RNS Number : 0297I
Cobra Resources PLC
25 March 2024

THIS ANNOUNCEMENT CONTAINS INSIDE INFORMATION FOR THE PURPOSES OF ARTICLE 7 OF REGULATION 2014/596/EU WHICH IS PART OF DOMESTIC UK LAW PURSUANT TO THE MARKET ABUSE (AMENDMENT) (EU EXIT) REGULATIONS (SI 2019/310) ("UK MAR"). UPON THE PUBLICATION OF THIS ANNOUNCEMENT, THIS INSIDE INFORMATION (AS DEFINED IN UK MAR) IS NOW CONSIDERED TO BE IN THE PUBLIC DOMAIN.

NOT FOR RELEASE, PUBLICATION OR DISTRIBUTION, IN WHOLE OR IN PART, DIRECTLY OR INDIRECTLY IN OR INTO THE UNITED STATES, AUSTRALIA, CANADA, JAPAN, THE REPUBLIC OF SOUTH AFRICA OR ANY OTHER JURISDICTION WHERE TO DO SO WOULD CONSTITUTE A VIOLATION OF THE RELEVANT LAWS OF SUCH JURISDICTION.

25 March 2024

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

Drilling Results from Boland Prospect

Assays confirm high grade concentrations; modelled geology demonstrates massive scale; high calculated permeability supports in situ recovery

Cobra (LSE: COBR), an exploration company focused on the Wudinna Project ("Wudinna") in South Australia, is pleased to announce that preliminary results from recent sonic core drilling at the Boland ionic rare earths ("REE") prospect further demonstrate that the discovery could be a world class source of magnet and heavy rare earths.

Cobra confirmed ionic REE metallurgical recoveries at Boland in 2023 and recent sonic core drilling has provided greater geological detail which confirms the Company's thesis that grade concentrations are high, mineralisation is amenable to low-cost extraction via in situ recovery ("ISR"), and the discovery has exceptional province scale potential. Results demonstrate:

- **High grade concentrations across three zones of mineralisation**
- **High grades in geological formations with high permeabilities amenable to ISR**
- **Modelled mineralised units support exceptional scale**

Rupert Verco, CEO of Cobra, commented:

"These results are sensational! It is pleasing to see our value proposition materialise, and these results, coupled with the excellent metallurgical recoveries achieved last year, demonstrate Boland is not only unique but world class.

The value of in situ recovery cannot be overestimated. It is the preferred mining method from scale, cost and environmental perspectives and we are now positioned to be industry leaders in applying this form of mining long used for uranium to ionic rare earth mineralisation.

Whilst the Brazilian ionic rare earth projects have captured market interest, our results are comparable in grade, scale and metallurgy and the Boland prospect's advantage is the unique geology that makes it amenable to ISR. Our forward work programme is designed to demonstrate the project's commercial advantage as we continue to define scale, grade upside, and highlight the value of ISR."

Highlights

- **High grade concentrations across three zones of mineralisation:** results received from three holes intersect three zones of mineralisation that yield length-weighted averages of:
    - **Zone 1:** 3.1m at 1,007 ppm Total Rare Earth Oxides ("TREO"), where $Nd_2O_3 + Pr_6O_{11}$ totals 212 ppm and $Dy_2O_3 + Tb_2O_3$ totals 23.5 ppm (Magnet Rare Earth Oxides ("MREO") 23.4%, Heavy Rare Earth Oxides ("HREO") 17%) from 15.6m
    - **Zone 2:** 1.9m at 1,043 ppm TREO, where $Nd_2O_3 + Pr_6O_{11}$ totals 205 ppm and $Dy_2O_3 + Tb_2O_3$ totals 22 ppm (MREO 22%, HREO 18%) from ~20.5m
    - **Zone 3**: 0.6m at 1,538 ppm TREO where $Nd_2O_3 + Pr_6O_{11}$ totals 305 ppm and $Dy_2O_3 + Tb_2O_3$ totals 52 ppm (MREO 23%, HREO 28%) from ~26.6m
- **High grades with high permeabilities**: the highest grade assay of 4,608 ppm TREO, where $Nd_2O_3 + Pr_6O_{11}$ totals **934** ppm and $Dy_2O_3 + Tb_2O_3$ totals **91** ppm (MREO 24%, HREO 27%), comes from Zone 3, where:
    - Particle size distribution analysis supports high calculated permeabilities with 67.6% of the mineralised interval having a particle size greater than 0.1mm (fine sand)
    - Particle size distribution yields a high calculated transmissivity of 135-275 m/day[1] and is very supportive of high ISR success
    - The highest ionic recoveries were yielded: 79% Tb, 67% Dy, 60% Nd and 47% Pr using a simple AMSUL wash at pH3

