

# Maiden drilling program commences at the niobium-rich Karloning REE Project, WA

**2,000m RC drilling program underway at the high-grade Karloning Rare Earth Project, representing the first drilling to focus on the REE and niobium potential in the district.**

## Highlights

- Three key exploration datasets collected at the recently secured **Karloning Rare Earth Element (REE) Project**, located in WA's Wheatbelt, 260km north-east of Perth – soil sampling, drone magnetics and ground radiometric surveys.
- The data collected has guided the planning of the Company's maiden ~2,000m Reverse Circulation (RC) drill program, which has now commenced.
- Drilling aimed at determining the extent of the pegmatite, its broader geological setting and understanding the zonation and distribution of the high-grade, high-value permanent magnet rare earths **dysprosium, neodymium, terbium and praseodymium** hosted in *xenotime* (a phosphate mineral rich in heavy rare earths).
- Drilling will also test for pegmatite-hosted **niobium**, a critical metal used in the steel industry with applications including wind turbines and high-performance batteries, first identified by the Company in the rock sampling completed in late 2022<sup>1</sup>.
- Previously reported assays from the 2022 grab sampling program returned some outstanding high grades including<sup>1</sup>:
  - **28,463ppm (2.85%) dysprosium oxide (Dy<sub>2</sub>O<sub>3</sub>)**
  - **64,100ppm (6.41%) niobium**
  - **186,000ppm (18.60%) tantalum**
  - **3,516ppm (0.35%) Terbium Oxide (Tb<sub>4</sub>O<sub>7</sub>)**
  - **2,659ppm (0.27%) Neodymium Oxide (Nd<sub>2</sub>O<sub>3</sub>)**
  - **235ppm Praseodymium Oxide (Pr<sub>6</sub>O<sub>11</sub>)**
- The Karloning Project represents an excellent opportunity for Codrus to diversify into the critical minerals space and build on its current gold and copper assets by securing exposure to a commodity sector with outstanding fundamentals and a strong growth outlook.

## ASX Announcement

12 April 2023

### Directors

**Andrew Radonjic**

Non-Executive Chairman

**Shannan Bamforth**

Managing Director

**Jamie Byrde**

Non-Executive Director

& Company Secretary

## Investment Highlights

ASX Code	CDR
Issued Capital	75,430,004
Share Price	\$0.086
Market Cap.	\$6.49M

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1: See ASX announcement, 9<sup>th</sup> December 2022.

Codrus Minerals (ASX: **CDR**, **Codrus** or **the Company**) is pleased to advise that it has commenced its maiden drilling program at the recently acquired **Karloning REE-Niobium Project** in WA. The drilling is aimed at confirming the project’s credentials as an exciting growth and diversification opportunity for Codrus in the rare earths sector.

In November 2022, Codrus entered into a farm-in and joint venture agreement with Talgamine Minerals Pty Ltd (Talgamine) to earn up to a 90% interest in the Karloning Project, which is located in Western Australia’s Wheatbelt region (see Figure 1) (see ASX announcement “Codrus Secures Large-Scale Niobium-Rich REE Project in WA”, 23rd November 2022).

The Project offers compelling exploration potential for the high-value Rare Earth Elements (REE’s) used in the manufacture of high-strength permanent magnets – namely praseodymium, neodymium, terbium and dysprosium.

These elements are in high demand because of the explosive growth in industries that rely on permanent rare earth magnets, such as electric vehicles, wind turbines and other renewable energy applications.



Figure 1. Location of the Karloning REE Project in Western Australia’s Wheatbelt.

**Codrus Managing Director, Shannan Bamforth, said:**

*"We are pleased to announce the start of our first-ever drill campaign at the recently acquired Karloning Project.*

*"The careful planning and targeting of this program reflects the excellent work completed by the team in the first quarter of this year, including soil sampling, drone magnetics and ground radiometric surveys.*

*"The robust datasets generated have been used to refine the location of the drill-holes, which will determine the extent of the pegmatite at Karloning and its broader geological setting while also providing important information on the zonation and distribution of the high-grade, high-value permanent magnet rare earths within the mineralised system.*

*"The initial program should also give us some indication of the extent of the pegmatite-hosted niobium mineralisation at the project, which could further enhance the suite of critical minerals at Karloning .*

*"This is an exciting time for our shareholders, as we work to unlock the full potential of this exciting and well-located critical minerals project in the heart of the WA Wheatbelt."*

**The Karloning Project**

The Karloning Project can be easily accessed by sealed roads via the town of Mukinbudin.

The geology within the tenements (E70/5339 and E70/6306) comprises mainly medium-to-coarse grained biotite granite and adamellite with a large quartz-microcline pegmatite, known as the Karloning Pegmatite (see Figure 2).

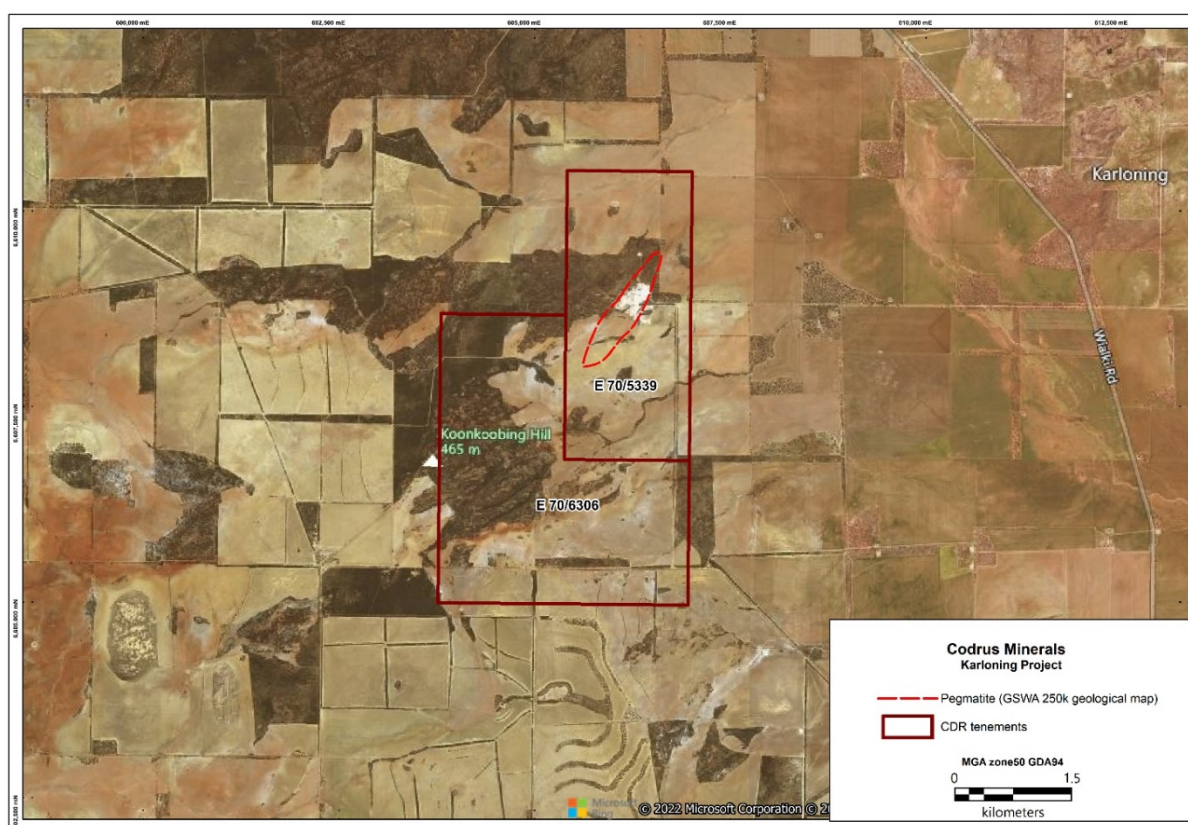


Figure 2. Karloning Project location showing the location of E70/5339 (Talgomine Joint Venture CDR earning in), and E70/6306 (100% Codrus), with the historic quarry visible in E70/5339.

Tertiary lateritic duricrusts skirt the granite outcrops and are eroded by the Quaternary paleo drainages forming broad sheetwash areas consisting of sands, clays and silts.

Mapping by the Geological Survey of Western Australia (1:250,000 Perth map sheet) shows a strike extent of ~1.5km for the Karloning Pegmatite, and Codrus believes there is a potential significant extension to the pegmatite beneath cover and for multiple pegmatite horizons to be discovered within the project area. There may also be the opportunity to identify broader zones of lower grade REE mineralisation in the widespread alkaline granite.

## Soil Sampling

A systematic soils sampling program was undertaken over preliminary areas of interest and covered a significant amount of the project tenure. This first-pass program comprised 320 samples on a nominal 100m x 100m grid, with an additional 289 in-fill samples collected on 50 m x 50m and 25m x 25m grids over priority areas.

This new soil sampling work successfully shows strong Rare Earth Element and associated element anomaly (peaking at 896ppm total rare earths and yttrium (TREY) over the mapped niobium yttrium fluorine (NYF) pegmatite at Karloning, along with a strong halo flanking the pegmatite to the north-west (see Figure 3). This lower grade TREY anomalism associated with the host alkaline granite system may form a substantial secondary target zone within the project.

The entire TREY-in-soil anomaly associated with the Karloning Pegmatite is c.2-2.5km long and the mapped pegmatite represents a priority REE drill target. The new soil sampling also shows the presence of three high priority geochemical targets along trend and south of the Karloning Pegmatite within Codrus' tenure.

At the new southern anomalies, the TREY-in-soil anomalism peaks at 1,101ppm. Follow-up sampling is being conducted to evaluate the new TREY soil anomalies and potentially advance them to drill target status.

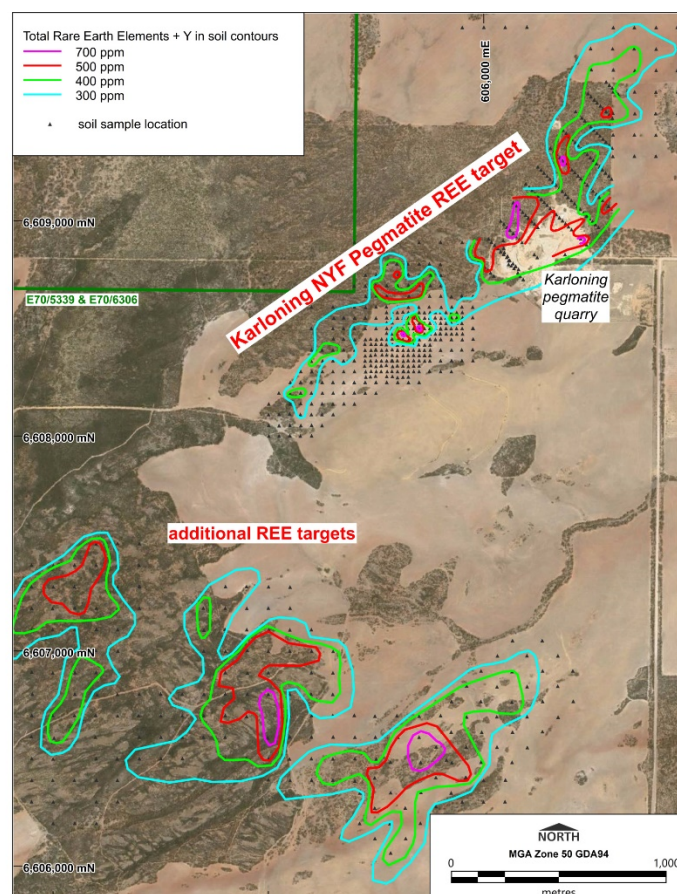


Figure 3. Karloning Project showing the main pegmatite in the quarry and potential extensions with soil geochemistry.



## Drone Magnetics

The acquisition of drone magnetic data was completed with flight lines flown at 100m spacings across the majority of the tenure, and in-fill undertaken at 25m line spacing over discrete areas of interest.

The data has now been processed and inversion modelling indicates magnetic stratigraphy dips steeply south-southeast. The mapped Karloning Pegmatite and associated TREY soil anomaly is observed to correlate closely with a significant north-northeast trending magnetic low (being largely free of magnetic minerals) (see Figure 4), and interpretation suggests several potential extensions to the known Karloning Pegmatite for follow-up mapping and geochemical sampling.

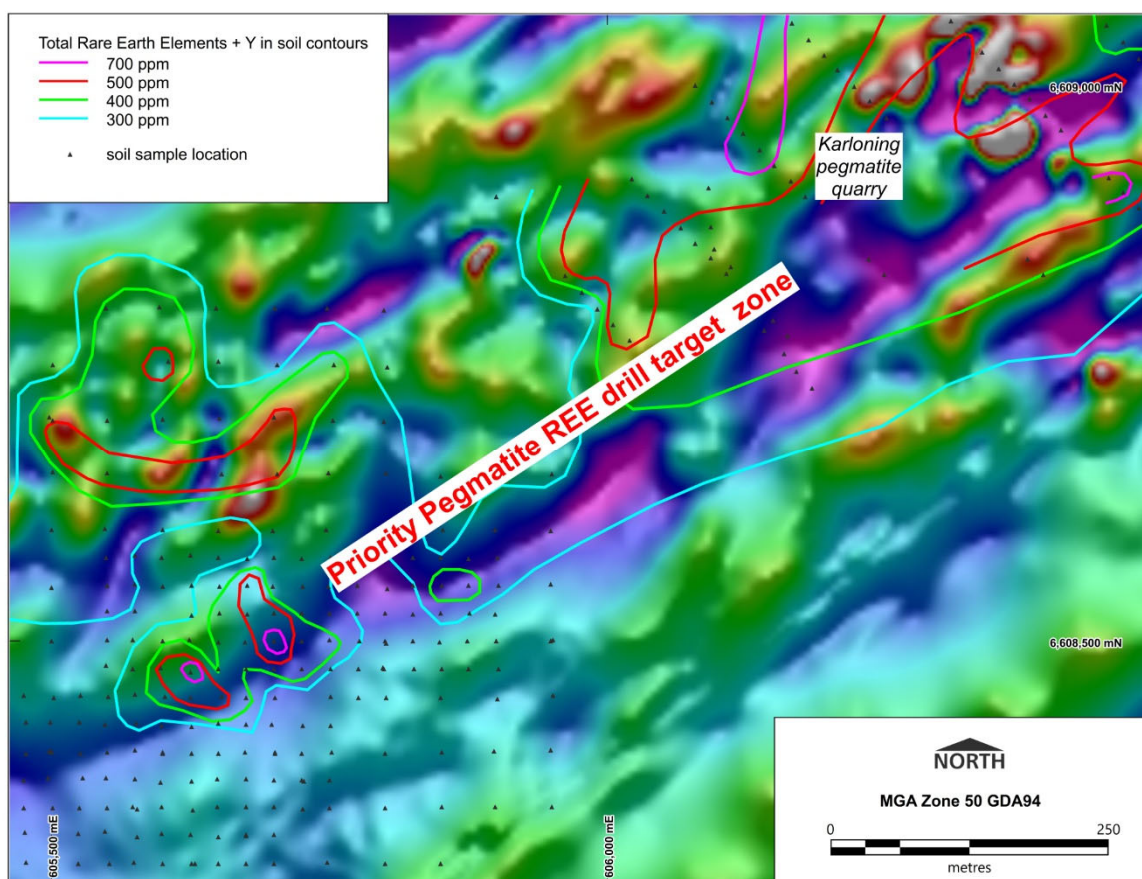


Figure 4. Karloning Project showing the TREY soil anomalism and TMI1VD magnetic image.

## Ground Radiometrics

The ground radiometric samples were collected at broadly the same locations as the soil samples. The data has been processed and shows a strong correlation with the mapped Karloning Pegmatite, highlighting in particular the south-east of the Karloning quarry as a priority target. The radiometric data also correlates strongly with and confirms prospectivity of the additional TREY-in-soil anomalies for REE mineralisation.

## Drilling Program

The maiden drilling program, which commenced in April 2023, has been designed to define the footprint of the known fertile pegmatite and will test for the presence of mineralisation at priority areas identified from the soil sampling, ground radiometrics and drone magnetic data.

The first drill program will comprise approximately 2,000m of RC drilling, with drill holes planned up to two hundred metres depth. Notably, this will be the first drilling to test the scale of the Karloning Pegmatite and the distribution of REE and niobium mineralisation. Additional areas of soil sampling and mapping will be completed during the program to assist with further drill targeting at the project in areas of interest, highlighted by the datasets collected earlier in the year.

### Priority Areas

Drilling will focus on areas of anomalism extending away from the known quarry area where outcropping xenotime has been mapped and sampled. The key response being tested in the current program is Thorium anomalism that coincides with a magnetic low to the south-west of the quarry.

### Future Work

The drilling at Karloning is anticipated to be completed by the end of April with assays to be returned in June. Further drilling at the project may be triggered by geology observed in the maiden drill program, and from additional mapping and sampling being completed.

**This announcement was authorised for release by the Board of Codrus Minerals.**

**ENDS**

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#### **About Codrus Minerals Limited**

Codrus Minerals recently secured an exciting new growth and diversification opportunity in the rare earths sector after entering into a farm-in and joint venture agreement with Talgomine Minerals Pty Ltd to earn up to a 90% interest in the Karloning Rare Earth Element (REE) Project, located in Western Australia's Wheatbelt. In addition to our REE project, Codrus has a portfolio of exciting projects in Western Australia (WA) and Oregon, United States of America (USA). All of our Australian assets are located in close proximity to existing operating mines and the Bull Run Project in the USA is located in a rich historic gold producing area. Codrus currently has four projects in WA, comprising 31 tenements with a total landholding of approximately 243km<sup>2</sup>. The Karloning REE Project in the Wheatbelt, the Silver Swan South and Red Gate Projects are in the Eastern Goldfields, whilst the Middle Creek Project is located in the Eastern Pilbara. The tenements are prospective for rare earth elements and potential economic gold mineralisation, with Silver Swan South also being prospective for Nickel. In the USA, the company holds a 100% legal and beneficial interest for 79 claims and is party to an 'Option Agreement', which covers a further 11 claims in Baker County in Eastern Oregon. In total the claims cover approximately 7km<sup>2</sup> in the Ironside Mountain Inlier. The Bull Run project is prospective for gold and has been mined intermittently since approximately 1929.

#### **Competent Persons Statement**

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Shannan Bamforth who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Bamforth is a permanent employee of Codrus Minerals and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Bamforth consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Information in this announcement that relates to previous exploration results for the Projects is extracted from the following ASX announcement:

- *"Codrus Secures Large-Scale Niobium Rich REE Project in WA" 23<sup>rd</sup> November 2022*
- *"Codrus Confirms High Grades at Niobium-Rich REE Project" 12<sup>th</sup> December 2022*
- *"Exploration Update - Karloning REE Project, WA" 27<sup>th</sup> February 2023*

The above announcement is available to view on the Company's website at [codrusminerals.com.au](http://codrusminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant original market announcements. The Company confirms that the information and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### **Exploration and Resource Targets**

Any discussion in relation to the potential quantity and grade of Exploration and Resource Targets is only conceptual in nature. While Codrus is continuing exploration programs aimed at reporting additional JORC compliant Mineral Resources, there has been insufficient exploration to define mineral resources and it is uncertain if further exploration will result in the determination of maiden JORC compliant Mineral Resources.

