

ASX ANNOUNCEMENT | 9 May 2024

AUGER DRILLING IDENTIFIES HIGH GRADE RARE EARTH ELEMENTS AT RED PEAK PROJECT IN THE GASCOYNE REGION, WESTERN AUSTRALIA



HIGHLIGHTS

- Auger drilling campaign completed during the exploration season at the 100%-owned Red Peak Project located in the Gascoyne Region of Western Australia
- Red Peak is located immediately southeast of the Mt Clere REE-Niobium project owned by Krakatoa Resources Limited (ASX. KTA)
- A total of 801 auger drilling samples were collected on a 500m x 500m grid with the assay results demonstrating significant and high-grade Rare Earth Element (REE) mineralisation for both "light" and "heavy" Rare Earth Element groups
- Total Rare Earth Oxide (TREO) results up to 4505 ppm TREO with 15 results greater than 766 ppm TREO
- Total Light Rare Earth Oxide (TLREO) results up to 4284 ppm TLREO
 - o Light Rare Earth Element results were dominated by Cerium (Ce) as well as Lanthanum (La) and Praseodymium (Pr)
 - o Cerium Results up to 2990 ppm Ce
- Total Heavy Rare Earth Oxide (THREO) results up to 884 ppm THREO with Heavy Rare Earth Element results dominated by Samarium (Sm), Europium (Eu), Gadolinium (Gd) and Dysprosium (Dy)

Askari Metals Limited (ASX: AS2) ("**Askari**" or "**Company**") is pleased to announce the assay results from its auger drilling campaign completed at the 100%-owned Red Peak project located in the Gascoyne Region of Western Australia.

A total of 801 auger drilling samples were collected on the Red Peak project on a 500m x 500m grid with the assay results demonstrating significant and high-grade Rare Earth Element (**REE**) mineralisation for both "light" and "heavy" Rare Earth Element groups.



The Red Peak project is located immediately southeast of the Mt Clere REE-Niobium project owned by Krakatoa Resources Limited (ASX. KTA) sharing the same geological features and settings and boasting the same mineralisation potential.

The design basis for the 801-point auger drilling grid was to test the potential of the Red Peak project at a project-wide level with a 500m x 500m sample spacing. The location of the samples were selected based on field activities undertaken by the Company during previous exploration campaigns as well as Rare Earth Element results from the WAMEX database. In addition, the Company utilised the target generation survey identified by ASTER satellite hyperspectral analysis.

The results from this initial auger drilling campaign has demonstrated the significant exploration upside at the Red Peak project for "light" and "heavy" REE mineralisation as well as the potential for identifying potential Niobium mineralisation utilizing similar techniques to those adopted nearby at the Mt Clere project.

The Company is now planning to follow up this project-wide campaign with a 250m x 250m infill auger drilling grid. The assay analysis covered the full suite of Rare Earth Elements (REE), and the data was reviewed with reference to Total Rare Earth Oxides (TREO), Total Light Rare Earth Oxides (TLREO) and Total Heavy Rare Earth Oxides (THREO).

Significantly, these assay results demonstrate that 381 samples have TREO results above the nominal background value of 255 ppm TREO, and they also show that Light REOs are more prevalent in the data than Heavy REOs, although both are extremely anomalous.

Commenting on the assay results, Managing Director, Mr Gino D'Anna, stated:

"The results of the auger drilling campaign at Red Peak have provided a significant number of high-grade REE mineralised surface results with notable high maximum results achieved by some metals like Cerium, Samarium, Gadolinium and Europium. This dataset has identified areas to focus on more closely with a follow-up infill auger drilling sampling campaign.

Rare Earth Element exploration requires an in-depth knowledge of the host lithology and how the REE's can be liberated. The Company is proposing to conduct more detailed work focusing on REE liberation and will engage suitable industry experts to advance the project.

Askari looks forward to defining the REE potential of the Red Peak project and evaluating future exploration activities, updating our shareholders as our exploration activities continue."

Background

Rare earth elements (REEs) are a group of 17 elements that are important for a range of applications and are found in a variety of geological settings. Examples of REE hosts include carbonatites, pegmatites, ion-adsorption clays and iron-oxide-copper-gold deposits.

REEs are widely used in modern technologies such as electronic devices, wind turbines, electric vehicle batteries, high-performance alloys, magnets, and medical applications such as MRI machines and X-ray tubes.



REEs are also used in pollution control and specialised glass and ceramic products for smartphones and televisions. Their unique properties make them essential for many modern technologies, and their importance is expected to grow.

