

5 JANUARY 2023

# KANGANKUNDE DELIVERS OUTSTANDING HIGH GRADE RARE EARTHS ASSAYS

**FIRST ASSAYS FOR HOLES 1 & 2 DELIVER EXCEPTIONALLY HIGH GRADES,  
EXTENSIVE DISTRIBUTION AND CONTINUOUS, NON-RADIOACTIVE  
MINERALISATION**

## HIGHLIGHTS

- Assays from first two drill holes demonstrate outstanding grades of up to 11.8% TREO (Appendix 2) show continuous rare earths mineralisation over the entire length of holes from surface
- KGKRC00: 110 metres from surface at average of 2.9% TREO, including:
  - 12 metres @ 4.2% TREO from surface,
    - (Including 1m @ 7.2% TREO from 8 metres and 1 metre @ 6.4% TREO from 4 metres)
  - 25 metres @ 3.0% TREO from 34 metres, (including 1 metre @ 5.7% TREO from 35 metres)
  - 20 metres @ 3.9% TREO from 64 metres, (including 1 metre @ 6.2% TREO from 75 metres)
  - 8 metres @ 3.8% TREO from 102 metres, (including 1 metre @ 8.5% TREO from 103 metres)
- KGKRC002: 250 metres from surface averaging 2.9% TREO with intersections including:
  - 16 metres @ 5.7% TREO from surface, (including 2 metres at 11.5% from 12 metres)
  - 79 metres @ 3.2% TREO from 30 metres
  - 29 metres @ 3.5% TREO from 124 metres,
  - 66 metres @ 2.5% TREO from 211 metres
- Both holes terminated in mineralisation and will be extended with core drilling
- Critical battery metal elements of neodymium-praseodymium (NdPr) ratio of 21% of TREO content
- Assays demonstrate that, on average, the mineralisation is very low in uranium and thorium
- A further six (6) batches of samples are in process for assay and will be reported progressively in the coming weeks
- Drilling program recommences early January with three drill rigs
- 4,061 metres of RC drilling and 489m of core drilling completed so far in the Phase 1 Drill Program of planned 12,500 metres

Lindian Resources Limited (ASX:LIN) (“Lindian” or “the Company”) is pleased to advise the receipt of the first two batches of assays from the Phase 1 drilling program at the Kangankunde Rare Earths Project in Malawi.

The assays reported are for the first two reverse circulation (RC) holes, KGKRC001 and KGKRC002. Both holes contain mineralisation with very high rare earths grades, broad intersections of non-radioactive material over the entire lengths of the holes, a large percentage of critical battery metal elements of NdPr. The holes ended in mineralisation which will be further extended with core drilling later in the program.

## COMMENT

**Lindian’s Chief Executive Officer, Alistair Stephens commented:** *“These first assay results are absolutely outstanding in terms of grade, distribution and continuity, and with a steady stream of assays to follow, we are confident of delivering more of the same and building the case that in 2023, Kangankunde will rapidly emerge as a standout, globally significant rare earths project in terms of grade, scale and non-radioactivity. Today’s results should be regarded as a leading indicator of this. I am not aware of another deposit anywhere in the world demonstrating such high grades of rare earths mineralisation over these continuous lengths to such depth. Added to this is the non-radioactivity of the Kangankunde rare earths mineralisation - a highly unique and extremely commercially advantageous characteristic, with the potential for concentrates from Kangankunde to be shipped anywhere in the world, free of Class 7 restrictions. The commercial significance of this cannot be understated.”*

*“The high content of NdPr reported in these assays is in line with historical work and indicates that the concentrates from Kangankunde will be in high demand with NdPr being used to produce strong permanent magnets critical to global decarbonisation technologies including EVs and wind turbines.”*

*“With a total of 26 RC holes for 4,061 metres and 2 core drill holes for 489 metres completed prior to the drilling break for the festive season, we anticipate reporting a steady stream of assays from here on. Concurrently, other mine development work is expected to commence shortly which will add another reporting stream alongside ongoing assay results, the delivery of an exploration target and maiden Mineral Resource Estimate sometime in Q2 CY2023. Lindian is in excellent shape, we are well capitalised and these results will only increase investor interest and awareness in Kangankunde globally. We look forward to delivering more good news very soon.”*

## DRILL ASSAY RESULTS

Assay results have been received from the first two RC holes in the Phase 1 Kangankunde Rare Earths Project.

Results for holes KGKRC001 and KGKRC002 demonstrate **continuous rare earths mineralisation over their entire drill lengths**. Both drill holes were collared in the central zone of the Kangankunde carbonatite complex and designed to drill toward the outer margin of the central carbonatite. Neither hole reached the outer margin of the central carbonatite. Figure 3 provides a plan view of the Kangankunde carbonatite geology.

The holes were entirely drilled in carbonatite or carbonatite breccia with two main alteration types associated with mineralisation logged. The alteration comprises:

- Iron oxide and manganese oxide in moderately weathered to fresh carbonatite with individual Total Rare Earth Oxides (TREO) up to 11.8% TREO, the primary rare earth bearing mineral monazite, is frequently visible in the drill cuttings, and
- Potassic (fenite) alteration; associated with carbonatite ranging from 1% to 2% TREO.

## Significant Intercepts

Significant intersections are summarised in Table 1. Cross sections showing TREO intersections with summarised alteration zones are shown in Figure 1 and Figure 2 with a plan view of the hole locations on simplified geology in Figure 3.

Both holes finished in mineralisation and will be continued with core drilling later in the program.

**Table 1: Significant rare earth intersections**

Hole ID	From (m)	To (m)	Intersection (m)	TREO ppm	TREO %	NdPrO* ppm	NDPrO% of TREO**
<b>KGKRC001</b>	<b>0</b>	<b>110</b>	<b>110</b>	<b>28,909</b>	<b>2.9</b>	<b>6,006</b>	<b>21%</b>
Including:	0	12	12	42,074	4.2	8,471	20%
	34	59	25	30,194	3.0	6,463	21%
	64	84	20	38,688	3.9	8,174	21%
	102	110 EOH	8	38,035	3.8	7,174	19%
<b>KGKRC002</b>	<b>0</b>	<b>250</b>	<b>250</b>	<b>29,066</b>	<b>2.9</b>	<b>6,010</b>	<b>21%</b>
Including:	0	16	16	56,638	5.7	10,668	19%
	30	109	79	31,843	3.2	6,653	21%
	124	153	29	35,441	3.5	7,424	21%

\* NdPrO = Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub>

\*\* NdPrO% / TREO% x 100

## Neodymium and Praseodymium Ratio

The mineralisation is dominated by light rare earths cerium (Ce), lanthanum (La), neodymium (Nd) and praseodymium (Pr). The total of Nd and Pr content in oxide form constitutes 21% of the TREO in KGKRC001 and KGRC0002.

## Non-Radioactive Mineralisation

Radionuclides uranium (U) and thorium (Th) are low in grade in both drill holes. KGKRC001 averages 5.41ppm U and 53ppm Th over 110 metres and KGKRC002 averages 7.5 ppm U and 49 ppm Th over 250 metres. All drill samples are routinely scanned on site for radiation with results consistently in the 2- 3 counts per second (cps) range. These readings are very low and support the low radiation content of the rare earth bearing monazite mineralisation.

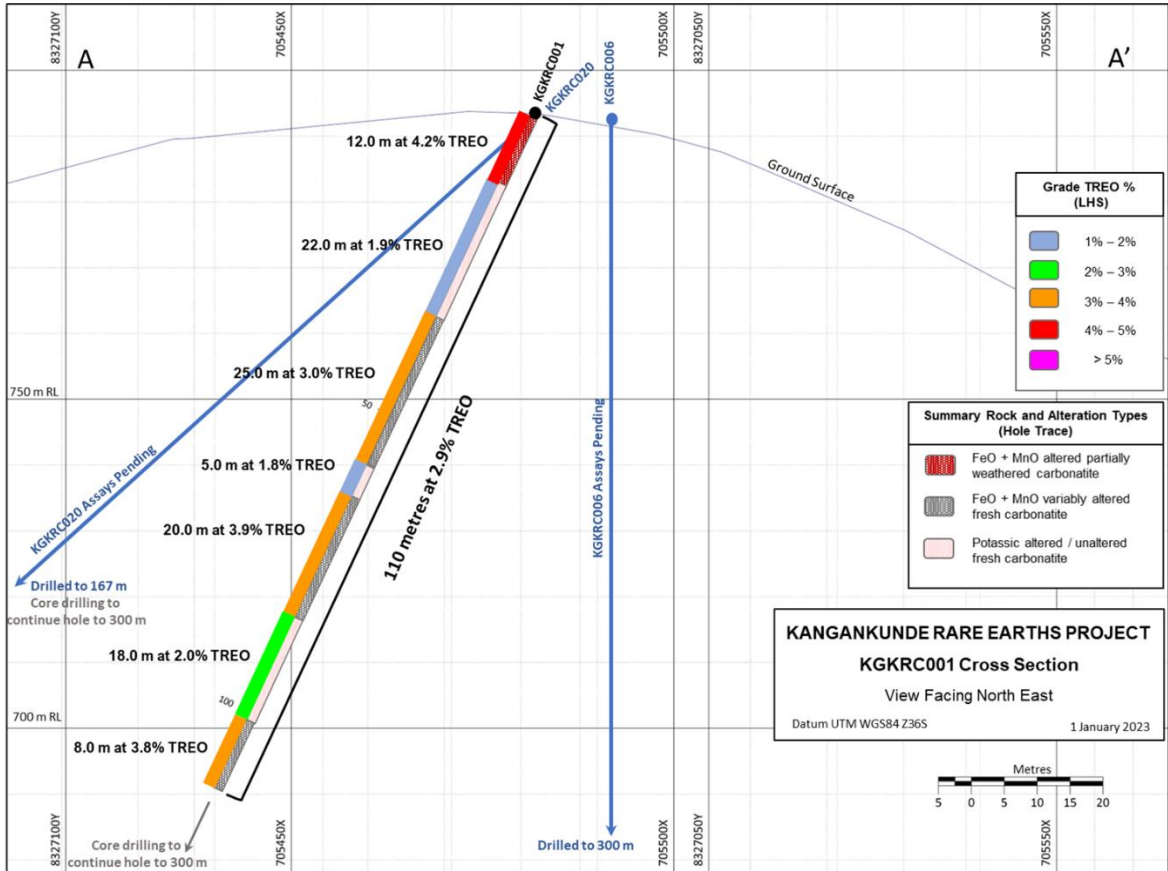


Figure 1: KGKRC001 Cross Section A - A'