  Further sizing analysis is underway for Zones 1 and 2
- **Modelled mineralised units support exceptional scale**: mineralised host units have been modelled across the palaeochannel at Boland, where:
    - The geological formation hosting Zone 1 mineralisation is mapped across ~128,000,000m^2
    - The geological formation hosting Zone 2 mineralisation is mapped across ~58,000,000m^2
    - The geological formation hosting Zone 3 mineralisation is mapped across ~139,000,000m^2
- Modelling is based on the downhole geophysical responses attributed to each mineralised zone in alignment with a REPTEM survey flown in 2008 that defines the base of the Narlaby Palaeochannel
- Downhole geophysics from historical uranium focused drilling has been digitised, interpreted and wireframes developed
- 233 samples from 13 drillholes from south and north of Boland are at the laboratory. These results will validate and refine the model with the aim of supporting a near term maiden mineral resource estimation

Next Steps:

- Samples are being prepared for mineralogy studies to understand the adsorption characteristics of REEs

- Sieve sizes are being assayed to understand distribution of REEs
- A total of 233 historic pulp samples from the greater Boland target area have been submitted for re-analysis to validate the model of mineralised geological formations
- A total of five holes were drilled, cased, and screened with slotted PVC screens. Screens have been set at a depth to coincide with Zone 3 mineralisation. These wells will enable hydrology studies and support a future pilot study
- Hydrology testing has commenced. Water quality and water yield data will be compiled to define environmental baselines and evaluate productivity potential
- Select zones of core have been sent to Australia's Nuclear Science and Technology Organisation ("ANSTO") to enable column ISR testing. Results from these tests are anticipated to support the amenability of mineralisation to be mined through ISR
- Pregnant solutions from ANSTO testwork will be used by Watercycle Technologies to advance a flow sheet through membrane desorption
- Hydrology testing has commenced. Water quality and water yield data will be compiled to define environmental baselines and evaluate productivity potential

Sonic Drilling - Overview of Boland Strategy

Results are from a five drillhole programme totalling 145m completed in February 2024. The programme has successfully provided quality drill core that is enabling Cobra to advance the ISR potential of the Boland ionic REE discovery. Drilling was undertaken in a five-hole ISR wellfield configuration at 25m spacings, where holes were cased and screened to support a future "push-pull" pilot ISR study.

The wellfield was drilled proximal to Aircore hole CBAC00163 that yielded the following intersections:

- Zone 1: 3m at 559 ppm TREO (24% MREO) from 18m (playa clay)
- Zone 2: 3m at 618 ppm TREO (22% MREO) from 21m (playa clay)
- Zone 3: 3m at 468 ppm TREO (21% MREO) from 27m (basal clay)
- Saprolite: 12m at 1,191 ppm TREO (27% MREO) from 36m

Cobra believed that, owing to the geological and chemical conditions that promote ionic adsorption, higher grades would be defined concentrated to lithologies with high permeability and be amenable to ISR.

Sonic drilling has enabled representative sampling. Narrow intervals relating to geology from three holes were sampled and submitted for assay to evaluate potential grade concentration. Length weighted average composites from three sonic core holes assayed proximal to CBAC00163 validate grade concentration, where:

- **Zone 1:** 3.1m at 1,007 ppm TREO (23.4% MREO) from 15.6m represents a 180% increase in grade
- **Zone 2:** 1.9m at 1,043 ppm TREO (22% MREO) from ~20.5m represents a 169% increase in grade
- **Zone 3**: 0.6m at 1,538 ppm TREO (MREO 23%, HREO 28%) from ~26.6m represents a 329% increase in grade

Increased grades confined to permeable lithology is important from an ISR standpoint and bodes well for future extraction success. Mineralised intervals from the two holes not reported have been sent to ANSTO for bench scale leach ISR testing. A summary of significant intersections is tabulated below:

Table 1: Significant intersections from sonic core holes

Mineralisation zone	Hole ID	From (m)	To (m)	Int (m)	TREO	Pr_6O_{11}	Nd_2O_3	Tb_2O_3	Dy_2O_3	MREO %	HREO%
Zone 1	CBSC0001	15.6	19.2	3.7	1,025	49	172	4	22	24%	17%
Zone 2	CBSC0001	20.8	23.0	2.2	1,010	46	156	4	20	22%	18%
Zone 3	CBSC0001	27.0	27.7	0.7	2,118	90	321	10	59	23%	26%
Zone 1	CBSC0005	15.6	18.5	2.9	915	44	154	3	18	24%	16%
Zone 2	CBSC0005	19.5	21.4	1.9	1,226	56	192	4	19	22%	15%
Zone 3	CBSC0005	26.3	27.0	0.7	1,248	56	202	6	35	24%	27%
Zone 1	CBSC0004	15.7	18.5	2.8	1,082	48	167	4	20	22%	15%
Zone 2	CBSC0004	21.4	23.0	1.6	870	36	126	3	17	21%	17%
Zone 3	CBSC0004	26.3	26.8	0.5	1,130	45	179	7	38	24%	31%

Figure 1: Aerial photograph of the Boland wellfield with significant intersections

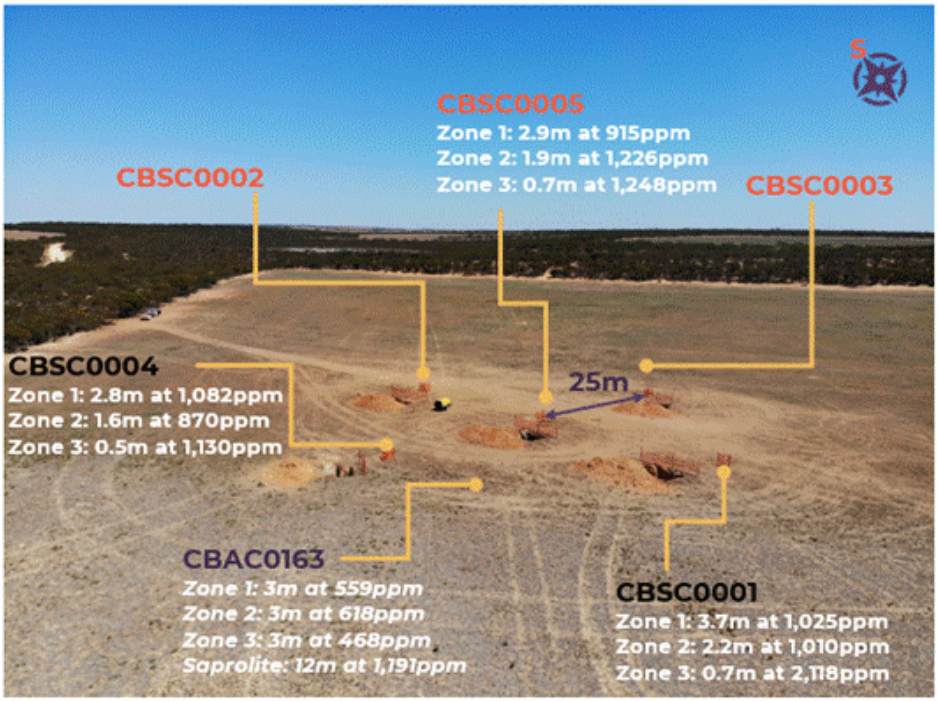


Table 2: Length weighted averages of significant intersections

Mineralisation zone	Int (m)	TREO	Pr_6O_{11}	Nd_2O_3	Tb_2O_3	Dy_2O_3	MREO %	HREO%
Zone 1	3.1	1,008	47	165	4	20	23%	16%
Zone 2	1.9	1,042	46	159	3.4	19	22%	17%
Zone 3	0.6	1,538	66	240	8	45	23%	28%

Association of Metallurgy to Mineralised Lithology

Sonic core drilling has enabled the Company to evaluate the nature of mineralisation and its potential to be mined via ISR. Whilst sizing results, further assays, and bench scale ISR column leach tests are outstanding, preliminary observations are very positive and correlate well to diagnostic metallurgical tests performed by ANSTO. Observations and average recoveries by zone are summarised in table 3:

Table 3: 2023 averaged metallurgical recoveries of magnet rare earths achieved in ANSTO sighter testwork according to mineralised palaeochannel horizon and the ranked ISR recovery potential