The wide-spaced (500m x 500m) auger drilling and sampling survey was designed using targets identified by the WAMEX database, data from rock samples collected by the Company and remote Sentinel-2 satellite imagery using REE indicators such as helium and talc.

Discussion of Results

The assay results received from the soil sampling campaign were reviewed for all the Rare Earth Elements. The oxides for those elements were calculated using conversion factors and the formulas:

$La \times 1.1728 = La_2O_3$; $Ce \times 1.1713 = Ce_2O_3$; $Pr \times 1.1703 = Pr_2O_3$; $Nd \times 1.1664 = Nd_2O_3$; $Sm \times 1.1596 = Sm_2O_3$; $Eu \times 1.1579 = Eu_2O_3$; $Gd \times 1.1526 = Gd_2O_3$; $Tb \times 1.151 = Tb_2O_3$; $Dy \times 1.1477 = Dy_2O_3$; $Ho \times 1.1455 = Ho_2O_3$; $Er \times 1.1435 = Er_2O_3$; $Tm \times 1.1421 = Tm_2O_3$; $Yb \times 1.1387 = Yb_2O_3$; $Y \times 1.2699 = Y_2O_3$ and $Lu \times 1.1371 = Lu_2O_3$.

The resultant Total Rare Earth Oxides was determined by summing the oxides as calculated above using the formula:

$TREO$ (Total Rare Earth Oxide) = $La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$.

The Total Rare Earth Element suite was split into the Total Light Rare Earth Oxides (TLREO) and Total Heavy Rare Earth Oxides (THREO).

The TLREO (Total Light Rare Earth Oxides) include $La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3$, while the THREO (Total Heavy Rare Earth Oxides) include $Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3$.

To help understand whether sample results are positive, it helps to compare them against expected background values for the element in the appropriate environment. The likelihood of positively anomalous results increases if the average result is above the background value.

The Total Rare Earth Oxide (TREO) suite's background level is 255ppm TREO. The background value for the Total Light Rare Earth Oxide (TLREO) suite is 178ppm TLREO, while the background value for the Total Heavy Rare Earth Oxide (THREO) suite is calculated to be 78ppm THREO.

Total Rare Earth Oxides – TREO

The Total Rare Earth Oxide results are encouraging and show an average of 279 ppm TREO from the 801 samples, which is above the average background TREO. Fifteen samples have TREO values greater than three times (3 x) the background value of 766 ppm TREO.

The highest TREO result of 4505 ppm TREO is impressive and justifies additional efforts to define this exciting target.



Table 1 below tabulates the top fifteen TREO sample results from the soil sampling program.

Sample ID	Total Rare Earth Oxides
AA00658	4505
AA00803	3611
AA00404	1534
AA00567	1481
AA00727	1084
AA00675	1083
AA00632	1062
AA00581	925
AA00615	913
AA00511	884
AA00599	880
AA00522	788
AA00570	778
AS81068	776
AA00647	767

Table 1: Table of the top fifteen TREO results from the auger drilling and sampling campaign

A spatial review of the data indicated that most elevated results are concentrated in the central part of the tenement, with a few outliers to the east and west. Figure 1 illustrates the spatial distribution of the TREO values from the soil sampling campaign.

