hours and 7 hours at pH 1.5

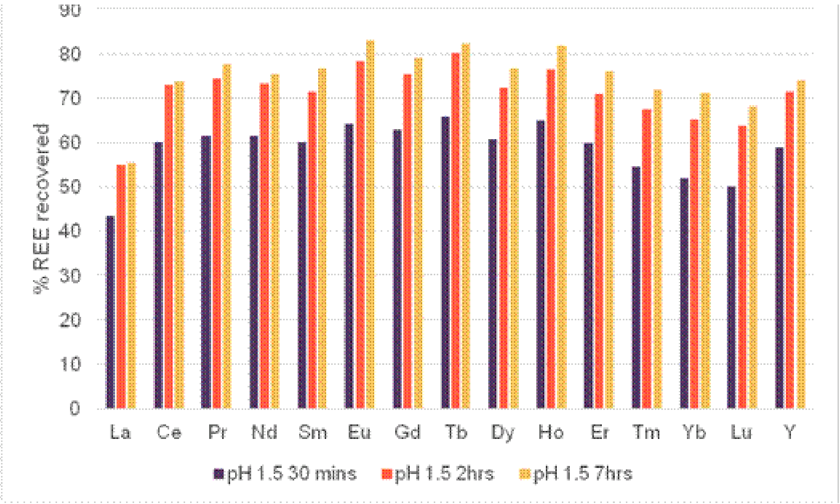
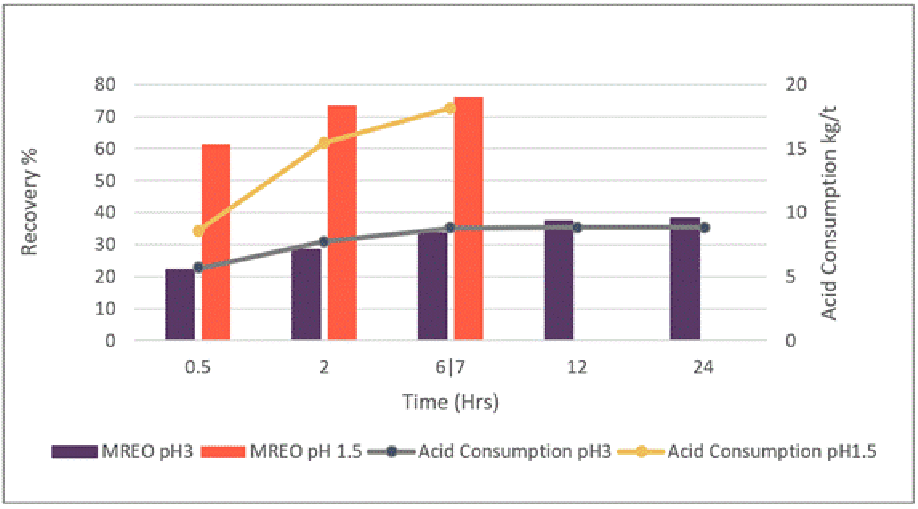


Figure 3: CBSC003 REE recoveries at pH 3 and pH 1.5 over time with measured acid consumption



Composite samples subject to the diagnostic leach tests have been derived from CBSC003 (26.7m to 27.2m). The sub-sample head grade and subsequent recoveries are presented in table 1 below:

Table 1: Diagnostic leach sample head grade and subsequent recoveries at pH 1.5 after 7 hours

	Pr_6O_{11} ppm	Nd_2O_3 ppm	Tb_2O_3 ppm	Dy_2O_3 ppm	MREO %	HREO %	TREO ppm
Sub-sample (443g) Grade	220	826	22	130	23%	28%	5,230
Recovery	78%	75%	82%	77%	76%	76%	72%

A favourable characteristic of ionic mineralisation is the low level of impurities and radioactive deleterious elements that are recovered.