### **Forward-Looking Statements**

Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Codrus. There is continuing uncertainty as to the full impact of COVID-19 on Codrus's business, the Australian economy, share markets and the economies in which Codrus conducts business. Given the high degree of uncertainty surrounding the extent and duration of the COVID-19 pandemic, it is not currently possible to assess the full impact of COVID-19 on Codrus' business or the price of Codrus securities. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements. Any forward-looking statements in this presentation speak only at the date of issue of this presentation. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Codrus does not undertake any obligation to update or revise any information or any of the forward-looking statements in this presentation or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

**Table 1: Karloning Project soil sample locations and REE + Y assays. See Appendix one for sampling and assaying information.**

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS287	606600	6609300	50.9	76.3	8.8	30.1	4.7	0.68	3.43	0.51	3.08	0.64	1.85	0.27	2.05	0.29	19.9
KGS288	606700	6609301	19	34	3.02	10.4	1.74	0.46	1.57	0.24	1.4	0.32	1.01	0.16	1.26	0.18	10.1
KGS289	606800	6609301	65.5	137.5	12.7	42.9	6.56	0.94	5.46	0.79	4.91	0.94	2.92	0.42	2.55	0.37	27.1
KGS291	606601	6609400	61.1	111	11.05	36.4	5.56	0.79	3.92	0.62	3.76	0.74	2.24	0.36	2.45	0.35	21.1
KGS292	606700	6609400	63.2	123	12.5	39.9	6.04	0.85	4.53	0.63	3.87	0.69	2.12	0.33	2.08	0.26	19.9
KGS293	606800	6609399	16	38.8	2.99	10.6	1.82	0.38	1.74	0.32	2.07	0.44	1.35	0.25	1.72	0.26	12.6
KGS294	606902	6609400	42.2	96	7.83	26.3	4.07	0.72	3.27	0.5	3.11	0.62	1.77	0.26	1.96	0.23	16.7
KGS296	606600	6609501	93	167.5	17.2	58.4	9.75	1.11	7.91	1.24	7.86	1.53	4.56	0.67	4.3	0.53	48.1
KGS297	606702	6609499	100	194	20.3	69	11.45	1.34	8.76	1.35	8.19	1.46	4.39	0.65	4.05	0.53	40.3
KGS298	606799	6609499	37.7	98.4	8.05	28.7	4.82	0.82	3.85	0.59	3.8	0.83	2.62	0.36	2.45	0.37	21.6
KGS299	606900	6609500	26.4	54.4	5.37	18.4	3.59	0.53	3.24	0.51	3.7	0.75	2.28	0.35	2.35	0.32	22.5
KGS301	606601	6609600	109	179	18.4	61.3	9.74	1.06	7.77	1.22	8.44	1.76	5.15	0.77	5.27	0.65	53.7
KGS302	606701	6609600	59.6	122.5	11.05	38.2	6.24	0.66	4.37	0.68	4.47	0.87	2.63	0.37	2.42	0.25	25.2
KGS303	606800	6609599	49.7	93.2	8.96	29.9	4.92	0.77	3.72	0.66	3.87	0.74	2.28	0.33	2.44	0.31	23.2
KGS304	606900	6609600	22.1	48.7	4.43	14.9	3.51	0.39	2.52	0.42	2.52	0.56	2.02	0.3	2.18	0.26	16.5
KGS305	607001	6609600	17.6	39.3	3.72	13.1	2.49	0.41	1.96	0.31	2.15	0.39	1.41	0.24	1.5	0.25	11.5
KGS306	606500	6609703	104	185.5	19.55	65.9	10.15	1.21	7.62	1.13	7.59	1.43	4.04	0.62	3.43	0.4	39.9
KGS307	606602	6609702	97.8	170.5	16.75	54.5	8.03	1	6.27	0.99	5.68	1.04	3.14	0.47	3.09	0.4	31.6
KGS308	606702	6609699	96.8	180.5	17.55	55.2	7.29	1.08	6.37	1.01	6.18	1.16	3.5	0.5	3.42	0.43	33.8
KGS309	606801	6609700	58	113	10.9	38.4	6.23	0.8	4.85	0.72	4.98	0.96	3.12	0.47	3.01	0.39	29.2
KGS310	606899	6609699	53.1	112.5	10.4	35.2	5.86	0.84	5.05	0.72	4.62	0.93	2.81	0.41	2.73	0.32	27.1
KGS311	606999	6609701	14.8	46.2	3.07	11.1	1.86	0.26	1.56	0.26	1.91	0.39	1.23	0.23	1.58	0.22	11.8
KGS312	606497	6609801	74.8	133	14.45	47.2	6.89	1.06	5.67	0.77	5.29	0.97	2.85	0.42	2.66	0.3	28.7
KGS313	606599	6609800	87.6	159	15.7	50.6	8.37	0.91	5.91	0.96	5.69	1.12	3.17	0.5	2.89	0.43	31
KGS314	606699	6609800	98.4	182.5	18.65	60.4	9.67	1.21	6.96	1	6.39	1.24	3.54	0.55	3.4	0.5	35.2
KGS315	606801	6609799	78.5	162.5	15.55	51.8	8.23	1.05	6.05	0.95	5.59	1.16	3.31	0.46	3.43	0.42	31.9
KGS316	606899	6609799	68.2	128.5	13.85	46.6	8.04	0.95	5.74	0.8	5.1	1.06	2.95	0.45	3.02	0.38	31.1
KGS317	607000	6609799	21.6	55	4.52	15.1	2.57	0.47	2.1	0.34	2.46	0.49	1.58	0.22	1.72	0.21	14.6
KGS318	606602	6609899	68.7	117.5	13	45.5	6.94	0.9	5.46	0.75	4.69	0.94	2.7	0.36	2.43	0.33	26.5
KGS319	606700	6609899	68.3	129	13.7	46.1	7.17	1.11	5.63	0.79	5.04	0.95	2.66	0.4	2.44	0.3	25.1
KGS320	606801	6609899	45.8	104	9.35	31.2	4.92	0.81	4.19	0.63	4.24	0.84	2.54	0.34	2.49	0.31	23.7
KGS321	606899	6609900	39.9	77.2	7.88	26.3	4.07	0.65	3.45	0.47	3.58	0.7	2.09	0.3	2.33	0.28	21
KGS322	607000	6609899	39.8	67.9	7.41	24.3	3.81	0.65	3.11	0.45	3.25	0.6	1.84	0.3	1.89	0.23	18
KGS323	605202	6608300	56.4	143	11	37.1	6.16	0.91	4.8	0.8	5.19	1.06	3.15	0.45	2.58	0.32	28.1
KGS324	605300	6608300	56.3	109.5	10.9	36.7	6.33	0.69	4.46	0.74	4.54	0.83	2.23	0.32	2	0.26	22.2
KGS325	605400	6608300	28.9	58.5	6	19.5	3.42	0.46	2.61	0.45	2.53	0.47	1.34	0.2	1.26	0.18	12.7
KGS326	605201	6608400	55	116	11.6	39.4	7.04	0.98	5.37	0.8	4.9	0.96	2.44	0.35	2	0.27	22.5
KGS327	605300	6608400	82.4	186	17.75	60.2	10.2	1.22	7.82	1.38	9.27	1.88	5.47	0.67	3.66	0.44	46.6
KGS328	605401	6608400	71.7	129	14.3	46.9	7.88	1.01	5.66	0.86	5.05	0.97	2.51	0.34	2.22	0.26	24.2
KGS331	605699	6608401	39.8	79.8	8.39	27.5	4.9	0.54	3.51	0.55	3.06	0.6	1.56	0.22	1.51	0.22	15.3
KGS337	605700	6608501	216	398	38.9	127.5	20.1	1.93	13.85	2.11	11.95	2.13	5.38	0.72	3.87	0.46	52.6
KGS338	605799	6608500	40.2	68.1	6.36	19.5	3.65	0.38	2.34	0.39	2.21	0.46	1.26	0.19	1.06	0.15	10.9
KGS344	605701	6608600	72.5	129.5	14.05	46.9	8.74	0.89	5.61	0.88	5.24	1.05	3.08	0.43	2.82	0.37	26.7
KGS345	605801	6608599	82.3	153	14.7	49.9	7.78	0.86	5.8	0.93	5.24	1.01	2.73	0.35	2.3	0.3	25.2
KGS346	605900	6608599	85.2	156	16.1	54.7	8.23	1.04	6.55	0.91	5.95	1.04	3.11	0.4	2.52	0.36	28.4
KGS457	605900	6609900	49.3	86.6	9.69	32.9	5.2	0.82	4.23	0.7	4.08	0.76	2.35	0.31	2.4	0.34	22.9
KGS458	605999	6609899	44.4	87.7	8.97	30.7	5.49	0.78	4.43	0.73	4.49	0.9	2.53	0.33	2.15	0.31	23.2
KGS459	606100	6609899	48	97.1	9.83	33.9	5.82	0.79	4.29	0.69	4.3	0.82	2.42	0.37	2.19	0.29	22.7
KGS460	606200	6609899	48.7	85.5	9.61	33.5	5.89	0.93	4.49	0.73	4.54	0.91	2.43	0.33	2.03	0.28	21.7
KGS461	605800	6610000	59.6	116.5	11.35	39.1	6.51	0.88	4.98	0.79	4.52	0.9	2.39	0.36	2.12	0.29	23.8
KGS462	605901	6610000	65.1	114.5	12.3	42.9	7.19	0.99	5.59	0.82	5.55	1.08	3.24	0.48	2.8	0.38	30
KGS463	606002	6610002	55.2	112.5	12.25	42.2	7.17	0.84	5.48	0.83	4.87	0.92	2.73	0.39	2.31	0.33	24.1
KGS464	606100	6610000	60.5	116.5	13.05	44.4	8.17	1.04	5.48	0.85	5.47	1.03	3.1	0.4	2.8	0.37	27.1
KGS465	606202	6610000	22	40.8	4.05	13.2	2.25	0.5	2.41	0.4	2.94	0.52	1.62	0.25	1.85	0.32	16.9
KGS466	606300	6610001	25.3	47.1	5.18	17.1	3.26	0.62	2.68	0.43	3.04	0.65	1.87	0.29	1.87	0.28	17.4
KGS467	605798	6610101	82.7	154.5	18.15	60.8	10.2	1.28	7.73	1.12	7.08	1.34	3.56	0.49	2.9	0.4	35.5
KGS468	605998	6610099	51.8	101.5	11.2	37.1	6.04	0.8	4.46	0.73	4.55	0.85	2.48	0.33	2.19	0.26	23.4
KGS469	606100	6610107	105	203	21.2	73.6	12.3	1.47	8.58	1.23	7.96	1.52	4.13	0.59	3.57	0.48	40.4
KGS470	606199	6610099	53.4	107.5	11.7	39.9	7	0.97	5.16	0.82	4.72	0.88	2.51	0.34	2.21	0.31	24.3
KGS471	606299	6610100	51.3	104	10.15	35.6	6.13	0.84	4.5	0.7	4.57	0.83	2.58	0.31	2.19	0.28	21.6
KGS472	606300	6610101	29.5	54.8	5.67	19.1	3.44	0.66	2.98	0.51	3.43	0.74	2.49	0.36	2.3	0.34	22.1
KGS473	606802	6610199	50.9	100.5	10.4	36.1	6.13	0.68	4.22	0.62	3.98	0.8	2.45	0.32	1.94	0.29	21.2



Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS474	605902	6610200	47.1	85.4	9.13	31.7	5.01	0.73	3.87	0.57	3.77	0.76	2.2	0.33	2	0.28	20.5
KGS475	606000	6610199	67.7	128	14.6	49.3	8.57	0.95	6.22	0.97	5.56	1.2	3.26	0.44	2.67	0.36	29.8
KGS476	606102	6610200	50.6	98.1	9.87	34.2	5.99	0.81	4.41	0.7	4.55	0.88	2.49	0.34	2.19	0.33	22.3
KGS477	606201	6610201	65.1	130	13.6	46.3	8.26	1.03	5.78	0.9	5.99	1.09	3.23	0.43	2.86	0.44	30.6
KGS478	606300	6610200	23	42.8	4.34	14.6	2.48	0.5	2.13	0.37	2.2	0.51	1.58	0.23	1.52	0.23	13.1
KGS479	605798	6610301	25.3	48	5.05	16.9	2.91	0.48	1.99	0.36	2.39	0.46	1.38	0.21	1.5	0.2	12.7
KGS480	605899	6610299	34.3	60.1	6.35	21.5	3.08	0.48	2.91	0.46	3.01	0.56	1.65	0.29	2.11	0.29	17.5
KGS481	605998	6610302	32.8	62.3	6.72	22.1	4.19	0.55	2.97	0.51	2.79	0.7	2.1	0.32	2.22	0.28	17.2
KGS482	606098	6610300	40.4	71.3	7.86	26.1	4.51	0.54	3.26	0.5	3.14	0.62	1.9	0.32	1.64	0.2	16.9
KGS483	606200	6610298	36.3	69.4	7.76	24.2	4.51	0.59	3.43	0.52	3.38	0.73	1.91	0.32	2.31	0.28	18.7
KGS484	606299	6610299	22.3	41.4	4.3	14.7	2.25	0.47	1.92	0.33	2.13	0.4	1.37	0.16	1.44	0.16	11.1
KGS485	605801	6610399	49.5	86.3	10.35	32.6	5.91	0.81	4.42	0.69	4.18	0.78	2.6	0.4	2.41	0.4	21.8
KGS486	605902	6610399	41.7	83.9	8.5	29.7	4.87	0.65	4.13	0.58	3.81	0.72	2.26	0.31	2.05	0.29	20.1
KGS487	606000	6610399	41.1	80.5	8.61	29.1	4.51	0.7	4.03	0.62	4.06	0.7	2.16	0.32	2.09	0.29	20.1
KGS488	606103	6610402	34.4	64.5	6.47	22.3	3.67	0.56	3.32	0.53	3.26	0.66	1.83	0.32	1.7	0.2	16
KGS489	606201	6610401	24.8	42.3	4.51	14.6	2.56	0.47	2.34	0.36	2.66	0.48	1.64	0.22	1.63	0.22	13.7
KGS490	606300	6610399	33	61.8	6.09	21.8	3.75	0.58	2.93	0.42	2.61	0.51	1.64	0.22	1.19	0.15	14
KGS491	605797	6610499	61.9	118	13.3	43.4	7.12	1	5.53	0.83	5.22	1	2.93	0.4	2.57	0.39	25.7
KGS492	605899	6610501	51.4	103.5	11.2	35.5	6.58	0.75	4.88	0.75	5.25	0.97	2.57	0.38	2.81	0.4	24.7
KGS493	605996	6610503	41	90.6	9.06	30.4	5.62	0.75	3.94	0.67	3.72	0.73	2.53	0.33	2.09	0.28	20.9
KGS494	606102	6610505	41.4	79.8	8.02	26.5	4.48	0.73	3.47	0.57	3.67	0.72	2.24	0.29	2.11	0.27	20.5
KGS495	606203	6610505	30.4	59.9	6.03	19.8	3.91	0.42	2.61	0.44	3.03	0.6	1.93	0.29	1.9	0.32	16.7
KGS496	606301	6610503	33.3	64.2	6.51	20.8	3.25	0.55	2.79	0.42	3.09	0.61	1.74	0.25	2.03	0.31	16.6
KGS609	605401	6608550	89.8	146.5	15.55	51.9	8.11	1.08	6.55	1.03	6.57	1.4	3.92	0.5	3.83	0.46	40.3
KGS610	605451	6608549	99.2	176.5	19.45	65.7	10.5	1.3	7.87	1.2	7.46	1.4	4.12	0.47	3.09	0.41	38.3
KGS611	605500	6608550	76.1	173.5	15.05	49.6	7.76	1.04	6.27	0.95	5.9	1.1	3.19	0.4	2.56	0.34	27.8
KGS612	605550	6608550	81.5	146	14.4	48.7	8.24	1.03	6.22	0.92	5.72	1.09	2.89	0.39	2.62	0.33	25
KGS613	605603	6608549	67.7	117	11.5	36.5	5.49	0.57	4.49	0.7	4.36	0.81	2.49	0.29	2.09	0.26	21.9
KGS614	605651	6608549	81.1	145	15	49.4	7.8	0.84	5.48	0.81	4.63	0.89	2.37	0.3	1.94	0.22	21.6
KGS615	605699	6608550	96.4	165.5	16.2	51	8.66	0.93	5.72	0.93	5.3	0.94	2.55	0.31	1.86	0.22	23.4
KGS616	605749	6608551	57.3	107.5	10.15	34.2	5.37	0.57	3.74	0.61	3.61	0.73	1.93	0.27	1.91	0.24	18.6
KGS617	605799	6608551	55.7	97	9.35	30.7	5.15	0.54	3.49	0.49	3.29	0.66	1.84	0.26	1.62	0.2	16.3
KGS618	605850	6608549	111.5	209	20	62.8	10.65	0.99	6.8	1.04	6.23	1.1	2.93	0.36	2.98	0.34	26.5
KGS619	605901	6608551	62.7	135	12.8	43.4	6.78	0.88	5.13	0.73	4.42	0.81	2.45	0.29	2.01	0.3	24.2
KGS620	605952	6608551	42.6	91.3	9.27	31	5.18	0.61	4.06	0.64	3.67	0.76	2.02	0.3	1.99	0.27	21.2
KGS621	605451	6608600	59.8	126.5	12.2	43.3	7.36	1.15	6.51	0.9	5.98	1.18	3.76	0.5	2.95	0.43	35.7
KGS622	605551	6608600	69.9	116.5	13.1	46.3	7.44	0.97	5.82	0.85	5.27	0.96	2.87	0.39	2.4	0.33	29.7
KGS623	605649	6608600	52	82.9	8.41	28.4	4.27	0.65	3.78	0.58	3.73	0.85	2.73	0.34	2.33	0.36	24.1
KGS624	605750	6608600	76.4	146	15.55	52.9	8.56	0.97	6.54	0.93	5.04	0.99	2.88	0.41	2.51	0.36	28
KGS625	605852	6608599	44.9	77.4	9.03	30.8	4.83	0.53	3.76	0.53	3.05	0.59	1.66	0.22	1.2	0.14	16.2
KGS626	605950	6608600	77.2	156.5	15.65	55.5	9.25	1.06	6.79	0.97	5.97	1.25	3.26	0.47	2.66	0.37	34.2
KGS627	605450	6608651	31.4	69.1	6.37	22.7	3.92	0.76	3.7	0.58	3.92	0.86	2.61	0.37	2.7	0.38	26.1
KGS628	605499	6608651	72.2	157.5	14	50.8	8.33	1.26	7.52	1.26	7.48	1.36	4.06	0.54	3.37	0.51	41.5
KGS629	605550	6608651	108.5	183.5	23.6	84.1	13.6	1.52	10.4	1.63	10.45	2.11	6.54	0.9	5.04	0.63	60.8
KGS631	605651	6608650	140	217	26.3	92.3	14.35	1.82	11.15	1.56	8.84	1.84	5.89	0.78	4.64	0.65	58.4
KGS632	605703	6608649	152.5	253	29.8	105.5	16.9	2.03	12.8	1.78	10.65	2.07	6.41	0.86	5.74	0.77	64.2
KGS633	605750	6608649	78.9	138	14.8	50.2	8.14	1.11	6.85	1.06	6.57	1.4	4.33	0.71	4.3	0.56	42.1
KGS634	605801	6608650	83.1	135.5	15.8	52.8	8.91	1.37	7.34	1.04	6.02	1.17	3.34	0.5	2.83	0.41	32.4
KGS635	605850	6608650	63.1	102.5	12.55	45.1	7.16	0.95	5.75	0.98	5.75	1.22	3.86	0.53	3.08	0.4	37.7
KGS636	605899	6608651	65.4	128	12.45	45	6.68	0.98	5.71	0.87	5.92	1.11	3.42	0.46	2.63	0.36	32.7
KGS637	605950	6608651	59.2	88.4	10.65	38	5.9	0.88	4.46	0.67	3.89	0.72	2.2	0.28	1.76	0.23	21.2
KGS638	605450	6608699	39.3	59.7	6.65	23.4	4.22	0.68	3.27	0.61	3.7	0.77	2.29	0.38	2.36	0.3	24.6
KGS639	605550	6608701	92.6	153.5	17.05	61	10	1.23	7.87	1.2	7.32	1.52	4.7	0.68	4.16	0.64	48.9
KGS640	605649	6608698	81	143	15.4	53.1	7.92	1.01	6.25	0.95	5.89	1.18	3.64	0.6	4.11	0.61	39.3
KGS641	605751	6608699	74.3	159.5	16.05	55.9	8.67	1.28	7.04	1.03	5.9	1.3	3.53	0.54	3.18	0.42	35.7
KGS642	605800	6608699	75.7	127.5	14.95	51.3	8.4	1.24	6.54	0.99	5.9	1.12	3.34	0.45	2.8	0.38	34.3
KGS643	605450	6608751	49.9	93.7	8.46	28.6	5.16	0.91	4.07	0.71	4.39	0.87	2.44	0.35	2.13	0.29	24.1
KGS644	605498	6608749	62.5	100.5	11.95	43	6.63	0.99	5	0.83	4.77	0.9	2.59	0.34	2	0.27	25.7
KGS646	605601	6608749	115	220	21	70.2	11.3	1.44	8.38	1.23	7.21	1.44	4.03	0.62	3.89	0.49	41.3
KGS647	605650	6608750	25.9	49.3	4.91	15.8	2.87	0.62	2.45	0.4	2.78	0.66	2.1	0.36	2.56	0.33	20.5
KGS648	605700	6608750	51.2	107	11.05	38.9	6.55	0.95	5.49	0.86	5.48	1.08	3.6	0.52	3.11	0.42	34.4
KGS649	605750	6608750	94	194.5	19.35	69.4	11.55	1.42	8.01	1.26	6.95	1.42	4.12	0.54	3.32	0.49	39.9
KGS650	605802	6608748	62.7	95.9	12.85	45.2	6.96	1.08	6.04	0.86	5.58	1.18	3.74	0.51	3.27	0.44	37.7