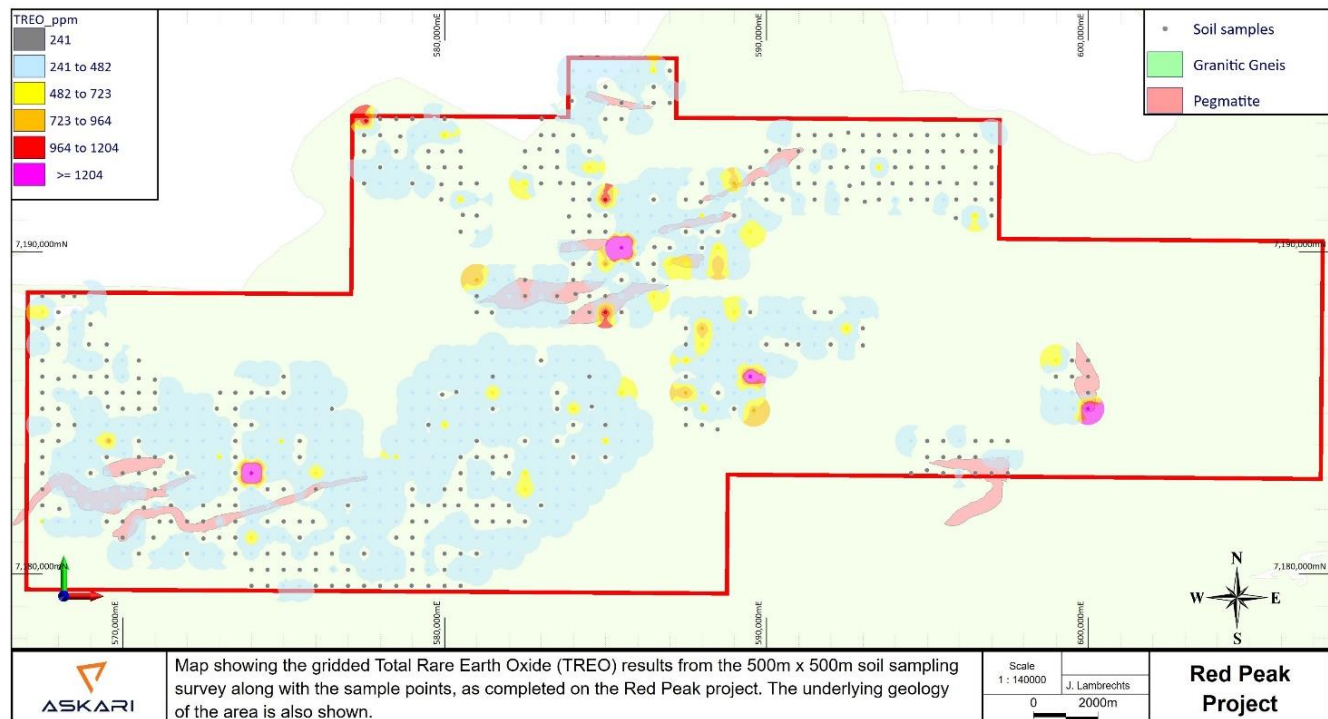


Figure 1: Image depicting the gridded TREO results from the auger drilling and sampling campaign

Total Light Rare Earth Oxides – TLREO

The Total Light Rare Earth Oxide results are excellent and show an average of 231 ppm TLREO from the 801 samples, which is above the average background of 178 ppm TLREO. Twenty-four (24) samples have TLREO values greater than three times (3 x) the background value of 534 ppm TLREO. The highest result of 4284 ppm TLREO is impressive and justifies additional efforts to define this exciting target.

On an individual front, the Light Rare Earth Element suite is dominated by Cerium, with a maximum result forty-five times (45 x) the background value of 66.4 ppm Ce and an average of 99 ppm Ce, well above the background value.

Lanthanum and Praseodymium are also positively anomalous, with average values above the expected background for the individual elements and a high proportion of samples returning results three times or more than the background value. Table 2 tabulates the top fifteen elemental results for the Light Rare Earth Element suite.

Sample ID	Light Rare Earth Elements			
	Lanthanum La_ppm	Cerium Ce_ppm	Praseodymium Pr_ppm	Neodymium Nd_ppm
AA00658	316.0	2990.0	82.3	270.0
AA00803	363.0	1040.0	174.0	754.0
AA00567	263.0	534.0	53.7	194.0
AA00404	428.0	166.0	91.6	340.0
AA00727	233.0	396.0	47.5	148.0
AA00675	280.0	322.0	49.3	153.0
AA00632	208.0	380.0	49.3	166.0
AA00615	215.0	373.0	37.5	108.0
AA00581	234.0	298.0	37.4	110.0
AA00511	144.0	400.0	27.6	93.4
AA00522	186.0	314.0	31.5	97.7
AA00599	79.8	473.0	13.4	54.1
AS81068	178.0	299.0	30.9	102.0
AA00647	129.0	355.0	27.9	83.1
AA00570	90.2	420.0	19.3	64.8