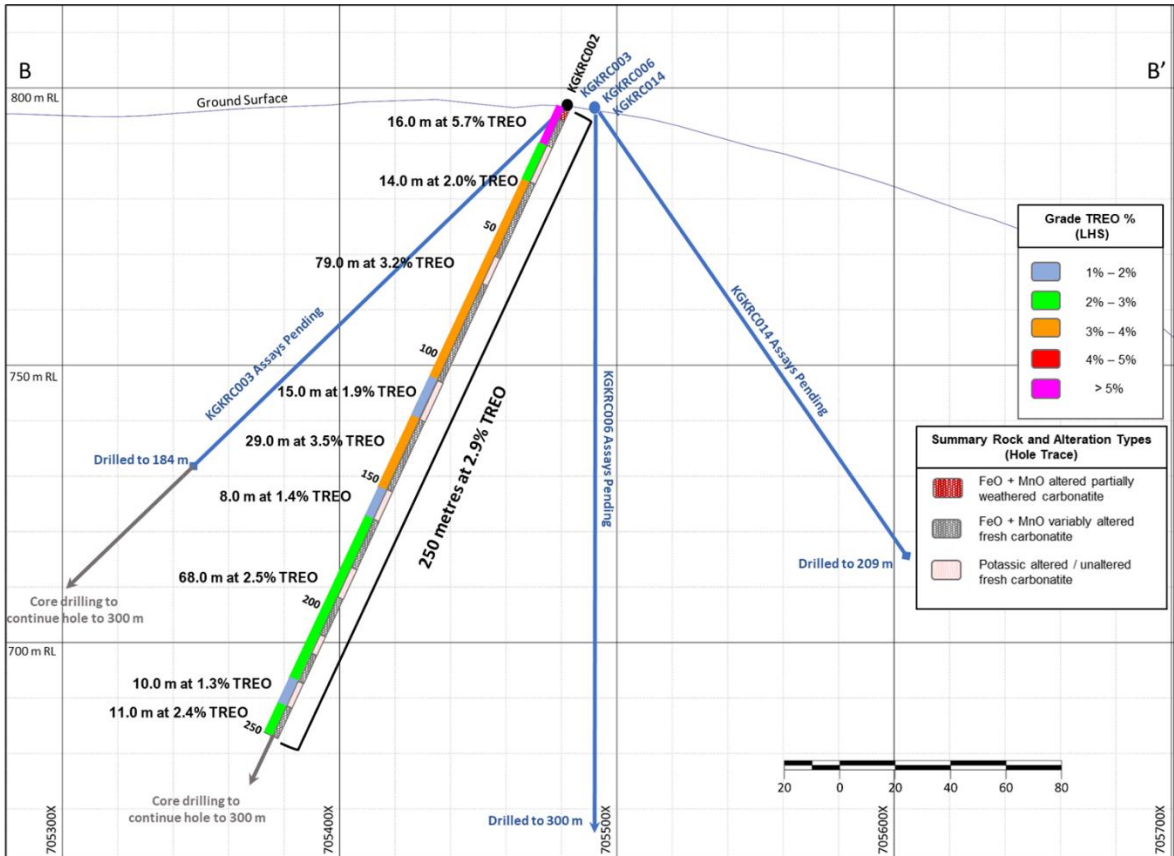


Figure 2: 8327060 North Cross Section B - B' Including KGKRC002



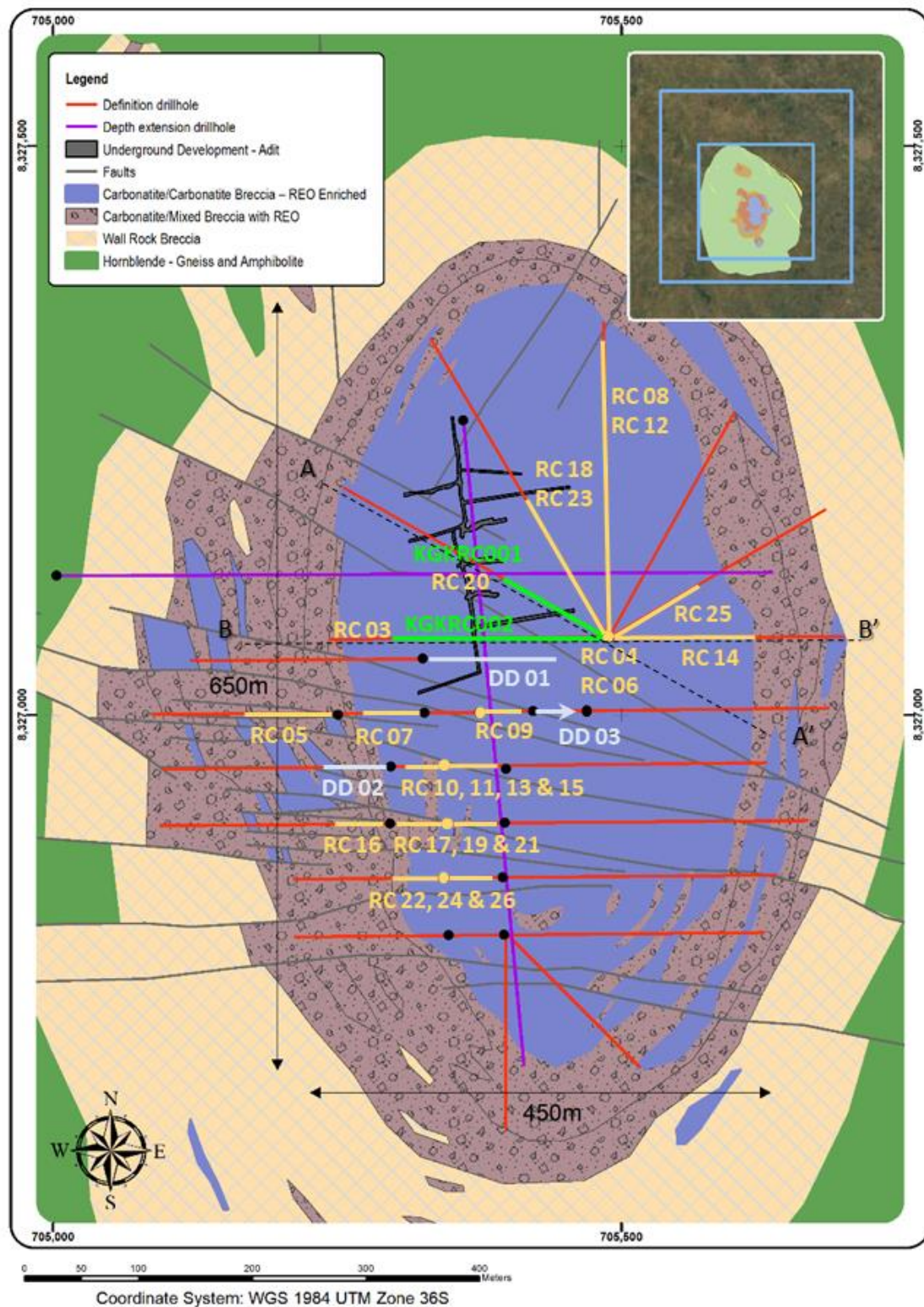


Figure 3: Kangankunde central carbonatite simplified geology with planned drilling (Phase 1=red, Phase 2= purple), completed RC holes (yellow) completed core holes (blue) and assay reported holes (green). Cross sections A-A' and B-B' lines shown in black

**PHASE 1 PROGRAM STATUS**

A total of 26 RC holes for 4,061 drill metres and 2 core drill holes for 489 metres had been completed prior to the drilling break for the festive season.

Drill crews and Lindian field staff will return to site on January 8th with drilling due to recommence on January 10th. The intention is to continue drilling with two RC and one core rig during the wet season for the duration of the program and manage rain delays as they occur.

As of 1st January 2023, the status of the drill hole sampling and assay is as follows:

**Table 2: Completed drill hole sampling and assay status at 1<sup>st</sup> January 2023**

Hole Number	Reported	ALS Geochemistry (Australia)	ALS Geochemistry (South Africa)	In transit (Malawi to South Africa)	At Kangankunde Site
22KKRC001	✓				
22KK RC002	✓				
22KK RC003		✓			
22KK RC004		✓			
22KK RC005		✓			
22KK RC006		✓			
22KK RC007		✓			
22KK RC008		✓			
22KK RC009			✓		
22KK RC010			✓		
22KK RC011			✓		
22KK RC012			✓		
22KK RC013			✓		
22KK RC014			✓		
22KK RC015				✓	
22KK RC016				✓	
22KK RC017				✓	
22KK RC018				✓	
22KK RC019				✓	
22KK RC020				✓	
22KK RC021				✓	
22KK RC022				✓	
22KK RC023				✓	
22KK RC024				✓	
22KK RC025				✓	
22KK RC026				✓	
22KK DD001				✓	
22KK DD002					Sampling commenced
22KK DD003					Sampling pending

## PROGRAM SUMMARY

The Kangankunde drilling program is planned in separate phases with distinct outcomes targeted.

### PHASE 1 DRILL PROGRAM (MINE DEFINITION)

The Phase 1 program consists of 10,000 metres of RC drilling and 2,500 metres of core drilling on the Kangankunde hill top. The drill pattern is based on 50 metre east-west sections, and as radial fans perpendicular to the interpreted carbonatite boundary where topography provides access (Figure 3). The program is designed to give initial data for resource evaluation and mine planning.

The Phase 1 Drill Program is only partially complete with a total of 4,550 metres drilled of a planned 12,500 metres. Refer above.

### PHASE 2 DRILL PROGRAM (DEPTH EXTENSION)

Two additional deep drill holes are planned from drill pads near the base of the Kangankunde hill (Figures 1 and 2) and are designed to allow drilling to continue during the wet season. These two drill holes, each planned to be 1,000 metres in length, are designed to test the N-S and E-W axes of the carbonatite between 300 metres and 800 metres below the hill top. The Phase 2 Drill Program has not yet commenced.

-ENDS-

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

#### For further information, please contact:

**Asimwe Kabunga (Chairman)**

**Phone:** +61 8 6557 8838

**Email:** [info@lindianresources.com.au](mailto:info@lindianresources.com.au)

**Alistair Stephens (CEO)**

**Phone:** +61 488 992 544

**Email:** [info@lindianresources.com.au](mailto:info@lindianresources.com.au)

## About Lindian

### RARE EARTHS

**Lindian Resources Limited** will progressively acquire 100% of Malawian registered Rift Valley Resource Developments Limited and its 100% owned title to Exploration Licence EPL0514/18R and Mining Licence MML0290/22 (refer ASX announcement ASX:LIN dated 1 August 2022) issued under the Malawi Mines and Minerals Act 2018. 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. The Kangankunde Project, located within ML0290, has been subject to significant historic exploration by Lonrho Plc (Lonrho) in the 1970's and the French geoscience Bureau de Recherches Géologiques et Minières (BRGM) in the 1990's. The project has an underground adit (a horizontal drive with cross cuts extending at least 300 metre underground) and exploration sampling by trenching and drilling has identified significant non-radioactive monazite mineralisation over a footprint of at least 800m by 800m.

### BAUXITE

**Lindian Resources Limited** has over 1 billion tonnes of **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.

## About Malawi

**Malawi** is a landlocked country in southern and eastern Africa that parallels the great Lake Malawi, the 5th largest fresh water lake in the world that fills part of the massive rift valley of the Africa continent. Malawi is a peaceful country known ubiquitously as "the warm heart of Africa", with a government and legal system emanated from the English Westminster system (from colonial rule up to 1964). The Malawi economy is currently heavily reliant on agriculture, a small manufacturing sector and foreign aid. Over 80% of Malawians living in rural areas are engaged in traditional subsistence

agriculture. The mining industry in Malawi is in its infancy with a new Mining Act introduced in 2019 expected to forge the way for significant expansion and growth. Having seen the impact of mining in neighbouring countries, the Malawi Government has placed mining as the primary growth sector to diversify the Malawi economy and improve living conditions for its people. A growing mining industry is the central plank of the current President’s plans for employment. Significant mineral endowment exists in the form of rare earths, uranium, niobium, tantalum, and graphite in a country substantially underexplored.

**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 STATEMENT**

The information in this Report that relates to drilling, sampling, and assay results is based on information compiled by Mr. Geoff Chapman, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Chapman is a Director of geological consultancy GJ Exploration Pty Ltd that is engaged by Lindian Resources Limited. 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).

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	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Drill Type	Hole Length EOH (m.)	Azimuth	Inclination
KGKRC0001	705481	8327064	795	RC	110	300	-65
KGKRC0002	705481	8327064	795	RC	250	270	-65

\* Planned hole locations and orientations. Survey pending for accurate collar and downhole details



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Appendix 2: Analytical Results KGKRC001 and KGKRC002

Note: NS= No sample

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm	
KGKRC001	0.0	1.0	12,314	25,796	2,658	8,585	598	95.3	167.1	12.4	37.0	4.1	7.3	0.7	4.0	0.5	102.9	50,383	5.0	117.0	10.4	
	1.0	2.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2.0	3.0	4,785	9,704	963	3,056	224	36.1	64.9	5.2	17.2	2.3	5.0	0.4	2.7	0.3	58.4	18,925	1.9	31.2	9.2	
	3.0	4.0	7,201	13,328	1,263	3,872	298	55.6	117.6	11.9	50.7	7.8	16.5	1.6	8.7	1.0	223.5	26,457	2.6	72.8	10.6	
	4.0	5.0	18,061	32,553	3,033	9,051	568	92.3	161.9	12.3	36.8	4.4	7.9	0.7	3.9	0.4	105.4	63,692	6.4	90.2	13.3	
	5.0	6.0	6,509	12,775	1,220	3,791	259	41.8	76.1	5.8	18.0	2.3	4.6	0.5	3.2	0.4	58.4	24,765	2.5	47.5	9.7	
	6.0	7.0	8,339	16,338	1,607	4,782	335	55.0	99.6	7.8	24.3	2.9	5.4	0.5	3.2	0.4	73.7	31,673	3.2	76.7	13.8	
	7.0	8.0	7,553	14,864	1,480	4,502	340	60.6	118.7	10.2	29.2	3.4	6.3	0.6	3.9	0.4	86.4	29,058	2.9	141.5	11.7	
	8.0	9.0	20,641	36,483	3,407	10,428	669	110.8	208.0	16.1	45.6	5.0	8.5	0.7	3.8	0.5	119.4	72,147	7.2	211.0	6.2	
	9.0	10.0	17,592	30,341	2,851	8,491	576	100.7	194.2	15.5	47.3	5.3	8.7	0.8	4.3	0.6	129.5	60,359	6.0	149.0	4.5	
	10.0	11.0	10,696	21,006	2,072	6,124	412	66.3	118.7	8.9	26.7	3.0	5.1	0.5	2.5	0.4	71.1	40,612	4.1	87.2	8.9	
	11.0	12.0	10,884	23,094	2,374	7,570	499	77.7	130.2	8.8	25.4	2.8	4.8	0.4	2.5	0.4	68.6	44,742	4.5	93.2	5.1	
	12.0	13.0	4,269	8,587	841	2,694	206	34.9	65.8	5.2	16.3	2.1	4.2	0.4	2.6	0.3	52.1	16,781	1.7	61.7	10.3	
	13.0	14.0	4,304	8,415	807	2,566	195	33.7	65.7	5.5	16.3	1.9	3.9	0.4	2.5	0.4	52.1	16,469	1.6	73.4	8.4	
	14.0	15.0	4,808	9,016	838	2,531	168	27.7	50.1	4.0	11.9	1.6	2.9	0.3	1.6	0.3	36.8	17,500	1.7	34.6	7.4	
	15.0	16.0	5,970	10,613	965	2,951	220	38.7	76.2	6.6	19.4	2.2	4.0	0.4	2.3	0.4	53.3	20,922	2.1	67.5	6.4	
	16.0	17.0	4,633	8,279	759	2,333	170	29.3	54.1	4.4	14.1	1.6	3.0	0.2	1.8	0.3	40.6	16,323	1.6	47.1	5.3	
	17.0	18.0	5,442	9,717	892	2,694	181	29.5	53.1	4.2	13.5	1.5	2.6	0.2	1.4	0.1	35.6	19,068	1.9	31.2	5.2	
	18.0	19.0	3,800	7,763	771	2,496	181	27.6	45.8	3.0	8.5	1.0	1.8	0.1	1.0	0.1	22.9	15,123	1.5	22.9	7.8	
	19.0	20.0	7,869	14,679	1,414	4,257	311	52.9	104.8	9.3	33.5	4.8	9.6	0.9	5.5	0.7	130.8	28,883	2.9	62.6	11.0	
	20.0	21.0	9,206	18,303	1,830	5,552	392	62.5	109.3	8.5	25.6	3.2	6.3	0.6	3.2	0.4	78.7	35,582	3.6	64.0	10.3	
	21.0	22.0	9,957	19,777	2,030	6,194	450	72.5	130.2	10.1	31.4	3.9	7.4	0.7	4.2	0.5	100.3	38,769	3.9	87.2	10.3	
	22.0	23.0	3,671	7,297	721	2,309	166	26.5	43.6	3.0	8.8	1.1	1.9	0.2	1.1	0.2	26.7	14,277	1.4	25.1	9.6	
	23.0	24.0	2,369	4,840	471	1,528	118	20.4	38.3	3.1	9.5	1.1	2.1	0.2	1.0	0.1	27.9	9,430	0.9	37.5	10.1	
	24.0	25.0	3,694	7,297	710	2,263	160	25.5	43.3	3.1	9.2	1.1	2.3	0.2	1.1	0.1	26.7	14,237	1.4	19.7	9.8	
	25.0	26.0	5,125	9,852	941	2,928	203	32.0	53.0	3.6	10.2	1.2	2.2	0.2	1.0	0.2	26.7	19,179	1.9	25.4	7.2	
	26.0	27.0	5,008	9,594	915	2,846	195	29.9	49.4	3.5	9.2	1.1	1.8	0.1	1.0	0.1	25.4	18,679	1.9	27.6	7.3	
	27.0	28.0	3,741	8,243	848	2,776	200	29.8	48.4	3.1	8.1	0.9	1.6	0.1	0.9	0.1	20.3	15,921	1.6	22.5	5.0	
	28.0	29.0	3,835	7,530	721	2,245	150	22.3	37.9	2.5	7.2	0.8	1.7	0.1	1.0	0.1	20.3	14,576	1.5	17.6	9.3	
	29.0	30.0	4,633	9,090	872	2,729	186	28.9	50.1	3.6	10.9	1.2	2.1	0.2	1.3	0.2	29.2	17,638	1.8	33.7	7.9	
	30.0	31.0	5,207	9,839	1,048	3,348	208	35.9	55.7	4.6	13.3	1.4	2.5	0.2	1.1	0.1	30.5	19,795	2.0	34.2	6.6	
	31.0	32.0	6,333	11,412	1,173	3,732	223	39.1	59.5	4.3	11.1	1.2	1.8	0.2	0.9	0.1	22.9	23,015	2.3	27.9	7.2	
	32.0	33.0	5,242	9,446	991	3,126	185	30.1	44.1	3.1	8.5	0.9	1.5	0.2	0.9	0.1	19.0	19,099	1.9	20.5	9.1	
	33.0	34.0	4,246	7,862	826	2,543	162	26.7	41.5	3.0	8.4	0.9	1.6	0.1	0.8	0.1	20.3	15,742	1.6	23.3	10.0	
	34.0	35.0	9,359	16,461	1,655	5,237	307	52.7	78.1	5.7	14.9	1.5	2.3	0.2	0.9	0.1	31.7	33,207	3.3	34.8	3.2	
	35.0	36.0	17,768	28,130	2,622	7,663	450	79.9	125.6	9.5	25.1	2.5	4.0	0.3	1.4	0.2	52.1	56,934	5.7	50.7	1.2	
	36.0	37.0	6,662	11,621	1,177	3,639	209	36.9	55.9	4.2	11.1	1.2	2.3	0.2	1.0	0.1	25.4	23,446	2.3	24.3	7.0	
37.0	38.0	3,671	6,940	741	2,234	141	24.8	39.3	3.0	8.7	0.9	1.7	0.1	1.0	0.1	19.0	13,826	1.4	21.4	6.5		