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS651	605451	6608799	97.4	154.5	18.05	61.1	10.1	1.26	7.77	1.15	6.86	1.38	3.49	0.47	2.86	0.33	35.6
KGS652	605551	6608801	95.3	182	17.5	56.5	9.27	1.16	7.64	1.14	6.98	1.44	4.11	0.54	3.4	0.42	38.3
KGS653	605651	6608799	30.2	54.7	5.94	18.9	3.59	0.61	2.94	0.52	3.33	0.67	1.88	0.29	1.95	0.28	17.5
KGS654	605749	6608800	70.3	107	14.3	48.1	8.01	1.13	7.16	1.02	6.43	1.16	3.09	0.48	2.8	0.46	31
KGS655	605800	6608800	39.4	67.6	6.68	22.2	3.89	0.68	3.44	0.62	3.9	0.78	2.47	0.33	2.38	0.35	22.8
KGS656	605901	6608575	70.1	137.5	13.7	44.4	7.21	0.79	5.55	0.81	4.86	1	2.59	0.37	2.24	0.29	23.8
KGS657	605901	6608524	56.4	138.5	12.4	39.1	6.02	0.69	4.69	0.72	3.7	0.78	2.06	0.28	1.84	0.24	17.5
KGS658	605900	6608476	28	73.3	5.72	19.9	3.15	0.45	2.71	0.45	2.87	0.53	1.68	0.22	1.48	0.21	13.7
KGS659	605876	6608575	74.7	150	14.65	47.5	7.68	0.9	5.84	0.86	5.52	1	2.52	0.37	2.33	0.36	25
KGS660	605875	6608550	84.6	178	17.4	57.2	9.03	1.02	6.91	1.06	6.42	1.18	3.38	0.47	3.25	0.5	33.3
KGS661	605876	6608526	49.2	119	10.3	32.9	5.07	0.6	4.17	0.6	3.52	0.65	1.73	0.26	1.57	0.27	17.2
KGS662	605877	6608501	27.1	65.8	5.56	18.5	3.74	0.44	2.63	0.39	2.52	0.55	1.58	0.22	1.37	0.21	11.9
KGS663	605875	6608475	26.5	65.2	5.68	18.2	3.45	0.47	2.81	0.43	2.77	0.55	1.65	0.23	1.54	0.23	13.8
KGS664	605850	6608575	64.4	121.5	11.6	36	5.76	0.62	4.31	0.63	4.01	0.73	2.05	0.24	1.69	0.22	17.9
KGS665	605850	6608524	67.9	147.5	12.75	41.4	6.66	0.7	4.91	0.74	4.39	0.79	2.28	0.31	2.14	0.29	20.9
KGS666	605851	6608474	22.9	53.6	4.91	16.4	3.08	0.37	2.36	0.33	2.34	0.47	1.34	0.19	1.41	0.19	11
KGS667	605825	6608575	77.2	143	13.55	44.1	7.12	0.78	5.17	0.8	4.6	0.86	2.23	0.34	2.1	0.27	21
KGS668	605825	6608550	46.1	77.5	6.78	22	3.63	0.43	2.78	0.44	2.44	0.52	1.54	0.23	1.44	0.2	13.2
KGS669	605825	6608525	58.3	117	10.35	35.5	5.84	0.63	4.03	0.65	3.96	0.68	1.9	0.26	1.83	0.24	18
KGS670	605825	6608499	63.8	139.5	12.5	41.5	6.95	0.71	5	0.74	4.25	0.8	2.13	0.3	1.92	0.24	20
KGS671	605826	6608475	36.3	80.8	7.32	24.7	4.63	0.5	3.65	0.52	3.15	0.63	1.73	0.27	1.71	0.22	16
KGS672	605800	6608574	59.3	101.5	9.74	31.5	4.74	0.54	3.68	0.58	3.59	0.62	1.84	0.27	1.73	0.24	16.6
KGS673	605800	6608525	61.8	110	10.2	34.1	5.26	0.61	3.99	0.59	3.59	0.65	1.61	0.23	1.67	0.24	16.9
KGS674	605800	6608500	45.9	85.8	8.28	27.7	4.78	0.55	3.63	0.55	3.39	0.61	1.67	0.27	1.75	0.22	16.6
KGS675	605799	6608474	38.2	79.3	7.72	25.9	4.05	0.57	3.1	0.5	2.85	0.54	1.62	0.22	1.39	0.22	14.6
KGS676	605776	6608576	68.8	130	12.8	41.1	6.57	0.74	4.42	0.68	4.01	0.75	2.12	0.3	1.82	0.26	19.5
KGS677	605775	6608551	70.8	131.5	13.1	42.6	6.97	0.77	4.65	0.72	4.52	0.8	2.26	0.33	2.08	0.29	21.5
KGS678	605775	6608524	62.1	99.8	9	29.8	4.75	0.49	3.33	0.53	3.21	0.6	1.67	0.25	1.55	0.24	17.3
KGS679	605776	6608500	75.4	131	12.7	42.4	6.9	0.68	5.17	0.76	4.13	0.81	2.23	0.32	2.08	0.24	20.8
KGS680	605777	6608475	43.8	78.6	7.81	26.3	4.49	0.48	3.09	0.53	3.06	0.55	1.58	0.22	1.7	0.19	14.4
KGS681	605774	6608450	43.3	87.9	8.77	28	4.69	0.5	3.51	0.54	3.41	0.6	1.8	0.24	1.59	0.24	16.2
KGS682	605751	6608575	81.8	154	15.1	48.3	7.39	0.8	5.4	0.86	4.87	0.89	2.7	0.35	2.28	0.28	23.3
KGS683	605749	6608525	79.3	131.5	12.55	42.2	6.9	0.75	5.14	0.79	4.6	0.84	2.45	0.34	1.99	0.26	23.6
KGS684	605750	6608475	67.8	121.5	11.9	40.8	6.43	0.67	4.85	0.74	4.06	0.8	2.22	0.28	1.97	0.22	20.3
KGS685	605751	6608425	62.3	113.5	12.45	41.5	6.94	0.94	5.39	0.75	4.13	0.79	2.17	0.36	1.86	0.26	20.4
KGS686	605750	6608374	19.8	38.5	3.92	12.8	2.27	0.27	1.88	0.34	1.94	0.41	1.06	0.18	1.08	0.17	9.9
KGS687	605725	6608575	88.3	178.5	16.95	55.2	8.83	1.02	6.3	0.96	5.68	1.1	3.24	0.41	3.1	0.4	28.3
KGS688	605726	6608551	75.9	133.5	12.8	40	5.9	0.65	4.48	0.68	4.4	0.82	2.6	0.33	2.04	0.3	22.3
KGS689	605724	6608526	79.8	135.5	13.5	44.7	7.15	0.7	5.47	0.82	4.92	0.97	2.67	0.4	2.34	0.33	26.5
KGS690	605725	6608501	74.8	130.5	13.7	44.4	6.92	0.86	5.37	0.86	4.98	0.89	2.31	0.3	2.07	0.25	21.8
KGS691	605726	6608475	121	206	20.7	67.3	9.72	1.08	7.16	1.1	5.88	1.08	2.67	0.37	2.17	0.29	27.7
KGS693	605726	6608426	31.2	58.2	6.14	20	3.83	0.46	2.75	0.42	2.34	0.51	1.44	0.18	1.23	0.18	12.1
KGS694	605725	6608399	28.8	54.5	5.61	19.3	3.83	0.39	3.52	0.66	4.26	0.9	2.89	0.51	2.99	0.54	31.7
KGS695	605727	6608376	19.8	41.8	4.11	13.7	2.61	0.28	2	0.36	1.86	0.4	1.26	0.17	1.18	0.21	10.9
KGS696	605726	6608350	22.4	43.8	4.45	15.2	2.76	0.3	2.2	0.38	2.49	0.51	1.42	0.22	1.49	0.24	13.6
KGS697	605700	6608575	83.4	157.5	16.05	54.9	8.89	1.08	5.79	0.86	5.27	0.96	2.58	0.4	2.14	0.3	23.7
KGS698	605699	6608525	171.5	300	30	96.5	15.5	1.48	10.4	1.48	8.59	1.58	4.4	0.46	3.08	0.37	37.3
KGS699	605702	6608500	179	316	32.6	107.5	17.4	1.73	11.2	1.7	9.5	1.68	4.22	0.59	3.22	0.35	41.3
KGS700	605700	6608474	112.5	207	21.3	70.1	10.9	1.2	7.39	1.21	6.78	1.3	3.31	0.48	2.76	0.33	32.2
KGS701	605700	6608424	47.8	89.9	9.3	30	4.85	0.63	3.75	0.56	3.43	0.61	1.77	0.26	1.66	0.2	16.4
KGS702	605701	6608399	32.7	63.9	6.45	21.4	4.09	0.49	3.27	0.6	3.72	0.76	2.45	0.36	2.74	0.4	29.1
KGS703	605700	6608374	34.3	69.2	6.99	24.8	4.68	0.51	3.25	0.51	3.27	0.65	1.97	0.29	2.07	0.29	18.7
KGS704	605700	6608324	39.6	82.6	8.15	30.5	5.45	0.69	4.28	0.61	3.76	0.72	2.16	0.29	2.11	0.29	19.6
KGS705	605677	6608576	71.3	128	13.05	42	7.41	0.72	4.69	0.72	4.32	0.77	2.33	0.33	2.11	0.26	21.3
KGS706	605676	6608551	130	243	24.3	77.8	12.6	1.25	8.58	1.3	7.24	1.22	3.21	0.43	2.56	0.3	32.3
KGS707	605677	6608524	140	255	25.3	81.8	13.1	1.25	8.71	1.34	7.76	1.38	3.64	0.45	2.92	0.35	35
KGS708	605675	6608501	123	214	21	69.4	10.7	1.13	7.29	1.12	6.32	1.07	2.89	0.41	2.38	0.3	28.3
KGS709	605675	6608476	88.3	156.5	16.25	52.1	8.38	0.81	5.62	0.87	5.08	0.87	2.43	0.35	2.09	0.28	23.8
KGS710	605674	6608450	99.8	180	17.9	58	9.78	0.99	6.34	0.95	5.5	1.02	2.88	0.38	2.49	0.32	28.4
KGS711	605675	6608425	86.2	168.5	17.05	56.3	9.14	0.98	5.97	0.87	4.92	0.99	2.79	0.36	2.18	0.28	25
KGS712	605673	6608401	27.7	55	5.71	18	3.56	0.43	2.58	0.42	2.41	0.49	1.26	0.22	1.37	0.17	12.6
KGS713	605675	6608375	35.3	69.7	7.14	24.7	4.66	0.59	3.32	0.48	2.88	0.61	1.81	0.28	1.6	0.26	15.6
KGS714	605675	6608351	33	66.6	6.93	23.1	4.02	0.53	3.17	0.54	3.29	0.67	2.04	0.32	2.06	0.28	18.8

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS715	605675	6608325	37.2	71.6	7.46	25.7	4.6	0.64	3.64	0.58	3.57	0.73	2.07	0.28	1.88	0.27	18.5
KGS716	605675	6608301	36.1	74.8	7.31	25.7	4.49	0.65	3.66	0.58	3.47	0.67	2.03	0.28	1.8	0.26	18.1
KGS717	605649	6608575	64.1	121	12.2	40.1	6.52	0.75	4.82	0.72	4.38	0.89	2.54	0.41	2.44	0.28	23.5
KGS718	605649	6608527	111.5	213	21	67.7	10.9	1.04	7.32	1.06	6.04	1.16	3.13	0.4	2.55	0.29	28.4
KGS719	605650	6608475	79.9	151	15.45	47.3	8.34	0.88	4.99	0.76	4.95	0.88	2.38	0.34	2.32	0.35	23.5
KGS720	605651	6608425	52.3	103.5	10.1	32.8	5.29	0.72	3.58	0.47	3.61	0.6	1.98	0.29	1.56	0.25	16.9
KGS721	605651	6608374	39.2	83.1	8.82	29.1	4.82	0.65	3.53	0.49	3.44	0.65	1.9	0.28	1.66	0.27	18.5
KGS722	605650	6608324	40.5	90	8.37	32.2	5.22	0.8	3.95	0.68	3.79	0.72	2.29	0.33	2.16	0.35	18.7
KGS723	605650	6608275	12.7	23	2.35	7	1.69	0.15	1.18	0.22	1.65	0.33	1.2	0.2	1.17	0.21	9.5
KGS724	605625	6608576	41.9	77.7	7.78	26.8	4.51	0.63	3.38	0.48	2.85	0.67	1.77	0.24	1.82	0.23	17.2
KGS725	605625	6608551	68.3	127.5	12.4	43.7	6.38	0.7	5.41	0.75	4.59	0.9	2.42	0.38	2.3	0.34	24.5
KGS726	605626	6608525	69.7	116	11.15	32.5	5.69	0.61	3.86	0.63	4.12	0.76	1.96	0.31	1.99	0.3	20.2
KGS727	605626	6608500	67.3	118	11.25	33.3	5.98	0.69	3.63	0.63	3.63	0.71	2	0.3	1.97	0.26	19.5
KGS728	605625	6608476	175	357	34.4	111	16.75	1.66	10.65	1.7	8.97	1.6	4.71	0.65	3.73	0.54	47
KGS729	605625	6608450	113.5	243	23.3	71.6	9.8	1.24	6.29	1.02	5.72	1.06	2.93	0.42	2.83	0.37	27.5
KGS730	605628	6608425	46.2	99.2	10.25	33.8	5.65	0.71	3.62	0.57	3.74	0.69	1.87	0.26	1.66	0.23	17.9
KGS731	605626	6608401	38.6	80.1	7.82	26	4.42	0.56	3.27	0.51	3.27	0.52	1.94	0.25	1.69	0.23	16
KGS732	605626	6608375	46	94.5	9.39	31.2	5.93	0.63	4.3	0.64	3.82	0.65	2.01	0.3	1.88	0.32	19.6
KGS733	605624	6608350	34.9	75.7	7.91	25.3	4.67	0.61	3.13	0.54	3.32	0.61	1.84	0.28	1.88	0.3	17.1
KGS734	605625	6608326	33.8	73.5	7.53	26.4	4.9	0.55	3.28	0.53	3.12	0.61	1.67	0.25	1.7	0.27	17
KGS735	605625	6608300	23.3	50.1	4.74	17	3.44	0.39	2.41	0.4	2.89	0.49	1.52	0.26	1.82	0.27	14.4
KGS736	605625	6608274	23.5	48.1	4.79	17.8	3.11	0.57	2.42	0.4	2.72	0.47	1.47	0.22	1.53	0.27	12.8
KGS737	605600	6608575	60.2	111	11.2	36.8	6.89	0.8	4.65	0.72	4.4	0.81	2.71	0.35	2.7	0.36	25.7
KGS738	605600	6608526	60.7	108	9.9	31.2	5.07	0.61	3.71	0.62	3.85	0.67	2.08	0.3	2.32	0.32	19.2
KGS739	605601	6608500	97.3	187	17.5	55.5	9.37	0.97	6.09	0.93	6.07	1.11	3.53	0.5	3.14	0.47	31.4
KGS740	605601	6608475	117	236	22.1	69.2	11.1	1.34	6.92	1.16	6.47	1.25	3.55	0.52	2.76	0.42	33.3
KGS741	605600	6608425	66.5	131	12.65	38.5	6.08	0.75	4.24	0.62	4.08	0.77	2.09	0.3	1.7	0.27	18.8
KGS742	605601	6608398	34.8	75	7.23	23.6	3.63	0.55	2.79	0.45	3.06	0.55	1.67	0.25	1.52	0.26	15.5
KGS743	605601	6608374	34.7	75.1	7.27	22.4	3.96	0.49	2.89	0.46	2.83	0.54	1.48	0.22	1.47	0.24	14.2
KGS744	605600	6608326	27.4	55.6	5.27	19	3.36	0.45	2.8	0.41	2.61	0.49	1.61	0.18	1.43	0.25	13.9
KGS745	605601	6608275	17.7	37.7	3.83	13.8	2.75	0.22	2	0.31	2.25	0.42	1.17	0.19	1.46	0.24	12.7
KGS746	605575	6608578	63.3	121	12.05	39.8	7.04	0.74	4.68	0.83	5.01	0.93	2.79	0.39	2.51	0.41	26.8
KGS747	605575	6608552	67.6	133	12.4	39.9	6.5	0.79	4.88	0.81	4.97	0.96	2.84	0.39	2.48	0.37	26.6
KGS748	605575	6608527	57.5	113	10.95	34.9	5.93	0.56	4.42	0.75	4.5	0.96	2.61	0.39	2.68	0.43	24.1
KGS749	605575	6608502	60.5	117.5	10.9	34.5	6.2	0.63	4.43	0.72	4.35	0.84	2.74	0.42	2.45	0.37	22.8
KGS750	605576	6608478	75.2	137	11.75	37	6.22	0.61	4.4	0.68	4.13	0.7	2.11	0.29	1.82	0.23	19.6
KGS751	605575	6608453	93.4	181.5	17.2	51.1	9.01	0.83	5.56	0.94	5.35	0.96	2.48	0.38	2.4	0.23	24.6
KGS752	605575	6608428	88.8	175.5	17.3	52.4	8.35	0.84	5.53	0.82	5.03	0.86	2.62	0.28	2.1	0.23	24.1
KGS753	605575	6608403	42.9	86.4	8.14	27.7	4.22	0.53	2.82	0.45	3.25	0.53	1.68	0.23	1.62	0.24	13.6
KGS754	605575	6608377	27.5	56.1	5.4	16.3	2.77	0.35	1.96	0.39	2.15	0.49	1.29	0.18	1.2	0.15	11.9
KGS755	605576	6608352	28.3	60.6	5.44	19.1	3.13	0.38	2.43	0.46	2.56	0.59	1.75	0.27	1.67	0.25	15.5
KGS756	605575	6608327	21.4	36.1	3.41	10.3	1.95	0.24	1.44	0.23	1.78	0.34	1.18	0.19	1.19	0.14	8.8
KGS757	605575	6608302	19.5	39.5	4.12	14.8	2.61	0.46	1.94	0.34	2.08	0.41	1.28	0.24	1.38	0.18	12
KGS758	605575	6608277	20.2	40.8	4.12	13.4	2.46	0.34	1.94	0.36	2.23	0.41	1.34	0.2	1.51	0.2	12.9
KGS759	605550	6608576	81.8	153.5	16.45	53.9	8.97	0.97	6.58	0.98	5.94	1.14	3.22	0.48	2.59	0.34	31.5
KGS760	605551	6608527	75.5	138	13.55	44.1	6.5	0.82	5.14	0.79	4.79	0.88	2.43	0.35	1.94	0.3	23.8
KGS761	605551	6608477	49.6	92.1	8.76	27.8	5.02	0.56	3.12	0.5	3.69	0.59	1.92	0.29	1.76	0.19	17.7
KGS762	605550	6608427	37	74.1	6.97	21.9	4.37	0.52	2.62	0.39	2.41	0.53	1.33	0.21	1.44	0.2	13.7
KGS763	605550	6608377	23.9	48.6	4.4	13.6	2.12	0.32	1.82	0.29	2.06	0.4	1.11	0.16	1.23	0.19	11.5
KGS764	605551	6608327	22.6	46.2	4.9	17.1	2.8	0.43	2.23	0.37	2.32	0.49	1.49	0.2	1.55	0.24	14.4
KGS765	605550	6608277	23.5	50.3	4.73	18	3.38	0.49	2.71	0.45	2.93	0.61	1.75	0.25	2.05	0.26	15.6
KGS766	605526	6608453	49.8	93.1	8.7	27.3	4.24	0.56	3.13	0.57	3.37	0.64	1.76	0.25	1.79	0.2	16.5
KGS767	605527	6608427	52	95.1	9.04	28.3	4.58	0.53	3.22	0.56	3.23	0.55	1.73	0.25	1.48	0.19	15.2
KGS768	605525	6608402	51.9	106.5	10.25	34.9	4.63	0.69	3.71	0.63	3.96	0.69	2.02	0.29	1.86	0.22	18.1
KGS769	605524	6608378	34.3	79.7	7.62	26.1	4.33	0.51	3.41	0.48	3.25	0.58	1.79	0.28	1.56	0.29	16.6
KGS770	605525	6608352	25.2	54.1	5.28	17.7	3.45	0.44	2.3	0.38	2.53	0.47	1.32	0.22	1.25	0.16	11.3
KGS771	605524	6608327	23.3	47	4.89	17.4	3.28	0.51	2.14	0.31	2.36	0.44	1.44	0.21	1.41	0.21	10.9
KGS772	605524	6608301	20.3	41.7	4.15	15.9	2.48	0.4	1.96	0.32	2.33	0.49	1.28	0.21	1.27	0.21	11.7
KGS774	605501	6608427	47.5	89.6	8.44	26.6	3.99	0.57	3.3	0.55	3.09	0.56	1.62	0.21	1.41	0.19	16.9
KGS775	605502	6608402	45.4	89.8	8.91	31.4	5.24	0.68	3.79	0.61	3.46	0.63	1.86	0.26	1.72	0.24	18.8
KGS776	605500	6608376	30.6	66.2	6.68	23.4	4.04	0.56	2.77	0.45	3.09	0.55	1.83	0.29	1.68	0.2	16.9
KGS777	605501	6608327	25.4	50.6	5.16	17	3.24	0.47	1.97	0.37	2.09	0.41	1.27	0.2	1.24	0.17	11.1
KGS778	605501	6608278	28.5	61.7	5.95	21.7	4.1	0.51	2.79	0.44	3.19	0.6	1.96	0.23	1.88	0.26	15.7