Table 2: Table of the top fifteen Light Rare Earth Element results

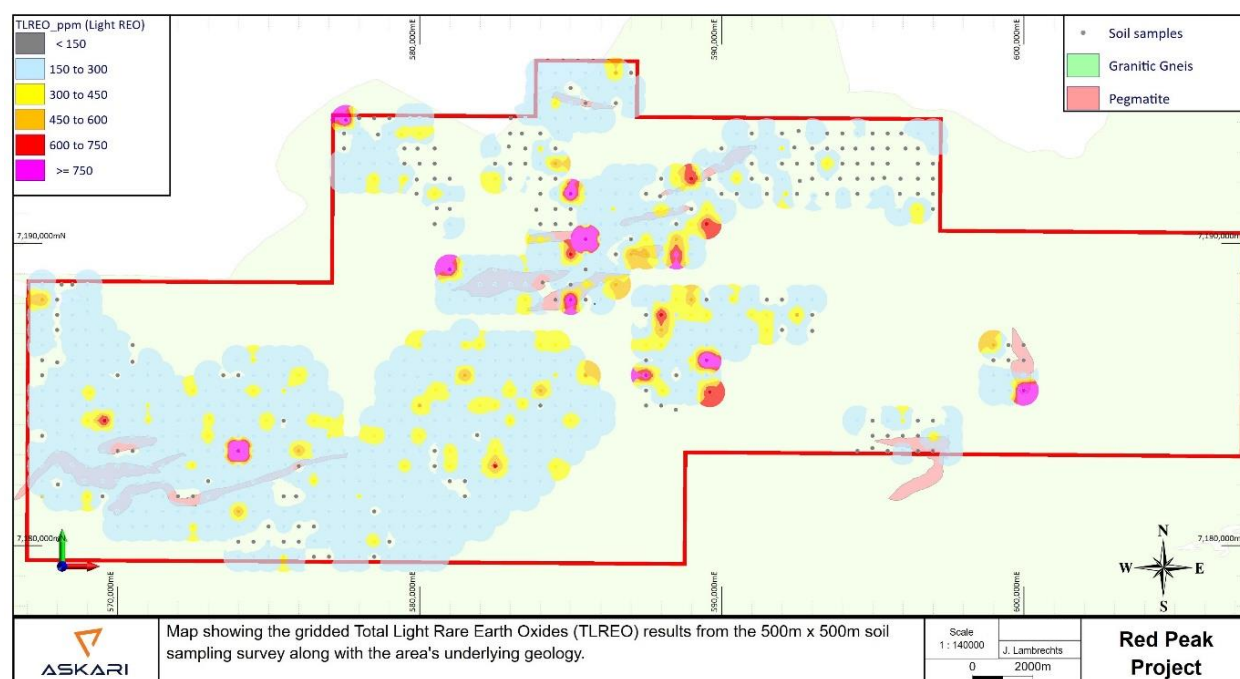


Figure 2: Map showing the Total Light Rare Earth Oxide results for the auger sampling campaign

The Spatial distribution of the light Rare Earth Oxide minerals is similar to that of the Total Rare Earth Oxides and clusters around the central portion of the tenement, with outliers in the east and west.

Total Heavy Rare Earth Oxides – THREO

Three samples have THREO values greater than three times (3 x) the background value, with the highest result of 884 ppm THREO.

On an individual basis, the Heavy Rare Earth Element suite is dominated by Samarium, Europium and Gadolinium, with a maximum result of more than twenty times (20 x) the background value.

Terbium and Dysprosium are also positively anomalous, with average values above the expected background for the individual elements and several samples returning results three times or more than the background value. Table 2 tabulates the top fifteen elemental results for the Heavy Rare Earth Element suite.

Table three below tabulates the top fifteen results of the Heavy Rare Earth Element suite.

Figure three below depicts the spatial distribution of the soil sampling campaign's Total Rare Earth Oxide results. As with the TREO and TLREO results, the positively anomalous samples cluster in the central portion of the tenement. The footprint of the THREO anomalism is smaller than those of the TLREO and TREO, but it shares the same spatial characteristics, making it possible for an appropriately designed follow-up soil program to test all three Rare Earth Element categories.