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	38.0	39.0	8,515	16,215	1,710	5,622	350	61.9	93.6	6.6	16.8	1.7	2.7	0.3	1.4	0.2	33.0	<b>32,629</b>	<b>3.3</b>	51.1	3.5
	39.0	40.0	4,597	9,311	1,044	3,464	230	41.0	61.4	4.2	11.4	1.2	2.3	0.2	1.3	0.2	24.1	<b>18,794</b>	<b>1.9</b>	29.9	1.6
	40.0	41.0	6,685	12,653	1,341	4,362	263	45.4	67.9	4.8	13.3	1.3	2.3	0.2	1.0	0.1	27.9	<b>25,468</b>	<b>2.5</b>	38.5	6.3
	41.0	42.0	4,398	8,513	913	2,834	182	32.7	53.3	4.5	12.9	1.3	2.1	0.2	0.8	0.1	27.9	<b>16,976</b>	<b>1.7</b>	37.8	7.5
	42.0	43.0	10,473	20,269	2,157	7,150	460	82.2	128.5	9.7	25.5	2.3	3.2	0.2	1.1	0.2	45.7	<b>40,807</b>	<b>4.1</b>	104.0	2.1
	43.0	44.0	11,587	22,541	2,410	7,978	515	90.2	137.7	9.6	24.3	2.4	4.1	0.3	1.7	0.3	49.5	<b>45,352</b>	<b>4.5</b>	89.8	1.6
	44.0	45.0	8,784	17,075	1,830	6,042	379	63.2	92.4	6.2	15.6	1.6	2.3	0.2	0.9	0.1	29.2	<b>34,322</b>	<b>3.4</b>	55.1	5.3
	45.0	46.0	5,887	11,228	1,203	3,919	249	43.8	68.5	5.2	14.1	1.4	2.3	0.2	1.0	0.2	30.5	<b>22,654</b>	<b>2.3</b>	46.0	6.0
	46.0	47.0	8,960	16,276	1,673	5,354	322	55.3	86.7	6.6	17.8	1.7	2.7	0.2	0.9	0.2	38.1	<b>32,796</b>	<b>3.3</b>	55.7	2.5
	47.0	48.0	6,075	10,945	1,126	3,558	215	39.1	65.9	6.3	20.7	2.2	3.2	0.2	1.3	0.1	47.0	<b>22,105</b>	<b>2.2</b>	56.6	3.8
	48.0	49.0	8,116	15,539	1,619	5,132	289	47.1	68.7	4.7	12.6	1.3	2.2	0.2	0.9	0.1	26.7	<b>30,859</b>	<b>3.1</b>	35.3	5.3
	49.0	50.0	7,998	15,048	1,583	5,120	306	50.9	73.8	4.9	12.6	1.3	2.1	0.2	0.9	0.1	25.4	<b>30,228</b>	<b>3.0</b>	34.5	7.6
	50.0	51.0	5,219	9,925	1,041	3,196	186	31.6	49.8	3.8	11.1	1.3	2.5	0.2	1.3	0.2	29.2	<b>19,698</b>	<b>2.0</b>	25.5	8.4
	51.0	52.0	11,787	21,190	2,096	6,415	342	57.2	87.6	6.5	17.4	1.8	2.7	0.2	1.1	0.1	36.8	<b>42,042</b>	<b>4.2</b>	51.7	1.6
	52.0	53.0	10,086	17,628	1,722	5,144	279	48.4	75.3	5.8	15.4	1.6	2.4	0.2	0.9	0.1	30.5	<b>35,039</b>	<b>3.5</b>	45.1	1.3
	53.0	54.0	14,953	25,919	2,513	7,593	401	67.9	105.9	8.0	22.3	2.1	3.3	0.2	1.3	0.2	44.4	<b>51,636</b>	<b>5.2</b>	70.7	1.9
	54.0	55.0	6,662	12,591	1,317	4,152	233	38.1	57.1	4.2	11.5	1.2	1.9	0.2	0.9	0.1	25.4	<b>25,096</b>	<b>2.5</b>	34.2	2.6
	55.0	56.0	5,348	10,208	1,086	3,523	206	34.2	52.3	3.8	10.4	1.1	1.9	0.2	1.0	0.1	22.9	<b>20,499</b>	<b>2.0</b>	31.1	1.4
	56.0	57.0	5,723	10,847	1,157	3,709	221	36.8	55.8	3.9	11.2	1.1	1.9	0.2	1.0	0.1	25.4	<b>21,796</b>	<b>2.2</b>	30.6	4.0
	57.0	58.0	7,729	14,434	1,486	4,724	263	43.3	65.6	4.8	12.5	1.3	2.2	0.2	0.9	0.1	27.9	<b>28,795</b>	<b>2.9</b>	37.5	3.4
	58.0	59.0	7,858	14,925	1,571	5,027	290	46.7	70.3	5.0	13.0	1.4	2.3	0.2	1.0	0.1	29.2	<b>29,840</b>	<b>3.0</b>	37.7	4.4
	59.0	60.0	4,504	8,587	928	2,881	193	33.6	54.2	3.8	10.2	1.1	1.9	0.2	0.9	0.1	22.9	<b>17,221</b>	<b>1.7</b>	31.6	8.2
	60.0	61.0	5,700	11,080	1,096	3,429	224	36.0	60.9	3.7	11.1	1.2	2.1	0.1	1.1	0.1	22.9	<b>21,669</b>	<b>2.2</b>	29.8	4.9
	61.0	62.0	5,008	9,582	933	2,881	186	29.5	50.9	3.2	9.9	1.0	1.8	0.1	0.9	0.1	22.9	<b>18,710</b>	<b>1.9</b>	30.0	4.8
	62.0	63.0	3,718	7,137	695	2,170	141	22.5	39.6	2.8	8.6	0.9	1.5	0.2	1.0	0.1	19.0	<b>13,956</b>	<b>1.4</b>	22.0	1.1
	63.0	64.0	4,844	9,594	964	3,091	216	35.8	62.6	4.1	12.9	1.4	2.5	0.2	1.4	0.2	31.7	<b>18,861</b>	<b>1.9</b>	38.8	4.6
	64.0	65.0	8,409	16,461	1,673	4,969	349	58.9	106.0	7.5	21.8	2.1	3.3	0.3	1.4	0.2	49.5	<b>32,112</b>	<b>3.2</b>	80.4	1.6
	65.0	66.0	8,831	17,505	1,800	5,365	356	56.3	98.9	6.2	18.4	1.9	3.2	0.3	1.5	0.2	39.4	<b>34,084</b>	<b>3.4</b>	58.2	0.9
	66.0	67.0	9,981	19,532	1,987	5,844	401	64.1	117.0	7.9	24.1	2.2	3.5	0.3	1.5	0.1	49.5	<b>38,015</b>	<b>3.8</b>	78.3	0.6
	67.0	68.0	9,124	17,628	1,776	5,237	361	59.6	111.8	8.0	24.1	2.3	3.8	0.3	1.4	0.1	53.3	<b>34,391</b>	<b>3.4</b>	81.7	0.7
	68.0	69.0	9,394	18,426	1,873	5,552	386	65.1	123.9	8.8	26.6	2.4	3.7	0.3	1.5	0.2	53.3	<b>35,917</b>	<b>3.6</b>	102.0	0.6
	69.0	70.0	10,227	20,637	2,132	6,369	412	64.8	111.9	7.4	21.2	2.0	3.2	0.2	1.4	0.2	43.2	<b>40,032</b>	<b>4.0</b>	62.3	0.8
	70.0	71.0	9,136	19,409	2,102	6,334	415	65.3	115.3	7.7	23.1	2.2	3.5	0.3	1.6	0.2	47.0	<b>37,662</b>	<b>3.8</b>	68.0	1.0
	71.0	72.0	7,588	15,355	1,577	4,747	313	49.0	87.1	5.7	16.9	1.6	2.7	0.2	1.1	0.1	35.6	<b>29,780</b>	<b>3.0</b>	51.1	0.6
	72.0	73.0	9,218	18,303	1,849	5,482	366	58.6	103.0	6.7	19.2	1.9	3.0	0.2	1.5	0.2	40.6	<b>35,453</b>	<b>3.5</b>	61.0	0.7
	73.0	74.0	11,095	22,418	2,283	6,800	455	70.6	122.2	7.5	20.9	2.0	3.1	0.2	1.3	0.1	39.4	<b>43,318</b>	<b>4.3</b>	63.4	0.6
	74.0	75.0	14,308	29,359	3,045	9,378	539	84.1	140.0	8.9	25.4	2.3	3.4	0.2	1.3	0.2	47.0	<b>56,941</b>	<b>5.7</b>	76.5	0.9
	75.0	76.0	15,774	32,430	3,310	10,393	611	94.6	158.5	9.3	26.7	2.4	4.0	0.3	1.6	0.2	53.3	<b>62,869</b>	<b>6.3</b>	85.1	1.0
	76.0	77.0	10,250	20,576	2,102	6,205	392	62.1	106.5	6.8	18.8	1.8	3.2	0.3	1.5	0.2	38.1	<b>39,765</b>	<b>4.0</b>	56.7	1.0
	77.0	78.0	10,156	20,576	2,139	6,439	409	63.6	113.3	7.2	21.1	2.0	3.5	0.3	1.6	0.2	47.0	<b>39,978</b>	<b>4.0</b>	74.4	1.2
	78.0	79.0	10,825	21,374	2,181	6,474	423	66.5	117.0	6.9	20.4	1.8	2.9	0.2	1.1	0.1	39.4	<b>41,533</b>	<b>4.2</b>	69.8	1.5