Min Zone	Lith Summary	Acidity (pH)	Pr	Nd	Tb	Dy	Acid consumption (kg/t)
Zone 1	Upper playa clay	4	16%	20%	31%	33%	15.9
		3	**22%**	**26%**	**31%**	**40%**	**22.3**
Zone 2	Middle playa clay and sand interbeds	4	22%	25%	37%	41%	17.3
		3	**36%**	**40%**	**52%**	**54%**	**28.8**
Zone 3	Organic rich - clayey sand	4	35%	45%	44%	49%	9.4
		3	**47%**	**60%**	**79%**	**67%**	**17.6**
Upper Saprolite	Weathered granite	4	8%	11%	21%	16%	10.9
		3	9%	13%	27%	25%	29.2

Downhole Geophysics and Implications for Scalability

All sonic core holes were logged for lithology and compared against downhole geophysical measurements. Downhole geophysical responses can de directly attributed to the geological formations that host mineralisation. In particular:

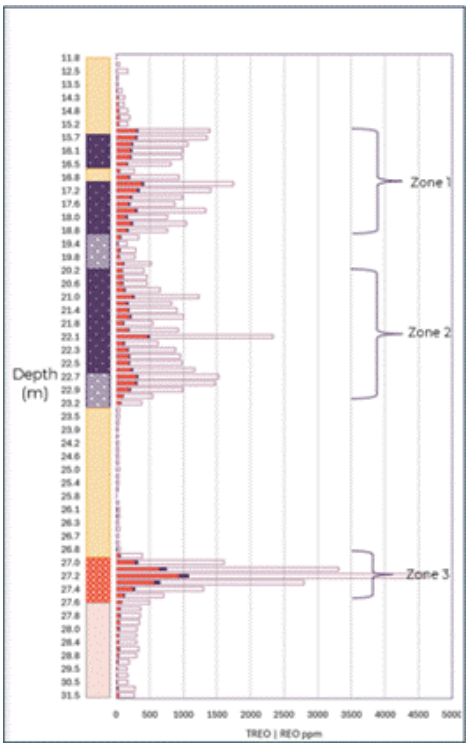
- **Zone 1**: mineralisation is confined between two distinct gamma peaks at the margins of the mineralised unit, where the lower peak relates to a narrow, coarse reduced sand unit

- **Zone 2**: mineralisation has an overall low gamma response where small spikes associate with elevated REE grades

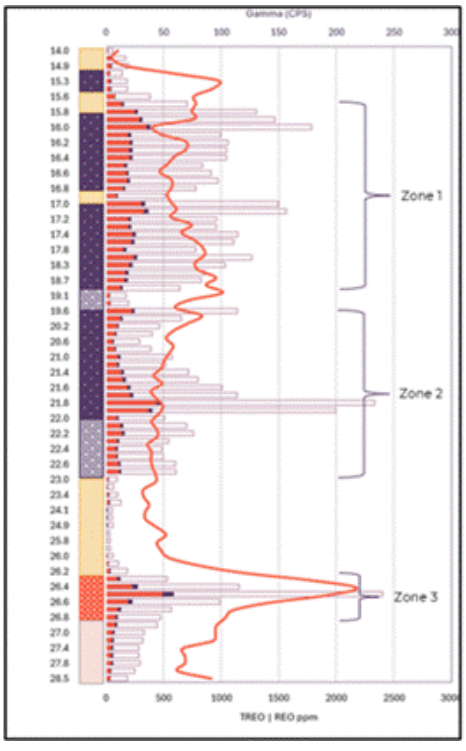
- **Zone 3**: mineralisation is associated with a high geophysical response that is interpreted to be a product of the high quantity of organics contained within the mineralised sandy clay

Figure 2-4: Grade distribution of rare earths down-hole and their association to palaeochannel geology and associated downhole geophysics

