

# KANGANKUNDE MINERAL RESOURCE ESTIMATE UPDATED TO INCLUDE 61 MILLION TONNES INDICATED CATEGORY GRADING 2.43% TREO

## INCLUDES HIGHER GRADE COMPONENT OF 25 MILLION TONNES GRADING 3.26% TREO

### HIGHLIGHTS

- An Indicated category resource of 61 million tonnes @ 2.43% TREO (0.5% TREO cutoff grade) has been defined from the phase 3 drilling campaign within an updated Mineral Resource Estimate (MRE) of 261 million tonnes grading 2.14% TREO
- The Indicated resource includes a higher-grade component of 25 million tonnes grading 3.26% TREO (2.5% TREO cutoff grade)
- Indicated resource contains 300,000 tonnes of neodymium-praseodymium (NdPr) with NdPr ratio averaging 20.2% of TREO
- The higher-grade component of the Indicated resource will be significant for the Stage 1 Feasibility Study to be published this quarter
- Mineralisation remains uniquely non-radioactive
- Greatly enhances Kangankunde's status as one the world's largest and most strategically significant rare earths deposits

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Lindian Resources Limited (ASX:LIN) ("Lindian" or "the Company") is pleased to report the updated Mineral Resource Estimate (MRE) for the Kangankunde Rare Earths Project in Malawi which now includes *61 million tonnes of Indicated Resource grading 2.43% TREO (0.5% TREO cutoff grade) with a higher grade component of 25 million tonnes grading 3.26% TREO (2.5% TREO cutoff grade)* within the total indicated and inferred resource of 261 million tonnes averaging 2.14% TREO above a 0.5% TREO cut-off grade. The MRE update follows the Phase 3 infill drilling program completed in Q3 2023, which added forty-five (45) drill holes for 4,886 metres of drilling. The updated MRE has been estimated in accordance with JORC 2012 guidelines and is summarised in Table 1.

**Lindian's Executive Chairman, Asimwe Kabunga commented:** "We are pleased to deliver another key milestone central to our near-term goal of bringing the fully permitted Kangankunde project into production and establishing this world class project as a dependable long-term supplier of Rare Earths concentrate to global markets. This updated MRE reaffirms the project's status as a top tier asset that will deliver material benefits to Malawi, the local community, key stakeholders and our shareholders. Other milestones to be reported shortly will reinforce Kangankunde's strategic value."

**Chief Executive Officer, Alistair Stephens added:** *"The Indicated portion of the MRE is an excellent outcome and exceeds our expectations in terms of tonnage and grade, particularly when taking into account the higher grade 25 million tonne component which likely underpins multiple years of production under our Stage 1 development plan.."* 





Resource Classification	Tonnes (millions)	TREO (%)	NdPr% of TREO** (%)	Tonnes Contained NdPr* (millions)
Indicated Resource	61	2.43	20.1	0.3
Inferred Resource	200	2.05	20.4	0.8
Total Resource	261	2.14	20.3	1.1

#### Table 1: Kangankunde Rare Earths Project Mineral Resource Above 0.5% TREO Cut-off Grade

Rounding has been applied to 1.0Mt for tonnes and 0.1% NdPr% of TREO which may influence total calculation.

\* NdPr = Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>, \*\* NdPr% / TREO% x 100

Resource estimation utilised multi-element relationships from rock chemistry and rare earth mineralisation to define six domains within the overall carbonatite intrusion. These domains were assessed against geological understanding and field observations from surface mapping and drill core and were considered appropriate representations of the mineralisation distribution. The resource estimation by classification and domains is summarised in Table 2.

#### Table 2 Kangankunde Rare Earths Mineral Resource by Estimation Domain (above 0.5% TREO cut-off)

Indicated Classification	Tonnes	TREO	NdPr% of TREO	Tonnes Contained NdPr*
by Domain	(millions)	(%)	(%)	(000's)
Domain 1	7	1.97	21.0	30
Domain 2	13	2.05	20.4	56
Domain 3	13	3.00	19.7	77
Domain 4	14	2.21	20.9	67
Domain 5	9	2.65	20.2	49
Domain 6	4	2.99	16.6	20
Total Indicated Resource	61	2.43	20.2	298

Inferred Classification	Tonnes	TREO	NdPr% of TREO	Tonnes Contained NdPr*
by Domain	(millions)	(%)	(%)	(000's)
Domain 1	41	1.73	21.8	157
Domain 2	40	1.75	21.1	146
Domain 3	14	2.31	20.2	64
Domain 4	51	2.07	19.9	212
Domain 5	44	2.34	20.3	207
Domain 6	10	2.85	17.0	48
Total Inferred Resource	200	2.05	20.5	834



Total Resource	Tonnes	TREO	NdPr% of TREO	Tonnes Contained NdPr*
by Domain	(millions)	(%)	(%)	(000's)
Domain 1	48	1.77	21.7	187
Domain 2	53	1.82	20.9	202
Domain 3	27	2.64	20.0	141
Domain 4	65	2.10	20.1	279
Domain 5	53	2.39	20.3	256
Domain 6	14	2.89	16.9	68
Total Resource	261	2.14	20.4	1132

\* NdPr = Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>. Rounding has been applied to 1.0Mt for tonnes and 0.1% NdPr% of TREO which may influence total calculation.

Grade tonnage curve analysis of the resource shows the robustness of grade continuity in the resource with a reduction in tonnes and increase in grade with increasing cut-off. Figure 1 shows the Indicated Resource grade tonnage relationship and Figure 2 the Inferred Resource relationship.

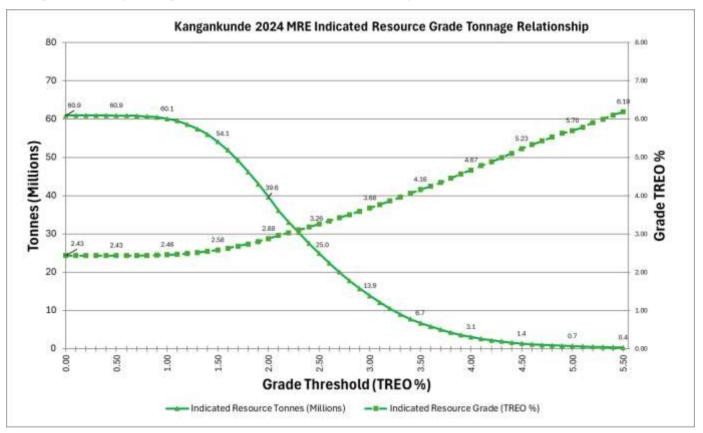


Figure 1: Grade tonnage relationship Kangankunde Indicated Resource



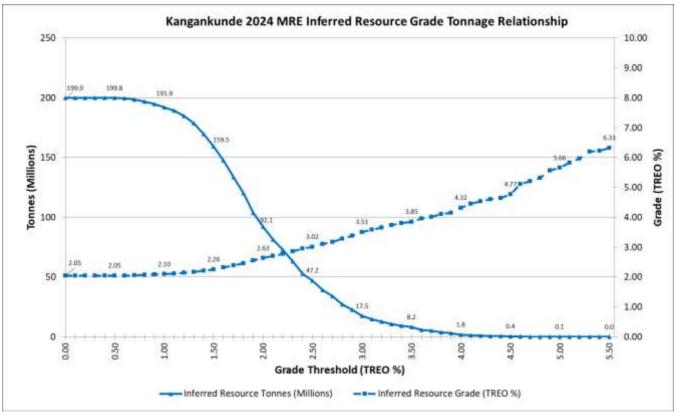


Figure 2 Grade tonnage relationship Kangankunde Inferred Resource

### SUMMARY OF MATERIAL INFORMATION USED TO ESTIMATE THE MINERAL RESOURCE

The following is a summary of material information used to estimate the Mineral Resource, as required by Listing Rule 5.8.1 and JORC 2012 Reporting Guidelines.