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	79.0	80.0	9,242	18,242	1,861	5,564	361	56.4	99.9	6.2	19.3	2.0	3.5	0.3	1.5	0.2	43.2	35,501	3.6	56.8	2.7
	80.0	81.0	8,960	17,935	1,855	5,552	350	54.8	95.2	6.2	18.6	1.8	3.0	0.2	1.4	0.1	39.4	34,872	3.5	64.4	2.8
	81.0	82.0	7,588	15,171	1,546	4,596	282	42.7	72.4	4.6	13.1	1.2	2.2	0.1	1.0	0.1	27.9	29,348	2.9	34.4	4.0
	82.0	83.0	7,740	15,478	1,607	4,759	310	49.1	88.4	6.4	21.0	2.1	3.4	0.3	1.7	0.3	52.1	30,119	3.0	49.9	2.1
	83.0	84.0	11,013	21,558	2,193	6,532	437	70.9	134.3	10.6	34.7	3.2	4.9	0.4	2.0	0.2	74.9	42,069	4.2	93.2	1.2
	84.0	85.0	5,665	11,547	1,157	3,686	253	41.9	84.0	7.4	27.8	2.9	4.7	0.4	2.3	0.3	73.7	22,553	2.3	79.4	3.7
	85.0	86.0	5,993	11,915	1,177	3,697	234	36.6	63.4	4.6	13.8	1.4	2.4	0.2	1.3	0.2	33.0	23,174	2.3	40.8	7.3
	86.0	87.0	4,492	9,188	921	2,928	201	32.8	63.7	5.2	17.7	1.7	2.7	0.2	1.4	0.2	39.4	17,895	1.8	61.1	12.2
	87.0	88.0	5,887	11,645	1,161	3,651	241	39.0	75.1	6.0	19.3	1.9	2.9	0.2	1.1	0.2	43.2	22,775	2.3	63.9	4.7
	88.0	89.0	3,589	7,026	690	2,152	140	21.3	37.7	2.6	8.8	0.9	1.9	0.1	1.0	0.1	22.9	13,694	1.4	20.8	8.7
	89.0	90.0	6,579	12,837	1,275	3,931	244	36.5	61.4	3.7	10.2	1.2	1.8	0.2	0.9	0.1	22.9	25,004	2.5	27.8	4.8
	90.0	91.0	6,990	14,495	1,546	4,409	289	46.2	74.9	5.7	16.3	1.7	3.0	0.2	1.4	0.2	35.6	27,914	2.8	51.4	5.0
	91.0	92.0	3,600	7,469	780	2,379	161	25.2	41.4	3.1	9.5	1.0	1.7	0.1	0.8	0.1	20.3	14,494	1.4	26.3	7.4
	92.0	93.0	3,260	6,768	702	2,117	144	23.6	39.3	3.0	8.8	1.0	1.8	0.1	1.0	0.1	21.6	13,093	1.3	24.2	9.2
	93.0	94.0	3,518	7,702	837	2,613	187	31.5	54.1	4.3	12.7	1.3	1.9	0.1	0.9	0.1	26.7	14,991	1.5	45.7	4.5
	94.0	95.0	4,949	9,876	1,010	2,963	188	30.3	50.8	3.6	11.1	1.3	1.8	0.1	1.0	0.1	24.1	19,111	1.9	37.3	6.4
	95.0	96.0	5,196	10,638	1,107	3,289	213	34.5	58.6	4.6	12.6	1.3	1.8	0.1	0.8	0.1	25.4	20,582	2.1	49.3	2.5
	96.0	97.0	5,383	10,859	1,114	3,254	210	32.5	54.1	4.2	12.4	1.2	2.1	0.1	0.9	0.1	24.1	20,952	2.1	38.9	4.7
	97.0	98.0	5,794	11,486	1,170	3,429	223	36.0	59.6	4.4	13.1	1.3	2.1	0.1	1.0	0.1	26.7	22,246	2.2	39.2	5.5
	98.0	99.0	6,626	13,328	1,377	4,024	256	40.1	64.5	4.3	11.8	1.1	1.9	0.1	0.8	0.1	22.9	25,760	2.6	41.3	18.8
	99.0	100.0	6,966	14,249	1,553	4,339	291	45.4	73.3	4.9	13.3	1.3	2.2	0.2	0.8	0.1	26.7	27,567	2.8	39.2	4.1
	100.0	101.0	4,281	8,697	904	2,741	179	27.9	46.0	3.1	8.8	1.0	1.9	0.1	0.9	0.2	19.0	16,911	1.7	23.6	4.0
	101.0	102.0	4,609	9,348	967	2,869	188	30.3	51.1	3.6	11.1	1.1	1.9	0.1	0.8	0.1	24.1	18,106	1.8	38.1	4.1
	102.0	103.0	10,016	18,180	1,667	4,561	250	41.0	71.9	5.8	17.3	1.9	3.1	0.3	1.4	0.2	43.2	34,860	3.5	52.2	3.1
	103.0	104.0	25,919	44,468	3,866	10,159	551	91.5	156.8	12.1	32.8	3.2	4.3	0.4	1.5	0.2	67.3	85,333	8.5	114.0	1.7
	104.0	105.0	14,777	28,990	2,718	7,652	426	67.4	110.4	7.8	20.9	2.0	2.9	0.2	0.9	0.1	43.2	54,819	5.5	69.1	1.6
	105.0	106.0	8,573	17,259	1,698	4,876	281	43.7	71.1	4.8	13.0	1.3	2.1	0.2	0.7	0.1	27.9	32,851	3.3	39.4	4.9
	106.0	107.0	4,445	8,771	874	2,403	152	24.4	40.2	2.7	7.7	0.8	1.5	0.1	0.8	0.1	19.0	16,741	1.7	20.4	9.2
	107.0	108.0	4,011	8,267	832	2,368	149	23.5	37.7	2.7	8.1	0.9	1.7	0.2	1.0	0.1	22.9	15,726	1.6	19.4	6.6
	108.0	109.0	10,708	22,725	2,302	6,905	452	72.0	117.0	7.5	19.3	1.9	2.9	0.3	1.3	0.2	39.4	43,354	4.3	84.8	5.5
	109.0	110.0	4,984	10,749	1,116	3,394	215	34.4	56.1	3.9	11.4	1.2	2.1	0.2	0.9	0.1	27.9	20,597	2.1	34.5	6.2
<b>KGKRC002</b>	0.0	1.0	14,719	28,867	3,081	9,121	667	111.7	198.2	13.9	42.5	4.5	7.5	0.7	4.3	0.6	101.6	56,941	5.7	153.5	16.6
	1.0	2.0	9,277	18,426	1,903	5,925	445	73.3	129.1	9.3	30.1	3.3	5.4	0.6	3.5	0.5	74.9	36,306	3.6	114.0	17.1
	2.0	3.0	5,113	10,011	1,037	3,371	278	51.2	106.0	9.4	29.4	3.0	5.0	0.5	3.1	0.4	71.1	20,090	2.0	143.5	9.8
	3.0	4.0	7,095	13,267	1,311	4,024	282	46.1	81.4	5.8	18.6	2.0	3.7	0.3	2.3	0.3	45.7	26,185	2.6	67.1	12.1
	4.0	5.0	5,489	11,154	1,208	3,977	306	50.0	86.0	5.2	15.3	1.6	2.6	0.3	1.4	0.2	33.0	22,330	2.2	52.2	8.2
	5.0	6.0	11,482	23,462	2,573	7,862	604	98.5	166.0	10.3	26.5	2.6	4.0	0.3	1.6	0.2	49.5	46,343	4.6	121.0	5.7
	6.0	7.0	7,846	14,986	1,498	4,619	335	56.0	99.9	6.8	21.8	2.3	4.1	0.4	2.2	0.3	52.1	29,531	3.0	55.9	16.8
	7.0	8.0	18,530	31,079	2,996	8,246	551	91.9	163.1	11.3	35.3	3.9	6.2	0.5	2.7	0.4	82.5	61,800	6.2	93.5	7.1
	8.0	9.0	18,530	29,604	2,791	7,465	488	82.7	149.3	11.0	35.5	3.8	5.9	0.5	2.2	0.3	81.3	59,251	5.9	82.9	3.8
	9.0	10.0	24,160	39,309	3,637	10,346	638	105.3	181.0	12.2	38.1	3.9	5.8	0.5	2.2	0.2	77.5	78,515	7.9	86.4	3.3

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	10.0	11.0	24,394	39,554	3,673	10,358	632	106.4	186.7	12.2	38.4	4.0	5.8	0.5	2.0	0.2	78.7	<b>79,046</b>	<b>7.9</b>	86.2	3.2
	11.0	12.0	28,030	46,188	4,350	12,364	773	127.4	216.7	13.9	42.6	4.3	6.2	0.5	2.2	0.3	82.5	<b>92,201</b>	<b>9.2</b>	104.0	6.0
	12.0	13.0	34,363	55,769	5,183	14,697	944	154.6	263.9	17.6	54.3	5.3	7.7	0.5	2.0	0.3	104.1	<b>111,566</b>	<b>11.2</b>	122.0	2.8
	13.0	14.0	36,357	59,086	5,413	15,688	1000	163.3	282.4	18.9	58.8	5.7	8.1	0.6	2.2	0.3	109.2	<b>118,193</b>	<b>11.8</b>	139.5	2.8
	14.0	15.0	7,963	13,205	1,208	3,569	260	44.5	81.4	6.4	23.6	2.6	4.0	0.3	1.6	0.2	54.6	<b>26,425</b>	<b>2.6</b>	59.2	2.8
	15.0	16.0	12,725	20,883	1,891	5,307	369	64.3	124.5	10.1	32.0	3.4	5.3	0.5	2.2	0.3	73.7	<b>41,491</b>	<b>4.1</b>	86.5	2.1
	16.0	17.0	5,207	9,594	936	2,869	202	32.8	56.1	3.6	11.9	1.2	2.3	0.2	1.0	0.1	26.7	<b>18,945</b>	<b>1.9</b>	30.2	7.4
	17.0	18.0	4,304	8,009	783	2,426	169	27.1	47.1	3.2	9.5	1.0	1.9	0.2	1.1	0.1	21.6	<b>15,804</b>	<b>1.6</b>	24.4	8.4
	18.0	19.0	3,073	6,007	613	1,948	150	24.8	40.9	2.6	8.8	1.0	2.1	0.2	1.1	0.2	21.6	<b>11,894</b>	<b>1.2</b>	15.6	6.9
	19.0	20.0	4,351	8,279	830	2,589	188	28.7	48.3	2.9	8.6	1.0	1.8	0.2	1.0	0.1	19.0	<b>16,349</b>	<b>1.6</b>	23.6	8.6
	20.0	21.0	6,486	12,960	1,329	4,129	296	45.7	74.0	4.6	11.6	1.3	1.7	0.2	0.9	0.1	24.1	<b>25,363</b>	<b>2.5</b>	33.5	5.6
	21.0	22.0	5,688	11,473	1,226	4,001	293	47.4	79.1	4.8	14.3	1.5	2.4	0.2	1.0	0.2	30.5	<b>22,863</b>	<b>2.3</b>	45.5	7.0
	22.0	23.0	5,125	9,827	997	3,138	224	34.7	56.6	3.5	9.6	1.1	1.7	0.2	0.9	0.2	21.6	<b>19,441</b>	<b>1.9</b>	26.0	5.1
	23.0	24.0	5,489	10,503	1,074	3,324	234	36.2	60.1	3.8	10.4	1.2	1.6	0.2	1.0	0.1	21.6	<b>20,760</b>	<b>2.1</b>	29.6	7.5
	24.0	25.0	5,911	11,191	1,134	3,511	247	37.9	62.5	3.5	10.4	1.1	1.9	0.2	1.0	0.1	20.3	<b>22,133</b>	<b>2.2</b>	27.9	6.7
	25.0	26.0	5,887	11,166	1,132	3,546	263	43.4	74.2	4.8	13.5	1.4	2.2	0.2	1.0	0.2	29.2	<b>22,165</b>	<b>2.2</b>	45.2	7.6
	26.0	27.0	6,110	11,289	1,103	3,301	222	34.5	56.8	3.5	10.0	1.0	1.8	0.1	0.8	0.1	21.6	<b>22,156</b>	<b>2.2</b>	27.2	8.9
	27.0	28.0	6,157	11,780	1,163	3,558	244	38.3	62.6	3.9	12.1	1.2	2.1	0.2	0.8	0.1	24.1	<b>23,047</b>	<b>2.3</b>	37.4	7.4
	28.0	29.0	5,090	9,717	981	3,068	213	33.1	54.1	3.3	9.8	1.1	1.8	0.2	0.9	0.2	21.6	<b>19,194</b>	<b>1.9</b>	26.1	8.2
	29.0	30.0	5,137	9,766	977	3,044	223	36.7	64.0	4.1	12.9	1.4	2.3	0.2	1.1	0.1	26.7	<b>19,297</b>	<b>1.9</b>	40.9	5.1
	30.0	31.0	8,257	15,969	1,679	5,319	377	61.6	102.1	6.0	19.3	2.0	3.1	0.3	1.5	0.3	38.1	<b>31,835</b>	<b>3.2</b>	61.9	2.2
	31.0	32.0	10,755	20,699	2,193	6,928	508	83.9	139.5	8.7	24.7	2.4	3.7	0.3	1.8	0.2	48.3	<b>41,396</b>	<b>4.1</b>	104.5	1.1
	32.0	33.0	5,841	11,178	1,177	3,732	270	44.3	73.7	4.4	14.1	1.4	2.2	0.2	1.1	0.2	31.7	<b>23,372</b>	<b>2.2</b>	44.2	6.6
	33.0	34.0	6,145	11,805	1,214	3,826	264	42.0	67.8	4.0	11.9	1.2	1.9	0.1	0.9	0.1	24.1	<b>23,409</b>	<b>2.3</b>	35.9	7.1
	34.0	35.0	8,479	16,583	1,746	5,517	392	64.6	104.8	5.9	16.9	1.7	2.4	0.2	1.1	0.2	34.3	<b>32,950</b>	<b>3.3</b>	68.0	3.5
	35.0	36.0	8,831	16,276	1,655	5,027	335	54.4	86.1	5.0	14.1	1.4	2.1	0.2	1.1	0.1	26.7	<b>32,316</b>	<b>3.2</b>	44.3	4.9
	36.0	37.0	7,647	14,311	1,468	4,537	313	52.5	86.1	5.4	15.6	1.5	2.3	0.2	1.3	0.1	30.5	<b>28,471</b>	<b>2.8</b>	53.8	5.3
	37.0	38.0	7,834	14,802	1,546	4,852	351	59.3	96.1	5.8	17.3	1.7	2.6	0.2	1.3	0.2	34.3	<b>29,605</b>	<b>3.0</b>	62.8	2.9
	38.0	39.0	7,013	13,635	1,432	4,502	326	53.6	86.3	5.1	15.5	1.6	2.7	0.2	1.3	0.2	33.0	<b>27,108</b>	<b>2.7</b>	52.4	3.7
	39.0	40.0	6,063	11,768	1,214	3,767	264	41.9	69.7	4.3	13.1	1.4	2.4	0.2	1.1	0.1	29.2	<b>23,241</b>	<b>2.3</b>	47.9	4.4
	40.0	41.0	5,371	10,257	1,062	3,301	224	36.0	59.8	3.7	11.7	1.3	2.1	0.2	1.1	0.1	25.4	<b>20,357</b>	<b>2.0</b>	35.7	3.6
	41.0	42.0	7,201	13,512	1,408	4,374	299	47.1	77.3	4.5	13.8	1.4	2.5	0.2	1.0	0.1	29.2	<b>26,971</b>	<b>2.7</b>	43.7	4.4
	42.0	43.0	5,254	9,803	1,002	3,079	207	33.7	55.8	3.8	11.7	1.2	2.2	0.2	1.0	0.2	29.2	<b>19,484</b>	<b>1.9</b>	43.7	8.0
	43.0	44.0	5,055	9,422	944	2,846	183	29.5	52.0	4.1	12.6	1.4	2.5	0.2	1.1	0.2	29.2	<b>18,582</b>	<b>1.9</b>	40.0	4.4
	44.0	45.0	7,846	13,697	1,323	3,966	259	44.5	81.0	6.9	24.4	2.5	3.8	0.3	1.4	0.1	53.3	<b>27,308</b>	<b>2.7</b>	67.9	1.0
	45.0	46.0	6,110	11,866	1,226	3,802	259	42.8	74.3	5.4	16.9	1.6	2.7	0.2	1.1	0.1	36.8	<b>23,446</b>	<b>2.3</b>	59.4	3.1
	46.0	47.0	7,447	13,635	1,359	4,047	253	39.4	64.7	3.8	12.1	1.3	2.1	0.2	1.1	0.2	29.2	<b>26,896</b>	<b>2.7</b>	36.3	4.5
	47.0	48.0	7,318	13,328	1,329	3,907	233	36.5	57.7	3.7	11.5	1.2	2.1	0.2	1.0	0.1	26.7	<b>26,257</b>	<b>2.6</b>	32.6	5.1
	48.0	49.0	10,227	19,224	1,933	5,739	340	54.1	86.0	5.0	15.1	1.5	2.6	0.2	1.1	0.2	33.0	<b>37,662</b>	<b>3.8</b>	46.9	2.4
	49.0	50.0	10,156	19,347	1,951	5,774	349	54.1	85.5	5.0	15.6	1.6	2.9	0.3	1.1	0.2	31.7	<b>37,776</b>	<b>3.8</b>	49.3	1.0
	50.0	51.0	9,300	16,891	1,667	4,817	279	44.9	70.7	4.8	16.0	1.7	3.2	0.3	1.5	0.1	36.8	<b>33,135</b>	<b>3.3</b>	36.6	1.3