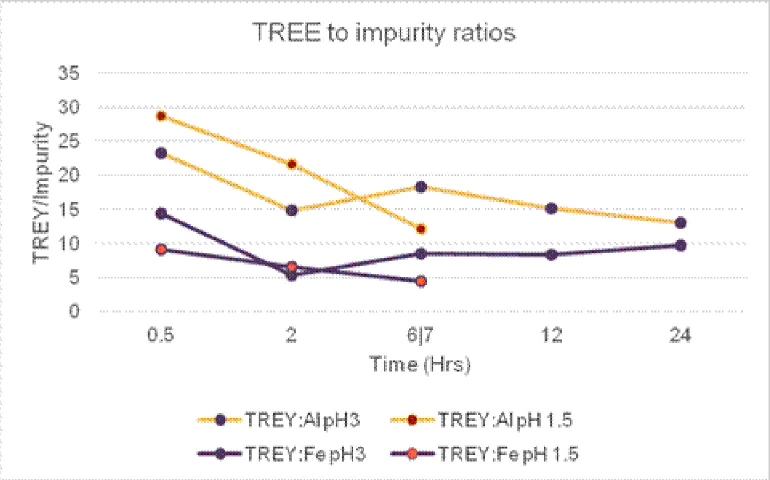
Even at increased acidities, the levels of impurities are very low with the abundance of REE in solution far exceeding impurities. Whilst the levels of U and Th recoveries are low, the quantity of radionuclides is unknown and will be evaluated as further processing steps are tested.

Table 2: Diagnostic leach impurity ratios and levels of radioactive deleterious elements in solution at pH 1.5 over 7 hours. Note ratios are calculated by TREY/Impurity

TREY:Al	TREY:Fe	TREY:Si	U mg/L	Th mg/L
12.1	4.4	41.8	6	8

TREY = La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y
Al - aluminium
Fe - iron
Si - silicon
U - uranium
Th - thorium

Figure 4: TREY/ individual impurities in solution - supporting a single step, low temperature impurity removal process

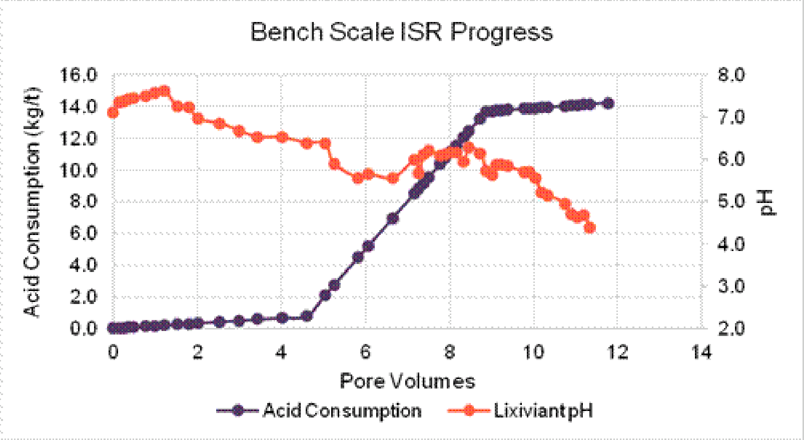


Appendix 3: Bench scale study update

ANSTO is currently performing a column ISR recovery test on the section of mineralised core from Boland. The process is aimed at emulating the ISR injection and recovery process. A key part of the ISR process is aquifer conditioning. Through this period, acid consuming gauge are removed. A summary of progress is presented below:

- At the commencement of the test the sample pH was 7, after 11.8 pore volumes the sample pH is below 4.4
- Acid consumption to date is 14.23 kg/t
- Most of the acid consuming gauge have been removed with rare earth desorption evident
- Rare Earth concentrations in solution are being monitored with extractions expected to occur rapidly from this point forward
- Results of cumulative recoveries will be reported when testing is completed

Figures 5: Cumulative acid consumption from bench scale ISR testing and the associated pregnant lixiviant pH



Further Planned Work

- The bench scale ISR test will continue until REE recoveries plateau under current test conditions
- As a consequence of results released in this announcement, further diagnostic leaches have been performed at pH 2.5 and 2.0 with results pending
- Results from these additional diagnostic tests, coupled with the results presented within this release will be used determine the optimal conditions for project economics balancing recovery, impurities and acid consumption
- A second column leach is being prepared to be executed under optimised lixiviant conditions