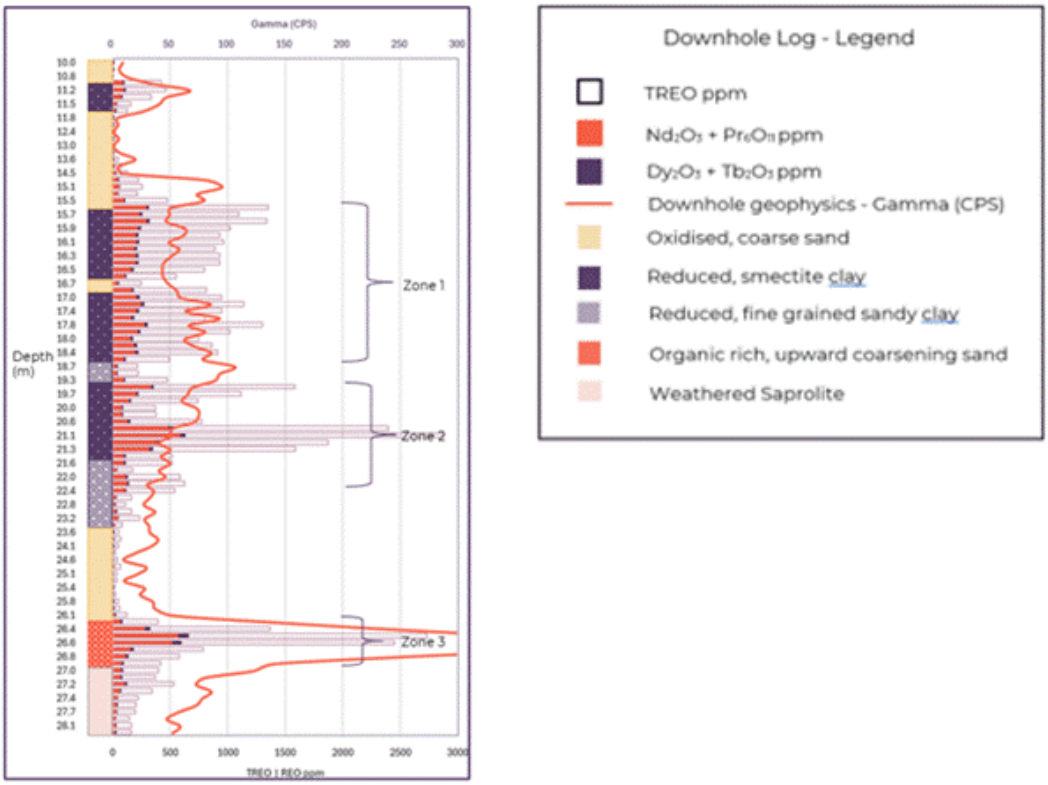
Drillhole: CBSC0001



Drillhole: CBSC0004



Drillhole: CBSC0005



- Downhole geophysics across all five sonic core holes exhibit responses that can be attributed to mineralised lithologies
- The Boland prospect is located on EL5953 "Minipa" where uranium explorers have previously undertaken exploration and carried out downhole geophysics on numerous holes across the tenement
- Downhole geophysical data and historical logs have been digitised and interpreted, enabling Cobra's technical team to assess the extent of the mineralised zones across the tenement area
- Mineralised zones are most prominent on the margins of the palaeosystem, which is interpreted to be a result of their marine transgressional deposition and not the fluvial depositional environment that is constrained in the central portions of the palaeochannel
- This supports significant scale potential as sediments from marine transgression are interpreted to be more extensive across the palaeosystem
- The scale of the geological formations that host mineralisation are mapped across ~155km^2 on EL5953 alone. Recent reanalysis results demonstrate that these formations host mineralisation across the Company's greater tenement holdings which cover an additional 1,850km^2 of palaeosystems
- Re-analysis of samples from drillholes highlighted in Figure 5 are aimed to validate the modelled zones and confirm estimated volumes
- Collation and digitisation of downhole geophysical data across Cobra's greater land tenure is ongoing and will inform further re-analysis and future drilling
- Follow-up Aircore drilling will be designed to infill shortfalls in geological data, supporting a maiden mineral resource estimate

Figure 5: 3D section highlighting the modelled geological units that host REE mineralisation (zones 1-3)