Sample ID	Heavy Rare Earth Elements										
	Samarium Sm_ppm	Europium Eu_ppm	Gadolinium Gd_ppm	Terbium Tb_ppm	Dysprosium Dy_ppm	Holmium Ho_ppm	Erbium Er_ppm	Thulium Tm_ppm	Ytterbium Yb_ppm	Yttrium Y_ppm	Lutetium Lu_ppm
AA00803	174.0	41.1	133.0	16.0	79.8	12.2	29.6	4.0	25.0	226.0	3.2
AA00404	60.0	14.3	45.2	6.1	29.5	4.6	10.6	1.2	7.5	99.7	0.9
AA00567	29.7	4.2	27.6	3.4	19.7	3.8	9.6	1.2	7.9	105.0	1.2
AA00658	44.4	10.3	29.2	3.8	18.7	3.1	7.7	1.0	5.9	60.8	0.8
AA00594	7.0	2.3	10.6	1.6	10.0	2.3	6.8	0.8	4.2	85.1	0.7
AA00782	6.1	2.3	9.2	1.6	11.6	2.6	7.9	1.2	7.6	76.7	1.2
AA00599	10.7	2.7	11.2	1.7	10.4	2.3	6.7	0.9	5.5	73.5	0.8
AS81111	10.0	2.5	11.8	1.6	9.7	2.2	5.9	0.8	4.9	71.2	0.8
AA00566	14.8	3.8	14.0	2.1	12.3	2.4	6.5	0.9	5.4	56.5	0.8
AA00675	22.1	4.5	17.8	2.1	10.5	1.8	4.8	0.6	3.7	49.2	0.5
AA00635	13.5	2.8	12.6	1.9	10.7	2.1	5.9	0.8	4.9	56.2	0.7
AA00581	16.2	3.6	13.0	1.5	8.3	1.7	5.0	0.7	4.4	52.2	0.7
AA00575	12.9	3.2	11.6	1.6	9.0	1.7	5.0	0.7	4.0	56.8	0.6
AA00643	17.0	3.7	14.0	1.8	9.1	1.7	4.6	0.6	3.5	50.4	0.5
AA00472	17.2	3.0	15.4	2.0	10.1	1.8	4.5	0.5	3.3	47.3	0.5

Table 3: Table of the top fifteen Rare Earth Element suite



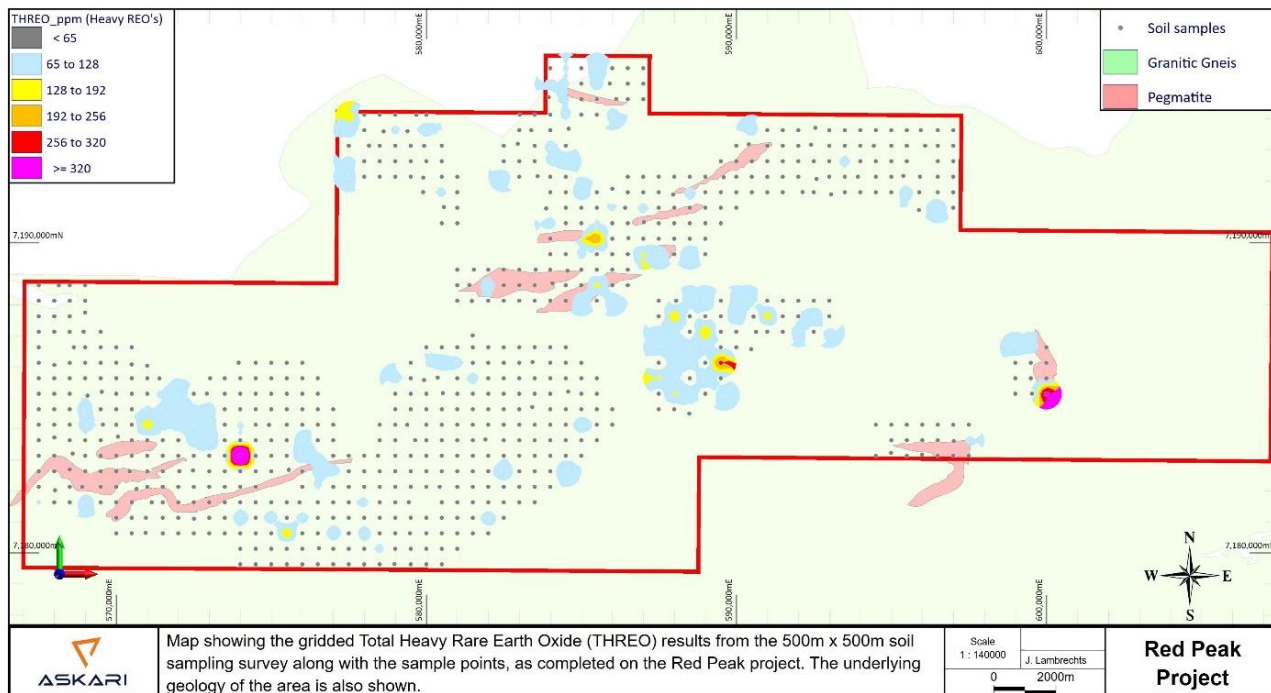


Figure 3: Figure depicting the spatial distribution of the Total Heavy Rare Earth Oxide results from the auger campaign

FUTURE WORK

The results of this initial project-wide auger drilling and sampling campaign have enabled the Company to identify a target area in the centre of the tenement where a closer-spaced infill sampling campaign will help define the Rare Earth Element target more clearly. The current sample spacing is about 500m x 500m, and the proposed infill program is planned to be 250m x 250m and should include a further 635 samples. The Board will determine the commencement of this program depending on the Company's overall exploration strategy. Figure 4 below shows the design of the infill sampling program.