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS779	605475	6608452	75	137.5	14.2	46.5	8.05	0.86	6.43	0.88	5.05	1.05	2.84	0.42	2.46	0.38	28.4
KGS780	605474	6608427	52	100	9.97	30.2	4.9	0.62	3.82	0.6	3.66	0.71	1.87	0.28	1.72	0.24	17.8
KGS781	605477	6608402	56.9	117.5	12.6	42.4	6.94	0.77	5.11	0.68	4.55	0.75	2.16	0.31	2.07	0.36	21.1
KGS782	605475	6608377	38.3	76.4	7.67	25.6	4.8	0.56	3.27	0.48	3.08	0.56	1.67	0.27	2.08	0.22	16.7
KGS783	605474	6608352	38	80.5	8.04	27.7	4.89	0.65	3.03	0.47	3.14	0.53	1.74	0.26	1.69	0.25	16
KGS784	605476	6608327	41.7	88.4	9.31	29.5	5.18	0.57	3.73	0.6	3.86	0.66	2.48	0.33	2.43	0.33	22.1
KGS785	605476	6608302	7.8	14.7	1.52	4.6	1.16	0.16	0.83	0.14	1.23	0.22	0.97	0.14	1.05	0.15	5.9
KGS786	605476	6608277	32.7	66	6.82	25.2	4.25	0.61	3.27	0.49	2.84	0.59	1.74	0.25	1.78	0.2	15
KGS787	605449	6608428	56.2	107.5	11.2	37.3	6.33	0.75	4.55	0.67	3.96	0.76	2.13	0.32	1.98	0.31	20.6
KGS788	605450	6608377	40.6	81.7	8.01	26.1	4.37	0.5	3.02	0.49	2.66	0.53	1.58	0.24	1.3	0.22	13.3
KGS789	605450	6608326	49.4	103	10.3	33.6	5.42	0.89	3.96	0.62	3.39	0.63	1.89	0.27	1.86	0.25	17.6
KGS790	605452	6608278	24.3	35.8	3.41	10.1	1.95	0.24	1.48	0.25	1.61	0.3	0.94	0.16	1.17	0.15	8.7
KGS791	604401	6606499	123.5	218	21.1	67.6	9.57	0.86	5.88	0.71	3.48	0.62	2.1	0.32	1.88	0.32	21
KGS792	604401	6606600	93.2	166.5	16.15	53.1	8.12	0.52	5.82	0.78	4.9	0.74	2.42	0.37	2.29	0.42	26.9
KGS793	604399	6606699	98.5	173.5	17.7	57	8.88	0.57	6.31	0.86	5.11	0.87	2.32	0.34	2.36	0.34	27.4
KGS794	604400	6606800	147	265	27.5	89.5	13.5	0.67	9.91	1.34	6.31	1.2	3.1	0.39	2.25	0.34	31
KGS795	604500	6606499	95.7	153	16.05	51.5	7.72	0.82	5.63	0.89	5.02	1	2.85	0.41	2.88	0.45	29.6
KGS796	604501	6606600	67.3	116.5	11.35	36.6	5.44	0.46	3.48	0.5	2.61	0.5	1.56	0.26	1.62	0.27	15.1
KGS797	604501	6606701	55.7	89.3	9.63	32	5.2	0.55	3.71	0.6	3.2	0.63	2	0.26	1.96	0.34	21.5
KGS798	604502	6606799	54	94.7	9.36	28.5	5.38	0.47	3.38	0.58	3.75	0.71	2	0.32	1.77	0.25	21.9
KGS799	604601	6606501	131.5	238	22.9	72.2	9.85	0.74	7.36	1.04	6.22	0.98	3.17	0.42	2.41	0.39	31
KGS800	604601	6606601	86.6	146.5	15.1	47.8	6.79	0.48	5.48	0.74	4.23	0.73	2.34	0.29	2.1	0.34	23.7
KGS801	604600	6606701	64.6	111.5	11.25	35	6	0.59	3.98	0.58	3.3	0.63	2.08	0.32	2.23	0.4	20
KGS802	604601	6606799	94.8	170	16.7	54.9	8.64	0.55	6.26	0.84	5.23	0.93	2.53	0.37	2.41	0.37	27
KGS804	604703	6606600	94.9	172	16.55	52.7	8.51	0.52	5.96	0.85	4.62	0.98	2.75	0.4	2.58	0.43	28.6
KGS805	604798	6606500	99.8	181	17.35	54.5	7.77	0.43	5.59	0.77	4.77	0.84	2.72	0.36	2.37	0.36	26
KGS806	604798	6606599	103	189	18.7	56.7	8.77	0.48	6.48	0.92	4.67	0.93	2.65	0.38	2.29	0.35	27.8
KGS807	604901	6606501	79.7	135	14.8	48.5	7.94	0.99	6	0.82	5.26	0.98	2.86	0.36	2.65	0.38	27.3
KGS809	605000	6606500	161.5	296	28.2	88.6	12.85	0.66	8.7	1.22	7.2	1.26	3.5	0.49	3.22	0.48	33.4
KGS810	604998	6606601	282	508	50	156	23.3	0.66	15.45	2.05	9.7	1.56	4.21	0.45	2.99	0.45	44.6
KGS811	605201	6606700	149.5	261	25.3	80.4	12.55	0.64	8.6	1.16	6.05	1.09	3.17	0.45	2.9	0.42	34.6
KGS812	605202	6606699	43	75.7	7.67	23.6	4.32	0.4	3.16	0.52	2.9	0.58	1.75	0.22	1.93	0.28	19
KGS814	605102	6606600	90.2	155	16.7	53.1	8.26	0.81	6.2	0.88	5.08	1.07	3.09	0.45	3.1	0.44	31.1
KGS815	605100	6606501	75.4	124	13	39.7	6.23	0.63	4.45	0.7	3.64	0.66	2.06	0.29	2.05	0.27	20.9
KGS816	605100	6606399	112	199.5	19.2	62.4	8.88	0.5	6.85	1.01	5.86	1	3.03	0.42	2.66	0.49	32.7
KGS818	605201	6606600	67.9	119.5	12.45	38.1	5.53	0.56	4.05	0.69	4.14	0.73	2.53	0.36	2.68	0.36	25
KGS819	605202	6606499	90.3	152	16.25	50.8	7.83	0.66	5.47	0.74	4.04	0.68	1.83	0.28	1.74	0.32	20.6
KGS820	605201	6606401	84.7	156.5	14.85	45.3	7.27	0.51	5.29	0.76	4.31	0.77	2.14	0.33	2.27	0.38	24.4
KGS821	605300	6606800	134	227	22.2	75	11.1	0.87	7.27	0.87	5.48	0.94	2.71	0.35	2.43	0.37	27.8
KGS822	605300	6606700	92.6	168	16.45	50.6	8.05	0.53	5.34	0.72	3.45	0.66	1.74	0.26	1.72	0.27	19.3
KGS823	605301	6606601	69.1	122	12.1	40	6	0.61	4	0.59	3.02	0.58	1.6	0.23	1.53	0.22	16.2
KGS824	605302	6606502	95.6	176.5	19.05	62.2	9.61	0.94	7.72	1.12	5.4	1.06	2.9	0.37	2.54	0.44	28.3
KGS825	605300	6606400	102	180.5	17.55	58.5	8.62	0.58	6.32	0.89	5.07	0.83	2.24	0.35	2.14	0.28	23
KGS826	605401	6606700	81.4	155	14.95	49.8	7.97	0.71	5.36	0.8	3.87	0.74	2.21	0.28	1.87	0.22	21.4
KGS827	605400	6606600	38.5	66	6.66	21.5	3.9	0.41	2.71	0.4	2.5	0.5	1.26	0.19	1.27	0.18	13.4
KGS828	605401	6606502	124.5	232	22.4	71.1	10.8	0.76	7.2	1.04	5.34	0.93	2.62	0.31	2.36	0.39	28.3
KGS829	605402	6606400	77.3	138	13.6	42.4	6.39	0.47	4.93	0.65	3.11	0.64	1.72	0.23	1.55	0.27	18.4
KGS830	605499	6606700	68.8	101	13.85	46.2	7.76	1.06	5.49	0.72	4.5	0.87	2.3	0.35	1.99	0.31	24.9
KGS831	605500	6606600	43.5	72.3	7.95	26.4	4.31	0.58	3.12	0.54	2.91	0.53	1.93	0.23	1.74	0.29	15.8
KGS832	605500	6606501	81.4	133	14.25	46.5	6.41	0.52	4.9	0.73	3.61	0.65	1.52	0.19	1.51	0.23	17.8
KGS833	605600	6606699	71.5	119.5	12.55	39.4	6.18	0.71	4.08	0.59	3.51	0.65	1.74	0.25	1.64	0.22	17.8
KGS834	605600	6606601	155	275	27.5	82.5	12.55	0.56	7.97	1.12	5.62	0.95	2.59	0.34	2.19	0.33	26.4
KGS835	605701	6606700	118	211	20.3	60.3	8.14	0.6	6.67	0.91	4.49	0.74	2.13	0.31	2.11	0.4	26.3
KGS836	605700	6606600	219	403	38.1	116	18.25	0.63	11.85	1.44	7.15	1.23	3.3	0.45	3.14	0.46	36.9
KGS837	605799	6606700	113	211	20	63.3	10	0.45	7.49	1.12	6.5	1.2	3.53	0.44	3.53	0.48	38.4
KGS838	605899	6606300	35	68.1	6.63	20.6	4.12	0.56	3.08	0.54	3.11	0.56	1.99	0.22	1.89	0.35	15.1
KGS839	606001	6606399	45.6	94.8	8.64	29.8	5.63	0.8	4.15	0.67	4.32	0.91	2.44	0.32	2.53	0.38	21.9
KGS840	606001	6606300	47.8	134.5	8.86	29.6	5.62	0.73	4.25	0.7	4.27	0.86	2.2	0.36	2.48	0.37	22.5
KGS841	606099	6606398	28.7	64.4	5.99	20.2	3.84	0.72	3.26	0.53	3.2	0.71	1.83	0.26	2	0.27	16.9
KGS842	606100	6606298	16.8	32.6	3.17	10.7	2.26	0.29	1.46	0.25	1.68	0.34	0.97	0.13	1.28	0.18	9.8
KGSHT036	605827	6606494	160	293	28.4	87.6	14.65	0.81	9.15	1.28	7.11	1.26	3.62	0.55	4.02	0.52	38.8
KGS329	605500	6608400	41	82.9	8.12	27.7	4.46	0.59	3.58	0.57	3.05	0.6	1.64	0.24	1.57	0.26	15.2
KGS330	605600	6608400	31.7	67	6.45	20.4	3.24	0.5	2.51	0.42	2.4	0.47	1.4	0.18	1.27	0.15	11.6



Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS332	605201	6608500	59.9	145.5	12.5	41.4	6.42	0.96	5.31	1	6.19	1.3	4.03	0.57	3.47	0.42	36.3
KGS333	605301	6608500	61.6	131.5	12.3	41.6	6.88	1.07	5.98	1.01	6.6	1.38	4.22	0.6	3.76	0.49	38.3
KGS334	605400	6608499	51.1	103.5	10.05	33.4	5.52	0.8	5.12	0.86	5.29	1.1	3.46	0.56	3.38	0.45	34.5
KGS335	605499	6608499	38.4	72.2	6.63	22.9	3.91	0.53	2.97	0.49	3.11	0.57	1.74	0.27	1.85	0.24	14.8
KGS336	605599	6608499	74.4	141	12.8	40.6	6.45	0.86	4.95	0.83	4.74	0.89	2.68	0.39	2.38	0.31	23.6
KGS339	605200	6608600	58.5	106.5	11	36.9	5.64	0.91	4.93	0.92	5.9	1.28	3.88	0.54	2.86	0.33	34
KGS340	605301	6608601	46.2	91.2	9.29	31.4	5.55	0.81	4.37	0.76	4.7	1.02	3.1	0.45	3.1	0.4	29.5
KGS341	605398	6608599	64.4	121.5	12.8	44.8	7.41	1.05	6.41	0.98	5.35	1.14	3.17	0.46	3.08	0.42	30.5
KGS342	605500	6608600	78.6	141	14.8	49.2	7.61	1.04	6.34	1	5.8	1.1	2.99	0.41	2.61	0.38	29.8
KGS343	605600	6608600	71.3	128	12.65	42.6	7.1	0.88	5.42	0.87	5.24	1.04	3.14	0.47	3.05	0.36	27.3
KGS347	605200	6608704	74.1	149	16.2	56	8.89	1.16	7.25	1.2	7.4	1.58	4.91	0.72	4.12	0.51	42.4
KGS348	605302	6608699	38.1	78.7	8.22	28	4.98	0.78	4.01	0.73	4.65	0.98	3.08	0.42	2.87	0.4	27.3
KGS349	605400	6608700	39.3	71.9	7.96	27.2	4.31	0.73	4	0.66	4.2	0.86	2.77	0.41	2.52	0.35	23.5
KGS350	605499	6608699	122.5	223	26.4	90.4	15.15	1.62	11.4	1.89	11	2.23	6.84	0.93	5.41	0.73	60.7
KGS351	605601	6608699	67.9	109.5	12.95	44.6	6.99	1.04	5.48	0.94	5.84	1.18	3.68	0.48	2.93	0.39	35.3
KGS352	605702	6608699	124.5	240	24.4	80.5	12.5	1.41	9.29	1.52	9.06	1.8	5.18	0.76	4.41	0.54	50.2
KGS353	605300	6608799	95.9	166	17.1	56.6	8.15	1.01	6.2	1.06	5.96	1.23	3.28	0.45	2.32	0.33	32.5
KGS354	605405	6608801	116.5	255	24.4	83.9	13	1.5	10.1	1.61	9.65	1.9	5.6	0.74	4.11	0.49	50.7
KGS355	605500	6608800	57	87.9	10.45	35.4	5.81	0.85	4.49	0.65	3.96	0.68	2.22	0.29	1.67	0.22	20.1
KGS356	605601	6608801	91.5	185	16.55	56.2	8.9	1.24	7.07	1.2	6.66	1.23	3.7	0.47	2.96	0.42	34.8
KGS357	605702	6608803	57.5	114	11.35	37.3	5.78	0.95	5.03	0.83	4.96	0.94	3.02	0.41	2.55	0.4	27.3
KGS358	605400	6608899	92.5	142.5	17.3	58.5	9.67	1.1	7.36	1.07	6.39	1.23	3.48	0.45	2.8	0.36	32.8
KGS359	605500	6608901	55	89.3	10.2	35.1	6.28	0.88	4.58	0.7	4.08	0.79	2.38	0.3	1.92	0.25	22.9
KGS360	605602	6608900	63.9	95.7	11.6	38	6.62	0.87	4.8	0.83	4.99	0.99	2.79	0.45	2.55	0.33	26.7
KGS361	605700	6608900	82	130	16.15	54.3	9.18	1.15	6.81	1.1	6.22	1.25	3.8	0.5	2.9	0.36	33.3
KGS362	605801	6608901	84	142.5	16.05	55.5	8.6	1.22	6.71	1.13	6.33	1.2	3.41	0.46	2.71	0.33	31.3
KGS363	605899	6608900	51	95	8.67	28.4	4.49	0.78	3.52	0.63	3.42	0.69	2.24	0.3	2.14	0.26	20.8
KGS364	604698	6606700	101	186	18.05	57.9	9.13	0.57	6.59	1.04	5.5	1.05	2.75	0.4	2.72	0.36	30.8
KGS365	604798	6606703	143	269	25.3	80.7	12.2	0.7	9.4	1.4	7.25	1.36	3.98	0.54	3.41	0.49	39.1
KGS366	604900	6606701	122	224	21.5	67.8	10	0.63	6.96	0.96	4.94	0.9	2.57	0.33	1.94	0.27	24.8
KGS368	605098	6606701	77.4	127	12.75	38.3	5.86	0.51	3.91	0.58	3.25	0.56	1.52	0.2	1.56	0.21	15.8
KGS369	604700	6606799	79.5	139.5	14.2	44.9	7.75	0.4	5.03	0.72	3.65	0.72	2.14	0.28	1.84	0.22	19
KGS370	604800	6606801	126.5	221	21.3	69.5	11.2	0.6	6.83	0.93	5.02	0.96	2.51	0.34	2.22	0.28	23.7
KGS371	604902	6606798	142	250	24.1	79.1	12.2	0.51	7.6	0.95	4.98	0.91	2.56	0.32	2.43	0.37	25.1
KGS372	605002	6606802	196.5	350	33.9	111	18.05	0.68	11.95	1.77	9.71	1.88	4.84	0.73	4.66	0.68	50.4
KGS373	605100	6606799	77.5	126	12.55	40.9	6.92	0.43	4.13	0.64	3.1	0.56	1.52	0.22	1.5	0.21	15.1
KGS374	605199	6606800	144	247	24.1	73.5	11.6	0.7	7.5	1	4.85	0.91	2.31	0.33	1.96	0.3	23
KGS376	604800	6606901	151.5	268	25.7	83.1	13.4	0.56	7.88	1.12	6.05	1.02	2.81	0.42	2.88	0.4	27.4
KGS377	604907	6606896	142	253	23.4	74.9	11.8	0.68	7.82	1.06	5.44	0.96	2.57	0.34	2.29	0.33	24.9
KGS378	605000	6606900	83.7	143.5	13.95	44.8	7.39	0.38	4.62	0.61	3.27	0.63	1.7	0.21	1.4	0.18	16.2
KGS380	605202	6606901	106.5	190.5	18.05	57.3	9.05	0.67	5.86	0.78	4.32	0.73	2.09	0.24	1.69	0.22	19.5
KGS381	605300	6606900	110	187.5	18.65	60.5	9.58	0.7	6.21	0.87	4.8	0.88	2.44	0.33	2.51	0.31	24
KGS382	604702	6606999	87.1	146.5	14.5	47.3	7.97	0.45	5.13	0.7	3.49	0.68	1.84	0.27	1.93	0.27	18.4
KGS383	604802	6606999	35.6	61.4	6.12	19.6	3.24	0.42	2.35	0.39	2.13	0.45	1.3	0.19	1.5	0.23	12.2
KGS384	604901	6606998	128	219	22	70.5	11.1	0.8	7.43	1.06	5.49	1.12	2.81	0.41	2.7	0.33	28.8
KGS385	604998	6606999	139	222	24.8	83.3	12.8	1.02	8.63	1.21	6.3	1.12	3.02	0.36	2.62	0.38	29.1
KGS386	605103	6607001	131	225	23.1	74.3	11.5	0.84	8.05	1.09	5.82	1.04	2.69	0.37	2.46	0.37	26.3
KGS387	605201	6606999	130.5	232	22.5	76.8	11.8	1.1	7.9	1.11	6.11	1.1	2.86	0.37	2.59	0.43	29
KGS388	605301	6607000	104	180	18.2	59.1	9.79	0.8	6.21	0.79	4.2	0.77	2.13	0.3	1.94	0.32	20.3
KGS389	604702	6607100	150	264	25.2	82.5	13.35	0.77	8.48	1.26	6.55	1.27	3.31	0.49	3.48	0.52	32.2
KGS390	604801	6607100	26.9	44.3	4.34	14.8	2.74	0.46	1.96	0.33	2.09	0.43	1.38	0.19	1.72	0.24	12
KGS391	604900	6607100	47.4	82.4	7.92	25.7	4.4	0.31	2.67	0.41	2.38	0.45	1.17	0.18	1.19	0.18	11.6
KGS392	605001	6607100	116	254	20.5	67.9	11.9	1.3	8.75	1.38	7.41	1.44	4.06	0.54	3.87	0.51	36.6
KGS393	605101	6607100	93.6	158.5	16.15	53.5	9.1	0.72	5.89	0.79	4.2	0.83	2.13	0.31	2.1	0.29	20.8
KGS395	604699	6607200	180	323	31.5	99.8	16.35	0.72	10.1	1.28	6.7	1.1	3.05	0.34	2.58	0.38	29.2
KGS396	604800	6607200	97.5	162	16.45	52	8.68	0.74	5.57	0.81	4.2	0.82	2.15	0.25	1.92	0.26	20.2
KGS397	604901	6607200	30.4	51	5.01	16.2	2.71	0.46	2.39	0.39	2.3	0.56	1.6	0.27	1.81	0.24	14.2
KGS398	605000	6607200	36.5	65.3	6.53	20.5	3.41	0.41	2.63	0.4	2.19	0.46	1.22	0.16	1.4	0.22	11.8
KGS399	605101	6607201	41.2	70.9	6.91	22.5	4.36	0.36	2.76	0.4	2.25	0.52	1.5	0.2	1.51	0.18	12.9
KGS401	604801	6607300	86.8	150	14.55	47.5	7.79	0.87	4.99	0.76	4.12	0.73	1.88	0.29	1.84	0.23	18.6
KGS402	604899	6607300	121	208	18.9	59.1	9.24	1.02	5.43	0.9	4.4	0.8	2.2	0.3	2.12	0.28	19.5
KGS403	605001	6607299	28.4	46	4.65	15.4	2.72	0.42	1.85	0.32	1.92	0.4	1.36	0.17	1.4	0.22	11.2
KGS404	605101	6607300	48.5	81.8	7.96	25	4.08	0.47	3.01	0.47	2.63	0.55	1.48	0.27	1.84	0.23	14.3