#### **Mineral Tenement and Land Tenure Status**

The Kangankunde Rare Earths Project is located in the south of Malawi, 90 km north of the city of Blantyre. The mineral tenements include a Medium Scale Mining Licence (MML0290/22) which is surrounded by Exploration Licence EPL0514/18R (Figure 3). The Exploration and Mining Licences have an Environmental and Social Impact Assessment Licence No.2:10:16 issued under the Malawi Environmental Management Act No. 19 of 2017.Both licences are in good standing with no known impediments.

Licence ID	Licence Type	icence Type Granted Date		Area (km²)
MML0290/22	Medium Scale Mining	22 April 2022	22 April 2032	9.0
EPL0514/18R	Exploration	16 October 2021	16 October 2025	16.0



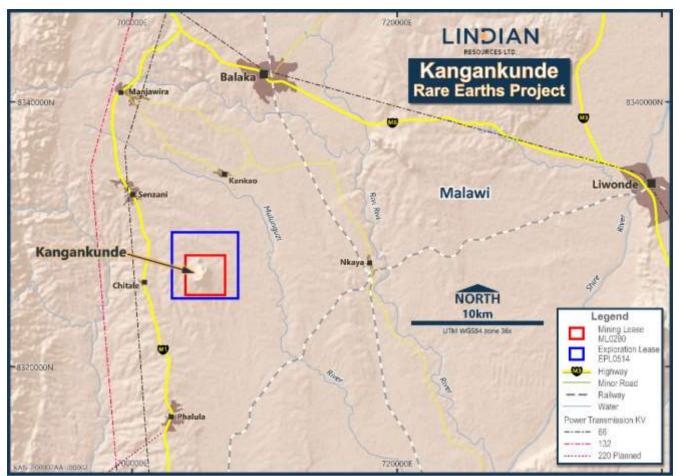


Figure 3: Project Location Plan with Project Mineral Licences

On 1 August 2022 Lindian announced the acquisition of 100% of Malawian registered Rift Valley Resource Developments Limited (Rift Valley) and its 100% owned title to Exploration Licence EPL0514/18R and Mining Licence MML0290/22.

Under the terms of the Transaction, Lindian has an agreement to acquire all the shares in Rift Valley from its existing shareholders for US\$30 million, payable in tranches. To date, Lindian has paid US\$20.0 million in cash and is the registered owner of 67% of the shares in Rift Valley. The remaining amount of US\$10.0 million is due 48 months from the signature date of the Share Purchase Agreement, or on the commencement of production (refer ASX release 1 August 2022) at which time the remaining 33% of the shares in Rift Valley will be transferred to Lindian.



### Geology

The Kangankunde Hill rises to a height of up to 200 m above the surrounding plain. The deposit contains a central zone of carbonatite rocks passing outwards to a series of zones of altered breccias of varying composition of carbonatite and wall rock clasts in a carbonatite matrix, and ultimately into unaltered gneiss host rock (Figure 4). Similar to many rare earth deposits, the main rare earth containing mineral in the deposit is monazite.

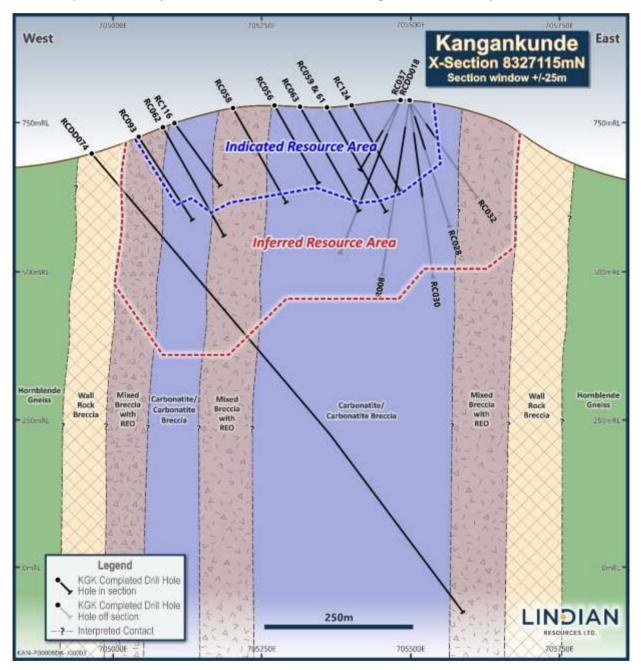


Figure 4: Typical Cross-section showing Main Geology Features with Resource Footprint

Estimation domaining utilised multi-element relationships from minor rock chemistry and rare earth mineralisation to define five domains within the overall carbonatite limits. These domains were assessed against geological understanding and field observations from surface mapping and drill core and were considered appropriate representations of the mineralisation distribution. Leapfrog was utilised to build mineralisation domain wireframes and to code sample intervals with the applicable domain. A plan representation of the defined domains is presented in Figure 5.



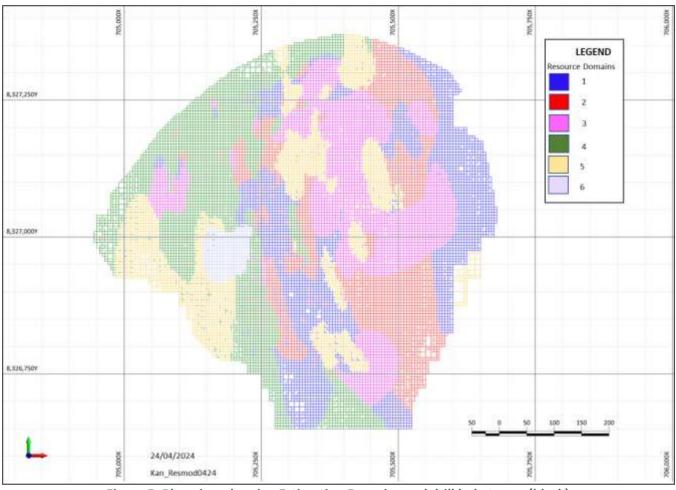


Figure 5: Plan view showing Estimation Domains and drill hole traces (black)

## **Drilling Techniques and Hole Spacing**

Drilling completed at the Kangankunde Rare Earths Project and used to support the MRE includes twelve (12) diamond core (DD) holes totaling 2,387.4 metres, one hundred and seventeen (117) reverse circulation (RC) holes totaling 16,424 metres, and eight (8) RC holes with diamond core tails (RCD) totaling 3,080.7 metres. Drilling of all types totals 21,892 metres.

All holes are drilled from surface with various orientations depending on terrain constraints. RC drilling utilised a 5.25" (134 mm) face sampling hammer to generate one-metre samples, which are placed into large plastic bags marked with the hole ID and sample interval. Sample weights are recorded for each sample, with recovery maximised via use of PVC collars in upper portions of the collar.

Diamond drilling used a HQ3 size (63.5 mm diameter) with triple tube techniques used to maximise core recovery. NQ2 (50.6mm diameter) core was used for deeper drill holes. Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed.