Appendix 4: JORC Code, 2012 Edition - Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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*	**2023** RC • Samples were collected via a Metzke cone splitter mounted to the cyclone. 1m samples were managed through chute and butterfly valve to produce a 2-4 kg sample. Samples were taken from the

	meaning of sampling. • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	point of collar, but only samples from the commencement of saprolite were selected for analysis. • Samples submitted to Bureau Veritas Laboratories, Adelaide, and pulverised to produce the 50 g fire assay charge and 4 acid digest sample. AC • A combination of 2m and 3 m samples were collected in green bags via a rig mounted cyclone. An PVC spear was used to collect a 2-4 kg sub sample from each green bag. Samples were taken from the point of collar. • Samples submitted to Bureau Veritas Laboratories, Adelaide, and pulverised to produce the 50 g fire assay charge and 4 acid digest sample. **2024** SONIC • Core was scanned by a SciAps X555 pXRF to determine sample intervals. Intervals through mineralized zones were taken at 10cm. Through waste, sample intervals were lengthened to 50cm. Core was halved by knife cutting. XRF scan locations were taken on an inner surface of the core to ensure readings were taken on fresh sample faces. • Samples were submitted to Bureau Veritas for 4 acid digest ICP analysis.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	2023 • Drilling completed by Bullion Drilling Pty Ltd using 5 ¾" reverse circulation drilling techniques from a Schramm T685WS rig with an auxiliary compressor. • Drilling completed by McLeod Drilling Pty Ltd using 75.7 mm NQ air core drilling techniques from an ALMET Aircore rig mounted on a Toyota Landcruiser 6x6 and a 200psi, 400cfm Sullair compressor. 2024 • Sonic Core drilling completed Star Drilling using 4" core with a SDR12 drill rig. Holes were reamed to 6" or 8" to enable casing and screens to be installed
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	Aircore & RC • Sample recovery was generally good. All samples were recorded for sample type, quality and contamination potential and entered within a sample log. • In general, sample recoveries were good with 10 kg for each 1 m interval being recovered from AC drilling. • No relationships between sample recovery and grade have been identified. • RC drilling completed by Bullion Drilling Pty Ltd using 5 ¾" reverse circulation drilling techniques from a Schramm T685WS rig with an auxiliary compressor • Sample recovery for RC was generally good. All samples were recorded for sample type, quality and contamination potential and entered within a sample log. • In general, RC sample recoveries were good with 35-50 kg for each 1 m interval being recovered. • No relationships between sample recovery and grade have been identified.

		Sonic Core • Sample recovery is considered excellent.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Aircore & RC • All drill samples were logged by an experienced geologist at the time of drilling. Lithology, colour, weathering and moisture were documented. • Logging is generally qualitative in nature. • All drill metres have been geologically logged on sample intervals (1-3 m). Sonic Core • Logging was carried out in detail, determining lithology and clay/ sand content. Logging intervals were lithology based with variable interval lengths. • All core drilled has been lithologically logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	2021-onward • The use of an aluminum scoop or PVC spear to collect the required 2-4 kg of sub-sample from each AC sample length controlled the sample volume submitted to the laboratory. • Additional sub-sampling was performed through the preparation and processing of samples according to the lab internal protocols. • Duplicate AC samples were collected from the green bags using an aluminium scoop or PVC spear at a 1 in 25 sample frequency. • Sample sizes were appropriate for the material being sampled. • Assessment of duplicate results indicated this sub-sample method provided good repeatability for rare earth elements. • RC drill samples were sub-sampled using a cyclone rig mounted splitter with recoveries monitored using a field spring scale. • Manual re-splitting of RC samples through a riffle splitter was undertaken where sample sizes exceeded 4 kg. • RC field duplicate samples were taken nominally every 1 in 25 samples. These samples showed good repeatability for REE. Sonic Drilling • Field duplicate samples were taken nominally every 1 in 25 samples where the sampled interval was quartered. • Blanks and Standards were submitted every 25 samples • Half core samples were taken where lab geochemistry sample were taken. • In holes where column leach test samples have been submitted, full core samples have been submitted over the test areas.