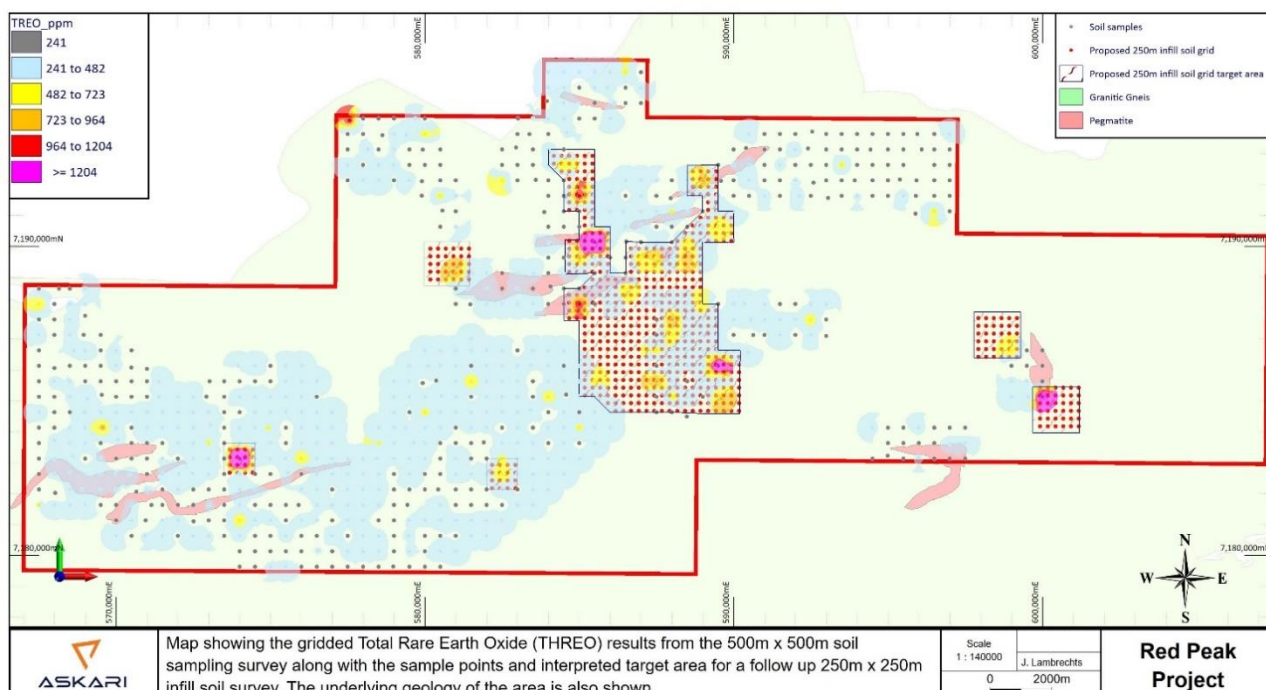


Figure 4: Map depicting the planned 250m x 250m infill auger drilling sampling program

This announcement is authorised for release by the Board of the Company.

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FOR FURTHER INFORMATION PLEASE CONTACT

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ABOUT ASKARI METALS

Askari Metals is a focused Southern African exploration company. The Company is actively exploring and developing its Uis Lithium Project in Namibia located along the Cape-Cross – Uis Pegmatite Belt of Central Western Namibia. The Uis project is located within 2.5 km from the operating Uis Tin-Tantalum-Lithium Mine which is currently operated by Andrada Mining Ltd and is favourably located with the deep water port of Walvis Bay being less than 230 km away from the Uis project, serviced by all-weather sealed roads. In March 2023, the Company welcomed Lithium industry giant Huayou Cobalt onto the register who remains supportive of the Company's ongoing exploration initiatives.

The Company has also recently acquired the Matemanga Uranium Project in Southern Tanzania which is strategically located less than 70km south of the world-class Nyota Uranium Mine. Askari Metals is actively engaged in due diligence to acquire further uranium projects in this emerging tier-1 uranium province.

The Company is currently assessing its options for a spin-out divestment strategy of the Australian projects which includes highly prospective gold, copper, lithium and REE projects.