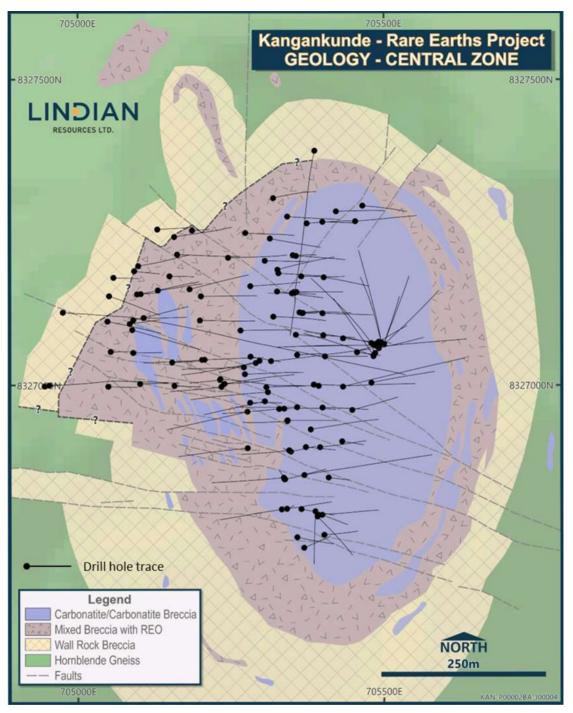


Figure 6: Drill Hole Layout Plan on Central Zone Geology

## Sampling

Samples from the RC drilling are collected on one-metre intervals from the rig mounted cyclone and placed into large plastic bags. These are subsequently split using a two-tier riffle splitter to obtain a ¼ sub-sample. This is subsequently reduced in a single-tier riffle splitter to generate an A and B sample reduced to a nominal 1.5 kg. Sample lengths for diamond drilling were determined by geological boundaries with a maximum sample length of 2 metres applied. The core was cut using an electric core saw. Quarter core was submitted to either ALS or Intertek laboratories for chemical analysis using industry standard sample preparation and analytical techniques.

Certified reference materials (CRM), analytical blanks, and field duplicates were used as part of the QAQC procedures and were each inserted at a rate of 1:20 samples.



### Sample Analysis

All samples were dispatched by air freight direct to ALS or Intertek laboratory in Johannesburg for sample preparation. Following sample preparation, a 30-gram pulverised sub-sample is shipped to ALS or Intertek in Perth Australia for analysis. Sample preparation included whole sample crushing to 70% less than 2mm, Boyd rotary slitting to generate a 750g sub-sample, and pulverising to achieve better than 85% passing 75 microns. Analysis for REE suite was via fusion digestion and ICP-MS finish (ALS code ME-MS81h, Intertek code FP6/OM), with elements analysed at ppm levels. This method is considered a total analysis.

### **Bulk Density**

Insitu dry bulk density was determined using the Archimedes method on a 20 metre downhole interval from available core drilling. A total of 96 samples were tested with dry bulk density ranging from 2.08 g/cm<sup>3</sup> to 3.45 g/cm<sup>3</sup> with the average of 2.95 g/cm<sup>3</sup> used in resource estimation.

### **Estimation Methodology**

Resource estimation was undertaken by Cube Consulting of Perth Australia using data provided by Lindian Resources.

Drill hole sample data was composited to one-metre downhole lengths using a best fit-method. No residuals were generated.

A total of 15 REE grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu), and three deleterious elements (Sc, U, and Th) were estimated. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO). The grade estimation process was completed using Maptek Vulcan software using Ordinary Kriging (OK). The variogram for Sm was applied to Eu and Gd; La was applied to the other light rare earth elements, while the Dy variogram was applied for the heavy rare earths. Other variables (Sc, Th and U) were directly modelled.

Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed using kriging neighborhood analysis (KNA) with a minimum number of 8 to 10 composites and an optimum number of 16 to 21 composites, with a restriction on the number of composites per octant set to five. Blocks were estimated in a three-pass strategy with first pass maximum search distance of 100 metres. The second pass doubled the first pass search distance and no anisotropy ratio and a minimum of 5 composites and an optimum from 18 to 23 composites. The third search goes up to 600 metres with no anisotropy ratio and a minimum of 2 composites. A cross section looking north with estimated TREO block grades is presented in Figure 7.

The model has a block size of 20 m (X) by 20 m (Y) by 5 m (Z) and 80 m (X) x 80m (Y) x 20 m (Z) with sub-celling of 5 m (X) by 5 m (Y) by 2.5m (Z). Grades were estimated into the parent cells; depending on the drill spacing (Figure 8).

The block model was validated using a combination of visual and statistical techniques including global statistics comparisons, correlation coefficients comparisons, and trend plots.



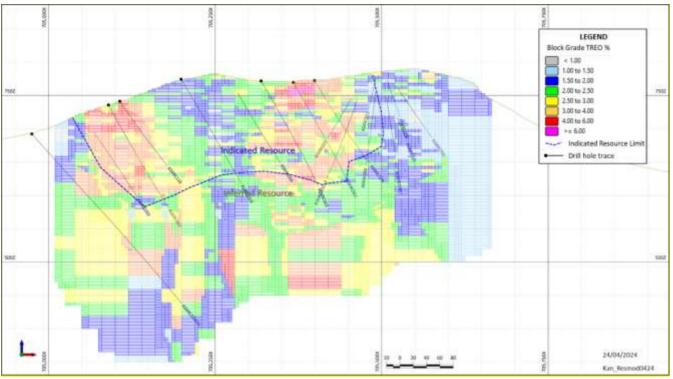


Figure 7: Cross section 8,327,115mN (looking north) with TREO block grades, indicated resource boundary and drill hole traces

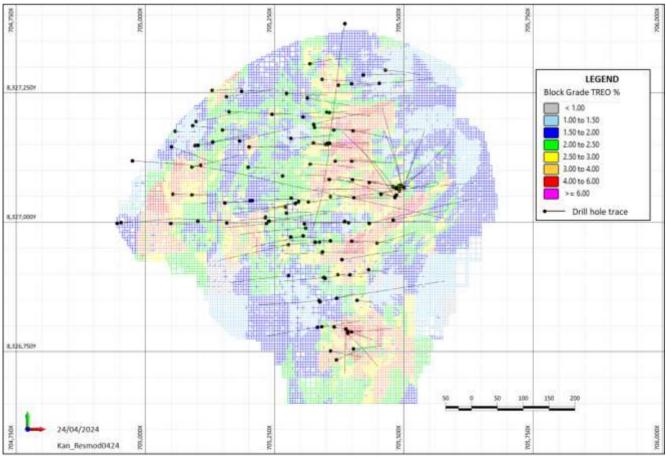


Figure 8: Kangankunde REE Project – Plan view of Inferred Resources showing TREO grades



### **Resource Classification**

A range of criteria was considered when addressing the suitability of the classification boundaries. These criteria include:

- Geological continuity and volume;
- Drill spacing and drill data quality;
- Modelling technique; and
- Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.

Blocks have been classified as indicated and inferred (Figure 9).; criteria for resource classification are given below:

- Indicated: drill spacing of ~ 40m with a Dy\_ppm\_ok slope of regression ≥ 0.7
- Inferred: drill spacing of ~100 m.

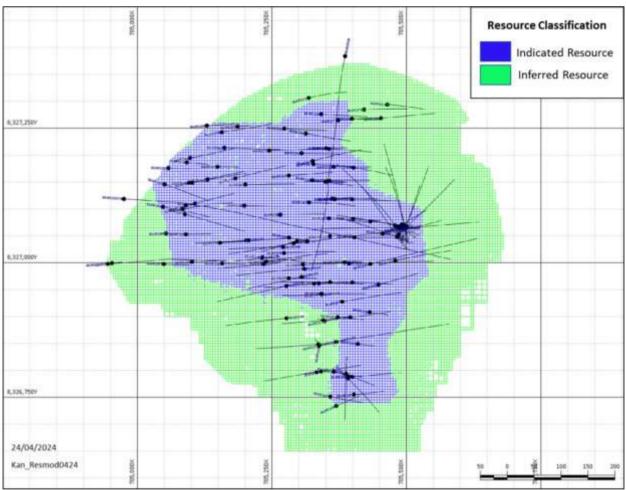


Figure 9: Plan view of resource classification with drill hole traces

## **Cut-off Grade**

The Mineral Resource has been reported above a 0.5% total rare earth oxide (TREO) cut-off. Determination of an appropriate cut-off grade has metallurgical test work rare earth recoveries and concentrate parameters (ASX releases 11 April 2023 and 5 March 2024). Based on these results a price for the predicted contained REO product has been derived from 3<sup>rd</sup> party pricing forecasts and NSR calculation.