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS405	605424	6606200	88.2	144	15.6	47.6	7.38	0.65	5.68	0.78	3.81	0.76	2.13	0.26	1.9	0.28	19.8
KGS406	605495	6606129	73.2	120.5	13.35	42.5	6.61	0.83	5.21	0.72	3.77	0.74	2.2	0.25	1.68	0.27	19.3
KGS407	605566	6606058	98.6	260	18.25	57.6	9.41	0.9	6.76	1.04	5.17	1.09	2.77	0.39	2.68	0.35	27.3
KGS408	605423	6606340	71.3	125.5	12	36.3	5.97	0.47	3.63	0.56	2.89	0.55	1.44	0.2	1.36	0.18	14.5
KGS409	605495	6606270	132	223	23.6	73.9	11.4	1.08	8.35	1.18	6.04	1.18	3.12	0.42	2.56	0.41	31.6
KGS410	605568	6606200	74.5	127	13.05	41.6	6.92	0.72	4.66	0.67	3.74	0.7	1.86	0.25	1.54	0.24	18.7
KGS411	605638	6606129	102.5	204	18.95	58.4	8.72	0.93	5.91	0.92	4.71	0.88	2.28	0.3	2.15	0.3	22.9
KGS412	605495	6606413	140.5	226	24.2	74.5	11	0.81	7.75	1.1	5.46	1.17	2.94	0.41	2.74	0.45	30.8
KGS413	605566	6606341	127.5	221	22.4	68.4	11.1	0.99	7.83	1.1	5.71	1.06	2.71	0.34	2.27	0.37	28.1
KGS414	605636	6606271	108.5	214	20	64	10.35	1	7.25	0.95	5.28	1.04	2.63	0.41	2.65	0.42	26.2
KGS415	605708	6606200	73	130.5	14.6	50.8	9	1.56	6.84	0.98	5.17	1.06	2.46	0.34	2.17	0.32	23
KGS416	605568	6606482	146.5	258	25.5	81.4	11.55	0.69	8.2	1.08	5.37	0.96	2.53	0.31	2.25	0.33	25.5
KGS418	605708	6606338	82.1	186	14.9	48.1	7.42	0.58	5.36	0.76	3.9	0.78	2.08	0.28	1.84	0.28	20.1
KGS419	605778	6606273	42.4	71.7	6.95	21.1	3.39	0.32	2.24	0.34	1.82	0.36	0.83	0.14	0.93	0.13	9.1
KGS420	605708	6606483	186	330	32.7	98.3	15.25	0.64	9.78	1.3	6	1.08	2.48	0.36	2.23	0.34	26.9
KGS421	605778	6606412	114	206	21.6	67.4	10.95	0.91	7.35	1.04	4.94	0.94	2.35	0.27	1.86	0.3	22.5
KGS422	605849	6606341	94.7	173.5	17.2	52.6	8.95	0.58	5.78	0.89	4.24	0.79	2.17	0.29	2.12	0.28	20.9
KGS423	605778	6606554	238	421	41.8	124.5	19.4	0.71	12.3	1.66	7.89	1.47	3.78	0.47	3.03	0.51	40.4
KGS425	605919	6606412	127	236	22.7	70	11	0.67	7.74	1.06	5.23	0.95	2.55	0.33	2.3	0.3	24
KGS426	605849	6606623	122	210	20.8	60.8	9.65	0.48	6.66	0.93	4.35	0.8	1.86	0.24	1.6	0.27	20.5
KGS427	605918	6606554	120	214	21.2	64.8	10.55	0.57	7.4	1.04	5.4	1.14	2.93	0.41	2.77	0.43	30.8
KGS428	605991	6606483	114.5	208	20.7	64.1	10.8	0.63	7.06	1.03	4.86	0.91	2.16	0.3	2.15	0.29	22.1
KGS429	605849	6606766	115	200	20.3	62.3	10.25	0.5	7.68	1.1	5.53	1.13	3.04	0.45	2.98	0.44	32.5
KGS430	605922	6606695	89.1	152.5	14.95	46.1	6.84	0.5	4.9	0.67	4.02	0.67	1.59	0.23	1.57	0.24	17.9
KGS431	605989	6606625	95	162.5	16.6	50.6	8.14	0.5	6.05	0.88	4.22	0.84	2.44	0.36	2.29	0.35	22.3
KGS432	606062	6606554	55.1	98.7	9.78	30.6	5.16	0.35	3.84	0.59	3.2	0.7	1.74	0.3	2.17	0.29	17.7
KGS433	606131	6606483	16.8	36.4	3.78	12.8	2.25	0.42	2.24	0.36	2.16	0.51	1.46	0.22	1.41	0.24	11.8
KGS434	605920	6606836	112	193	19.9	60.6	9.78	0.59	6.91	1.02	5.19	1.08	2.54	0.36	2.45	0.37	28.6
KGS435	605988	6606766	103.5	180	18.4	55.1	8.9	0.58	6.77	0.96	4.71	0.88	2.49	0.27	2.32	0.3	24.8
KGS436	606061	6606695	86.7	153	15.55	49.6	8.12	0.54	5.66	0.75	3.98	0.75	1.82	0.27	1.93	0.29	19.7
KGS437	606131	6606624	36.7	66.7	6.46	20.5	3.46	0.37	2.71	0.48	2.7	0.55	1.34	0.2	1.47	0.22	13.6
KGS438	606202	6606553	10	18.6	1.86	6.6	1.37	0.16	1.22	0.19	1.22	0.3	0.81	0.13	1.04	0.17	7.4
KGS439	605990	6606908	96.2	158	17.7	55.8	9.64	0.75	6.81	0.93	5.63	0.97	2.93	0.46	2.87	0.4	28.3
KGS440	606061	6606836	123	227	22.1	67.8	10.4	0.58	7.7	1	5.38	0.91	2.42	0.4	2.26	0.33	25
KGS441	606132	6606766	192.5	368	34.9	109	17.35	0.92	12.15	1.8	10.1	1.98	5.56	0.87	5.73	0.81	63.2
KGS442	606202	6606694	17.4	36.1	3.61	11.6	2.29	0.29	1.76	0.32	1.75	0.38	1.12	0.18	1.18	0.18	10.8
KGS443	606273	6606623	13.9	29.8	2.69	9.6	1.56	0.2	1.42	0.29	1.88	0.36	1.22	0.2	1.36	0.22	11.3
KGS444	606061	6606977	66.6	115.5	12.05	36.6	6.4	0.61	4.74	0.67	3.78	0.68	1.94	0.29	1.87	0.28	20.4
KGS445	606131	6606907	99.7	189	18.2	58.2	9.57	0.61	6.9	0.93	5.01	0.91	2.47	0.38	2.42	0.3	25.9
KGS446	606202	6606834	82.3	146	15.1	48.3	7.49	0.61	5.32	0.81	4.53	0.77	2.48	0.37	2.25	0.32	23.9
KGS447	606274	6606766	16.8	36.3	3.49	11.5	2.37	0.26	1.83	0.29	1.95	0.39	1.08	0.2	1.21	0.19	10.7
KGS448	606344	6606695	22.5	45.1	4.58	15.6	2.83	0.45	2.42	0.39	2.52	0.48	1.5	0.25	1.76	0.28	14.7
KGS449	606131	6607048	51.4	85.8	9.25	29.8	5.11	0.57	3.91	0.54	3.55	0.6	1.88	0.29	1.88	0.27	18.4
KGS450	606203	6606977	69.7	141	13.75	43	7.2	0.52	5.33	0.8	3.99	0.79	2.4	0.38	2.38	0.27	21.6
KGS451	606274	6606908	37.9	78.7	7.46	24.4	4.63	0.4	3.49	0.55	2.93	0.63	1.96	0.32	2.22	0.32	17.3
KGS452	606343	6606837	18.6	41.4	3.82	13	2.41	0.26	1.88	0.36	2.1	0.41	1.3	0.21	1.48	0.18	12.2
KGS453	606414	6606768	26	67.4	5.49	18.8	3.59	0.55	3.07	0.53	3.77	0.75	2.53	0.43	2.64	0.41	22.4
KGS454	606273	6607049	50.5	104	9.85	31.3	5.89	0.45	4.19	0.61	3.87	0.67	2.16	0.34	2.27	0.31	19.9
KGS455	606344	6606977	58.7	115.5	11.35	36.4	6.66	0.41	5.2	0.81	4.57	0.94	2.84	0.45	3.02	0.39	26.4
KGS456	606414	6606906	27.7	70.3	5.74	21	3.95	0.49	3.18	0.53	3.21	0.69	1.98	0.29	2.12	0.33	18.5
KGS497	605000	6607999	32.1	52	5.06	16.2	2.94	0.53	2.3	0.41	2.47	0.45	1.44	0.22	1.64	0.23	13.3
KGS498	605052	6608003	24.6	42.2	4.19	14.4	2.6	0.28	1.96	0.32	2.14	0.39	1.12	0.23	1.38	0.19	11.7
KGS499	605101	6608000	35.7	66	6.79	22.2	4.05	0.29	2.8	0.45	2.88	0.55	1.68	0.24	1.74	0.22	15.4
KGS502	605003	6608048	25	47.5	4.66	14.6	2.65	0.48	1.95	0.34	2.43	0.47	1.36	0.2	1.42	0.2	12.1
KGS503	605049	6608049	24.5	45.8	4.59	15	2.75	0.31	2.28	0.37	2.5	0.48	1.48	0.26	1.69	0.22	14.9
KGS504	605099	6608050	19.6	36.4	3.63	12.4	2.09	0.27	1.8	0.3	1.84	0.39	1.13	0.21	1.28	0.26	12.6
KGS505	605150	6608050	35.2	66.2	6.48	22	3.77	0.37	2.94	0.5	3.23	0.6	1.98	0.27	2.29	0.32	18.7
KGS506	605200	6608050	26.2	46.9	4.9	15.6	2.61	0.25	2.15	0.4	2.4	0.55	1.53	0.26	1.91	0.25	16
KGS507	605251	6608050	29.1	46.8	4.33	12.6	2.29	0.23	1.88	0.35	2.32	0.47	1.5	0.23	1.78	0.23	14.5
KGS508	605003	6608101	48.7	132	8.37	28.8	4.94	0.63	3.8	0.55	3.98	0.75	2.31	0.32	2.22	0.28	21.4
KGS509	605050	6608101	19.2	44	3.32	11.2	1.96	0.37	1.72	0.29	2.12	0.39	1.14	0.21	1.24	0.17	10.5
KGS510	605101	6608100	32.3	52.6	5.27	16.7	2.95	0.38	2.59	0.44	2.86	0.61	2	0.26	1.72	0.22	17
KGS511	605152	6608099	76.2	158	15.05	50.3	8.64	0.99	6.43	0.96	5.78	0.98	2.69	0.38	2.8	0.33	27.7