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Samples were submitted to Bureau Veritas Laboratories, Adelaide for preparation and analysis. • Multi element geochemistry were digested by four acid ICP-MS and analysed for Ag, Ce, Cu, Dy, Er, Eu, Gd, Ho, La, Lu, Mg, Na, Nd, P, Pr, Sc, Sm, Tb, Th, Tm, U, Y and Yb. • For the sonic samples Ag was removed from the analytical suite and V was included • Field gold blanks and rare earth standards were submitted at a frequency of 1 in 25 samples. • Field duplicate samples were submitted at a frequency of 1 in 25 samples • Reported assays are to acceptable levels of accuracy and precision. • Internal laboratory blanks, standards and repeats for rare earths indicated acceptable assay accuracy. • Samples retained for metallurgical analysis were immediately vacuum packed and refrigerated. • These samples were refrigerated throughout transport. Metallurgical Test Work performed by the Australian Nuclear Science and Technology Organisation (ANSTO). ANSTO laboratories prepared a 80g sample from the homogenized core section CBSC003 26.7-27.2m. The sample was • Standard desorption conditions: • 0.5M (NH4)2SO4 as lixiviant • pH 3 • 30 minutes, 2 hrs, 6 hrs, 12 hrs & 24 hours • Ambient temperature of 22°C; and • 4 wt% solids density • Prior to commencing the test work, a bulk 0.5 M (NH4)2SO4 solution was prepared as the synthetic lixiviant and the pH adjusted to 3 using H2SO4. • Each of the leach tests was conducted on 80 g of dry, un-pulverised sample and 1920 g of the lixiviant in a 2 L titanium/ stainless steel baffled leach vessel equipped with an overhead stirrer. • Addition of solid to the lixiviant at the test pH will start the test. 1 M H2SO4 was utilised to maintain the test pH for the duration of the test, if necessary. The acid addition was measured. • At the completion of each test, the final pH was measured, the slurry was vacuum filtered to separate the primary filtrate. • The primary filtrate was analysed as follows: • ICP-MS for Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Mn, Nd, Pb, Pr, Sc, Sm, Tb, Th, Tm, U, Y, Yb (ALS, Brisbane); • ICP-OES for Al, Ca, Fe, K, Mg, Mn, Na, Si (in-house, ANSTO); • The water wash was stored but not analysed.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Sampling data was recorded in field books, checked upon digitising and transferred to database. • Geological logging was undertaken digitally via the MX Deposit logging interface and synchronised to the database at least daily during the drill programme. • Compositing of assays was undertaken

	• *Discuss any adjustment to assay data.*	• Compositing of assays was undertaken and reviewed by Cobra Resources staff. • Original copies of laboratory assay data are retained digitally on the Cobra Resources server for future reference. • Samples have been spatially verified through the use of Datamine and Leapfrog geological software for pre 2021 and post 2021 samples and assays. • Twinned drillholes from pre 2021 and post 2021 drill programmes showed acceptable spatial and grade repeatability. • Physical copies of field sampling books are retained by Cobra Resources for future reference. • Elevated pXRF grades were checked and re-tested where anomalous. pXRF grades are semi quantitative.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Pre 2021 • Collar locations were pegged using DGPS to an accuracy of +/-0.5 m. • Downhole surveys have been completed for deeper RC and diamond drillholes • Collars have been picked up in a variety of coordinate systems but have all been converted to MGA 94 Zone 53. Collars have been spatially verified in the field. • Collar elevations were historically projected to a geophysical survey DTM. This survey has been adjusted to AHD using a Leica CS20 GNSS base and rover survey with a 0.05 cm accuracy. Collar points have been re-projected to the AHD adjusted topographical surface. 2021-onward • Collar locations were initially surveyed using a mobile phone utilising the Avenza Map app. Collar points recorded with a GPS horizontal accuracy within 5 m. • RC Collar locations were picked up using a Leica CS20 base and Rover with an instrument precision of 0.05 cm accuracy. • Locations are recorded in geodetic datum GDA 94 zone 53. • No downhole surveying was undertaken on AC holes. All holes were set up vertically and are assumed vertical. • RC holes have been down hole surveyed using a Reflex TN-14 true north seeking downhole survey tool or Reflex multishot • Downhole surveys were assessed for quality prior to export of data. Poor quality surveys were downgraded in the database to be excluded from export. • All surveys are corrected to MGA 94 Zone 53 within the MX Deposit database. • Cased collars of sonic drilling shall be surveyed before a mineral resource estimate
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drillhole spacing was designed on transects 50-80 m apart. Drillholes generally 50-60 m apart on these transects but up to 70 m apart. • Additional scouting holes were drilled opportunistically on existing tracks at spacings 25-150 m from previous drillholes. • Regional scouting holes are drilled at variable spacings designed to test structural concepts • Data spacing is considered adequate for a saprolite hosted rare earth Mineral Resource estimation. • No sample compositing has been applied

		• No sample compositing has been applied • Sonic core holes were drilled at ~20m spacings in a wellfield configuration based on assumed permeability potential of the intersected geology.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• RC drillholes have been drilled between -60 and -75 degrees at orientations interpreted to appropriately intersect gold mineralisation • Aircore and Sonic drill holes are vertical.
Sample security	• *The measures taken to ensure sample security.*	Pre 2021 • Company staff collected or supervised the collection of all laboratory samples. Samples were transported by a local freight contractor • No suspicion of historic samples being tampered with at any stage. • Pulp samples were collected from Challenger Geological Services and submitted to Intertek Genalysis by Cobra Resources' employees. 2021-onward • Transport of samples to Adelaide was undertaken by a competent independent contractor. Samples were packaged in zip tied polyweave bags in bundles of 5 samples at the drill rig and transported in larger bulka bags by batch while being transported. • There is no suspicion of tampering of samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No laboratory audit or review has been undertaken. • Genalysis Intertek and BV Laboratories Adelaide are NATA (National Association of Testing Authorities) accredited laboratory, recognition of their analytical competence.