These assumptions, together with other cost inputs, were utilised in definition of an optimisation shell to assess the impact of assumed geotechnical constraints and associated strip ratio on the portions of the Mineral Resource which may not be economically recovered. In the opinion of the Competent Person, the results of the optimisation demonstrate that the project has met the conditions for reporting of a Mineral Resource with reasonable prospects of economic extraction.

### **Mining and Metallurgy**

Development of this Mineral Resource assumes mining using standard equipment and methods. The assumed mining method is open pit mining at an appropriate bench height with conventional drill and blast with excavator and truck configuration for load and haul. Lindian Resources Ltd have completed metallurgy test work that resulted in the qualification of a water-based gravity separation process and resulted in a recovery of 70% at a concentrate grade of 60% TREO (refer ASX release dated 11th April 2023 and 5 March 2024). These results together with indicative mining and processing costs and other cost inputs are considered adequate to achieve reasonable expectations of economic metallurgical processing of the project mineralisation.



## Table 4: Kangankunde Rare Earths Mineral Resource (at 0.5% TREO cut-off)

Class	Tonnes (Mt)	La₂O₃ (ppm)	CeO₂ (ppm)	Pr <sub>6</sub> O <sub>11</sub> (ppm)	Nd₂O₃ (ppm)	Sm₂O₃ (ppm)	Eu₂O₃ (ppm)	Gd₂O₃ (ppm)	Tb₄O <sub>7</sub> (ppm)	Dy₂O₃ (ppm)	Ho₂O₃ (ppm)	Er₂O₃ (ppm)	Tm₂O₃ (ppm)	Yb₂O₃ (ppm)	Lu₂O₃ (ppm)	Y₂O₃ (ppm)
Indicated	61	6,850	12,150	1,230	3,650	260	40	70	5	16	2	3	0.3	2	0.2	40
Inferred	200	5,640	10,260	1,040	3,130	230	40	70	5	17	2	4	0.4	2	0.3	50
Total	261	5,920	10,700	1,080	3,250	240	40	70	5	17	2	4	0.4	2	0.3	50

#### Table 5: Kangankunde Rare Earths Mineral Resource (at 0.5% TREO cut-off)

Classification	Tonnes (Mt)	TREO (%)	HREO (%)	LREO (%)	NdPr (ppm)	NdPr % of TREO (%)	SEG (ppm)	TbDy (ppm)	U₃O <sub>8</sub> (ppm)	ThO₂ (ppm)
Indicated	61	2.43	0.02	2.39	4,880	20.2	370	21	6	50
Inferred	200	2.05	0.02	2.01	4,180	20.5	340	22	6	50
Total	261	2.14	0.02	2.10	4,340	20.4	340	22	6	50

#### Table 6: Kangankunde Rare Earths Mineral Resource by Estimation Domain (at 0.5% TREO cut-off)

Classification	Estimation Domain	Tonnes (Mt)	TREO (%)	HREO (%)	LREO (%)	NdPr (ppm)	NdPr % of TREO (%)	SEG (ppm)	TbDy (ppm)	U₃O <sub>8</sub> (ppm)	ThO <sub>2</sub> (ppm)
	1	7	1.97	0.02	1.93	4,150	21.0	340	20	7	45
	2	13	2.05	0.02	2.01	4,190	20.4	340	24	8	47
	3	13	3.00	0.02	2.95	5,910	19.7	440	25	6	62
Indicated	4	14	2.21	0.02	2.17	4,630	20.9	340	17	1	37
	5	9	2.65	0.02	2.61	5,370	20.2	390	23	8	58
	6	4	2.99	0.02	2.95	4,970	16.6	330	18	2	37
	Total Indicated	61	2.43	0.02	2.39	4,880	20.2	370	21	6	49
	1	41	1.73	0.02	1.68	3,770	21.8	340	24	7	57
	2	40	1.75	0.02	1.70	3,690	21.1	340	28	9	57
	3	14	2.31	0.02	2.26	4,660	20.2	370	24	7	63
Inferred	4	51	2.07	0.02	2.03	4,130	19.9	310	17	2	41
	5	44	2.34	0.02	2.30	4,760	20.3	360	21	8	50
	6	10	2.85	0.01	2.82	4,850	17.0	310	15	2	31
	Total Inferred	200	2.05	0.02	2.01	4,180	20.5	340	22	6	50
	1	49	1.76	0.02	1.72	3,830	21.7	340	24	7	55
Total	2	53	1.82	0.02	1.78	3,810	20.9	340	27	9	54
Resource	3	27	2.64	0.02	2.59	5,270	19.9	400	25	7	63
	4	66	2.10	0.02	2.06	4,240	20.2	320	17	2	40



5	53	2.40	0.02	2.35	4,870	20.3	360	22	8	51
6	14	2.89	0.01	2.85	4,880	16.9	310	16	2	32
Total Resource	261	2.14	0.02	2.10	4,340	20.4	340	22	6	50

Notes: All ppm rounded from original estimate to the nearest 10 ppm. Minor variables rounded to nearest 1 ppm however these are immaterial overall. Percentages rounded to nearest 0.01% which may lead to differences in averages from Table 4.

Y<sub>2</sub>O<sub>3</sub> is included in the TREO and HREO calculation.

**TREO (Total Rare Earth Oxide)** =  $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$ . **HREO (Heavy Rare Earth Oxide)** =  $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$  **LREO (Light Rare Earth Oxide)** =  $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3$  **SEG** =  $Sm_2O_3 + Eu_2O_3 + Gd_2O_3$ **TbDy** =  $Tb_4O_7 + Dy_2O_3$ 

 $\mathbf{NdPr} = \mathbf{Pr}_{6}\mathbf{O}_{11} + \mathbf{Nd}_{2}\mathbf{O}_{3}$ 

U and Th are deleterious elements being reported in accordance with JORC (2012) Guidelines.



#### -ENDS-

This ASX announcement was authorised for release by the Lindian Board.

#### For further information, please contact:

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# **About Lindian**

### RARE EARTHS

**Lindian Resources Limited** has ownership of Malawian registered Rift Valley Resource Developments Limited that has 100% title to Exploration Licence EPL0514/18R and Mining Licence MML0290/22, supported by an Environmental and Social Impact Assessment Licence No.2:10:16. In August 2023, Lindian released its maiden Mineral Resource Estimate (MRE) for the Kangankunde Rare Earths Project in Malawi of *261 million tonnes averaging 2.19% TREO* above a 0.5% TREO, refer ASX announcement of 3 August 2023.

#### **BAUXITE**

**Lindian Resources Limited** has Bauxite resources (refer company website for access to resources statements and competent persons statements) in Guinea with the Gaoual, Lelouma and Woula projects. Guinean bauxite is known as the premier bauxite location in the world, having high grade and low impurities premium quality bauxite.

# **Forward Looking Statements**

This announcement may include forward-looking statements, based on Lindian's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Lindian, which could cause actual results to differ materially from such statements. Lindian makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of the announcement.

# **Competent Persons Statements**

The information in this Report that relates to exploration results including drilling, sampling, assay and bulk density data applied to the mineral resource estimate for the Kangankunde Project is based on information compiled by Mr. Geoff Chapman, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM membership number 111889). Mr. Chapman has sufficient experience 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' (JORC Code).

The information in this report that relates to Mineral Resources is based on information compiled by Mr Geoff Chapman, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM membership number 111889). Mr. Chapman is the principal of geological consultancy GJ Exploration Pty Ltd that is engaged by to Lindian Resources Limited. Mr Chapman 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' (JORC Code).