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS512	605202	6608101	31	61.9	6.15	20.2	3.59	0.49	2.97	0.51	2.81	0.59	1.61	0.24	1.64	0.26	15.3
KGS513	605247	6608099	34.4	59.1	5.55	18	3.05	0.33	2.69	0.53	2.84	0.6	1.88	0.3	1.83	0.27	18.2
KGS514	605301	6608100	38.1	67.3	6.19	20.1	3.3	0.37	2.84	0.52	2.94	0.65	1.93	0.25	1.95	0.31	17.6
KGS515	605000	6608150	31.4	67.1	5.57	18.5	3.33	0.63	2.59	0.44	2.66	0.56	1.44	0.23	1.73	0.21	13.2
KGS517	605103	6608148	56.7	99	9.05	29.7	5.26	0.72	4.37	0.71	4.07	0.75	2.14	0.3	1.98	0.25	19.2
KGS518	605148	6608148	74.9	171	14.5	48.6	8.23	0.92	6.28	1.1	6.13	1.09	2.95	0.43	2.63	0.35	27.9
KGS519	605201	6608151	45.2	97.8	9.13	29.1	5.17	0.73	4.01	0.69	3.98	0.73	1.94	0.29	1.84	0.26	19.2
KGS520	605250	6608150	24.4	44.7	4.53	14.9	2.58	0.34	2.4	0.4	2.37	0.51	1.6	0.21	1.49	0.21	15.6
KGS521	605300	6608150	31.1	52.4	4.96	15.7	2.35	0.28	2.17	0.38	2.14	0.48	1.44	0.2	1.41	0.18	12.6
KGS522	605351	6608150	48.5	78.9	7.09	21.9	3.29	0.37	2.6	0.5	2.67	0.57	1.54	0.23	1.67	0.2	14.3
KGS523	605401	6608150	24.6	44.8	4.36	13.7	2.7	0.32	2.28	0.44	2.57	0.58	1.62	0.26	1.8	0.27	14.7
KGS524	605051	6608200	32.2	55.1	5.43	18.5	3.34	0.59	2.82	0.49	2.74	0.6	1.74	0.24	1.47	0.23	16
KGS525	605099	6608199	110.5	193.5	20.7	68.2	11.9	1.5	8.99	1.34	7.91	1.46	3.92	0.47	3.04	0.43	37
KGS526	605150	6608201	105.5	201	20.3	65	10.4	1.17	7.71	1.2	5.92	1.13	2.58	0.31	1.92	0.26	26.9
KGS527	605200	6608200	63.7	142	12.2	39.9	7.49	0.92	5.73	0.91	5.25	1	2.71	0.35	2.27	0.3	24.2
KGS528	605252	6608200	34.8	66.6	6.28	20.5	3.86	0.61	3.19	0.54	2.91	0.64	1.78	0.23	1.67	0.23	17.3
KGS529	605301	6608200	33.7	58.9	5.55	18.9	3.34	0.42	2.7	0.45	2.9	0.58	1.6	0.21	1.82	0.19	15.2
KGS530	605350	6608200	37.8	69.8	6.61	21.3	3.67	0.44	2.98	0.47	2.89	0.6	1.86	0.25	1.6	0.2	15.8
KGS531	605400	6608200	43.8	83.6	7.12	24.6	4.18	0.51	3.38	0.59	3.37	0.66	1.87	0.27	1.98	0.25	17.9
KGS532	605450	6608199	19.4	35.8	3.33	10.8	2.29	0.32	1.72	0.34	2.07	0.44	1.3	0.18	1.34	0.2	11
KGS533	605501	6608200	26.5	54.6	4.72	17	3.21	0.41	2.77	0.48	3.03	0.7	1.86	0.29	2.06	0.25	18.4
KGS534	605101	6608250	47.9	113	10.15	34.4	6.2	0.89	5.09	0.79	4.66	0.92	2.72	0.29	1.86	0.32	24.3
KGS535	605151	6608251	65.5	125	13.25	44.1	7.94	1.04	6.21	0.98	5.99	1.29	3.2	0.42	2.54	0.3	30.2
KGS536	605202	6608249	72.2	127	12.9	41.6	7.18	0.99	5.68	1.01	6.16	1.29	3.82	0.51	3.13	0.41	35.8
KGS537	605251	6608250	55.4	107	10.5	34.8	5.73	0.78	4.7	0.78	4.51	0.89	2.43	0.32	2.03	0.28	22.7
KGS538	605301	6608250	53.9	103.5	9.72	32.7	5.69	0.69	4.44	0.71	3.74	0.73	1.99	0.28	1.82	0.21	18.4
KGS539	605352	6608250	37	70.2	7.09	23.6	4.16	0.57	3.26	0.55	2.88	0.57	1.6	0.22	1.54	0.21	15.2
KGS540	605399	6608250	21.3	39.8	4.03	13.8	2.91	0.35	2.13	0.36	2.33	0.5	1.44	0.22	1.48	0.19	12.4
KGS541	605452	6608249	30.4	57.7	5.43	18.4	3.17	0.45	2.53	0.46	2.82	0.6	1.84	0.26	1.84	0.22	15.6
KGS542	605500	6608250	24.3	49.3	4.78	17.2	3.09	0.48	2.55	0.41	2.51	0.52	1.44	0.19	1.75	0.21	13
KGS543	605550	6608250	20.9	42	3.98	13	2.47	0.35	1.98	0.36	2.24	0.52	1.39	0.21	1.62	0.24	14.2
KGS544	605601	6608250	19.4	39.1	4	13.9	2.61	0.39	2.19	0.37	2.18	0.46	1.36	0.17	1.51	0.21	12.6
KGS545	605651	6608249	17.9	33	3.35	10.7	1.94	0.31	1.62	0.3	1.9	0.35	1.18	0.17	1.24	0.16	10.4
KGS546	605701	6608250	29.3	61.5	5.98	20.6	3.82	0.57	2.4	0.44	2.86	0.5	1.48	0.25	1.5	0.2	13.8
KGS547	605151	6608298	56.9	143.5	11.2	37.5	6.37	1	4.65	0.78	5.29	1	2.68	0.36	1.96	0.27	26.7
KGS548	605251	6608299	56.6	106.5	11.3	37	5.93	0.96	4.76	0.77	5.04	0.92	2.24	0.36	2.07	0.27	24.8
KGS549	605351	6608301	36	69.6	6.79	21.9	4	0.56	3.17	0.48	3.46	0.61	1.64	0.24	1.58	0.25	16.8
KGS550	605451	6608300	29.4	62.6	6.21	20.3	3.42	0.48	2.42	0.4	2.63	0.5	1.41	0.19	1.42	0.17	14.2
KGS551	605501	6608301	23.4	48.5	4.72	16.5	3.1	0.4	1.84	0.33	2.45	0.43	1.26	0.19	1.27	0.17	11.2
KGS552	605550	6608300	20.1	42.8	4.21	15.5	2.98	0.43	2.3	0.38	2.49	0.51	1.4	0.19	1.6	0.22	13.8
KGS553	605600	6608299	20.7	43.7	4.47	15.2	2.86	0.39	2.07	0.35	2.48	0.53	1.43	0.19	1.55	0.22	13.8
KGS554	605651	6608300	30.4	67.5	6.58	23	4.51	0.52	3.17	0.5	3.11	0.62	1.7	0.24	1.85	0.27	16.7
KGS555	605700	6608299	20.1	38.4	3.65	12.4	2.41	0.37	1.84	0.34	2.23	0.46	1.25	0.19	1.34	0.25	11.7
KGS556	605747	6608299	19.8	38.9	3.88	13.2	2.36	0.38	1.91	0.35	2.09	0.4	1.12	0.18	1.32	0.19	11.3
KGS557	605802	6608300	8.9	19.7	1.78	6	1.32	0.22	1.08	0.23	1.75	0.3	0.9	0.14	1.1	0.17	8.1
KGS558	605850	6608300	10.8	35.9	2.51	8.3	1.6	0.28	1.47	0.27	1.89	0.38	1.1	0.16	1.4	0.19	10.2
KGS559	605200	6608348	77.9	273	15.6	53.3	8.87	1.24	6.6	1.08	7.07	1.27	3.32	0.47	2.62	0.33	34.7
KGS560	605252	6608350	59	197.5	12.85	44.8	8.21	1.06	5.95	0.98	7.6	1.32	3.83	0.41	2.41	0.27	32.5
KGS561	605300	6608350	30.7	60.1	5.89	18.9	3.87	0.73	2.95	0.56	3.96	0.78	2.29	0.28	2.04	0.32	22.3
KGS562	605349	6608350	86.5	162	15.55	51.4	8.49	0.97	6.05	0.91	5.74	0.91	2.47	0.34	1.93	0.29	25.7
KGS563	605399	6608350	40.9	85.6	8.03	26	4.41	0.61	3.2	0.55	3.61	0.65	1.8	0.24	1.68	0.23	17
KGS564	605449	6608349	38.6	84.9	8.03	26.6	4.26	0.58	2.89	0.45	2.66	0.52	1.28	0.19	1.26	0.17	13.7
KGS565	605501	6608350	23.3	52.3	5.08	16.9	3.01	0.43	2.14	0.42	2.88	0.5	1.6	0.22	1.55	0.22	15.9
KGS566	605550	6608350	23.5	55.3	5.12	17.3	3.32	0.42	2.53	0.38	2.99	0.56	1.66	0.21	1.59	0.21	14.6
KGS567	605599	6608351	31.5	76.4	6.88	22.9	4.38	0.62	2.95	0.47	2.88	0.58	1.7	0.22	1.7	0.21	15.9
KGS568	605649	6608351	35	76.4	7.72	25.9	4.37	0.71	3.16	0.54	3.39	0.67	1.94	0.24	1.8	0.24	18.2
KGS569	605700	6608351	22.8	48.3	4.61	16	3.05	0.42	2.35	0.38	2.59	0.51	1.46	0.2	1.6	0.22	14.6
KGS570	605750	6608350	28.2	62.2	6.16	20.8	3.63	0.55	2.97	0.47	2.97	0.61	1.64	0.26	1.89	0.25	17.5
KGS571	605800	6608350	11.4	24	2.27	7.4	1.86	0.2	1.21	0.24	1.74	0.36	1.18	0.17	1.29	0.16	10.8
KGS572	605851	6608351	23.6	51.3	4.62	14.8	2.8	0.51	2.16	0.43	2.63	0.52	1.52	0.2	1.45	0.23	14.3
KGS573	605899	6608351	19.6	72.8	3.65	12.6	2.39	0.4	2.03	0.36	2.84	0.56	1.84	0.25	1.97	0.27	15.8
KGS574	605950	6608351	11	26	2.19	7.5	1.44	0.29	1.32	0.24	1.51	0.3	0.98	0.15	1.08	0.17	9.2
KGS575	605250	6608400	81.4	194.5	16.65	57.1	9.5	1.36	6.6	0.97	6.85	1.3	4.04	0.56	3.38	0.46	38.6

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS576	605350	6608401	79.2	164.5	15.75	50.9	8.66	1.18	6.1	1.04	6.6	1.3	3.36	0.45	3.03	0.38	37.2
KGS577	605449	6608399	55.6	119.5	11.55	39.4	6.2	0.91	4.33	0.7	4.01	0.82	2.09	0.27	1.93	0.26	20.5
KGS578	605550	6608400	60.2	131.5	12.75	40.2	7.01	0.81	4.24	0.76	4.34	0.77	2.14	0.29	1.99	0.27	20.1
KGS579	605650	6608399	50.2	108.5	11.35	35.2	5.84	0.82	4.32	0.73	4.39	0.84	2.36	0.37	2.49	0.33	21.3
KGS580	605752	6608400	27.1	53.9	5.49	18.6	3.47	0.36	2.41	0.42	2.64	0.54	1.69	0.21	1.56	0.25	14.5
KGS581	605800	6608399	29.3	60.4	6.26	21.8	3.86	0.56	2.97	0.5	2.73	0.56	1.66	0.25	1.59	0.22	14.9
KGS582	605851	6608400	19.6	42.3	4.18	14.6	2.96	0.41	2.14	0.37	2.16	0.48	1.4	0.2	1.41	0.22	12.9
KGS583	605901	6608401	24.4	49.6	4.72	14.8	2.64	0.34	2.03	0.37	2.13	0.47	1.17	0.22	1.4	0.21	12.2
KGS584	605950	6608399	41.4	85.4	7.6	24	4.42	0.61	2.98	0.53	3.26	0.62	1.76	0.25	1.7	0.26	16.8
KGS585	605300	6608449	68.9	144	13.25	43.8	7.86	1.03	5.47	1	6.88	1.44	4.23	0.56	3.33	0.36	38.6
KGS586	605352	6608452	66.3	155.5	14	45.2	7.71	1.14	5.64	1	6.38	1.28	3.99	0.59	3.53	0.46	36.3
KGS587	605400	6608450	62.7	122	11.55	37.2	6.52	0.8	4.78	0.77	4.93	1.08	3.26	0.49	3.18	0.43	31.3
KGS588	605450	6608451	63.3	121.5	12.95	40.5	7.33	0.85	5.07	0.78	4.58	0.86	2.25	0.3	1.89	0.26	21.4
KGS589	605499	6608450	46.9	90	8.21	26.4	4.52	0.55	3.4	0.56	3.62	0.68	2.23	0.31	2.08	0.27	19.6
KGS590	605549	6608450	61.2	109	9.97	31.1	5.19	0.58	3.25	0.59	3.53	0.64	1.72	0.27	1.54	0.23	16.8
KGS591	605598	6608451	94.6	193	18.65	57	9.28	0.98	5.73	0.96	5.3	1.06	2.86	0.42	2.54	0.32	26.4
KGS592	605651	6608450	119.5	246	24	73.9	12.2	1.4	7.93	1.2	7.22	1.36	3.74	0.54	3.31	0.39	35.2
KGS593	605702	6608450	66.3	127	12.65	39.2	6.07	0.7	4.2	0.63	4.01	0.73	2.07	0.27	1.92	0.25	18.7
KGS594	605751	6608450	43.1	80.6	7.98	25.9	4.68	0.41	3	0.44	2.78	0.49	1.32	0.2	1.16	0.16	13.3
KGS595	605802	6608451	52.4	108.5	10.55	34.4	6.26	0.71	4.39	0.67	4.02	0.81	2.2	0.32	2.04	0.29	20.1
KGS596	605850	6608450	22.3	53.5	5.48	18.4	3.37	0.42	2.62	0.38	2.48	0.53	1.51	0.23	1.7	0.24	13.1
KGS597	605901	6608452	32.5	72.7	6.21	20.3	3.96	0.44	2.88	0.5	2.75	0.54	1.64	0.26	1.44	0.22	14.9
KGS598	605950	6608450	23.5	51.1	4.35	14.2	2.27	0.28	1.78	0.3	1.79	0.37	1.1	0.17	1	0.16	10.4
KGS599	605348	6608500	74.2	127	13.9	47	7.98	1.08	5.75	1.02	6.3	1.34	4.03	0.57	3.51	0.48	38
KGS600	605452	6608502	60.1	108.5	11.35	35.6	6.74	1.03	4.71	0.77	4.47	0.82	2.33	0.32	1.9	0.3	22.3
KGS601	605551	6608499	39.3	76.8	7.13	21.5	4.13	0.44	2.87	0.5	2.99	0.62	1.9	0.25	1.76	0.23	16.2
KGS602	605651	6608500	95.8	179.5	17.9	54.2	8.79	0.92	5.94	1	5.6	0.99	2.75	0.42	2.6	0.3	26.4
KGS603	605750	6608500	120	204	19.75	63.6	10.7	1.02	6.94	1.16	6.26	1.18	3.06	0.41	2.6	0.36	29.5
KGS604	605851	6608500	45.3	108.5	9.02	29.1	4.56	0.59	3.34	0.59	3.42	0.64	1.91	0.3	1.58	0.22	17.6
KGS605	605901	6608499	30.6	84.9	6.91	22.5	4.13	0.56	2.85	0.46	2.72	0.54	1.56	0.24	1.34	0.26	13.3
KGS606	605952	6608499	56.3	126	11.5	36	5.97	0.71	3.87	0.64	3.46	0.71	1.7	0.26	1.56	0.21	17.6
KGS607	605304	6608552	68	133.5	13.1	41.6	7.4	0.89	5.72	0.96	6.12	1.34	4.03	0.66	3.61	0.49	41.1
KGS608	605355	6608550	53.5	154	9.5	30.7	5.88	0.83	4.59	0.84	5.66	1.18	3.63	0.58	4.03	0.52	34.1
KGS348	605302	6608699	37.4	76.9	7.75	27.2	4.43	0.72	3.64	0.63	3.89	0.81	2.43	0.34	2.09	0.29	22.7
KGS207	604000	6606198	27.4	50	5.24	16.9	3.59	0.33	3.42	0.63	4.31	1	3.31	0.58	3.18	0.54	30.6
KGS208	604099	6606200	57	102	9.88	33.4	6.07	0.71	4.97	0.76	4.85	0.97	2.52	0.4	2.58	0.39	25.2
KGS209	604200	6606200	58	97.3	9.83	31.6	6.14	0.76	5.24	0.79	4.75	1.02	2.93	0.38	2.32	0.37	26.2
KGS210	603900	6606300	67.4	124	11.95	38.3	6.85	0.43	5.3	0.8	4.54	0.99	2.65	0.42	2.28	0.32	26
KGS211	604001	6606299	45.6	86.8	8.26	25.4	4.56	0.53	3.99	0.66	3.5	0.71	1.89	0.32	1.96	0.28	19.4
KGS213	604201	6606299	50	87.5	9.23	29.5	5.87	0.46	4.73	0.83	4.69	0.96	2.94	0.46	2.77	0.46	29
KGS214	604302	6606299	77.2	135.5	14	43.2	8.33	0.42	6.55	0.96	5.24	1.18	3.08	0.49	2.67	0.45	31.2
KGS215	603901	6606400	40.2	76.3	7.1	22.4	4.34	0.44	3.74	0.69	4.24	1.04	2.82	0.42	2.74	0.4	26.7
KGS216	604000	6606400	35	67.4	6.22	20.2	3.97	0.44	3.47	0.56	4.1	0.88	2.44	0.4	2.45	0.41	25.3
KGS217	604101	6606400	37.9	79.5	6.25	19.4	3.56	0.52	3.17	0.61	3.64	0.86	2.68	0.38	2.46	0.38	22.2
KGS218	604199	6606401	70.8	125	12.5	39.5	6.91	0.45	5.23	0.78	3.91	0.72	1.9	0.29	1.72	0.3	19.4
KGS219	604301	6606399	51	86.6	8.39	26.2	4.32	0.36	2.85	0.39	2.08	0.44	1.21	0.19	1.13	0.17	11.1
KGS220	603802	6606498	43.4	85.1	7.65	23.9	4.42	0.39	3.12	0.57	3.4	0.7	2	0.31	1.91	0.3	20.3
KGS221	603902	6606501	28.2	50.8	4.66	14.5	2.58	0.31	2.1	0.42	2.53	0.59	1.54	0.27	1.74	0.24	16
KGS222	604000	6606500	26.3	55.1	4.23	13.7	2.52	0.37	2.01	0.37	2.49	0.51	1.47	0.25	1.66	0.28	14.1
KGS225	604299	6606498	68.4	121	11.8	37	6.93	0.63	5.43	0.82	4.27	0.82	2.17	0.33	2	0.33	22.6
KGS226	603801	6606601	24.3	43.6	4.35	13.5	2.53	0.22	1.89	0.34	2.15	0.44	1.36	0.22	1.38	0.22	11.7
KGS227	603899	6606599	44.2	74.5	6.7	20.8	3.55	0.51	2.96	0.53	2.91	0.69	2.02	0.31	1.84	0.3	18.4
KGS228	604000	6606600	139.5	225	25.2	80.3	13.6	1.41	10.2	1.65	9.76	2.19	6.08	0.93	5.49	0.75	62.1
KGS230	604201	6606600	92.6	164.5	16.55	50.2	8.58	0.66	5.84	0.82	4.04	0.71	1.92	0.27	1.71	0.24	19.2
KGS232	603802	6606698	58.6	109	11.25	35	6.43	0.64	4.7	0.74	4.14	0.86	2.36	0.38	2.35	0.34	22.6
KGS233	603900	6606700	73.3	127.5	12.25	39.2	6.36	0.63	5.06	0.77	4.25	0.85	2.13	0.38	2.21	0.33	24.7
KGS234	603999	6606698	137	251	23.3	69.2	11.25	1.12	7.75	1.31	6.81	1.36	3.73	0.56	3.51	0.48	37.9
KGS235	604100	6606700	127	205	23.9	71.1	12.5	1.13	9.29	1.46	7.95	1.57	4.12	0.55	3.25	0.46	43.8
KGS236	604201	6606701	53.6	83.6	8.86	27	4.32	0.55	3.55	0.57	2.94	0.61	1.78	0.28	1.52	0.26	16.9
KGS237	604302	6606698	21.1	36.3	3.51	10.3	1.98	0.21	1.44	0.25	1.54	0.33	0.87	0.14	1	0.12	8.5
KGS238	603801	6606801	13.8	21.4	2.24	7.1	1.2	0.18	1.12	0.22	1.4	0.3	0.73	0.12	0.79	0.14	7.4
KGS239	603901	6606801	36.8	62.2	6.22	19.8	3.49	0.5	2.68	0.44	2.41	0.58	1.42	0.27	1.5	0.28	15.1
KGS241	604101	6606800	126.5	181	21.2	66.7	10.75	1.03	9.01	1.59	9.26	1.87	5.11	0.8	4.13	0.6	53.2



Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGS242	604202	6606802	46.8	72.3	7.73	24.8	4.34	0.56	3.58	0.58	3.44	0.77	2.24	0.36	2.38	0.39	21.1
KGS243	604297	6606798	54.8	97.6	9.46	30.3	5.4	0.67	4.15	0.68	3.68	0.79	2.23	0.35	2.17	0.3	21.6
KGS244	603801	6606899	58.8	119.5	10.1	32.6	5.76	0.69	4.71	0.68	4.57	0.93	2.71	0.41	3.04	0.39	24.9
KGS245	603902	6606900	163.5	206	26	83.4	13.65	1.11	9.18	1.16	6.58	1.32	3.64	0.51	3.14	0.42	36.6
KGS246	604001	6606899	56.7	73.6	10.15	31.5	6.48	0.61	5.17	0.8	5.04	1.05	2.64	0.45	2.54	0.39	27.6
KGS247	604102	6606900	130.5	239	21.9	67.4	11.15	0.84	7.83	1.22	7.5	1.39	3.97	0.51	3.21	0.44	39.5
KGS248	604200	6606902	111.5	176.5	20.9	69.5	12.8	0.93	9.21	1.45	9.62	1.98	5.68	0.82	5.34	0.65	54
KGS249	604300	6606900	94.1	130.5	18.3	62.3	11.4	1.03	9.07	1.34	8.37	1.7	4.7	0.64	4.12	0.54	46.4
KGS250	603799	6606999	102	133.5	17.55	58	10.1	1.05	7.09	1.02	5.99	1.23	3.48	0.55	3.65	0.54	36.4
KGS251	603900	6606999	66	83.4	11.45	37.5	6.31	0.7	4.75	0.73	4.21	0.86	2.33	0.36	2.36	0.31	25
KGS252	604000	6606998	33.3	48.1	5.04	16.2	3.21	0.45	2.46	0.47	2.86	0.63	1.78	0.28	1.82	0.28	17.1
KGS253	604100	6607000	50.9	71.6	8.84	28.6	5.17	0.71	4.12	0.71	4.74	0.91	2.64	0.4	2.72	0.36	26.8
KGS254	604199	6606999	90.6	128	16.05	50.1	8.78	1	6.79	1.04	6.32	1.32	3.22	0.47	3.08	0.35	36.3
KGS255	604302	6607000	54.5	100	9.38	29.2	5.82	0.59	4.5	0.77	5.38	1.11	3.5	0.56	3.82	0.54	29.4
KGS256	603800	6607100	114.5	193	21.9	68.8	13.4	1.33	8.63	1.34	7.14	1.45	3.87	0.58	3.9	0.5	37.2
KGS257	603896	6607103	102	164.5	18.35	59.6	11.35	1	8.17	1.34	8.02	1.66	4.8	0.72	4.73	0.61	47
KGS258	603998	6607100	87.4	153.5	16.7	53.5	10.5	0.96	7.57	1.1	6.8	1.3	4.07	0.65	4.43	0.62	38.8
KGS259	604100	6607100	59.1	93	10.8	34.7	6.64	0.75	4.69	0.69	4.68	0.92	2.82	0.39	2.79	0.42	25.7
KGS260	604202	6607101	75.2	138	13.25	42.6	7.91	0.83	5.97	0.94	5.92	1.19	3.33	0.52	3.13	0.46	32.8
KGS261	604302	6607101	84.9	106.5	15.3	49.8	9.47	0.89	6.86	1.04	6.51	1.43	4.06	0.63	3.91	0.58	40
KGS262	603801	6607199	71.1	153.5	12.8	42.8	8.06	0.86	6.01	0.86	5.44	1.15	3.27	0.5	3.49	0.52	29.4
KGS263	603900	6607200	46.2	66.3	8.66	28.8	5.84	0.62	4.69	0.78	4.74	0.98	3.04	0.45	3.18	0.48	26.7
KGS264	604002	6607199	107.5	152	19.2	61.7	11.15	1.04	8.43	1.25	7.27	1.47	4.06	0.58	3.96	0.54	41
KGS265	604102	6607199	155.5	240	27.7	89.8	17.2	1.42	13.5	2.25	14.1	2.83	7.58	1.09	6.57	0.81	74.5
KGS266	604201	6607201	109	144.5	18.9	60	11.3	1.02	8.32	1.43	8.88	1.83	5	0.7	5.09	0.61	50.6
KGS267	604300	6607200	142.5	229	26.5	87.1	16.15	1.56	12.3	1.75	11.05	2.31	6.3	0.95	5.98	0.84	63.1
KGS268	604401	6607200	62.4	96.1	11.5	37.3	7.03	0.72	5.3	0.88	5.22	0.99	2.79	0.42	2.89	0.39	27.9
KGS269	603800	6607299	52.6	85.1	8.88	28.5	5.02	0.61	4.36	0.68	4.53	0.96	2.86	0.47	3.16	0.42	27.3
KGS270	603899	6607300	103.5	183	18.75	61.1	11.3	1.01	7.97	1.24	7.61	1.54	4.64	0.65	4.45	0.6	43.5
KGS271	604001	6607300	145	172	28	95.4	17.95	1.55	13.05	2.03	11.6	2.3	6.64	0.9	5.55	0.77	65.3
KGS272	604101	6607301	154	174.5	29.3	96.7	17.8	1.49	13.35	1.98	12	2.54	6.74	1	6.66	0.9	67.9
KGS274	604301	6607300	39.8	73.4	7.08	24	4.59	0.54	3.36	0.58	3.9	0.83	2.67	0.44	3.14	0.46	24.3
KGS275	604400	6607299	117.5	182	23.5	76.4	14.35	1.26	9.84	1.49	8.6	1.85	5.27	0.75	4.88	0.67	49.9
KGS276	603801	6607402	28.3	43	3.97	12.5	2.53	0.32	2.28	0.37	2.43	0.53	1.83	0.31	2.17	0.34	14
KGS277	603904	6607402	58.5	103.5	10.45	33.4	6.02	0.75	4.27	0.78	4.54	1.03	3.11	0.54	3.63	0.51	28.9
KGS278	604002	6607399	118.5	142	21.9	72.4	12.4	1.25	9.9	1.48	8.92	1.74	5.05	0.81	4.92	0.69	53.4
KGS279	604100	6607401	118.5	132.5	21.9	73.5	12.95	1.23	9.35	1.36	7.97	1.76	4.69	0.73	4.27	0.61	49.2
KGS280	604200	6607401	121.5	244	22.8	74.6	13	1.14	9.27	1.47	8.56	1.85	5.15	0.84	5.19	0.73	48.4
KGS281	604300	6607401	104.5	111	18.1	59.1	10.1	0.97	7.79	1.16	6.73	1.39	3.73	0.61	3.58	0.49	41
KGS282	604399	6607398	58.6	93.9	10.95	37.2	6.69	0.78	4.86	0.73	4.44	0.95	3.15	0.44	2.62	0.37	27
KGS283	604200	6607495	151	232	27.2	87	15.1	1.28	9.85	1.55	8.85	1.75	5.07	0.76	4.72	0.69	51.8
KGS284	604300	6607499	72.4	124.5	11.7	37.3	6.54	0.69	4.81	0.79	4.6	0.91	2.55	0.38	2.49	0.37	26.3
KGS285	604404	6607498	81.6	117.5	15.5	52.4	9.98	1.05	7.3	1.17	6.96	1.43	4.4	0.67	4.12	0.59	40.7
10KR0001	606184	6608728	35.4	48.7	6.43	21	3.5	0.5	3.3	0.61	3.7	0.8	2.4	0.4	2.3	0.33	23.8
10KR0002	606170	6608743	36.4	53.9	6.72	22.2	3.8	0.5	3.7	0.63	4	0.9	2.6	0.4	2.5	0.37	25.5
10KR0003	606159	6608759	42.5	68.8	7.65	25.2	4.6	0.6	4.7	0.88	5.7	1.3	3.6	0.6	3.4	0.47	36.9
10KR0004	606141	6608780	11.3	21.6	2.14	7.1	1.3	0.2	1.2	0.23	1.4	0.3	0.9	0.1	1	0.16	9.3
10KR0005	606128	6608791	9.1	16.2	1.62	5.4	1	0.2	0.9	0.17	1.2	0.2	0.8	0.1	0.9	0.17	8.1
10KR0006	606116	6608798	4.5	7.9	0.79	2.8	0.4	-0.1	0.4	0.07	0.5	0.1	0.3	-0.1	0.4	0.07	3.4
10KR0007	606116	6608815	18.8	34	3.24	10.5	2	0.3	2	0.38	2.8	0.6	2	0.3	2.4	0.37	18.9
10KR0008	606111	6608837	14.1	28.2	2.55	8.3	1.6	0.2	1.5	0.25	1.6	0.4	1.2	0.2	1.2	0.19	10.9
10KR0009	606096	6608853	49.9	99.3	10.44	35.6	6.6	0.8	5.9	1.07	7.2	1.6	5	0.8	5.3	0.84	48
10KR0010	606093	6608873	67.1	123.9	13.61	44.4	7.8	0.7	6.8	1.22	7.8	1.8	5.6	0.9	5.8	0.84	53.8
10KR0011	606091	6608908	61.6	104.7	11.85	38.4	6	0.6	4.9	0.82	5.1	1.1	3.3	0.5	3.5	0.53	34.5
KGG025	606569	6609646	147.9	296.7	27.63	88.4	14.88	1.69	13.21	2.3	15.25	3.1	9.16	1.46	8.63	1.09	87.6
KGG026	606584	6609631	92.9	189.4	16.12	54.2	8.98	1.03	8.31	1.54	10.37	2.28	7.47	1.31	8.41	1.15	70.4
KGG027	606597	6609618	90	176.6	14.69	47.9	8.16	0.99	8.27	1.64	11.94	2.79	9.48	1.69	11.32	1.6	91.4
KGG028	606612	6609603	82.8	137.2	12.68	41.9	6.26	0.87	6.22	1.07	7.15	1.54	4.67	0.83	4.99	0.71	46.5
KGG029	606625	6609590	92.4	195.9	15.69	51.4	8.67	1.01	7.39	1.29	8.47	1.76	5.46	0.93	5.55	0.73	49.4
KGG043	606485	6609592	127.9	240.7	23.21	78	13.32	1.38	12.06	2.14	14.07	2.87	8.72	1.45	8.76	1.24	84.1
KGG044	606498	6609578	126.1	236.8	22.49	75	11.73	1.3	10.05	1.74	10.65	2.16	6.6	1.08	6.48	0.86	65.6
KGG045	606514	6609563	173.2	330.1	31.3	101.7	16.32	1.71	13.25	2.13	13.3	2.63	7.79	1.27	7.42	0.97	76
KGG046	606527	6609549	90.8	169.6	15.61	49.7	8.27	1.1	7.33	1.28	8.32	1.72	5.38	0.88	5.24	0.71	48.2

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGG047	606542	6609535	80	139.6	14.14	47.5	7.53	1.05	6.4	1.16	7.89	1.61	5.32	0.89	5.57	0.74	45.6
KGG048	606554	6609522	116.7	213.3	21.81	72.1	12.26	1.38	10.14	1.74	11.18	2.21	6.81	1.12	6.62	0.89	61.4
KGG049	606568	6609508	132.5	326.1	26.36	89.8	15.25	1.87	12.53	2.06	13.4	2.58	7.79	1.26	7.33	1	70
KGG050	606583	6609493	129.5	259.4	25	86.4	14.16	1.74	11.93	1.93	12.06	2.4	7.14	1.14	6.94	0.93	64.8
KGG051	606598	6609478	111.6	222.9	21.18	71.2	12.2	1.47	10.53	1.72	11.02	2.18	6.54	1.07	6.46	0.87	61.4
KGG064	606427	6609508	81.6	161.4	15.98	53.9	9.22	1.23	7.98	1.47	10.02	2.04	6.51	1.09	6.4	0.84	57.3
KGG065	606441	6609494	103.7	210.2	20.14	68.8	11.53	1.3	9.88	1.71	11.35	2.42	7.68	1.27	7.29	0.96	64.5
KGG066	606456	6609479	92.6	187.1	17.59	60.3	9.82	1.16	8.72	1.49	10.25	2.17	6.89	1.13	6.64	0.86	59.5
KGG067	606470	6609465	112.6	200.3	20.65	71.6	11.61	1.34	10.08	1.69	10.64	2.16	6.57	1.07	6.05	0.75	58.6
KGG068	606484	6609451	84.7	143.9	15.75	52.9	9.04	1.18	8.09	1.38	8.77	1.75	5.46	0.91	5.18	0.7	48.1
KGG069	606497	6609438	85.6	160.1	15.95	52.3	9.19	1.17	7.8	1.31	7.93	1.63	5.14	0.86	5.12	0.7	45.7
KGG070	606512	6609423	67	124.8	12.76	44.3	7.56	1.07	6.66	1.11	7.16	1.46	4.44	0.77	4.7	0.61	40.5
KGG071	606526	6609409	65.4	107.2	12.16	41.5	6.96	0.95	5.98	0.99	5.97	1.26	3.97	0.68	4.35	0.61	36.5
KGG072	606540	6609395	69.8	130.4	12.61	43	7.21	0.96	6.25	1.04	6.65	1.33	4.26	0.78	4.89	0.71	39.5
KGG073	606554	6609381	82.4	156.3	15.55	52.6	9.09	0.98	7.18	1.11	6.51	1.26	4.08	0.7	4.51	0.64	36.7
KGG074	606568	6609367	85.3	155.3	14.46	46.7	7.28	0.91	6.41	1.05	6.59	1.33	4.34	0.81	5.15	0.75	38.4
KGG075	606583	6609352	53.8	93.4	8.74	29	4.95	0.69	4.48	0.77	4.97	1.05	3.37	0.62	3.72	0.55	29.7
KGG076	606597	6609338	106.6	159.1	17.56	56.9	9.17	1.2	7.67	1.25	7.44	1.52	4.83	0.76	4.79	0.69	43.6
KGG085	606368	6609422	94.2	179.8	17.18	58	10.58	1.21	10.54	2.23	16.01	3.55	11.48	2.04	12.37	1.63	82.7
KGG086	606383	6609407	113.8	202.4	20.78	64.1	10.29	1.31	9.54	1.69	10.63	2.33	7.05	1.09	6.84	0.88	70.4
KGG087	606397	6609393	170.4	258.6	33.37	109.9	18.12	2.29	16.51	2.75	15.93	3.38	10.16	1.39	8.41	1.13	103.6
KGG088	606411	6609378	51	89.2	8.94	27.6	4.95	0.68	5.02	1.06	7.23	1.74	5.84	1.02	7.08	1.02	56.1
KGG089	606425	6609365	105.9	211.4	20.98	68.1	11.11	1.34	9.95	1.83	11.75	2.43	7.3	1.17	7.46	1.05	73.3
KGG090	606438	6609352	71.8	121.6	12.9	41	6.59	0.92	6.28	1.15	7.27	1.63	5.13	0.88	6.05	0.86	48.8
KGG091	606452	6609337	64.7	121.6	11.09	35.7	5.78	0.86	5.61	1.03	5.92	1.35	4.22	0.69	5.03	0.74	39.8
KGG092	606467	6609322	152.7	267.5	28.88	91.3	14.21	1.85	11.72	1.88	10.13	2.12	6.15	0.96	6.28	0.9	63.9
KGG093	606481	6609309	139.6	231.6	25.35	80.5	12.49	1.61	10.68	1.67	9.38	1.97	6.19	0.93	6.31	0.9	60.8
KGG094	606495	6609294	174.7	278.1	31.2	95.9	14.52	1.79	11.79	1.88	10.53	2.11	6.09	0.93	6.09	0.87	61.9
KGG095	606509	6609281	160.5	273.1	30.87	99.5	15.83	1.93	12.92	2.01	11.17	2.29	6.74	1.04	6.87	0.98	64.9
KGG096	606524	6609266	97.7	164.1	18.44	59.2	9.49	1.24	7.31	1.21	6.71	1.39	4.32	0.66	4.37	0.65	39.6
KGG097	606538	6609251	105.4	173.3	19.44	60.2	10.08	1.33	8.42	1.27	7.37	1.5	4.41	0.7	4.7	0.7	43.3
KGG098	606551	6609238	85	153.7	16.43	54.1	9.13	1.07	7.73	1.15	6.2	1.3	4	0.61	4.22	0.63	36.1
KGG099	606566	6609223	77.4	134.8	14.77	47.6	7.95	1.13	6.58	1.12	6.53	1.31	4.05	0.66	4.15	0.64	37
KGG100	606581	6609209	92.3	159.5	17.24	56.1	9.14	1.24	7.64	1.26	7.21	1.44	4.3	0.69	4.4	0.68	42.2
KGG101	606594	6609195	63.1	97	10.71	33.2	5.7	0.82	5.07	0.89	5.2	1.11	3.4	0.59	3.88	0.6	33.7
KGG106	606310	6609338	181.2	267.2	34.06	106.6	17.9	2.25	16.01	2.75	16.07	3.36	9.85	1.42	8.39	1.12	94.9
KGG107	606326	6609322	83.6	144.1	16.17	52.2	8.81	1.25	7.9	1.41	8.78	1.86	5.63	0.86	5.18	0.73	53.1
KGG108	606339	6609309	144.4	250.6	26.23	81.5	13.42	1.3	11.77	2.06	12.33	2.67	8.07	1.25	7.73	1.17	71.6
KGG109	606354	6609294	132	224.6	25.41	78.8	13.03	1.47	11.6	2.12	12.92	2.9	8.99	1.38	8.88	1.32	82.4
KGG110	606367	6609280	196.9	301.3	39.9	128.9	21.46	2.58	18.77	3.14	18.42	3.82	10.99	1.58	9.22	1.25	103.7
KGG111	606381	6609267	139.1	272.5	28.08	90.3	14.96	1.89	11.93	2.04	12.02	2.58	7.55	1.2	7.46	1.05	66.4
KGG112	606395	6609252	70.8	125	12.95	42	6.6	0.93	5.6	0.99	6.08	1.36	4.72	0.78	5.15	0.77	38.8
KGG113	606410	6609238	164.2	277.7	31.14	95.8	15.05	2.03	12.31	1.89	10.82	2.19	6.12	0.96	6.15	0.88	57.7
KGG114	606423	6609225	77.3	138	14	43.3	6.94	1.01	5.91	1.05	6.36	1.38	4.07	0.73	4.56	0.7	36.2
KGG115	606438	6609210	104.3	178	20.43	65.7	10.39	1.39	8.73	1.44	8.31	1.78	5.53	0.9	5.93	0.86	47.9
KGG116	606451	6609197	116.8	207.9	23.11	73.6	12.04	1.54	10.01	1.76	10.45	2.21	6.86	1.05	6.7	1	62.3
KGG117	606467	6609181	101.2	177.8	19.64	62.6	10.49	1.44	9.16	1.57	9.58	2	5.83	0.94	5.72	0.84	54.6
KGG118	606481	6609167	173.7	232.8	32.6	100.9	16.75	2.1	13.88	2.24	12.45	2.43	6.79	0.98	5.85	0.83	65.4
KGG119	606494	6609154	86.2	139.7	15.93	51.2	8.45	1.07	7.63	1.35	8.23	1.81	5.5	0.88	5.14	0.74	46.6
KGG120	606508	6609139	71.4	142.9	14.53	46.7	8.26	1.16	7.29	1.35	8.28	1.75	5.32	0.87	5.38	0.75	45.7
KGG121	606523	6609125	81	153.1	15.53	49.3	8.06	1.02	7.08	1.27	7.78	1.7	5.27	0.85	5.26	0.76	46
KGG122	606537	6609110	148.2	236.5	29.01	93.9	15.2	1.81	12.9	2.12	12.22	2.36	6.47	0.95	5.65	0.77	62.6
KGG123	606551	6609097	110.7	189.7	22.21	69.5	11.85	1.39	9.59	1.61	9.1	1.77	5.15	0.76	4.74	0.67	46.4
KGG124	606565	6609083	146.4	236.5	27.34	82.1	14.98	1.74	13.03	2.32	14.24	2.91	8.7	1.4	8.7	1.27	75.3
KGG125	606580	6609068	186.9	336.4	32.6	99.6	15.52	1.65	12.66	2.09	11.05	2.1	5.97	0.9	5.72	0.79	55.2
KGG126	606592	6609056	142.7	289.5	27.02	90.6	14.44	1.63	11.33	1.86	10.64	2.04	5.94	0.84	5.38	0.75	53.7
KGG127	606252	6609251	49.5	95.9	9.24	30.5	5.36	0.65	5.45	1.1	7.46	1.76	6.02	0.93	6.57	1.02	53.3
KGG128	606266	6609237	70.3	128.4	14.03	44.5	7.73	0.89	7.21	1.36	8.8	1.92	6.03	0.85	5.64	0.77	56.3
KGG129	606280	6609223	87.3	168.1	17.17	55.5	9.7	1.01	9	1.63	10.47	2.09	7.19	1	6.19	0.86	60.2
KGG130	606295	6609208	66.4	145.1	13.29	43.5	8.09	0.82	7.84	1.51	9.29	2.07	6.8	0.89	5.44	0.78	58
KGG131	606308	6609195	61.4	142.3	12.74	44	8.11	0.87	7.61	1.35	8.83	1.94	5.97	0.86	5.33	0.76	49.2
KGG132	606322	6609181	66.1	140.4	13.91	47.5	8.45	1.1	7.4	1.44	9.2	1.96	5.98	0.88	5.51	0.78	51.9
KGG133	606336	6609167	82.6	150.1	16.89	57	9.91	1.25	9.08	1.59	9.99	2.02	6.05	0.86	5.28	0.7	51.7