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	51.0	52.0	13,839	25,059	2,416	6,940	386	61.0	94.6	6.0	18.4	1.8	3.0	0.3	1.3	0.1	38.1	<b>48,866</b>	<b>4.9</b>	52.4	2.3
	52.0	53.0	14,484	25,674	2,489	6,905	390	61.0	101.1	6.7	20.4	1.8	3.3	0.3	1.1	0.2	40.6	<b>50,178</b>	<b>5.0</b>	60.0	2.5
	53.0	54.0	6,767	12,653	1,299	3,954	260	41.8	70.9	5.1	15.4	1.5	2.6	0.2	1.1	0.2	35.6	<b>25,107</b>	<b>2.5</b>	52.6	2.6
	54.0	55.0	8,386	15,908	1,637	5,027	353	58.6	101.3	7.1	21.6	2.0	3.0	0.3	1.1	0.2	44.4	<b>31,550</b>	<b>3.2</b>	83.0	3.0
	55.0	56.0	10,579	19,900	2,036	6,205	408	65.3	109.8	6.8	20.2	2.0	3.4	0.3	1.5	0.2	41.9	<b>39,380</b>	<b>3.9</b>	61.6	0.6
	56.0	57.0	8,819	16,891	1,716	5,202	337	53.8	88.6	5.9	17.7	1.8	3.0	0.2	1.3	0.1	35.6	<b>33,173</b>	<b>3.3</b>	51.1	1.6
	57.0	58.0	6,966	13,267	1,389	4,281	286	46.5	78.6	5.2	15.4	1.5	2.5	0.3	1.3	0.1	33.0	<b>26,374</b>	<b>2.6</b>	50.7	2.5
	58.0	59.0	6,274	12,149	1,250	3,849	249	40.1	63.9	3.7	12.1	1.3	2.1	0.2	1.1	0.1	25.4	<b>23,922</b>	<b>2.4</b>	38.1	4.8
	59.0	60.0	10,860	20,821	2,151	6,625	460	76.7	130.2	8.5	27.1	2.4	3.7	0.3	1.4	0.2	47.0	<b>41,215</b>	<b>4.1</b>	102.0	1.5
	60.0	61.0	10,121	20,330	2,084	5,867	355	59.1	98.7	6.5	19.7	2.0	3.1	0.3	1.3	0.2	39.4	<b>38,987</b>	<b>3.9</b>	67.7	1.9
	61.0	62.0	10,309	20,944	2,108	6,135	407	68.2	113.4	7.8	21.9	2.2	3.3	0.3	1.3	0.2	43.2	<b>40,165</b>	<b>4.0</b>	83.5	0.9
	62.0	63.0	12,842	26,042	2,646	7,862	542	91.2	146.4	9.4	26.7	2.6	4.0	0.4	1.9	0.2	53.3	<b>50,269</b>	<b>5.0</b>	99.9	2.8
	63.0	64.0	17,123	35,869	3,770	11,244	732	117.5	179.2	10.7	28.3	2.6	3.7	0.3	1.3	0.1	48.3	<b>69,130</b>	<b>6.9</b>	98.1	1.1
	64.0	65.0	6,251	13,697	1,444	4,607	327	55.2	89.2	5.7	16.4	1.6	2.7	0.3	1.4	0.2	33.0	<b>26,532</b>	<b>2.7</b>	58.8	1.6
	65.0	66.0	6,943	14,249	1,432	4,479	314	54.7	95.6	6.8	21.1	1.9	2.9	0.2	1.1	0.1	36.8	<b>27,638</b>	<b>2.8</b>	93.5	3.4
	66.0	67.0	6,427	13,267	1,341	4,211	301	53.6	98.0	7.7	26.3	2.4	3.9	0.3	1.9	0.2	53.3	<b>25,795</b>	<b>2.6</b>	96.1	2.2
	67.0	68.0	6,169	12,898	1,299	4,059	292	51.6	93.6	7.6	25.9	2.4	3.9	0.4	1.8	0.3	54.6	<b>24,959</b>	<b>2.5</b>	95.4	2.3
	68.0	69.0	4,691	9,741	998	3,091	207	36.4	61.7	4.6	14.8	1.5	2.6	0.2	1.3	0.1	33.0	<b>18,885</b>	<b>1.9</b>	52.1	1.2
	69.0	70.0	3,718	7,481	754	2,344	154	25.0	39.6	2.6	8.4	0.9	1.6	0.2	1.0	0.2	20.3	<b>14,551</b>	<b>1.5</b>	24.7	9.0
	70.0	71.0	6,392	13,144	1,335	4,164	298	54.2	96.5	8.0	26.7	2.5	4.1	0.4	1.7	0.3	53.3	<b>25,580</b>	<b>2.6</b>	99.6	1.9
	71.0	72.0	3,589	7,604	788	2,531	191	32.2	53.6	3.7	10.4	1.2	2.1	0.2	1.0	0.1	22.9	<b>14,830</b>	<b>1.5</b>	40.0	9.2
	72.0	73.0	6,368	13,267	1,347	4,152	266	42.8	65.5	4.2	11.6	1.3	2.4	0.2	1.0	0.2	26.7	<b>25,556</b>	<b>2.6</b>	37.6	1.1
	73.0	74.0	7,494	15,416	1,540	4,701	295	49.2	79.1	5.4	16.5	1.6	2.9	0.3	1.4	0.1	34.3	<b>29,637</b>	<b>3.0</b>	54.0	2.8
	74.0	75.0	8,550	17,935	1,812	5,494	329	52.9	78.5	4.5	14.2	1.4	2.5	0.2	1.0	0.1	27.9	<b>34,303</b>	<b>3.4</b>	41.1	2.5
	75.0	76.0	6,216	12,345	1,220	3,639	219	34.3	52.2	3.2	9.6	1.0	1.9	0.2	1.1	0.1	21.6	<b>23,765</b>	<b>2.4</b>	28.4	8.2
	76.0	77.0	5,571	11,375	1,118	3,406	206	30.7	48.3	2.8	8.7	1.0	1.9	0.2	1.1	0.2	20.3	<b>21,791</b>	<b>2.2</b>	23.9	4.9
	77.0	78.0	6,791	14,004	1,426	4,514	303	48.7	77.3	5.2	15.1	1.5	2.3	0.2	1.3	0.2	30.5	<b>27,219</b>	<b>2.7</b>	58.6	4.4
	78.0	79.0	8,444	17,812	1,812	5,645	377	61.7	97.4	6.8	21.1	2.1	3.2	0.3	1.4	0.2	44.4	<b>34,329</b>	<b>3.4</b>	66.7	4.5
	79.0	80.0	9,828	19,839	2,054	6,089	393	61.8	97.2	6.6	18.6	1.8	3.0	0.3	1.5	0.2	39.4	<b>38,433</b>	<b>3.8</b>	68.7	3.7
	80.0	81.0	8,374	17,259	1,734	5,330	344	53.8	83.7	5.4	15.1	1.6	2.9	0.3	1.3	0.2	36.8	<b>33,242</b>	<b>3.3</b>	58.1	3.5
	81.0	82.0	7,412	14,679	1,450	4,362	267	41.3	65.9	4.8	15.4	1.8	3.0	0.3	1.1	0.2	39.4	<b>28,344</b>	<b>2.8</b>	45.6	6.2
	82.0	83.0	10,708	22,418	2,332	6,742	417	69.2	112.8	8.6	27.9	2.8	4.2	0.4	1.8	0.2	66.0	<b>42,911</b>	<b>4.3</b>	75.8	2.4
	83.0	84.0	7,119	14,065	1,371	4,106	262	42.8	71.5	5.5	18.1	1.9	3.1	0.3	1.4	0.2	41.9	<b>27,110</b>	<b>2.7</b>	66.0	6.9
	84.0	85.0	6,145	12,284	1,196	3,639	226	36.9	59.5	4.8	16.4	1.7	3.2	0.3	1.5	0.2	41.9	<b>23,657</b>	<b>2.4</b>	44.0	6.1
	85.0	86.0	7,893	15,294	1,498	4,386	257	39.3	62.1	4.5	13.3	1.3	2.5	0.2	1.1	0.1	30.5	<b>29,483</b>	<b>2.9</b>	38.9	5.7
	86.0	87.0	5,712	11,719	1,179	3,662	240	39.6	64.3	4.7	14.6	1.5	2.3	0.3	1.0	0.1	31.7	<b>22,672</b>	<b>2.3</b>	51.6	6.5
	87.0	88.0	11,658	24,077	2,525	7,290	450	70.7	109.5	7.2	21.7	2.1	3.5	0.3	1.6	0.2	45.7	<b>46,262</b>	<b>4.6</b>	62.0	4.9
	88.0	89.0	17,651	36,115	3,745	11,419	695	112.0	173.5	10.5	31.2	2.9	4.3	0.4	1.7	0.2	55.9	<b>70,017</b>	<b>7.0</b>	109.5	2.2
	89.0	90.0	15,657	29,850	3,359	10,101	689	107.0	176.9	10.9	28.2	2.7	3.9	0.3	1.4	0.1	58.4	<b>60,045</b>	<b>6.0</b>	102.5	3.8
	90.0	91.0	5,782	11,031	1,150	3,394	230	38.4	71.0	5.7	17.3	1.8	3.0	0.3	1.5	0.2	44.4	<b>21,771</b>	<b>2.2</b>	72.5	11.2
	91.0	92.0	12,314	23,278	2,561	7,325	481	76.2	134.9	9.5	28.3	3.0	5.5	0.5	2.5	0.3	77.5	<b>46,298</b>	<b>4.6</b>	96.1	6.9



Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	92.0	93.0	9,206	17,566	1,945	5,412	353	55.5	93.0	6.1	17.0	1.7	3.0	0.3	1.4	0.2	40.6	<b>34,701</b>	<b>3.5</b>	56.4	3.9
	93.0	94.0	10,907	20,146	2,211	5,995	385	59.1	98.0	6.1	16.5	1.6	3.0	0.2	1.3	0.2	40.6	<b>39,871</b>	<b>4.0</b>	57.6	6.8
	94.0	95.0	8,128	14,802	1,601	4,572	311	47.6	78.1	4.6	13.5	1.4	2.3	0.2	0.9	0.1	31.7	<b>29,594</b>	<b>3.0</b>	43.9	6.0
	95.0	96.0	12,432	22,848	2,549	7,313	460	68.3	109.5	6.5	17.4	1.8	2.7	0.2	1.1	0.2	40.6	<b>45,851</b>	<b>4.6</b>	60.5	2.3
	96.0	97.0	7,635	14,557	1,619	4,479	290	43.2	69.0	4.1	11.8	1.1	2.1	0.2	0.9	0.1	27.9	<b>28,740</b>	<b>2.9</b>	41.9	7.2
	97.0	98.0	7,436	13,512	1,365	3,907	240	35.1	56.9	3.6	10.3	1.0	1.7	0.2	0.8	0.1	25.4	<b>26,596</b>	<b>2.7</b>	33.6	4.3
	98.0	99.0	6,357	12,272	1,232	3,604	202	32.2	47.7	3.3	9.1	0.9	32.2	0.1	0.8	0.1	20.3	<b>23,783</b>	<b>2.4</b>	29.7	5.1
	99.0	100.0	6,380	12,591	1,293	3,896	241	40.4	65.8	5.0	14.7	1.5	40.4	0.2	0.9	0.1	31.7	<b>24,563</b>	<b>2.5</b>	53.2	2.8
	100.0	101.0	3,976	8,046	843	2,473	152	24.3	37.7	3.0	8.3	0.9	24.3	0.2	0.9	0.2	20.3	<b>15,588</b>	<b>1.6</b>	23.6	4.8
	101.0	102.0	5,242	10,613	1,104	3,348	204	35.2	57.4	4.5	12.1	1.2	35.2	0.2	1.0	0.1	26.7	<b>20,652</b>	<b>2.1</b>	42.9	6.1
	102.0	103.0	4,023	7,727	773	2,333	163	26.1	48.1	3.3	11.1	1.5	2.9	0.3	1.5	0.2	33.0	<b>15,146</b>	<b>1.5</b>	24.9	4.5
	103.0	104.0	2,615	5,294	539	1,685	137	26.4	53.5	5.0	19.7	2.8	6.4	0.7	3.6	0.5	73.7	<b>10,463</b>	<b>1.0</b>	41.1	5.9
	104.0	105.0	10,766	21,128	2,271	6,602	473	74.9	128.5	8.2	23.8	2.3	3.5	0.3	1.4	0.2	45.7	<b>41,530</b>	<b>4.2</b>	105.0	3.0
	105.0	106.0	11,458	21,067	2,139	5,867	391	62.4	106.6	6.9	20.0	2.2	3.8	0.3	1.7	0.2	45.7	<b>41,171</b>	<b>4.1</b>	72.9	3.6
	106.0	107.0	22,283	37,835	3,552	9,156	514	80.1	134.3	9.2	27.0	2.9	4.2	0.3	1.6	0.2	61.0	<b>73,661</b>	<b>7.4</b>	86.3	1.9
	107.0	108.0	10,954	20,330	2,084	5,727	356	56.3	96.1	6.3	18.1	1.9	2.9	0.2	0.9	0.1	36.8	<b>39,671</b>	<b>4.0</b>	58.3	1.9
	108.0	109.0	7,764	15,171	1,540	4,572	301	45.6	75.4	4.9	14.2	1.6	2.4	0.2	1.0	0.2	31.7	<b>29,526</b>	<b>3.0</b>	49.1	3.7
	109.0	110.0	4,961	9,287	935	2,811	201	33.1	57.5	4.3	14.5	2.0	4.1	0.4	2.4	0.3	49.5	<b>18,363</b>	<b>1.8</b>	34.7	5.1
	110.0	111.0	4,175	8,353	843	2,531	174	27.4	48.1	3.7	13.0	1.7	3.5	0.4	2.0	0.3	43.2	<b>16,220</b>	<b>1.6</b>	25.0	4.2
	111.0	112.0	7,037	13,390	1,389	4,187	277	43.7	71.0	4.5	12.5	1.4	2.3	0.2	1.0	0.2	33.0	<b>26,450</b>	<b>2.6</b>	34.8	5.7
	112.0	113.0	2,568	5,098	555	1,715	126	21.1	37.2	2.7	9.1	1.1	2.5	0.3	1.5	0.2	30.5	<b>10,168</b>	<b>1.0</b>	20.0	7.4
	113.0	114.0	3,706	7,149	752	2,251	148	21.8	35.6	2.4	6.7	0.8	1.6	0.2	0.8	0.1	19.0	<b>14,095</b>	<b>1.4</b>	17.1	6.8
	114.0	115.0	7,224	13,942	1,462	4,292	270	40.2	64.1	4.1	10.9	1.1	1.9	0.2	0.9	0.1	25.4	<b>27,340</b>	<b>2.7</b>	32.7	5.6
	115.0	116.0	8,667	16,645	1,836	5,086	318	48.5	78.6	5.1	15.1	1.6	2.5	0.3	1.1	0.2	40.6	<b>32,745</b>	<b>3.3</b>	44.8	4.7
	116.0	117.0	5,805	11,522	1,263	3,884	282	44.5	75.6	5.2	14.6	1.4	2.3	0.2	1.1	0.1	34.3	<b>22,935</b>	<b>2.3</b>	57.3	6.8
	117.0	118.0	4,527	8,353	870	2,578	176	25.9	43.8	3.1	9.0	0.9	1.6	0.1	0.8	0.1	22.9	<b>16,612</b>	<b>1.7</b>	32.3	7.3
	118.0	119.0	5,430	10,454	1,106	3,301	224	35.3	57.6	4.0	11.9	1.1	1.9	0.2	0.9	0.1	27.9	<b>20,655</b>	<b>2.1</b>	34.5	7.8
	119.0	120.0	7,107	13,820	1,371	4,316	283	42.3	71.8	5.0	16.1	1.6	2.6	0.2	1.3	0.2	39.4	<b>27,077</b>	<b>2.7</b>	46.4	6.2
	120.0	121.0	5,629	10,773	1,070	3,418	247	42.1	85.6	8.7	33.9	3.7	7.7	0.7	4.6	0.6	105.4	<b>21,430</b>	<b>2.1</b>	91.6	5.0
	121.0	122.0	3,061	6,756	678	2,193	158	26.2	48.6	3.9	15.3	1.9	3.8	0.4	2.2	0.3	49.5	<b>12,998</b>	<b>1.3</b>	27.9	5.5
	122.0	123.0	2,211	4,619	447	1,475	126	24.3	50.4	4.9	18.9	2.7	6.1	0.6	3.6	0.4	72.4	<b>9,063</b>	<b>0.9</b>	28.3	6.8
	123.0	124.0	4,304	8,292	779	2,438	156	24.1	39.8	2.6	7.6	0.8	1.4	0.2	0.8	0.1	19.0	<b>16,065</b>	<b>1.6</b>	27.6	17.4
	124.0	125.0	6,216	11,744	1,121	3,476	223	32.8	52.2	3.2	9.6	1.0	1.8	0.2	1.0	0.1	26.7	<b>22,908</b>	<b>2.3</b>	27.5	10.9
	125.0	126.0	7,694	14,679	1,426	4,467	293	45.9	78.3	5.2	16.1	1.7	3.3	0.3	1.8	0.2	48.3	<b>28,760</b>	<b>2.9</b>	59.2	4.3
	126.0	127.0	9,054	17,443	1,722	5,354	343	52.1	86.4	5.4	16.5	1.6	2.7	0.2	1.1	0.1	36.8	<b>34,119</b>	<b>3.4</b>	50.6	4.4
	127.0	128.0	7,776	15,355	1,492	4,701	301	46.7	77.6	5.1	15.8	1.6	2.9	0.3	1.3	0.2	34.3	<b>29,811</b>	<b>3.0</b>	50.5	6.3
	128.0	129.0	6,509	12,591	1,214	3,791	245	37.4	64.8	4.5	14.1	1.5	2.5	0.3	1.5	0.2	39.4	<b>24,516</b>	<b>2.5</b>	46.8	8.5
	129.0	130.0	7,189	14,004	1,365	4,269	270	37.6	58.7	3.9	11.2	1.2	2.5	0.2	1.5	0.2	33.0	<b>27,248</b>	<b>2.7</b>	33.9	3.1
	130.0	131.0	4,586	9,139	896	2,916	197	29.4	46.8	2.9	9.0	1.0	1.8	0.2	1.0	0.1	24.1	<b>17,851</b>	<b>1.8</b>	28.3	6.7
	131.0	132.0	9,300	17,996	1,752	5,517	363	53.3	88.2	5.4	15.8	1.6	2.7	0.2	1.3	0.2	36.8	<b>35,134</b>	<b>3.5</b>	47.4	2.8
	132.0	133.0	19,293	38,080	3,890	12,014	790	119.3	192.5	11.5	32.1	2.9	4.7	0.4	1.6	0.2	62.2	<b>74,494</b>	<b>7.4</b>	100.0	2.0

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	133.0	134.0	22,283	43,731	4,507	14,463	967	147.1	234.0	13.6	35.1	3.2	4.6	0.3	1.1	0.1	59.7	<b>86,450</b>	<b>8.6</b>	110.0	1.4
	134.0	135.0	16,830	32,675	3,407	10,183	683	101.3	168.9	9.9	27.8	2.5	3.7	0.3	1.3	0.2	52.1	<b>64,146</b>	<b>6.4</b>	97.1	1.9
	135.0	136.0	17,299	34,272	3,492	10,638	702	102.7	164.8	9.5	25.6	2.5	3.3	0.3	1.1	0.1	49.5	<b>66,762</b>	<b>6.7</b>	83.9	1.6
	136.0	137.0	15,188	29,727	2,984	9,051	586	88.8	140.0	8.1	21.7	2.1	3.4	0.2	1.1	0.1	39.4	<b>57,841</b>	<b>5.8</b>	67.4	2.4
	137.0	138.0	7,049	13,574	1,329	4,246	293	43.0	72.6	4.2	12.9	1.2	1.9	0.2	0.9	0.1	27.9	<b>26,655</b>	<b>2.7</b>	35.4	9.9
	138.0	139.0	7,178	13,758	1,365	4,386	318	47.9	82.1	5.3	13.9	1.3	2.4	0.2	1.0	0.1	27.9	<b>27,186</b>	<b>2.7</b>	52.5	7.3
	139.0	140.0	13,135	25,059	2,501	7,547	499	74.3	124.5	7.1	20.3	1.8	2.9	0.2	0.8	0.1	38.1	<b>49,011</b>	<b>4.9</b>	59.5	0.9
	140.0	141.0	10,039	19,224	1,843	5,704	365	54.0	90.7	5.7	16.8	1.7	2.6	0.2	1.1	0.1	35.6	<b>37,384</b>	<b>3.7</b>	50.4	2.7
	141.0	142.0	12,197	22,910	2,205	6,847	452	69.6	117.0	7.5	21.1	1.9	3.2	0.2	1.1	0.2	43.2	<b>44,876</b>	<b>4.5</b>	78.5	1.9
	142.0	143.0	8,597	16,645	1,625	5,097	334	52.2	90.4	5.8	16.9	1.7	2.5	0.3	1.4	0.2	39.4	<b>32,508</b>	<b>3.3</b>	56.3	3.6
	143.0	144.0	8,104	16,645	1,710	5,540	384	58.6	98.5	5.8	16.3	1.6	2.9	0.3	1.3	0.1	39.4	<b>32,607</b>	<b>3.3</b>	60.4	4.6
	144.0	145.0	6,662	13,574	1,353	4,316	298	46.3	80.5	5.6	19.5	2.3	4.0	0.4	2.3	0.3	58.4	<b>26,422</b>	<b>2.6</b>	63.8	4.0
	145.0	146.0	5,172	11,031	1,115	3,662	269	43.7	77.9	6.0	20.7	2.6	5.8	0.5	3.3	0.4	73.7	<b>21,484</b>	<b>2.1</b>	54.7	4.7
	146.0	147.0	3,038	6,842	695	2,356	183	29.5	52.6	3.4	11.9	1.5	3.1	0.3	2.0	0.3	39.4	<b>13,258</b>	<b>1.3</b>	30.6	5.6
	147.0	148.0	8,573	15,969	1,546	4,876	333	50.5	85.4	5.4	14.5	1.4	2.2	0.2	1.1	0.2	27.9	<b>31,486</b>	<b>3.1</b>	48.9	1.6
	148.0	149.0	5,606	10,478	1,003	3,161	219	33.3	56.2	3.5	9.9	0.9	1.6	0.2	0.7	0.1	21.6	<b>20,595</b>	<b>2.1</b>	29.7	5.3
	149.0	150.0	10,332	20,576	1,994	6,065	357	55.8	88.1	5.3	15.8	1.5	3.2	0.2	1.4	0.1	36.8	<b>39,532</b>	<b>4.0</b>	52.4	2.6
	150.0	151.0	4,961	9,753	941	2,963	201	33.2	57.5	4.1	13.3	1.5	3.3	0.2	1.7	0.2	38.1	<b>18,972</b>	<b>1.9</b>	41.1	7.2
	151.0	152.0	3,718	7,334	703	2,245	147	23.9	37.2	2.3	8.4	0.7	1.5	0.1	0.8	0.0	19.0	<b>14,241</b>	<b>1.4</b>	25.6	11.8
	152.0	153.0	5,770	11,043	1,062	3,301	217	35.4	57.3	3.7	11.5	1.0	1.8	0.0	0.8	0.0	22.9	<b>21,528</b>	<b>2.2</b>	47.7	10.8
	153.0	154.0	3,272	6,732	652	2,105	156	28.6	53.3	4.1	15.6	1.9	4.7	0.4	2.6	0.2	53.3	<b>13,082</b>	<b>1.3</b>	27.4	6.0
	154.0	155.0	2,058	4,594	464	1,557	134	25.9	51.5	4.5	18.4	2.4	5.6	0.5	3.0	0.4	64.8	<b>8,984</b>	<b>0.9</b>	29.8	4.7
	155.0	156.0	3,213	7,395	762	2,543	195	32.8	58.9	4.0	15.8	1.8	3.9	0.3	2.4	0.2	44.4	<b>14,273</b>	<b>1.4</b>	32.5	4.4
	156.0	157.0	2,604	5,909	599	2,000	155	27.4	53.1	4.3	18.8	2.5	5.5	0.5	3.3	0.2	63.5	<b>11,446</b>	<b>1.1</b>	34.0	6.1
	157.0	158.0	2,217	5,196	521	1,720	126	22.2	38.5	2.8	10.3	1.2	2.7	0.2	1.5	0.1	30.5	<b>9,890</b>	<b>1.0</b>	18.2	4.5
	158.0	159.0	4,797	9,766	975	3,114	202	32.8	52.1	3.0	9.9	1.0	2.1	0.1	1.0	0.0	24.1	<b>18,980</b>	<b>1.9</b>	28.8	11.0
	159.0	160.0	4,445	9,287	919	2,963	195	31.6	53.7	3.7	12.7	1.3	3.1	0.2	1.6	0.1	33.0	<b>17,950</b>	<b>1.8</b>	29.0	3.7
	160.0	161.0	4,902	9,471	927	2,974	200	32.3	50.4	2.9	8.6	0.7	1.5	0.0	0.9	0.0	16.5	<b>18,588</b>	<b>1.9</b>	21.9	5.4
	161.0	162.0	10,930	21,804	2,145	6,812	435	66.3	101.3	6.0	16.5	1.4	2.7	0.1	0.8	0.0	30.5	<b>42,352</b>	<b>4.2</b>	44.1	2.9
	162.0	163.0	3,612	7,886	783	2,543	162	24.5	39.3	2.4	6.9	0.6	1.1	0.0	0.7	0.0	15.2	<b>15,077</b>	<b>1.5</b>	21.8	14.2
	163.0	164.0	5,876	11,400	1,092	3,418	212	32.1	53.9	3.7	11.2	1.0	2.1	0.0	0.8	0.0	24.1	<b>22,126</b>	<b>2.2</b>	40.8	9.4
	164.0	165.0	4,597	9,225	911	2,916	189	29.4	46.2	3.0	9.8	0.9	1.7	0.0	1.0	0.0	21.6	<b>17,952</b>	<b>1.8</b>	26.6	9.6
	165.0	166.0	6,486	13,390	1,347	4,281	273	41.6	66.7	4.5	14.0	1.3	2.3	0.1	1.3	0.0	29.2	<b>25,936</b>	<b>2.6</b>	36.3	4.4
	166.0	167.0	8,761	17,628	1,740	5,505	336	49.8	76.4	4.7	13.3	1.2	2.4	0.1	1.1	0.0	27.9	<b>34,147</b>	<b>3.4</b>	37.6	6.9
	167.0	168.0	4,738	9,864	996	3,231	215	32.8	49.4	2.9	8.8	0.8	1.6	0.0	0.7	0.0	17.8	<b>19,158</b>	<b>1.9</b>	26.9	12.1
	168.0	169.0	5,137	10,712	1,103	3,593	238	36.9	55.9	3.1	9.3	0.7	1.4	0.0	0.6	0.0	17.8	<b>20,908</b>	<b>2.1</b>	31.1	15.7
	169.0	170.0	8,784	16,706	1,643	5,214	350	55.8	88.1	5.6	15.4	1.3	2.2	0.1	1.0	0.0	30.5	<b>32,898</b>	<b>3.3</b>	59.6	9.5
	170.0	171.0	15,481	29,113	2,912	8,818	587	91.0	141.8	7.9	22.0	1.7	3.4	0.2	1.5	0.1	41.9	<b>57,222</b>	<b>5.7</b>	65.3	3.4
	171.0	172.0	6,791	13,082	1,287	4,141	279	43.5	68.9	4.2	11.9	1.0	2.2	0.1	0.8	0.0	24.1	<b>25,737</b>	<b>2.6</b>	38.0	13.4
	172.0	173.0	4,175	8,267	797	2,554	168	25.0	39.1	2.4	7.5	0.6	1.4	0.0	0.7	0.0	17.8	<b>16,056</b>	<b>1.6</b>	25.9	15.6
	173.0	174.0	7,600	14,618	1,444	4,607	303	46.0	70.2	4.0	11.1	1.0	1.6	0.1	0.7	0.0	21.6	<b>28,728</b>	<b>2.9</b>	34.1	10.7