For more information please visit: www.askarimetals.com



CAUTION REGARDING FORWARD-LOOKING INFORMATION

This document contains forward-looking statements concerning Askari Metals Limited. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the Company's beliefs, opinions and estimates of Askari Metals Limited as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Targets, Exploration Results or Mineral Resources is based on information compiled by Clifford Fitzhenry, a Competent Person who is a Registered Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP) as well as a Member of the Geological Society of South Africa (GSSA) and a Member of the Society of Economic Geologists (SEG).

Mr. Fitzhenry is the Chief Project and Exploration Manager (Africa) for Askari Metals Limited, who has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Fitzhenry consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



Appendix 1 – JORC Code, 2012 Edition, Table 1 report

Section 1 Sampling Techniques and Data (Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 	<p>Soi Auger samples Soil samples</p> <p>Samples are clear of organic matter.</p>
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details. 	Soil Auger and soil samples
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	Samples collected from the bottom of the flight and/or from the bottom of the hole.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource Estimation, mining studies and metallurgical studies. 	Samples were logged with comments on colour before being placed into Calico bags.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<p>All samples are crushed then pulverised in a ring pulveriser (LM5) to a nominal 90% passing 75 micron. An approximately 100g pulp sub-sample is taken from the large sample and residual material stored.</p> <p>A quartz flush (approximately 0.5 kilogram of white, medium-grained sand) is put through the LM5 pulveriser prior to each new batch of samples. A number of quartz flushes are also put through the pulveriser after each massive sulphide sample to ensure the bowl is clean prior to the next sample being processed. A selection of this pulverised quartz flush material is then analysed and reported by the lab to gauge the potential level of contamination that may be carried through from one sample to the next.</p>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<p>All AS2 samples were submitted to Bureau Veritas Laboratories in Adelaide. The samples were sorted, wet weighed, dried then weighed again. Primary preparation involved crushing and splitting the sample with a riffle splitter where necessary to obtain a sub-fraction which was pulverised in a vibrating pulveriser. All coarse residues have been retained.</p> <p>The samples have been analysed by a 40g lead collection fire assay as well as multi acid digest with an Inductively Coupled Plasma (ICP) Optical Emission Spectrometry finish for multi elements</p> <p>The lab randomly inserts analytical blanks, standards and duplicates into the client sample batches for laboratory QAQC performance monitoring. AS2 also inserted Certified Reference Material (CRM) samples and certified blanks, to assess the accuracy and reproducibility of the results.</p> <p>All of the QAQC data has been statistically assessed to determine if results were within the certified standard deviations of the reference material. If required a batch or a portion of the batch may be re-assayed. (no re-assays required for the data in the release).</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<p>An internal review of results was undertaken by Company personnel. No independent verification was undertaken at this stage.</p> <p>Validation of both the field and laboratory data is undertaken prior to final acceptance and reporting of the data.</p> <p>Quality control samples from both the Company and the Laboratory are assessed by the Company geologists for verification. All assay data must pass this data verification and quality control process before being reported.</p>
Location of data points	<ul style="list-style-type: none"> • 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. 	<p>Samples were collected and GPS located in the field using a hand-held GPS with roughly a 2-4m error.</p>
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<p>The soil samples were collected on a 500m x 500m grid</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	<p>Not Applicable</p>

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	All samples were collected and accounted for by AS2 employees or contractor personnel. All samples were bagged into calico bags. The appropriate manifest of sample numbers and a sample submission form containing laboratory instructions were submitted to the laboratory. Any discrepancies between sample submissions and samples received were routinely followed up and accounted for.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	No audits have been conducted on the historical data to our knowledge. NOTE: No historic Lithium data is available on this tenement.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	The Red Peak project area is considered poorly explored and highly prospective for lithium pegmatites as well as base metals, uranium and Rare Earth Elements. Notably, several pegmatites are already identified on 1:100,000 scale geological maps. However, only limited historical exploration has occurred and focused on either gold or base metals (Pb / Zn). Extensive pegmatite outcrop can be observed from the surface data, with at least eleven pegmatites mapped across the project, exhibiting strike lengths in excess of 3km and widths of between 150m and 200m. These are significant pegmatites that warrant further investigation, given the fertility of the geological setting. There is significant exploration upside at the Red Peak project, given the prior focus on gold and base metal mineralisation. The mapping completed by the WA Geological Survey has resulted in the mapping of extensive pegmatite fields across the Red Peak project area. This is a distinct strategic advantage for the Company. The focus will now shift towards developing the surface mineralisation model for conventional LCT (Lithium-Caesium-Tantalum) pegmatites. Further geological review is required for the Red Peak project in relation to the REE potential