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGG134	606351	6609152	107.5	200.7	21.15	72.8	12.06	1.32	10.22	1.67	9.98	1.98	5.79	0.79	4.84	0.64	50.7
KGG135	606365	6609138	125.4	227.8	24.65	80.3	14.03	1.51	11.65	2.02	11.48	2.22	6.69	0.88	5.38	0.72	61.3
KGG136	606380	6609123	79.6	167.6	16.9	59.1	10.53	1.36	9.61	1.69	10.36	2.09	6.45	0.86	5.12	0.73	54.3
KGG137	606392	6609110	116.6	215.6	23.34	77.8	13	1.52	10.62	1.84	11.22	2.2	6.23	0.85	4.83	0.65	55.4
KGG138	606407	6609095	96.9	162.3	19.7	65.5	12	1.42	11.13	2	12.43	2.62	8.37	1.15	6.93	1	73.8
KGG139	606422	6609081	120.9	183.9	23.89	78.7	13.66	1.7	11.24	1.8	10.36	1.88	5.51	0.72	4.23	0.62	49.9
KGG140	606435	6609068	135.9	156.1	24.1	75.5	12.97	1.57	11.21	1.86	10.41	1.96	5.47	0.77	4.98	0.78	56.8
KGG141	606449	6609054	91.6	156.6	16.94	56.6	9.7	1.12	7.8	1.4	8.1	1.63	4.88	0.77	4.97	0.79	46.1
KGG142	606464	6609039	94.8	164.4	19.05	63.7	11.64	1.39	11.15	2.03	12.57	2.67	8.01	1.22	7.66	1.2	70.4
KGG143	606478	6609024	145.1	282.7	29.63	100.2	16.91	1.76	14	2.2	11.85	2.27	6.91	1.04	7.17	1.09	64.9
KGG144	606492	6609011	52.2	99	9.94	32.8	5.95	0.75	5.6	1.12	7.49	1.63	5.48	0.88	5.65	0.85	50
KGG145	606505	6608998	68.5	130.5	13.19	44.4	7.06	0.82	5.88	1.09	6.39	1.45	4.92	0.74	5.07	0.77	40.5
KGG146	606519	6608983	102.3	191.4	19.83	63.9	11.15	1.21	9.14	1.54	9	1.75	5.34	0.8	4.79	0.73	50.6
KGG147	606533	6608970	140.3	277.7	28.77	89.8	15.38	1.46	11.21	1.84	11.11	2.3	6.77	0.99	6.2	0.92	60.3
KGG148	606196	6609172	53.8	107	10.69	34.8	6.12	0.9	5.88	1.17	7.69	1.73	5.33	0.78	5.12	0.73	46.4
KGG149	606211	6609157	62.3	135.8	13.25	42.5	8.03	1.12	6.77	1.2	7.53	1.54	5.13	0.76	4.62	0.71	42.5
KGG150	606225	6609143	79.6	162.2	16.54	55.1	9.47	1.3	8.26	1.47	9.38	1.87	6.35	0.89	5.75	0.78	52.2
KGG151	606239	6609128	103.4	194.3	21.5	70.9	11.8	1.41	9.63	1.75	11.33	2.42	7.65	1.05	6.22	0.85	64.3
KGG152	606253	6609115	133.5	291.3	28.17	92.1	15.78	1.96	14.45	2.63	16.32	3.57	10.96	1.51	8.4	1.13	96.7
KGG153	606267	6609101	103.9	225.1	22.42	75.4	13.3	1.69	11.4	2	12.68	2.62	8.22	1.08	6.59	0.88	69.7
KGG154	606281	6609087	81.1	207.5	18.08	63.3	11.54	1.4	9.6	1.91	13	2.9	8.68	1.26	7.3	0.94	70.1
KGG155	606295	6609073	99	219.9	22.89	78.4	13.34	1.56	11	1.87	11.09	2.17	6.29	0.86	5.35	0.75	56.4
KGG156	606309	6609058	83.1	208.3	18.5	62.7	11.16	1.21	8.8	1.55	8.85	1.7	5.21	0.69	4.53	0.62	42.6
KGG157	606324	6609044	100.4	286.3	23.89	79.4	15.11	1.54	12.42	2.12	12.83	2.46	7.45	1.01	6.07	0.88	63.2
KGG158	606337	6609030	84.9	162.2	17.35	56.1	9.99	1.27	9.97	2.17	15.17	3.37	10.12	1.37	7.56	0.99	84.2
KGG159	606352	6609015	97.2	223.3	20.96	69.2	11.73	1.5	11.07	2.07	12.99	2.69	8.35	1.09	6.67	0.87	67
KGG160	606366	6609001	124.7	208	24.96	80.6	13.94	1.44	11.7	1.96	12.37	2.55	7.81	1.08	7.19	1	71.7
KGG161	606380	6608988	110.7	198.7	24.28	80	14.74	1.44	13.74	2.44	14.92	3.15	10.14	1.39	9.82	1.45	94.3
KGG162	606394	6608973	142.5	242.9	29.22	98.1	17.85	1.7	16.21	3	18.52	4.01	12.07	1.97	12.2	1.75	114.4
KGG163	606408	6608960	128.6	231.6	25.71	87.6	15.85	1.35	14.55	2.74	17.19	3.74	11.18	1.97	12.96	1.94	120
KGG166	606451	6608917	277.6	486.2	59.28	201.4	33.24	3.35	25.85	4.16	22.41	4.29	11.67	1.78	10.4	1.43	111.3
KGG167	606464	6608904	173.4	342	37.49	127.2	21.42	2.5	16.89	2.72	14.97	2.93	8.23	1.26	7.61	1.09	79.9
KGG168	606478	6608890	120.6	257.6	26.15	89.8	14.86	1.72	10.99	1.81	9.43	1.84	4.86	0.76	4.74	0.65	47.9
KGG169	606137	6609085	126.1	249.6	25.98	86.9	14.79	1.75	11.7	2.07	12.74	2.78	8.37	1.4	8.52	1.15	76.6
KGG170	606152	6609070	166	316.5	34.21	116.3	18.64	2.24	15.86	2.69	16.67	3.76	11.74	1.83	11.4	1.52	110.2
KGG171	606166	6609056	128.2	258.7	25.52	83	14.19	1.75	11.63	2.09	13.16	2.98	9.5	1.63	10.5	1.45	84.1
KGG172	606181	6609041	144.3	271.8	29.07	95.9	15.8	1.83	12.48	2.11	13.06	2.9	8.66	1.47	9.05	1.18	81.1
KGG173	606195	6609027	136.7	319.5	28.73	95.8	16.06	1.73	13.64	2.41	15.02	3.38	10.24	1.63	9.57	1.21	94.3
KGG174	606207	6609014	130	255.2	26.08	88.2	14.49	1.63	12.25	2.11	12.57	2.67	8.1	1.26	7.7	1.02	76.3
KGG175	606222	6608999	119.5	184.2	22.95	74.8	12.82	1.48	11.06	1.93	11.39	2.4	7.16	1.17	7.37	1.02	69.3
KGG176	606236	6608986	104	184.2	19.91	66.8	11.45	1.23	10.43	1.82	11.52	2.59	7.71	1.22	8.62	1.28	77.6
KGG177	606251	6608971	185.9	342.9	35.06	116.7	18.11	1.09	15.88	2.66	17.06	3.75	11.19	1.75	12.09	1.71	116.7
KGG186	606378	6608844	50.4	98.4	10.54	39.4	7.43	0.71	7.26	1.47	10.01	2.24	7.01	1.16	8.08	1.12	74.4
KGG187	606392	6608830	115.8	199.6	23.73	77.3	13.31	1.58	10.83	1.62	9.3	1.84	4.97	0.72	4.83	0.65	48.8
KGG188	606079	6609000	121.2	238.3	24.82	83.1	13.84	1.71	11.18	1.94	12.01	2.54	7.55	1.24	7.57	1	71.6
KGG189	606094	6608985	121.3	240.4	25.23	85.4	14.45	1.59	11.99	2.17	13.53	3.08	9.59	1.65	10.43	1.4	88.4
KGG190	606108	6608971	123.6	306.9	28.47	96.4	17.39	1.97	13.63	2.36	14.44	3.18	9.85	1.65	10.7	1.4	88.2
KGG191	606122	6608957	173.8	345.5	37.22	124.3	21.2	2.15	17.21	2.87	17.28	3.57	11.05	1.8	11.12	1.52	105.3
KGG192	606137	6608942	226.1	407.8	47.62	159.2	27.29	2.52	21.77	3.42	20.19	4.09	12.25	1.95	11.99	1.65	120.3
KGG193	606150	6608928	132	365.7	30.28	104.2	18.21	1.96	14.27	2.26	13.37	2.7	7.74	1.23	7.23	1.04	74.2
KGG194	606165	6608914	117.3	253.5	24.07	78.3	13.74	1.44	11.85	2.05	13.04	2.78	8.12	1.39	8.63	1.27	80.7
KGG195	606178	6608900	89.2	250.6	20.49	69.8	13.31	1.29	11.62	2.1	13.65	2.75	8.31	1.35	8.51	1.2	79.5
KGG199	606235	6608844	40.4	89.4	7.31	24.8	4.9	0.58	5.24	1.12	8.13	1.88	6.17	1.08	7.15	1.04	58.8
KGG200	606249	6608830	61	127.9	13.26	45	8.57	1.1	8.24	1.59	10.61	2.35	7.64	1.24	8.22	1.17	72.1
KGG201	606022	6608916	157.4	240.3	29.08	93.3	15.63	1.76	13.48	2.26	13.8	2.93	9.2	1.55	10.46	1.5	95.4
KGG202	606036	6608901	128.7	256.9	25.9	86.1	15.56	1.66	13.22	2.21	14.24	2.87	8.97	1.52	10.04	1.41	92.7
KGG203	606051	6608887	139.3	257.6	27.87	92.9	16.99	1.85	16.55	2.96	19.6	4.15	13.36	2.29	15.47	2.28	138.8
KGG204	606066	6608872	115.1	211.7	22.95	76.4	13.67	1.51	12.12	2.15	13.72	2.89	9.05	1.53	9.98	1.42	90.2
KGG205	606079	6608858	87.4	160.9	18.49	62	11.59	1.32	10.42	1.85	11.8	2.41	7.06	1.17	7.28	1.06	69.9
KGG206	606093	6608845	41.5	99.1	8.64	29.2	5.95	0.79	5.93	1.21	8.8	2.01	6.67	1.17	7.74	1.16	57.8
KGG207	606107	6608831	28.2	51.5	4.9	16.7	3.17	0.43	3.24	0.64	4.56	1.03	3.36	0.57	3.67	0.54	28.5
KGG208	606121	6608817	30.5	55.5	5.27	17.5	3.17	0.39	3.32	0.65	4.62	1.03	3.27	0.59	4.08	0.63	30.8
KGG209	606136	6608802	30.4	60.3	5.41	17	3.3	0.45	3.13	0.61	4.18	0.88	2.75	0.48	3.09	0.48	24.5

Sample	East MGA Zone50 GDA94	North MGA Zone50 GDA94	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Y ppm
KGG210	606149	6608789	48.3	92.9	9.44	30.9	6.12	0.66	5.11	0.89	5.88	1.13	3.36	0.58	3.84	0.54	31.5
KGG211	606162	6608775	76.3	155.3	15.82	53	9.29	1.35	8.71	1.8	11.3	2.42	7.22	1.18	7.17	1.01	67.2
KGG229	605962	6608829	147.7	222.9	26.96	83.1	13.14	1.75	10.58	1.89	10.67	2.35	7.48	1.22	8.17	1.18	72.2
KGG230	605977	6608814	87.5	159.4	17.02	53.6	8.74	1.29	6.91	1.33	8.06	1.63	5.34	0.96	6.37	0.94	49.1
KGG231	605991	6608799	72.8	145.4	14.19	45.9	7.33	1.04	5.91	1.06	6.48	1.31	4.05	0.7	4.26	0.67	37.2
KGG232	606005	6608785	151.9	352.3	28.57	92.3	14.41	1.81	11.19	1.83	9.85	1.93	5.42	0.86	5.07	0.72	54.8
KGG233	606020	6608771	182.5	308.3	37.87	124.9	20.06	2.32	15.29	2.48	12.8	2.53	6.81	0.97	5.32	0.71	66.4
KGG234	606032	6608758	111.2	220.3	23.62	76.9	13.6	1.66	10.4	1.89	10.71	2.13	6.57	1	5.89	0.86	59.7
KGG235	606047	6608744	124.8	226.3	25.36	78.9	13.92	1.71	11.2	2.11	13.07	2.79	8.32	1.29	7.79	1.13	72.2



## 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The REE targets reported here are based on 609 soil samples collected by Codrus Minerals personnel and 155 historic soil samples by Kinloch Resources. The Codrus soil samples were collected using hand tools to a depth of c. 30 cm and sieved to c. -3mm for submission to ALS Geochemistry, Perth ("ALS") for assay. There is no information on how the Kinloch Resources soils were collected.</li> <li>The soil samples were screened to -1.6 mm, typically weighing 200-500 g each, and placed in Minsam paper bags, and submitted to ALS Geochemistry, Perth for preparation and assay by lithium borate fusion with ICP-MS finish (ME-MS81).</li> <li>Ground Radiometric data was collected at surface.</li> <li>Drone Based Airborne Magnetic data was acquired.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Not applicable – no drilling being reported.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable – no drilling being reported.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and</li> </ul>	<ul style="list-style-type: none"> <li>The Codrus Minerals soil samples were qualitatively logged and described by a suitably qualified geologist or field assistant. There is no geological logging information for the Kinloch Resources soils.</li> </ul>
	<p>geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all cores taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Codrus Minerals' soil samples were screened to c. -3mm on site and c. 300g of the -3mm fines submitted to ALS where they were dried and pulverised to nominally 85% passing 75 microns for assay.</li> <li>• Kinloch Resources soils were submitted to Genalysis, Perth and Acme Labs, Vancouver for assay but there is no information on preparation techniques.</li> <li>• Soil sample preparation follows industry standard best-practice. Samples were dried, crushed (&lt;2mm), and rotary divided where required. Pulverisation was done by LM1 mill, and bowls were barren-washed after each sample.</li> <li>• A field duplicate sample was collected after the 25<sup>th</sup> sample point.</li> <li>• Screened sample sizes (-1.6mm) of 200-500 g are considered appropriate for the style of mineralisation.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<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>	<ul style="list-style-type: none"> <li>• Codrus Minerals soil samples were assayed for a broad suite of elements including the REEs and Y by a lithium metaborate fusion with acid digestion and ICPMS finish at ALS (method ME-MS81).</li> <li>• Kinloch Resources soil samples were assayed for the REEs and Y at Genalysis, Perth by sodium peroxide fusion with acid digest and ICPMS finish, and Acme Labs, Vancouver using lithium metaborate fusion with ICPMS finish.</li> <li>• Codrus Minerals included commercially certified reference materials in the soil sample submissions to ALS at a rate of c. one in 25 samples. Greater than 90% of the commercial standards reported 10% of the certified values for REE and Y, with the exception of one commercial standard that under reported 12-20% for Gd.</li> <li>• Codrus Minerals personnel collected field duplicates at a rate of c. one duplicate per 25 soil samples and indicate good site repeatability.</li> <li>• It is not known what quality control procedures were undertaken for the historic soil sampling.</li> <li>• At ALS Perth the soil samples were oven dried at 60° C, pulverised to P85 -75 microns, and assayed by ALS Perth's ME-MS81 method, with ICP-MS finish.</li> <li>• One commercial reference standard was included in the submission between every 25th sample; the laboratory also utilized internal standards.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Sampling and data processing were conducted by suitably qualified Codrus Minerals field technicians and verified by Codrus Minerals geologists.</li> <li>• No drilling is being reported, the use of twinned holes is not applicable.</li> <li>• Primary data is stored and documented in industry standard ways.</li> <li>• Codrus Minerals assay data is as reported by ALS and has not been adjusted in any way. Remnant assay pulps are currently held in storage by ALS.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement points were located with a handheld GPS with an accuracy of +/- 5 metres.</li> <li>• All coordinates and maps presented here are in the MGA Zone 50 GDA94 system.</li> <li>• Topographic control is provided by government 250,000 topographic map sheets.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Codrus Minerals soil samples were collected on a c. 100x100m grid with infill sampling on 50x50m and 25x25m grids over priority target areas as shown in the accompanying figures.</li> <li>• Kinloch Resources soil samples were collected on 20m spacing along lines 100m apart as shown in the accompanying figures.</li> <li>• The soil sampling data is in no way sufficient to establish mineral resources.</li> <li>• Sample compositing has not been applied.</li> <li>• The soil sampling was a methodology used (together with ground radiometric and UAV-flown magnetics) to delimit the best area to drill and verify the presence and nature of rare earth element mineralisation within the Karloning Pegmatite system and cannot be considered representative of in situ grades or in any way suitable for resource estimation.</li> <li>• Not applicable</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• The soil samples were taken from a square grid, initially at 100 x 100m spacing and then infills at 50x50 m and 25 x 25m in areas that were deemed a priority area. Sample grids are planned to be orthogonal to mineralized trends, but they are poorly understood at this time.</li> <li>• All grids for Ground Radiometrics, and Drone Magnetics were flown with the aim of being orthogonal to the geology, but geological controls at this time are not well understood.</li> <li>• Not applicable.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• The chain of custody for all Codrus Minerals samples from collection to dispatch to assay laboratory was managed by Codrus Minerals personnel. Sample numbers are unique and do not include any locational information useful to non-Codrus Minerals personnel. The level of security is considered appropriate for such reconnaissance sampling.</li> <li>• Historic Kinloch Resources soil sample security procedures are not known.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• The soil assay results agree well with the observed materials and known REE mineralisation such as the Karloning pegmatite.</li> <li>• Follow up sampling of selected targets is anticipated. QA/QC reviews were done on the Drone Magnetic data prior to being submitted for processing.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The sampling was entirely conducted within granted exploration licenses E70/5339 (in JV with Talgomine Pty Ltd) and E70/6306 (100%).</li> <li>The tenement is in good standing, without known impediments.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Most of the previous owners and explorers' efforts were focused on the quarrying of feldspar and quartz from the Karloning pegmatite as aggregate products saleable to the construction industry and not relevant to the Codrus Minerals' exploration interests. Details of 20 RAB holes drilled vertically to a maximum depth of 21.3m have been collated with analysis only completed for Na<sub>2</sub>O and K<sub>2</sub>O</li> <li>Kinloch Resources completed a partial soil survey over the area (144 samples) in the 2011-2012 period and samples were analysed by ACME labs, Vancouver for REEs using a Lithium Metaborate fusion and ICP-MS finish. This work showed multiple soil anomalous zones with &gt;1000ppm TREEs over the northern part of the Karloning Pegmatite as mapped by the GSWA. Other than this work by Kinloch the Karloning Pegmatite does not appear to have been evaluated in any systematic way for REEs</li> </ul>



## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting, and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The tenement encompasses the Karloning Pegmatite system, an NYF type pegmatite which is typically zoned from biotite-phyrlic adamellite (quartz monzonite) wall rock through to graphic granite and transitioning into albite zone (with biotite veins and aplite dikes) and a quartz core; a few unidirectional solidification texture (UST) veining structures were observed in float samples. Note that the reconnaissance rock sampling results from the earlier announcement demonstrates potentially significant REE mineralization within at least the graphic granite and albite zones of the Karloning Pegmatite system.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• 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:               <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• 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               <ul style="list-style-type: none"> <li>○ explain why this is the case.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable – no drilling being reported.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• None applied or considered necessary for the style of sampling undertaken.</li> <li>• Not applicable.</li> <li>• No metal equivalents reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable – no drilling was carried out and the geometry of the pegmatite is not currently known.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant diagrams are included in this report, no significant discovery is being reported.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• All Codrus Minerals and historic Kinloch Resources REE+Y soil sample results are tabulated in this report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• The results are considered indicative only of the mineralisation in the area.</li> <li>• Geological observations are included in this report</li> <li>• Ground Radiometric device details: <ul style="list-style-type: none"> <li>• tripod-mounted Radiation Solutions RS-330 Portable Gamma Ray Spectrometer (with a 3"x3" NaI Crystal)</li> <li>• 120 second readings (on Assay Mode)</li> </ul> </li> <li>• Drone Magnetic device detail: <ul style="list-style-type: none"> <li>• a DJI multi-rotor UAV (Matrice 600 Pro)</li> <li>• GEM Systems Inc, Potassium Vapour Magnetometer (GSMP-35UB)</li> <li>• Gradient tolerance of 50,000 nT/m and 0.0002 nT sensitivity @1 Hz</li> <li>• +/- 0.1 nT absolute accuracy with a 15,000-120,000 nT dynamic range</li> <li>• Program reading intervals: 1 every metre.</li> <li>• Heading error +/-0.005 nT between 10-80deg and 360deg full rotation around axis</li> <li>• Laser altimeter, Inertial measurement unit (IMU), and GPS (0.7 meter resolution)</li> <li>• base station is a GSM19 Overhauser with a resolution of 0.01 nT, sensitivity of 0.022nT @1 Hz, and absolute accuracy of +/-0.1 nT</li> </ul> </li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Codrus has gained a better understanding of the REE mineralisation in the Karloning pegmatite system from the recently concluded soil sampling, ground radiometrics and UAV-flown magnetic surveys. The results are being used to plan a drilling program that has commenced to probe the identified REE bearing pegmatite mineralisation.</li> <li>• Extent of the Karloning Pegmatite is currently poorly constrained and significant extension</li> </ul>

Criteria	JORC Code explanation	Commentary
		beyond the currently mapped extent may be possible. Appropriate maps and diagrams are included in this report.

**Section 3 Estimation and Reporting of Mineral Resources**

Not applicable

**Section 4 Estimation and Reporting of Ore Reserves**

Not applicable