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	174.0	175.0	15,481	30,096	3,033	8,993	565	87.8	140.6	8.6	24.0	2.0	3.2	0.1	0.9	0.0	40.6	<b>58,475</b>	<b>5.8</b>	94.7	6.0
	175.0	176.0	5,934	11,866	1,200	3,919	271	42.1	66.5	4.2	12.2	1.0	1.6	0.0	0.8	0.0	24.1	<b>23,343</b>	<b>2.3</b>	46.7	11.0
	176.0	177.0	4,175	8,144	854	2,764	198	30.5	51.1	3.4	10.4	1.1	1.7	0.2	0.9	0.1	24.1	<b>16,260</b>	<b>1.6</b>	38.5	14.1
	177.0	178.0	11,904	23,524	2,561	7,722	457	69.8	109.8	7.0	19.3	1.8	2.4	0.2	0.9	0.1	38.1	<b>46,417</b>	<b>4.6</b>	78.0	4.1
	178.0	179.0	10,684	21,374	2,344	6,928	445	69.0	109.8	7.2	20.0	1.9	2.4	0.2	1.1	0.1	38.1	<b>42,026</b>	<b>4.2</b>	83.5	3.0
	179.0	180.0	5,207	9,925	1,012	3,114	202	31.6	50.6	3.2	9.8	1.0	1.6	0.2	0.8	0.2	22.9	<b>19,583</b>	<b>2.0</b>	33.6	12.1
	180.0	181.0	7,224	14,188	1,559	4,491	285	42.5	66.9	4.1	12.1	1.2	1.8	0.1	0.7	0.1	26.7	<b>27,903</b>	<b>2.8</b>	41.5	4.6
	181.0	182.0	6,720	14,065	1,625	5,016	350	53.1	80.3	5.1	14.2	1.5	2.4	0.2	1.1	0.2	33.0	<b>27,967</b>	<b>2.8</b>	47.6	6.0
	182.0	183.0	6,063	11,731	1,214	3,872	262	39.4	60.6	3.3	10.2	1.1	1.7	0.2	1.0	0.1	25.4	<b>23,286</b>	<b>2.3</b>	29.9	7.8
	183.0	184.0	4,973	9,741	1,011	3,184	206	30.5	46.7	2.8	8.1	0.9	1.6	0.2	0.9	0.1	22.9	<b>19,230</b>	<b>1.9</b>	23.6	7.9
	184.0	185.0	8,257	16,338	1,788	5,272	342	49.8	74.2	4.2	12.4	1.2	2.1	0.2	1.0	0.2	26.7	<b>32,169</b>	<b>3.2</b>	34.7	5.9
	185.0	186.0	6,415	12,345	1,269	3,896	245	36.6	54.1	3.0	9.0	1.0	1.4	0.2	0.7	0.1	19.0	<b>24,295</b>	<b>2.4</b>	28.7	10.0
	186.0	187.0	6,239	12,014	1,220	3,767	241	36.4	56.4	3.4	10.1	1.1	1.6	0.1	0.8	0.1	22.9	<b>23,615</b>	<b>2.4</b>	38.5	10.5
	187.0	188.0	5,946	11,424	1,174	3,674	233	34.9	52.4	3.0	8.1	1.0	1.4	0.1	0.8	0.1	20.3	<b>22,574</b>	<b>2.3</b>	27.6	15.0
	188.0	189.0	4,445	8,734	918	2,939	195	29.9	43.7	2.7	7.9	0.8	1.3	0.1	0.7	0.1	19.0	<b>17,337</b>	<b>1.7</b>	31.0	15.4
	189.0	190.0	4,398	8,992	942	2,893	192	28.6	44.4	2.7	7.5	0.8	1.5	0.1	0.7	0.1	17.8	<b>17,522</b>	<b>1.8</b>	27.8	13.2
	190.0	191.0	3,554	7,284	764	2,368	158	23.9	35.5	2.0	5.5	0.6	1.1	0.1	0.6	0.1	11.4	<b>14,208</b>	<b>1.4</b>	21.1	20.2
	191.0	192.0	3,425	7,063	742	2,315	159	23.9	38.0	2.3	5.9	0.7	1.1	0.1	0.7	0.1	14.0	<b>13,791</b>	<b>1.4</b>	19.2	14.8
	192.0	193.0	6,181	12,284	1,275	3,849	252	35.9	58.0	3.5	10.2	1.1	1.6	0.2	0.7	0.1	21.6	<b>23,973</b>	<b>2.4</b>	32.2	16.0
	193.0	194.0	7,307	14,434	1,462	4,339	269	39.9	63.4	3.9	10.7	1.2	2.1	0.2	0.9	0.1	25.4	<b>27,958</b>	<b>2.8</b>	35.1	7.2
	194.0	195.0	5,207	10,429	1,060	3,173	203	31.4	51.4	3.3	10.1	1.2	2.1	0.2	0.8	0.1	22.9	<b>20,195</b>	<b>2.0</b>	31.6	9.7
	195.0	196.0	4,703	9,287	958	2,916	189	28.6	46.0	3.2	9.8	1.0	1.7	0.2	0.9	0.1	22.9	<b>18,167</b>	<b>1.8</b>	29.6	9.1
	196.0	197.0	10,344	18,795	1,879	5,074	308	47.7	82.5	5.6	16.4	1.8	2.6	0.2	1.0	0.1	38.1	<b>36,596</b>	<b>3.7</b>	54.7	8.6
	197.0	198.0	9,042	17,259	1,734	4,969	311	47.1	78.8	5.2	13.8	1.4	2.2	0.1	0.6	0.1	27.9	<b>33,492</b>	<b>3.3</b>	53.7	2.5
	198.0	199.0	5,536	11,068	1,149	3,534	224	33.3	55.9	3.4	9.1	1.0	1.7	0.2	0.8	0.1	21.6	<b>21,638</b>	<b>2.2</b>	28.1	7.4
	199.0	200.0	9,664	18,733	1,963	5,435	328	50.4	83.7	5.9	17.1	1.7	2.6	0.2	0.9	0.1	36.8	<b>36,323</b>	<b>3.6</b>	69.1	7.0
	200.0	201.0	4,492	8,955	915	2,741	175	25.5	41.6	2.8	8.0	0.9	1.6	0.1	0.7	0.1	19.0	<b>17,378</b>	<b>1.7</b>	31.7	14.6
	201.0	202.0	9,019	17,566	1,843	5,295	334	47.8	76.3	4.3	12.5	1.3	1.9	0.1	0.7	0.1	26.7	<b>34,229</b>	<b>3.4</b>	45.5	12.4
	202.0	203.0	17,651	28,376	2,694	6,788	371	59.5	99.7	7.6	22.7	2.4	3.5	0.2	1.1	0.1	50.8	<b>56,128</b>	<b>5.6</b>	78.3	7.9
	203.0	204.0	6,521	11,608	1,113	3,254	192	31.1	48.9	3.6	10.9	1.2	1.6	0.2	0.7	0.1	25.4	<b>22,812</b>	<b>2.3</b>	39.1	23.9
	204.0	205.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	205.0	206.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	206.0	207.0	6,638	11,510	1,109	3,301	215	35.1	57.1	4.0	12.4	1.4	2.2	0.2	1.3	0.2	33.0	<b>22,920</b>	<b>2.3</b>	35.3	10.2
	207.0	208.0	6,521	11,350	1,087	3,196	209	33.5	54.5	3.9	11.5	1.4	2.2	0.2	1.1	0.1	29.2	<b>22,501</b>	<b>2.3</b>	33.3	14.6
	208.0	209.0	3,471	7,112	671	2,024	130	18.8	30.3	1.9	6.1	0.7	1.3	0.1	0.8	0.1	17.8	<b>13,486</b>	<b>1.3</b>	20.5	24.9
	209.0	210.0	3,741	7,948	773	2,344	152	21.5	34.9	2.4	7.0	0.8	1.4	0.2	0.8	0.1	17.8	<b>15,046</b>	<b>1.5</b>	21.8	14.2
	210.0	211.0	3,753	7,739	739	2,234	135	20.1	32.8	2.3	7.5	0.9	1.4	0.1	0.8	0.1	20.3	<b>14,686</b>	<b>1.5</b>	25.9	21.8
	211.0	212.0	5,618	12,087	1,180	3,616	221	31.4	50.1	3.0	8.8	0.9	1.6	0.1	0.8	0.1	20.3	<b>22,840</b>	<b>2.3</b>	24.6	8.2
	212.0	213.0	4,105	8,685	842	2,566	160	23.7	36.5	2.4	7.1	0.8	1.4	0.1	0.8	0.1	17.8	<b>16,449</b>	<b>1.6</b>	24.1	19.1
	213.0	214.0	6,849	14,495	1,408	4,292	263	38.4	58.3	3.4	9.9	1.0	1.5	0.1	0.8	0.1	20.3	<b>27,441</b>	<b>2.7</b>	30.6	12.2
	214.0	215.0	10,239	21,681	2,223	6,217	378	53.8	83.6	5.0	14.1	1.4	2.2	0.2	1.0	0.1	30.5	<b>40,930</b>	<b>4.1</b>	42.4	1.3

Hole ID	From m	To m	La <sub>2</sub> O <sub>3</sub> ppm	CeO <sub>2</sub> ppm	Pr <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	TREO ppm	TREO %	Th ppm	U ppm
	215.0	216.0	9,382	19,409	1,945	5,412	336	49.9	80.5	5.1	14.1	1.4	2.2	0.2	0.8	0.1	30.5	<b>36,669</b>	<b>3.7</b>	40.7	4.7
	216.0	217.0	4,199	9,004	884	2,741	181	25.5	40.1	2.5	7.3	0.8	1.1	0.1	0.7	0.1	17.8	<b>17,105</b>	<b>1.7</b>	24.2	12.8
	217.0	218.0	4,140	8,832	855	2,613	165	24.0	37.6	2.8	8.6	0.9	1.6	0.1	0.9	0.1	20.3	<b>16,702</b>	<b>1.7</b>	28.8	16.0
	218.0	219.0	4,117	8,427	797	2,356	145	21.5	36.5	2.5	8.0	0.8	1.5	0.2	0.9	0.1	19.0	<b>15,933</b>	<b>1.6</b>	26.9	24.1
	219.0	220.0	4,351	9,139	893	2,706	173	26.2	43.8	2.7	9.0	1.0	1.7	0.2	1.0	0.1	21.6	<b>17,370</b>	<b>1.7</b>	29.1	19.8
	220.0	221.0	5,629	12,591	1,257	3,919	264	38.8	60.5	3.6	10.6	1.1	1.6	0.2	0.8	0.1	24.1	<b>23,802</b>	<b>2.4</b>	39.9	7.8
	221.0	222.0	5,055	11,117	1,106	3,418	225	32.4	51.9	3.2	9.2	0.9	1.7	0.2	0.9	0.2	22.9	<b>21,043</b>	<b>2.1</b>	32.1	17.2
	222.0	223.0	3,999	8,525	841	2,589	165	22.9	36.7	2.4	7.3	0.7	1.4	0.1	0.9	0.1	17.8	<b>16,210</b>	<b>1.6</b>	23.3	18.2
	223.0	224.0	3,659	7,849	759	2,309	144	20.8	31.9	2.0	6.1	0.7	1.3	0.1	0.7	0.1	15.2	<b>14,800</b>	<b>1.5</b>	18.9	17.1
	224.0	225.0	3,905	8,120	777	2,379	162	24.1	41.5	3.1	9.8	1.1	1.9	0.2	1.0	0.2	26.7	<b>15,453</b>	<b>1.5</b>	35.0	15.0
	225.0	226.0	8,045	16,645	1,679	4,561	281	41.8	68.0	4.4	13.0	1.3	2.2	0.2	1.1	0.2	31.7	<b>31,375</b>	<b>3.1</b>	38.7	3.8
	226.0	227.0	5,020	10,552	1,019	3,021	195	28.3	47.9	3.4	10.1	1.1	2.4	0.2	1.4	0.2	30.5	<b>19,931</b>	<b>2.0</b>	28.3	10.0
	227.0	228.0	9,910	19,593	1,891	5,120	314	47.1	77.8	5.1	14.6	1.6	2.5	0.2	1.3	0.1	34.3	<b>37,013</b>	<b>3.7</b>	45.0	3.1
	228.0	229.0	5,066	10,687	1,040	3,161	197	28.9	46.7	3.0	8.6	1.0	1.6	0.2	0.8	0.1	21.6	<b>20,264</b>	<b>2.0</b>	25.8	13.4
	229.0	230.0	3,249	7,112	707	2,222	158	24.2	41.4	2.9	9.1	1.0	2.1	0.2	1.1	0.1	25.4	<b>13,555</b>	<b>1.4</b>	24.8	20.4
	230.0	231.0	3,448	7,579	770	2,438	175	26.3	42.6	2.8	8.4	0.9	1.6	0.1	0.9	0.1	20.3	<b>14,513</b>	<b>1.5</b>	26.9	20.6
	231.0	232.0	3,741	8,071	794	2,496	179	26.7	45.2	2.8	8.4	0.9	1.5	0.1	0.9	0.1	19.0	<b>15,386</b>	<b>1.5</b>	27.5	16.9
	232.0	233.0	3,249	7,284	750	2,414	178	27.3	45.2	2.8	8.1	0.8	1.5	0.2	0.7	0.1	17.8	<b>13,980</b>	<b>1.4</b>	25.8	17.1
	233.0	234.0	3,038	6,977	726	2,379	183	28.3	47.1	2.8	8.0	0.9	1.5	0.1	0.8	0.1	16.5	<b>13,410</b>	<b>1.3</b>	31.4	22.6
	234.0	235.0	3,026	6,744	684	2,158	154	23.7	38.8	2.5	6.8	0.8	1.4	0.2	0.9	0.1	17.8	<b>12,858</b>	<b>1.3</b>	23.5	17.4
	235.0	236.0	2,768	6,117	610	1,901	130	19.5	31.1	2.0	6.7	0.7	1.4	0.1	0.8	0.1	16.5	<b>11,605</b>	<b>1.2</b>	19.7	18.1
	236.0	237.0	2,768	5,945	581	1,802	119	16.4	26.9	1.8	4.9	0.6	1.1	0.1	0.7	0.1	14.0	<b>11,282</b>	<b>1.1</b>	18.2	16.4
	237.0	238.0	4,081	8,918	890	2,788	188	28.6	46.4	2.9	8.1	0.9	1.5	0.1	0.8	0.1	19.0	<b>16,975</b>	<b>1.7</b>	29.3	13.0
	238.0	239.0	2,475	5,245	539	1,750	125	19.8	32.0	2.1	5.9	0.8	1.3	0.1	0.9	0.1	16.5	<b>10,213</b>	<b>1.0</b>	20.8	14.6
	239.0	240.0	6,603	13,021	1,371	4,059	257	40.8	62.8	3.9	11.1	1.1	1.8	0.2	1.0	0.1	22.9	<b>25,458</b>	<b>2.5</b>	32.1	7.3
	240.0	241.0	5,934	11,289	1,154	3,441	230	36.4	56.6	3.6	9.2	1.1	1.8	0.2	1.0	0.1	24.1	<b>22,182</b>	<b>2.2</b>	29.1	12.4
	241.0	242.0	5,254	9,815	1,005	3,056	203	34.5	48.6	3.6	10.0	1.1	2.2	0.2	1.1	0.1	22.9	<b>19,458</b>	<b>1.9</b>	27.1	11.1
	242.0	243.0	3,788	7,248	748	2,298	162	28.6	46.8	3.3	9.8	1.2	2.1	0.2	0.9	0.1	21.6	<b>14,358</b>	<b>1.4</b>	25.5	12.4
	243.0	244.0	7,283	14,188	1,444	4,362	285	43.4	65.6	3.9	11.1	1.3	2.2	0.2	0.9	0.1	24.1	<b>27,715</b>	<b>2.8</b>	34.2	8.3
	244.0	245.0	5,160	9,913	1,015	3,056	199	31.4	50.3	3.3	9.8	1.1	1.8	0.2	1.1	0.1	25.4	<b>19,468</b>	<b>1.9</b>	28.1	10.8
	245.0	246.0	5,207	9,680	980	2,928	189	30.1	46.8	3.1	8.3	0.9	1.9	0.1	1.0	0.1	20.3	<b>19,096</b>	<b>1.9</b>	25.4	7.7
	246.0	247.0	5,360	10,147	1,003	3,021	187	29.1	46.3	2.9	8.4	0.9	1.4	0.2	0.8	0.1	20.3	<b>19,828</b>	<b>2.0</b>	23.7	11.0
	247.0	248.0	6,403	11,989	1,257	3,756	239	37.2	58.7	3.5	9.5	1.0	1.7	0.1	0.9	0.2	20.3	<b>23,777</b>	<b>2.4</b>	31.1	9.1
	248.0	249.0	7,635	14,004	1,414	4,094	255	39.8	64.8	4.3	11.5	1.1	1.8	0.2	0.9	0.1	24.1	<b>27,550</b>	<b>2.8</b>	35.8	7.6
	249.0	250.0	11,904	22,664	2,368	6,648	413	63.9	98.9	6.5	17.4	1.8	3.1	0.2	1.1	0.1	35.6	<b>44,226</b>	<b>4.4</b>	61.6	5.3