Appendix 3: Section 2 Reporting of Exploration Results

Criteria	**JORC Code explanation**	**Commentary**
Mineral tenement and land tenure status	• *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.* • *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.*	• RC drilling occurred on EL 6131, currently owned 100% by Peninsula Resources limited, a wholly owned subsidiary of Andromeda Metals Limited. • Alcrest Royalties Australia Pty Ltd retains a 1.5% NSR royalty over future mineral production from licenses EL6001, EL5953, EL6131, EL6317 and EL6489. • Baggy Green, Clarke, Laker and the IOCG targets are located within Pinkawillinnie Conservation Park. Native Title Agreement has been negotiated with the NT Claimant and has been registered with the SA Government. • Aboriginal heritage surveys have been completed over the Baggy Green Prospect area, with no sites located in the immediate vicinity. • A Native Title Agreement is in place with the relevant Native Title party.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• On-ground exploration completed prior to Andromeda Metals' work was limited to 400 m spaced soil geochemistry completed by Newcrest Mining Limited over the Barns prospect. • Other than the flying of regional airborne geophysics and coarse spaced ground gravity, there has been no recorded exploration in the vicinity of the Baggy Green deposit prior to Andromeda Metals' work. • Paleochannel uranium exploration was undertaken by various parties in the 1980s

		and the 2010s around the Boland Prospect. Drilling was primarily rotary mud with downhole geophysical logging the primary interpretation method.

Geology	• *Deposit type, geological setting and style of mineralisation.*	• The gold and REE deposits are considered to be related to the structurally controlled basement weathering of epidote- pyrite alteration related to the 1590 Ma Hiltaba/GRV tectonothermal event.
		• Mineralisation has a spatial association with mafic intrusions/granodiorite alteration and is associated with metasomatic alteration of host rocks. Epidote alteration associated with gold mineralisation is REE enriched and believed to be the primary source.
		• Rare earth minerals occur within the saprolite horizon. XRD analysis by the CSIRO identifies kaolin and montmorillonite as the primary clay phases.
		• SEM analysis identified REE bearing mineral phases in hard rock:
		    • Zircon, titanite, apatite, andradite and epidote.
		• SEM analyses identifies the following secondary mineral phases in saprock:
		    • Monazite, bastanite, allanite and rutile.
		• Elevated phosphates at the base of saprock do not correlate to rare earth grade peaks.
		• Upper saprolite zones do not contain identifiable REE mineral phases, supporting that the REEs are adsorbed to clay particles.
		• Acidity testing by Cobra Resources supports that pH chemistry may act as a catalyst for Ionic and Colloidal adsorption.
		• REE mineral phase change with varying saprolite acidity and REE abundances support that a component of REE bursary is adsorbed to clays.
		• Palaeo drainage has been interpreted from historic drilling and re-interpretation of EM data that has generated a top of basement model.
		• Ionic REE mineralisation is confirmed through metallurgical desorption testing where high recoveries are achieved at benign acidities (pH4-3) at ambient temperature.
		• Ionic REE mineralisation occurs in reduced clay intervals that contact both saprolite and permeable sand units. Mineralisation contains variable sand quantities that is expected

Drillhole Information	• *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:*
	    o *easting and northing of the drill hole collar*
	    o *elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar*
	    o *dip and azimuth of the hole*
	    o *down hole length and interception depth*
	    o *hole length.*
	• *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.*
		• Exploration results being reported represent a small portion of the Boland target area. Coordinates for Wellfield drill holes are presented in Table 3.