Mr. Chapman consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# Appendix 1: Kangankunde Rare Earths Project Hole Details (Datum UTM WGS84 Zone 36S)

Drill Hole ID	Drill Type	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Hole Length EOH (m.)	Azimuth TN (Ave.)	Inclination (Ave.)
KGKDD001	DD	705315	8327039	795	300.61	083	-57
KGKDD002	DD	705277	8326957	796	188.17	259	-47
KGKDD003	DD	705393	8326999	809	145.21	271	-59
KGKDD004	DD	705433	8326998	801	293.39	077	-45
KGKDD005	DD	705362	8327119	769	60.0	088	-50
KGKDD006	DD	705351	8327213	728	60.0	089	-49
KGKDD007	DD	705353	8327151	753	60.0	093	-53
KGKDD008	DD	705349	8327151	753	60.0	270	-50
KGKDD009	DD	705386	8327384	678	1000.0	086	-49
KGKDD010	DD	705399	8326788	805	75.0	112	-53
KGKDD011	DD	705084	8327100	735	75.0	083	-48
KGKDD012	DD	705096	8327149	734	70.0	087	-58
KGKRC004	RC	705487	8327065	797	95	000	-90
KGKRC005	RC	705234	8326997	792	117	265	-44
KGKRC006	RC	705492	8327065	797	300	265	-82
KGKRC007	RC	705310	8326989	802	186	264	-47
KGKRC008	RC	705496	8327069	797	272	343	-65
KGKRC010	RC	705385	8327001	810	139	000	-90
KGKRC010	RC	705385	8326942	810	32	081	-30
KGKRC012	RC	705496	8327070	797	210	347	-42
KGKRC012	RC	705343	8326942	806	162	090	-60
KGKRC013	RC	705490	8327063	797	209	085	-00
KGKRC014	RC	705490	8326941	806	160	269	-43
KGKRC015	RC	705277	8326897	800	171	263	-48
KGKRC010 KGKRC017	RC	705345	8326893	802	163	265	-40 -61
	RC				169	203	-86
KGKRC019	RC	705346 705483	8326893 8327048	804 795	169	287	-80 -44
KGKRC020	RC			803	89		-44 -62
KGKRC021		705348	8326891			078	
KGKRC022	RC RC	705338	8326846	801	147 28	077	-62
KGKRC023		705486	8327053	796		323	-45
KGKRC024	RC	705337	8326846	802	169	287	-84
KGKRC025	RC	705491	8327071	797	127	053	-65
KGKRC026	RC	705336	8326849	802	168	266	-45
KGKRC027	RC	705380	8326928	800	170	082	-48
KGKRC028	RC	705500	8327068	796	169	020	-45
KGKRC030	RC	705500	8327067	796	188	018	-64
KGKRC031	RC	705342	8326798	808	175	081	-65
KGKRC032	RC	705500	8327067	796	181	046	-43
KGKRC033	RC	705341	8326798	808	169	067	-85
KGKRC034	RC	705491	8327061	797	181	076	-66
KGKRC035	RC	705333	8326797	807	147	260	-45
KGKRC036	RC	705392	8326788	806	174	086	-55
KGKRC037	RC	705483	8327049	795	160	325	-45
KGKRC038	RC	705296	8327040	795	181	254	-68
KGKRC039	RC	705391	8326785	806	150	138	-55
KGKRC040	RC	705290	8327036	796	167	261	-43
KGKRC041	RC	705239	8327002	793	181	082	-51
KGKRC042	RC	705388	8326794	805	151	182	-55
KGKRC043	RC	705238	8327002	793	181	085	-68
KGKRC044	RC	705358	8326964	808	155	270	-50
KGKRC045	RC	705329	8326961	806	150	265	-51
KGKRC046	RC	705271	8327029	796	150	268	-47
KGKRC047	RC	705337	8326962	807	145	091	-54
KGKRC048	RC	705308	8326997	802	143	088	-51
KGKRC049	RC	705207	8327042	790	151	088	-50
KGKRC050	RC	705203	8327042	789	150	264	-50
KGKRC051	RC	705305	8326974	802	154	258	-49
KGKRC052	RC	705232	8327010	792	151	097	-53



KGKRC053	RC	705273	8327018	797	148	088	-49
KGKRC054	RC	705232	8327009	792	81	264	-52
KGKRC055	RC	705395	8326899	793	159	082	-61
KGKRC056	RC	705265	8327090	786	160	089	-59
KGKRC057	RC	705281	8326971	798	109	090	-62
KGKRC058	RC	705199	8327106	774	180	090	-60
KGKRC059	RC	705366	8327118	770	49	090	-60
KGKRC060	RC	705201	8327145	765	175	089	-58
KGKRC061	RC	705367	8327118	770	163	090	-61
KGKRC062	RC	705090	8327106	735	180	076	-59
KGKRC063	RC	705319	8327112	772	180	094	-65
KGKRC064	RC	705102	8327149	735	180	077	-57
KGKRC065	RC	705162	8327214	734	180	092	-55
KGKRC066	RC	705098	8327195	723	181	078	-61
KGKRC067	RC	705326	8327189	741	180	077	-58
KGKRC068	RC	705313	8327240	728	161	100	-58
KGKRC069	RC	705453	8327269	701	181	085	-56
KGKRC070	RC	705245	8327209	748	179	087	-57
KGKRC071	RC	705373	8327265	703	154	087	-61
KGKRC072	RC	705182	8327157	758	180	076	-56
KGKRC073	RC	705421	8327285	694	180	089	-63
KGKRC075	RC	705357	8327153	753	36	090	-60
KGKRC076	RC	705353	8327153	753	160	090	-60
KGKRC070	RC	705356	8327212	727	157	094	-59
KGKRC078	RC	705319	8327306	716	157	082	-63
KGKRC079	RC	705157	8327300	710	180	082	-03
KGKRC079	RC	705088	8327245	725	180	106	-58
KGKRC080	RC	705464	8327090	692	180	097	-50
	RC	703484		703	31	097	-62
KGKRC082	RC RC	704953	8326999	703	100	084	-50
KGKRC084			8327255				
KGKRC085	RC	705186	8327253	728	50	087	-55
KGKRC086	RC	705273	8327249	737	150	093	-57
KGKRC087	RC	705327	8327183	741	150	095	-58
KGKRC088	RC	705058	8327176	716	80	093	-59.
KGKRC089	RC	705282	8327047	795	100	101	-60
KGKRC090	RC	705403	8327047	805	136	090	-59
KGKRC091	RC	705456	8327054	799	80	098	-61
KGKRC092	RC	705372	8326899	800	100	095	-61
KGKRC093	RC	705050	8327146	719	150	110	-53
KGKRC095	RC	705049	8326997	720	80	093	-53
KGKRC096	RC	705305	8327204	740	140	093	-59
KGKRC097	RC	705356	8327083	787	100	099	-60
KGKRC098	RC	705399	8326963	799	150	093	-60
KGKRC099	RC	705053	8327054	722	80	090	-58
KGKRC100	RC	705479	8327004	788	150	080	-45
KGKRC101	RC	705101	8327002	742	80	088	-54
KGKRC102	RC	705130	8327155	745	120	082	-52
KGKRC103	RC	705448	8326960	784	150	075	-59
KGKRC104	RC	705410	8326849	789	60	097	-54
KGKRC105	RC	705149	8327178	746	80	091	-60
KGKRC106	RC	705432	8326908	781	60	098	-54
KGKRC107	RC	705358	8326751	820	120	101	-59
KGKRC108	RC	705281	8327162	760	150	086	-57
KGKRC109	RC	705370	8326734	819	80	067	-54
KGKRC110	RC	705358	8327050	798	80	088	-58
KGKRC111	RC	705092	8327187	723	80	097	-58
KGKRC112	RC	705365	8327178	742	150	091	-62
KGKRC113	RC	705325	8327153	754	150	098	-60
KGKRC114	RC	705401	8327177	742	150	101	-60
KGKRC115	RC	705399	8327267	700	100	091	-56
KGKRC116	RC	705107	8327110	741	120	089	-54