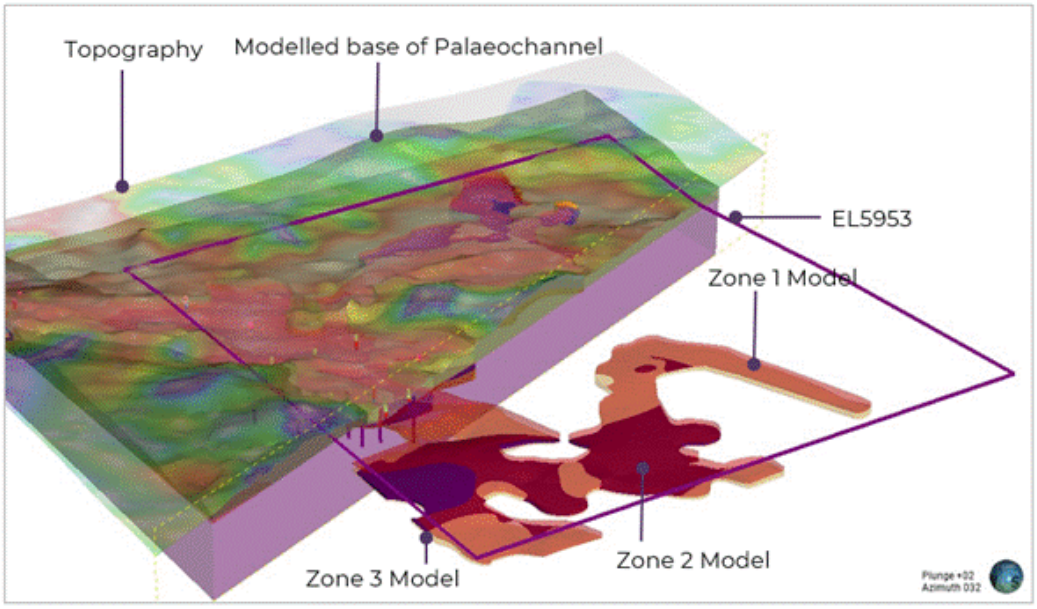
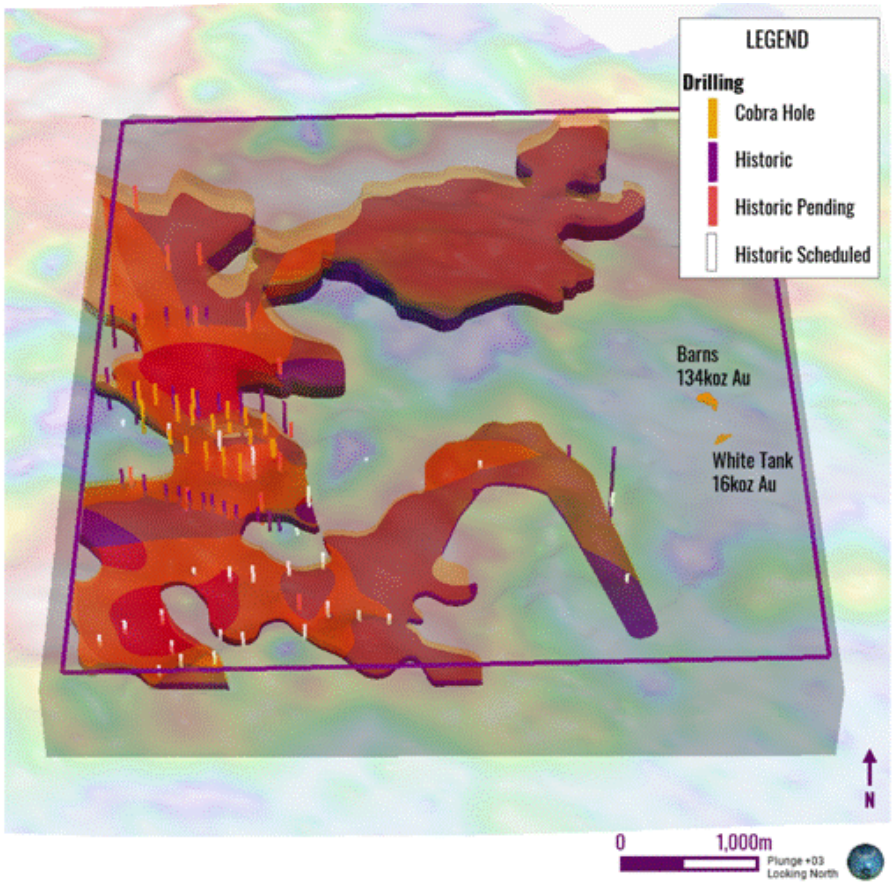


Figure 6: Plan view - highlighting the regional scale of the mapped geological units that host Boland ionic REE mineralisation and the holes that form stage 2 of the Company's re-assay strategy



Particle Size Distribution

Samples from each mineralised zone were taken and screened to evaluate:

· The particle distribution of mineralised lithologies

- The distribution of grade to particle size
- The permeability of material and its amenability to ISR

Samples were wet screened, and only the results on a zone 3 sample are reported. Results are highly favourable for ISR and indicate:

- Zone 3 mineralisation has a high quantity of sand with 67% of the sample mass screening above 0.1mm
- Particle size distribution parameters have been used to calculate the potential permeability using the Kozeny-Carman equation1, where:
    - Using the median particle size distribution yields a very high permeability of 275 m/day
    - Using the lower quartile of the particle distribution analysis provides a moderate -high permeability of 135 m/day

Figure 7: Particle size distribution of zone 3 (27-27.5m) from drillhole CBSC0001

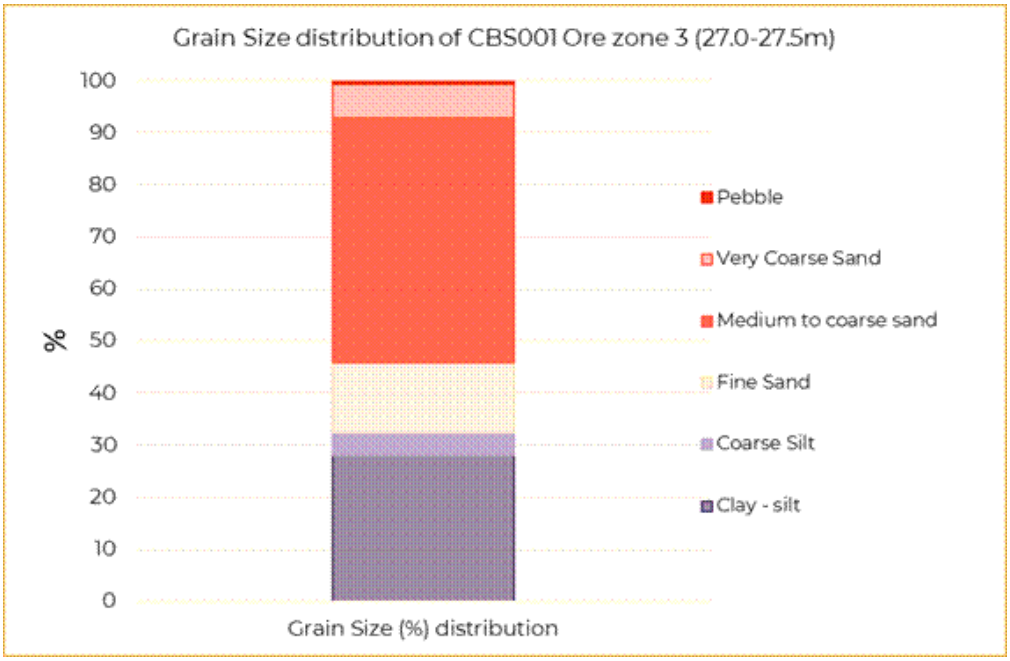
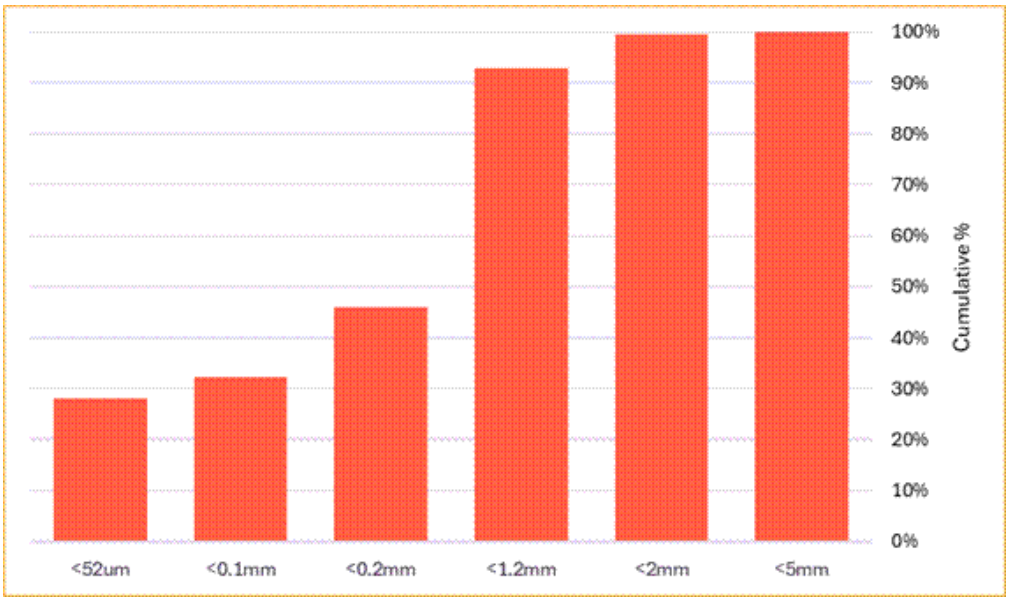