Data	• *In reporting Exploration Results,*	• Reported summary intercepts are weighted

<table>
<tr>
<td><i>aggregation methods</i></td>
<td><i>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>
• <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>
• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></td>
<td>averages based on length.
• No maximum/ minimum grade cuts have been applied.
• No metal equivalent values have been calculated.
• Gold results are reported to a 0.3 g/t cut-off with a maximum of 2m internal dilution with a minimum grade of 0.1 g/t Au.
• Rare earth element analyses were originally reported in elemental form and have been converted to relevant oxide concentrations in line with industry standards. Conversion factors tabulated below:
•
<table>
<tr><th>Element</th><th>Oxide</th><th>Factor</th></tr>
<tr><td>Cerium</td><td>CeO_2</td><td>1.2284</td></tr>
<tr><td>Dysprosium</td><td>Dy_2O_3</td><td>1.1477</td></tr>
<tr><td>Erbium</td><td>Er_2O_3</td><td>1.1435</td></tr>
<tr><td>Europium</td><td>Eu_2O_3</td><td>1.1579</td></tr>
<tr><td>Gadolinium</td><td>Gd_2O_3</td><td>1.1526</td></tr>
<tr><td>Holmium</td><td>Ho_2O_3</td><td>1.1455</td></tr>
<tr><td>Lanthanum</td><td>La_2O_3</td><td>1.1728</td></tr>
<tr><td>Lutetium</td><td>Lu_2O_3</td><td>1.1371</td></tr>
<tr><td>Neodymium</td><td>Nd_2O_3</td><td>1.1664</td></tr>
<tr><td>Praseodymium</td><td>Pr_6O_{11}</td><td>1.2082</td></tr>
<tr><td>Scandium</td><td>Sc_2O_3</td><td>1.5338</td></tr>
<tr><td>Samarium</td><td>Sm_2O_3</td><td>1.1596</td></tr>
<tr><td>Terbium</td><td>Tb_4O_7</td><td>1.1762</td></tr>
<tr><td>Thulium</td><td>Tm_2O_3</td><td>1.1421</td></tr>
<tr><td>Yttrium</td><td>Y_2O_3</td><td>1.2699</td></tr>
<tr><td>Ytterbium</td><td>Yb_2O_3</td><td>1.1387</td></tr>
</table>
• The reporting of REE oxides is done so in accordance with industry standards with the following calculations applied:
  • TREO = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3
  • CREO = Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3
  • LREO = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3
  • HREO = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3
  • NdPr = Nd_2O_3 + Pr_6O_{11}
  • TREO-Ce = TREO - CeO_2
  • % Nd = Nd_2O_3/ TREO
  • % Pr = Pr_6O_{11}/TREO
  • % Dy = Dy_2O_3/TREO
  • % HREO = HREO/TREO
  • % LREO = LREO/TREO

  • XRF results are used as an indication of potential grade only. Due to detection limits only a combined content of Ce, La, Nd, Pr & Y has been used. XRF grades have not been converted to oxide.</td>
</tr>
<tr>
<td><i>Relationship between mineralisation widths and intercept lengths</i></td>
<td>• <i>These relationships are particularly important in the reporting of Exploration Results.</i>
• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>
• <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></td>
<td>• All reported intercepts at Boland are vertical and reflect true width intercepts.
• Exploration results are not being reported for the Mineral Resource area.</td>
</tr>
</table>

	hole length, true width not known).	
Diagrams	- *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.*	- Relevant diagrams have been included in the announcement. - Exploration results are not being reported for the Mineral Resources area.
Balanced reporting	- *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	- Not applicable - Mineral Resource and Exploration Target are defined. - Exploration results are not being reported for the Mineral Resource area.
Other substantive exploration data	- *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.*	- Refer to previous announcements listed in RNS for reporting of REE results and metallurgical testing
Further work	- *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* - *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	- The metallurgical testing reported in this announcement represents the first phase of bench scale studies to test the extraction of ionic REEs via ISR processes. - Hydrology, permeability and mineralogy studies are being performed on core samples. - Installed wells are being used to capture hydrology base line data to support a future infield pilot study. - Trace line tests shall be performed to emulate bench scale pore volumes.

Table 3: Drillhole coordinates

Prospect	Hole number	Grid	Northing	Easting	Elevation
Boland	CBSC0001	GDA94 / MGA zone 53	6365543	534567	102.9
Boland	CBSC0002	GDA94 / MGA zone 53	6365510	534580	104.1
Boland	CBSC0003	GDA94 / MGA zone 53	6365521	534554	102.7
Boland	CBSC0004	GDA94 / MGA zone 53	6365537	534590	105
Boland	CBSC0005	GDA94 / MGA zone 53	6365528	534573	103.2

END