KGKRC117	RC	705090	8327053	739	80	089	-54
KGKRC118	RC	705157	8326999	765	80	092	-56
KGKRC119	RC	705154	8327037	768	80	087	-54
KGKRC120	RC	705402	8326755	808	100	084	-56
KGKRC121	RC	705365	8326797	808	100	100	-58
KGKRC122	RC	705401	8327082	791	100	094	-59
KGKRC123	RC	705433	8327077	795	150	096	-58
KGKRC124	RC	705399	8327118	772	150	092	-56
KGKRC125	RC	705342	8327276	710	150	094	-55
KGKRCDD001	RCDD	705486	8327068	797	273.81	281	-64
KGKRCDD002	RCDD	705486	8327065	797	323.21	270	-65
KGKRCDD003	RCDD	705485	8327065	797	240.97	269	-48
KGKRCDD009	RCDD	705386	8327001	810	317.2	089	-58
KGKRCDD018	RCDD	705479	8327069	797	297.41	318	-61
KGKRCDD029	RCDD	705370	8326853	797	322.51	081	-48
KGKRCDD074	RCDD	704975	8327119	692	980.59	095	-50
KGKRCDD083	RCDD	704945	8326998	703	325.0	086	-49

# LINDIAN RESOURCES LTD.

# JORC Code, 2012 Edition – Table 1 report

# Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant</li> </ul>	Reverse Circulation Drilling         Reverse Circulation drilling sampled on 1 metre intervals.         Riffle split sample mass averaging 1.5kg crushed, pulverized using standard laboratory procedures with subsample assayed using appropriate methods for rare earth element total digestion and analysis.         Diamond Core Drilling         Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed.         Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre and minimum of 0.2 metre applied.         Core was cut using a core saw and sampled on site at Kangankunde.         Core was initially cut in half then one half was further cut in half to give quarter core.
Drilling techniques Drill sample recovery	<ul> <li>disclosure of detailed information.</li> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> <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> </ul>	Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques.         Reverse Circulation Drilling         Standard reverse circulation drilling using 5 ¼ inch face sampling hammer.         Diamond Core Drilling         Core size was HQ triple tube with a nominal diameter of 61.1mm.         Reverse Circulation Drilling         Samples collected on a 1 drilled metre interval. Rock cuttings collected in large plastic bags marked with hole ID and interval from-to via a standard sample collection cyclone.
	• Whether a relationship exists between sample recovery and grade and	



Criteria	JORC Code explanation	Commentary
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	All 1 metre interval bags are weighed in the field after removal from the sample collection cyclone. Collected sample mass is measured on a tared digital scale and recorded in drill hole data files.
		<ul> <li>Sample recovery is maximized by:</li> <li>Installing PVC collar pipe in the upper fractured rock zone of the hole to a depth where air loss is minimised and sample return is consistent.</li> <li>Sample cyclone is sealed to plastic sample collection bags do not leak</li> </ul>
		Sample return was variable with:
		<ul> <li>Occasional natural voids of up to 7 metres having &lt;10%, often 0% return</li> <li>Intervals of rock fracturing and loss of air circulation having recoveries averaging 30-60%</li> </ul>
		<ul> <li>Competent rock proved good sample recovery averaging &gt;90%</li> </ul>
		No relationship exists between sample recovery and grade.
		Diamond Core Drilling
		Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 0% in instances where voids or structures caused complete core loss to 100% and averaged 92%.
		No relationship exists between core recovery and grade.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource	All RC chips and core has been geologically logged by the onsite geologist and chip and core trays retained and photographed
	<ul><li>estimation, mining studies and metallurgical studies.</li><li>Whether logging is qualitative or quantitative in nature. Core (or costean,</li></ul>	Logging is qualitative with fields including shade, colour, weathering, grainsize, texture, lithology, veining, mineralisation and alteration.
	channel, etc) photography.	Additional non-geological qualitative logging includes comments for sample recovery,
	• The total length and percentage of the relevant intersections logged.	moisture, and hardness for each logged interval.
Sub-sampling	• If core, whether cut or sawn and whether quarter, half or all core taken.	Reverse Circulation Drilling
techniques and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Plastic sample collection bags have been split using a 2-tier riffle splitter to achieve a $\frac{1}{4}$ sub sample of the original mass.
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	This split is then halved in a single tier splitter to give 2 equal samples of approximately 1kg to 2kg in mass. These are denoted split A and split B
	Quality control procedures adopted for all sub-sampling stages to maximise	



Criteria	JORC Code explanation	Commentary				
	<ul> <li>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-</li> </ul>	Each interval is provided with a unique sample number which is written on the subsample bags and corresponding numbered sample tickets are placed within the sub sample bags and stapled into the rolled top of each bag.				
	<ul><li><i>half sampling.</i></li><li><i>Whether sample sizes are appropriate to the grain size of the material being</i></li></ul>	Both split A a database upl	and split B samples are weighed with mass recorded oad.	d in the drill hole file for		
	sampled.		les are dispatched for laboratory analysis. Split B sa angankunde for future reference as required.	mples are retained in		
			hts were recorded prior to sample dispatch. Sample or the grain size of the material being sampled.	e mass is considered		
		Diamond Co	re Drilling			
			e collected from core trays by hand and placed in in bags were dispatched to the assay laboratory for ar			
		Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled.				
		Field duplicate sampling was conducted at a ratio of 1:20 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample.				
Quality of assay	• The nature, quality and appropriateness of the assaying and laboratory	Assay and L	aboratory Procedures – All Samples			
data and laboratory tests	procedures used and whether the technique is considered partial or total.	ALS				
	• 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of	ALS Code	Description			
	accuracy (i.e. lack of bias) and precision have been established.	WEI-21	Received sample weight			
		LOG-22	Sample Login w/o Barcode			
		DRY-21 CRU-31	High temperature drying Fine crushing – 70% <2mm			
		SPL-21	Split sample – Riffle splitter			
		PUL-31	Pulverise 250g to 85% passing 75 micron			



Criteria	JORC Code explanation	Commentary								
		CRU-QC PUL-QC LOG-24 Following sa ALS Perth fo	Crushing QC T Pulverising QC Pulp Login w/o mple preparation or analysis	test Barcod		verized	subsam	uple is s	hipped t	by airfreight to
		MS81h). Thi	echnique used for s is a recognised elements. Elemer	industry	y standa	ard anal	lysis tecl		•	
			CeDyLuNbTbTh	Er Nd Tm	Eu Pr U	Gd Rb W	Hf Sm Y	Ho Sn Yb	La Ta Zr	-
			other metals is contained analysis	nducte	d by fou	ur acid o	digest ar			code ME-
			AgAsPbSc	Cd TI	Co Zn	Cu	Li	Мо	Ni	]
		sample prepa	1	reight di	rect to In	ntertek la	boratory	Johanne	esburg Sc	uth Africa for
		High temper Fine crushin Split sample	ature drying g – 70% <2mm – Riffle splitter 0g to 85% passing C Test	75 micro	on					
			ple preparation, a 3	30 gram	pulverize	ed subsa	mple is s	hipped b	oy airfreig	nt to Intertek



Criteria	JORC Code explanation	Commentary									
		The assay technique used for REE was Lithium Borate Fusion ICP-MS (lab code CP MS-OES (FB6/OM)). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:									
			Ва	Cd	Ce	Dy	Er	Eu	Ga	Gd	7
			Но	La	Lu	Nb	Nd	Pr	Rb	Sc	
			Sm	Sr	Ta	Tb	Th	Tm	U	Y	_
			Yb SiO2	Zn	Zr	AI2O3	CaO	Fe2O3	MnO	P2O5	_
			•				ed are inc	dustry stan	dard and	d provide	e a total analysis.
		All laboratories	s used are	e ISO 170	)25 accr	redited.					
		QAQC									
		<ul> <li>Analytical Standards         <ul> <li>CRM AMIS0356, OREAS 463, GRE-02 and GRE-08 were included in sample batches at a ratio of 1:20 to drill samples submitted. This is an acceptable ratio.</li> <li>The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident.</li> </ul> </li> <li>Blanks         <ul> <li>A blank sourced from local barren rock was included in sample batches at a ratio of 1:20 to drill samples submitted for analysis. This is an acceptable ratio.</li> <li>No laboratory contamination or bias is evident from results for the blank samples.</li> </ul> </li> <li>Duplicates         <ul> <li>Field duplicate sampling was conducted at a ratio of 1:20 samples. Duplicates were created by replicating the sampling process from the primary sample. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample.</li> </ul> </li> </ul>									
								of accuracy			
								ratio of 1:20 to			
								ples.			
		Variability be evident.	tween d	uplicate	results	is consid	dered a	cceptable	e and no	o sampl	ing bias is
		Alternative A				alysis has	s been u	ındertake	n.		