## 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 style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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 disclosure of detailed information.</i></li> </ul>	<p>Reverse circulation drilling sampled on 1 metre intervals.</p> <p>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.</p>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<p>Standard reverse circulation drilling using 5 ¼ inch face sampling hammer</p>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure</i></li> </ul>	<p>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.</p>



Criteria	JORC Code explanation	Commentary
	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<p>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.</p> <p>Sample recovery is maximized by:</p> <ul style="list-style-type: none"> <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> <p>Sample return was variable with:</p> <ul style="list-style-type: none"> <li>Occasional natural voids of up to 4 metres having &lt;10%, often 0% return</li> <li>Intervals of rock fracturing and loss of air circulation having recoveries averaging 30-60%</li> <li>Competent rock proved good sample recovery averaging &gt;90%</li> </ul>
Logging	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>All RC chips have been geologically logged by the onsite geologist at 1 m intervals and chip trays have been retained and photographed</p> <p>Logging is qualitative with fields including shade, colour, weathering, grainsize, texture, lithology, veining, mineralisation and alteration.</p> <p>Additional non-geological qualitative logging includes comments for sample recovery, moisture, and hardness for each logged interval.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> </ul>	<p>Plastic sample collection bags have been split using a 2-tier riffle splitter to achieve a ¼ sub sample of the original mass.</p> <p>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</p> <p>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.</p> <p>Both split A and split B samples are weighed with mass recorded in the drill hole</p>

Criteria	JORC Code explanation	Commentary																																												
	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>file for database upload.</p> <p>Split A samples are dispatched for laboratory analysis. Split B samples are retained in storage at Kangankunde for future reference as required.</p> <p>Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled.</p>																																												
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p><b>Assay and Laboratory Procedures – All Samples</b></p> <p>Samples were dispatched by air freight direct to ALS laboratory Johannesburg South Africa for sample preparation.</p> <table border="1" data-bbox="1173 707 1854 1106"> <thead> <tr> <th>ALS Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>WEI-21</td> <td>Received sample weight</td> </tr> <tr> <td>LOG-22</td> <td>Sample Login w/o Barcode</td> </tr> <tr> <td>DRY-21</td> <td>High temperature drying</td> </tr> <tr> <td>CRU-31</td> <td>Fine crushing – 70% &lt;2mm</td> </tr> <tr> <td>SPL-21</td> <td>Split sample – Riffle splitter</td> </tr> <tr> <td>PUL-31</td> <td>Pulverise 250g to 85% passing 75 micron</td> </tr> <tr> <td>CRU-QC</td> <td>Crushing QC Test</td> </tr> <tr> <td>PUL-QC</td> <td>Pulverising QC test</td> </tr> <tr> <td>LOG-24</td> <td>Pulp Login w/o Barcode</td> </tr> </tbody> </table> <p>Following sample preparation, a 30 gram pulverized subsample is shipped by airfreight to ALS Perth for analysis</p> <p>The assay technique used for REE was Lithium Borate Fusion ICP-MS (ALS code ME-MS81h). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:</p> <table border="1" data-bbox="1337 1313 1989 1422"> <tbody> <tr> <td>Ce</td> <td>Dy</td> <td>Er</td> <td>Eu</td> <td>Gd</td> <td>Hf</td> <td>Ho</td> <td>La</td> </tr> <tr> <td>Lu</td> <td>Nb</td> <td>Nd</td> <td>Pr</td> <td>Rb</td> <td>Sm</td> <td>Sn</td> <td>Ta</td> </tr> <tr> <td>Tb</td> <td>Th</td> <td>Tm</td> <td>U</td> <td>W</td> <td>Y</td> <td>Yb</td> <td>Zr</td> </tr> </tbody> </table> <p>Analysis for other metals is conducted by four acid digest and ICP-MS (ALS code</p>	ALS Code	Description	WEI-21	Received sample weight	LOG-22	Sample Login w/o Barcode	DRY-21	High temperature drying	CRU-31	Fine crushing – 70% <2mm	SPL-21	Split sample – Riffle splitter	PUL-31	Pulverise 250g to 85% passing 75 micron	CRU-QC	Crushing QC Test	PUL-QC	Pulverising QC test	LOG-24	Pulp Login w/o Barcode	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
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		<p>ME-4ACD81). The elements analysed using this technique are:</p> <table border="1" data-bbox="1339 400 1989 475"> <tr> <td>Ag</td> <td>As</td> <td>Cd</td> <td>Co</td> <td>Cu</td> <td>Li</td> <td>Mo</td> <td>Ni</td> </tr> <tr> <td>Pb</td> <td>Sc</td> <td>Tl</td> <td>Zn</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>The sample preparation and assay techniques used are industry standard and provide a total analysis.</p> <p>All laboratories used are ISO 17025 accredited.</p> <p><b>QAQC</b></p> <p><b>Analytical Standards</b></p> <p>CRM AMIS0356 and GRE-02 were included in sample batches at a ratio of 1:20 to drill samples submitted. This is an acceptable ratio.</p> <p>The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident.</p> <p><b>Blanks</b></p> <p>CRM blank OREAS C26d and 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.</p> <p>Both CRM blanks contain some REE, with elements critical elements Ce, Nd, Dy and Y present in small quantities. The analysis results were consistent with the certified values for the blanks. No laboratory contamination or bias is evident from these results.</p> <p><b>Duplicates</b></p> <p>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.</p> <p>Variability between duplicate results is considered acceptable and no sampling bias is evident.</p>	Ag	As	Cd	Co	Cu	Li	Mo	Ni	Pb	Sc	Tl	Zn				
Ag	As	Cd	Co	Cu	Li	Mo	Ni											
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Criteria	JORC Code explanation	Commentary						
		<p><b>Alternative Analysis Technique</b> No alternative analytical method analysis has been undertaken.</p>						
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<p>No independent verification of significant intersection undertaken.</p> <p>No twinning of drill holes was undertaken.</p> <p>Sampling protocols for sampling and QAQC were documented and held on site by the responsible geologist. No procedures for data storage and management have been compiled yet.</p> <p>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.</p> <p>Assay data was received in digital format from the laboratory and merged with the sampling data in the database.</p> <p>Data validation of assay data and sampling data have been conducted to ensure data entry is correct.</p> <p>All assay data received from the laboratory in element form is unadjusted for data entry.</p> <p>Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.(Source:<a href="https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors">https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors</a>)</p> <table border="1" data-bbox="1391 1369 1935 1437"> <thead> <tr> <th data-bbox="1391 1369 1563 1437">Element ppm</th> <th data-bbox="1563 1369 1778 1437">Conversion Factor</th> <th data-bbox="1778 1369 1935 1437">Oxide Form</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Element ppm	Conversion Factor	Oxide Form			
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<i>Location of</i>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and</li> </ul>	Drill hole collar locations reported are planned locations only, pending survey of																																													



Criteria	JORC Code explanation	Commentary
<i>data points</i>	<p><i>down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>actual collar positions. Some variation in actual hole locations is expected from those in this announcement</p> <p>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.</p> <p>Downhole surveys are planned dip and azimuth pending finalisation of downhole surveys.</p> <p>Topography is derived from SRTM 30 metre digital elevation database.</p>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<p>Drill spacing for this phase of drilling is a nominal 50 metre hole spacing on 50 metre line spacing. Topography limitations have necessitated drilling some holes off section.</p> <p>Evaluation of hole spacing for suitability to determine geology and grade estimation will be undertaken following this phase of drilling.</p> <p>No mineral resource estimation has been undertaken.</p> <p>No sample compositing has been used.</p>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<p>The relationship between mineralisation and drill orientation is not known.</p>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<p>After collection, the samples were transported by Company representatives via road to Lilongwe and dispatched via airfreight to ALS Johannesburg South Africa. Sample shipments are managed by a professional cargo freight company and remain secure during transport.</p> <p>Following sample preparation subsamples are shipped to Perth Australia by ALS using DHL. Samples are received in Australia and subject to customs inspection</p>

Criteria	JORC Code explanation	Commentary
		<p>and quarantine treatment.</p> <p>Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative.</p>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>No audits or reviews have been undertaken</p>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	The Kangankunde Project comprising granted Exploration Licence EPL0514/18R and Mining Licence MML0290/22 is 100% owned by Rift Valley Resources (RVR) a Malawian registered company. Lindian Resources has a purchase agreement in place to progressively acquire 100 % of RVR.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>Previous exploration includes:</p> <p>1952-1958: Eight trenches excavated. No data records known to exist.</p> <p>1959: Geological mapping, ten trenches excavated, seven drill holes drilled below main trenches. Data not sighted</p> <p>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.</p> <p>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.</p> <p>Historical data is largely not available or not readily validated and is currently not reported.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>Intrusive carbonatite containing monazite as the main rare earth bearing mineral.</p> <p>The Kangankunde carbonatite complex is characterized by an elliptic structure centering Kangankunde Hill. The diameters in N-S and E-W directions are 900m and 700m, respectively.</p>

Criteria	JORC Code explanation	Commentary
		<p>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.</p> <p>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.</p> <p>Monazite is found in all carbonatite types in varying quantities. Other associated minerals are strontianite, barite and apatite.</p>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<p>The material information for drill holes relating to this announcement are contained in Appendix 1.</p>
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> </ul>	<p>Reported intersections are length weighted averages.</p> <p>No maximum or minimum grade cutting has been applied</p> <p>Aggregation for reported intercepts have been calculated based on visual alteration. For example, where contiguous alteration is dominantly FeO +MnO these zones have been averaged independently. Similarly, the contiguous unaltered or fenitised carbonatite has been averaged independently.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>All reported intercepts are drilled within the orebody and are rare earth mineralised with the lowest grade of 0.9%TREO reported. As such no geological natural cut-off has been observed and an economic cut-off is not appropriate at this stage of the project.</p> <p>No metal equivalents values are used.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<p>Down hole lengths reported, true widths are not known.</p>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<p>Refer to diagrams in body of text.</p>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<p>This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.</p>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<p>Multi element analysis has been conducted including potential radionuclides uranium (U) and thorium (Th) which are both reported in Appendix 2</p>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions,</i></li> </ul>	<p>Future work programs are intended to evaluate the economic opportunity of the project including extraction optimization, and resource definition.</p>



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Criteria	JORC Code explanation	Commentary
	<i>including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	