Figure 8: Cumulative distribution of particle sizes by screen passing



Enquiries:

Cobra Resources plc
Rupert Verco (Australia)
Dan Maling (UK)

via Vigo Consulting
+44 (0)20 7390 0234

SI Capital Limited (Joint Broker)
Nick Emerson
Sam Lomanto

+44 (0)1483 413 500

Global Investment Strategy (Joint Broker)
James Sheehan

+44 (0)20 7048 9437
james.sheehan@gisukltd.com

Vigo Consulting (Financial Public Relations)
Ben Simons
Kendall Hill

+44 (0)20 7390 0234
cobra@vigoconsulting.com

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

About Cobra

Cobra is defining a unique multi-mineral resource at the Wudinna Gold and Rare Earth Project in South Australia's Gawler Craton, a tier one mining and exploration jurisdiction which hosts several world-class mines. Cobra's Wudinna tenements totalling 1,832 km^2, and other nearby tenement rights totalling 2,941 km^2, contain highly desirable and ionic rare earth mineralisation, amenable to low-cost, low impact in situ recovery mining, and critical to global decarbonisation. Additionally, Cobra holds a 213 km^2 exploration tenement in northern Tasmania which is also considered highly prospective for ionic rare earth mineralisation.

Cobra's Wudinna tenements also contain extensive orogenic gold mineralisation and are characterised by potentially open-pitable, high-grade gold intersections, with ready access to

infrastructure. Cobra has 22 orogenic gold targets outside of the current 279,000 Oz gold JORC Mineral Resource Estimate, and several iron oxide copper gold (IOCG) targets.

Follow us on social media:

LinkedIn: https://www.linkedin.com/company/cobraresourcesplc
Twitter: https://twitter.com/Cobra_Resources

Subscribe to our news alert service: https://cobraplc.com/news/

Appendix 1: 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 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.*	**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 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 have been 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.*	Aircore & RC · All drill samples were logged by an experienced geologist at the time of drilling. Lithology, colour, weathering and moisture were documented.

	· *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* · *The total length and percentage of the relevant intersections logged.*	· 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.
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.* · *Discuss any adjustment to assay data.*	· 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 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*	Pre 2021

	surveys), trenches, mine workings and other locations used in Mineral Resource estimation. · *Specification of the grid system used.* · *Quality and adequacy of topographic control.*	· 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

		· 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 2: 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 REDOX 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 (pH3) · 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 are not being reported as part of the Mineral Resource area.
Data aggregation methods	· *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.* · *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.* · *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	· Reported summary intercepts are weighted 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:

Element	Oxide	Factor
Cerium	CeO_2	1.2284
Dysprosium	Dy_2O_3	1.1477
Erbium	Er_2O_3	1.1435
Europium	Eu_2O_3	1.1579
Gadolinium	Gd_2O_3	1.1526
Holmium	Ho_2O_3	1.1455
Lanthanum	La_2O_3	1.1728

Lutetium	Lu_2O_3	1.1371
Neodymium	Nd_2O_3	1.1664
Praseodymium	Pr_6O_{11}	1.2082
Scandium	Sc_2O_3	1.5338
Samarium	Sm_2O_3	1.1596
Terbium	Tb_4O_7	1.1762
Thulium	Tm_2O_3	1.1421
Yttrium	Y_2O_3	1.2699
Ytterbium	Yb_2O_3	1.1387

- 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.

Relationship between mineralisation widths and intercept lengths	· *These relationships are particularly important in the reporting of Exploration Results.* · *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* · *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	· Most intercepts are vertical and reflect true width intercepts. · Exploration results are not being reported for the Mineral Resource area.
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.*	· Samples have been submitted for pressurized column leach testing to confirm the ISR potential. · Hydrology, permeability and mineralogy studies will be performed on core samples. · Installed wells will be used to capture baseline hydrology data and shall be utilized for a future pilot study.

Appendix 1: 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

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact rns@lseg.com or visit www.rns.com.

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our Privacy Policy.

END

DRLBLGDXSDDDGSD