Criteria	JORC Code explanation	Commentary						
Verification of	• The verification of significant intersections by either independent or	No independent verification of significant intersection undertaken.						
sampling and assaying	<ul><li> alternative company personnel.</li><li> The use of twinned holes.</li></ul>	One RC drill pair were twinned, KGKRC40 and KGKRC046, with assay results acceptably comparable over similar depths.						
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Sampling protocols for sa responsible geologist. No compiled yet.						
	Discuss any adjustment to assay data.	Data collected in the field by hand and entered into Excel spreadsheet. Data are then compiled with assay results compiled and stored in a secure database managed by Geobase Australia a professional provider of database services. Data verification is conducted on data entry including hole depths, sample intervals and sample numbers. Sample numbers from assay data are verified prior to entry into the database.						
		Assay data was received sampling data in the data		rmat from the labo	ratory and merge	ed with the		
		Data validation of assay data and sampling data have been conducted to ensure data entry is correct.						
		All assay data received from the laboratory in element form is unadjusted for data entry.						
		Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.(Source: <u>https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors</u> )						
		Eler ppn	ment n	Conversion Factor	Oxide Form			
			Ce	1.2284	CeO <sub>2</sub>			
			Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>			
			Er	1.1435	Er <sub>2</sub> O <sub>3</sub>			
			Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>			
			Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>			
			Ho	1.1455	Ho <sub>2</sub> O <sub>3</sub>			
			La	1.1728	La <sub>2</sub> O <sub>3</sub>			
			Lu	1.1371	Lu <sub>2</sub> O <sub>3</sub>			
			Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>			
			Pr	1.2082	Pr <sub>6</sub> O <sub>11</sub>			



Criteria	JORC Code explanation	Commentary				
Location of data	Accuracy and quality of surveys used to locate drill holes (collar and down-	calculations are use Note that $Y_2O_3$ is in TREO (Total Rare E $Gd_2O_3 + Tb_4O_7 + D_2$ HREO (Heavy Rare $Er_2O_3 + Tm_2O_3 + Yb$ LREO (Light Rare E SEG = Sm2O3 + Eu TbDy = Tb4O7 + D2 NdPrO% = Nd_2O_3 + NdPrO% of TREO= Drill hole collar loca	ed for compiling f cluded in the TRI arth Oxide) = La $y_2O_3 + Ho_2O_3 + E$ Earth Oxide) = S $y_2O_3 + Y_2O_3 + Lu_2$ arth Oxide) = La $u_2O3 + Gd2O3$ $y_2O3$ $Pr_6O_{11}$ NdPrO%/TREO	2O3 + CeO2 + Pr <sub>6</sub> O <sub>11</sub> r <sub>2</sub> O3 + Tm <sub>2</sub> O3 + Yb <sub>2</sub> O Sm <sub>2</sub> O3 + Eu <sub>2</sub> O3 + Gd <sub>2</sub> d 2O3 2O3 + CeO2 + Pr <sub>6</sub> O <sub>11</sub>	ing and evaluat + Nd <sub>2</sub> O <sub>3</sub> + Sm <sub>2</sub> O <sub>3</sub> + Y <sub>2</sub> O <sub>3</sub> + Lu <sub>2</sub> O <sub>3</sub> + Tb <sub>4</sub> O <sub>7</sub> + Dy + Nd <sub>2</sub> O <sub>3</sub>	ion groups: 2O3 + Eu2O3 + O3. /2O3 + Ho2O3 +
points	<ul> <li>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> <li>considered accurate to 0.2m.</li> <li>Datum WGS84 Zone 36 South was used for location data planning, collection and storage This is the appropriate datum for the project area. No grid transformations were applied to the data.</li> <li>Downhole surveys were acquired using non-magnetic gyroscope survey for RC holes and by a combination of non-magnetic gyroscope and magnetic multi-shot for core holes.</li> <li>Topography is derived from LiDAR survey conducted in 2023 by Lindian Resources.</li> </ul>				
Data spacing and distribution	<ul> <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</li> </ul>	Drill spacing is a nominal 50 metre hole spacing on 50 metre line spacing. Topography limitations have necessitated drilling some holes off section.				



Criteria	JORC Code explanation	Commentary
	<ul><li>Ore Reserve estimation procedure(s) and classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	Evaluation of hole spacing for suitability to determine geology and grade estimation will be undertaken following this phase of drilling.
Orientation of data in relation to geological structure	<ul> <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>	The relationship between mineralisation and drill orientation is not known.
Sample security	The measures taken to ensure sample security.	After collection, the samples were transported by Company representatives via road to Lilongwe and dispatched via airfreight to ALS or Intertek Johannesburg South Africa. Sample shipments are managed by a professional cargo freight company and remain secure during transport.
		Following sample preparation subsamples are shipped to Perth Australia by ALS or Intertek using DHL. Samples are received in Australia and subject to customs inspection and quarantine treatment.
		Samples were subsequently transported from Australian customs to ALS or Intertek in Perth via road freight and inspected on arrival by a Company representative.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been undertaken

# **LINDIAN** RESOURCES LTD.

# Section 2 Reporting of Exploration Results

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

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 Kangankunde Project comprising granted Exploration Licence EPL0514/18R and Mining Licence MML0290/22 is 100% owned by Rift Valley Resource Developments (RVRD) a Malawian registered company. Lindian Resources currently holds 67% of RVRD with a binding share purchase agreement in place to acquire 100 % of RVRD.
	• 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.	
Exploration	Acknowledgment and appraisal of exploration by other parties.	Previous exploration includes:
done by other parties		1952-1958: Eight trenches excavated. No data records known to exist.
		1959: Geological mapping, ten trenches excavated, seven drill holes drilled below main trenches. Data not sighted
		1972-1981: Trench mapping and sampling, adit driven 300 metres north to south with several crosscuts. Diamond drilling from crosscuts. Pilot plant operated producing strontianite and monazite concentrate. Limited data available in hard copy only.
		1987- 1990: Feasibility study activities including surface core drilling, processing studies, geotechnical and groundwater studies, estimation of "geological reserves" (Not JORC compliant). Limited data available in hard copy reports.
		Historical data is largely not available or not readily validated and is currently not reported.
Geology	Deposit type, geological setting and style of mineralisation.	Intrusive carbonatite containing monazite as the main rare earth bearing mineral.
		The Kangankunde carbonatite complex is characterized by an elliptic structure centring Kangankunde Hill. The diameters in N-S and E-W directions are 900m and 700m, respectively.
		In the ellipse, the following rocks are zonally arranged from the centre to the outer part; carbonatites, carbonatized breccias, wall rock / carbonatite breccias and basement rocks.
		The carbonatites are dolomitic, sideritic and ankeritic and at surface are distributed widely on the northern and western slopes of the Kangankunde Hill. Manganese carbonatite is found at the top and on the eastern slope of the hill.



Criteria	JORC Code explanation	Commentary
		Monazite is found in all carbonatite types in varying quantities. Other associated minerals are strontianite, barite and apatite.
Drill hole 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:	The material information for drill holes relating to this announcement are contained in Appendix 1.
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	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.	
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No intervals reported in this announcement.
	• 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.	
Relationship between mineralisation	<ul> <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</li> </ul>	Not applicable. No intervals reported in this announcement.
widths and intercept	known, its nature should be reported.	
lengths	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	



Criteria	JORC Code explanation	Commentary
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.	Refer to diagrams in body of text.
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. No intervals reported in this announcement.
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.	Multi element analysis has been conducted including potential radionuclides uranium (U) and thorium (Th). Metallurgical testwork undertaken establishing gravity concentration processing. This is reported in separate announcements.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Future work programs are intended to evaluate the economic opportunity of the project including further near mine exploration drilling, resource definition drilling, processing optimization, mine op-itemisation and design.

# Section 3 Estimation and Reporting of Mineral Resources

# (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	Data collected in the field has been validated is validated prior to and during upload to the master database. Field data collection sheets and master database have validation controls on data entry. Analytical data is received in digital format from the laboratory and merged with the sampling data in the master database for QAQC analysis and review against field data. Once finalised and validated data is stored in a protected Access database. Prior to application to resource modelling the database is validated using standard software protocols



Criteria	JORC Code explanation	Commentary
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	The project site has been visited by the Competent Person who has observed drilling operations, reviewed drill core, and reviewed sampling and QAQC procedures.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The Kangankunde carbonatite complex includes a central core lithology which consists of carbonatite agglomerate and is cut by carbonatite dykes, and surrounded by a ring of feldspathic breccia and agglomerate. The carbonatite body is surrounded by a fenite aureole. The REE-rich carbonatites are concentrated in the centre of the complex, with others occurring irregularly in veins and dykes (commonly as dolomitic and ankeritic carbonatites) that intrude different units of the carbonatite body.
		Minor element chemistry together with rare earth mineralisation was used to define five mineralisation domains for subsequent estimation. These domains were assessed against geological understanding and field observations from surface mapping and drill core and were considered appropriate representations of the mineralisation distribution.
		There is a moderate degree of confidence in the interpretation of the mineralisation based on historical activity including adits and trenches. As drilling continues the geological and chemical profile of the project will increase, allowing more detailed domaining regimes to be applied.
		Numerous small-scale faults are interpreted to occur at the project however these infer relatively limited offsets within the mineralised zones.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Kangankunde Hill rises to a height of up to 200 m above the surrounding plain. The central carbonatite extends approximately 700 m north-south, and ~400 m east- west, around which is a broad collar of mixed carbonatite breccias and fenite. The mineralisation has been intercepted at ~300 m below surface and remains open at depth.
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine</li> </ul>	A total of 15 rare earth element (REE) grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu), Sc, and 3 deleterious elements (Sc, U, and Th) were estimated. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO). The grade estimation used the Ordinary Kriging ("OK") technique using 1 m composited samples. Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis.



Criteria	JORC Code explanation	Commentary
	<ul> <li>appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>neighbourhood analysis ("KNA"), which included: <ul> <li>Oriented ellipsoidal search radii ranged from 100m to 375m depending on the estimation domain;</li> <li>Minimum number of samples = 8 to 10;</li> <li>Optimum number of samples = 16 to 21, and</li> <li>A maximum of 5 samples per drill holes</li> </ul> </li> <li>Computer software used for the modelling and estimation were: <ul> <li>Leapfrog Geo v2023.2 was used for geological domain modelling.</li> <li>Imdex ioGAS 64-8.1 was used for geostatistical analysis.</li> <li>Supervisor v8.14 was used for geostatistical analysis.</li> <li>Supervisor v8.14 was used for geostatistical analysis.</li> <li>Surpac GEOVIA 2021.1 was used for grade estimation, block modelling and reporting.</li> </ul> </li> <li>The estimation block model definitions are: <ul> <li>Non-rotated block model with an azimuth of 000°GN;</li> <li>OK panel size was set at 20m x 20m x 5m and 80m x 80m x 20m (XYZ)</li> <li>Sub-block size of 5m x 5m x 2.5m (XYZ);</li> <li>The bulk of the drilling is irregular as defined by topography however broadly approaches 40m by 40m, and</li> <li>Appropriate search ellipses were derived from KNA with an average search radii of 100m to 600m and average anisotropy of 1.5:2 (major/semi:major/minor).</li> </ul> </li> <li>Selection of the block size was based on the geometry of the mineralisation, data density, and the likely degree to which selective mining can be successfully applied to the geologically based domain boundaries.</li> <li>Estimations of U and Th elements were completed for the Mineral Resource estimate. Estimates of Sc were also completed. No other deleterious elements or other non-grade variables of economic significance are reported.</li> </ul> <li>Correlations between the elements were determined from statistical analysis of the REE and demonstrated strong positive correlations between the majority of REE variables within the applicable grouping criteria.</li> <li>The estimation model was validated using the following techniques:</li>
		Visual 3D checking and comparison of informing samples and



Criteria	JORC Code explanation	Commentary
		<ul> <li>estimated values;</li> <li>Global statistical comparisons of raw sample and composite grades to the block grades;</li> <li>Comparison of correlation coefficients between composite and block data;</li> <li>Validation 'swath' plots by northing, easting and elevation for each domain, and</li> <li>Analysis of the grade tonnage distribution.</li> <li>No by-product recoveries were considered.</li> <li>No commercial scale mining production has taken place at the deposit.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnes are estimated on an Insitu Dry Bulk Density basis. No moisture content has been determined by testwork or used in estimation.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Lindian Resources Ltd have completed metallurgy testwork that resulted in the qualification of a water based gravity separation process and resulted in a recovery of 70% at a concentrate grade of 60% TREO (refer ASX release dated 11th April 2023 and 5th March 2024). These results together with indicative mining and processing costs, and geotechnical parameters were used to define a resource optimisation shell which supports application of a reporting cut-off grade of 0.5% TREO.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The assumed mining method would be standard drill, blast, load and haul using excavator and truck configuration.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the	Lindian Resources Ltd have completed metallurgy testwork that resulted in the qualification of a water based gravity separation process and resulted in a recovery of 70% at a concentrate grade of 60% TREO (refer ASX release dated 11th April 2023 and 5 <sup>th</sup> March 2024).



Criteria	JORC Code explanation	Commentary
	metallurgical assumptions made.	
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	Initial site layout designs have considered tailings emplacement locations. At this stage no mining waste dump or long-term stockpiles locations have been planned. There is sufficient land holding for adequate waste dumping.
Bulk density	<ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	Bulk density has been determined from 97 individual drill core measurements using Archimedes method. Samples were oven dried, weighed, coated with wax then weighed dry and in water using an appropriate analytical balance. The average bulk density of 2.95 g/cm <sup>3</sup> derived from these samples has been applied to the carbonatite for resource modelling with a value of 2.7 g/cm <sup>3</sup> applied to the surrounding country rock.
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>A range of criteria was considered when addressing the suitability of the classification boundaries. These criteria include: <ul> <li>Geological continuity and volume;</li> <li>Drill spacing and drill data quality;</li> <li>Modelling technique; and</li> <li>Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.</li> </ul> </li> <li>Blocks have been classified as indicated and inferred criteria for resource classification are: <ul> <li>Indicated: drill spacing of ~ 40m with a Dy_ppm_ok slope of regression ≥ 0.7</li> <li>Inferred: drill spacing of ~100 m.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	No audits or review have been completed for the Mineral Resource estimate.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to the global estimates of tonnes and grades.
	<ul> <li>relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	No production data is available.