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	Limited exploration of Lithium and REE in this region. No drilling for Lithium or REE has been previously reported.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The region has been deformed and metamorphosed at medium to high grade, intruded by granite and pegmatite, and then deformed and metamorphosed at medium to high grade. Parts of the region (the Yarlalweelor Gneiss Complex) were yet further deformed and metamorphosed at low to medium grade during the Capricorn Orogeny at 1830–1780 Ma, and intruded by voluminous granite sheets and dykes.</p> <p>Carbonatite dykes and lamprophyre dykes, which have been identified in diamond exploration, are probably common and could have been emplaced at this time.</p> <p>The Yilgarn represents the deepest and most severely weathered region in Australia. Large tracts are covered by a considerable regolith thickness, dominated by sand plains, laterite and transported sedimentary cover. The tenement is covered extensively by laterite, which is being eroded into unconsolidated sand, silt and gravel in braided streams and broad alluvial sheet-wash and colluvial plains. The presence of this regolith can commonly be a major impediment to exploration, but here monazite is concentrated in the alluvial areas and REE probably is enriched in the lateritic regolith, so regolith is the primary exploration target.</p> <p>The Errabiddy Shear Zone, a 5km to 20km wide major crustal suture that binds the accreted Palaeoproterozoic Glenburgh terrane to the Archaean Yilgarn Craton. Such reworked craton margins are a favourable setting for many large-scale gold and base metal deposits, where long-lived crustal-scale structures can act as conduits for the transfer of heat and mineralising fluids from the upper mantle. The structural corridor associated with the Errabiddy Shear Zone offers the Company further significant gold exploration opportunities.</p>
Drill hole Information	<ul style="list-style-type: none"> 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: 	Not Applicable
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 	Not Applicable

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> 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. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Not Applicable
Diagrams	<ul style="list-style-type: none"> 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. 	Diagrams are included in the body of the document.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of results. 	All results reported are exploration results in nature.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	Assessment of other substantive exploration data is not yet complete; however, it is considered immaterial at this stage.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	Follow-up work programmes will be subject to the interpretation of recent and historical results, which is ongoing and as set out in the announcement.

Appendix 2: Auger Drilling and Sampling Data Set

Sample ID	Light Rare Earth Elements							Heavy Rare Earth Elements							
	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	Y_ppm	Lu_ppm
AA00401	20.40	59.00	4.55	17.80	3.45	0.90	2.80	0.44	2.65	0.50	1.45	0.20	1.50	11.40	0.24
AA00402	26.20	18.30	5.30	19.20	3.20	0.65	2.60	0.36	2.00	0.40	1.10	0.15	1.05	10.00	0.16
AA00403	37.10	60.40	7.45	28.00	4.95	1.00	4.00	0.56	3.25	0.64	1.85	0.25	1.80	18.10	0.24
AA00404	428.00	166.00	91.60	340.00	60.00	14.30	45.20	6.12	29.50	4.56	10.60	1.20	7.45	99.70	0.88
AA00405	60.10	53.90	12.10	45.00	7.70	2.05	5.60	0.78	3.95	0.66	1.60	0.20	1.35	13.70	0.16
AA00406	66.50	121.00	12.40	44.70	7.95	1.35	5.80	0.82	4.40	0.80	2.15	0.25	1.90	22.60	0.28
AA00407	47.40	90.70	9.80	36.90	6.05	1.35	4.20	0.54	2.85	0.52	1.45	0.20	1.30	13.30	0.18
AA00408	55.40	44.90	11.30	45.10	7.75	1.70	6.00	0.78	4.45	0.86	2.45	0.30	2.15	25.60	0.32
AA00409	15.60	44.10	2.90	10.90	1.95	0.45	1.60	0.24	1.25	0.24	0.65	0.10	0.65	6.50	0.10
AA00410	18.40	40.70	5.45	26.00	6.70	2.15	7.40	1.22	7.55	1.50	4.25	0.55	3.90	39.70	0.54
AA00411	189.00	41.30	44.10	155.00	25.30	7.65	16.20	1.98	9.35	1.46	3.30	0.40	2.35	25.80	0.26
AA00412	27.90	50.80	5.15	19.70	3.55	1.00	3.20	0.46	2.65	0.52	1.45	0.20	1.30	14.10	0.20
AA00413	20.40	30.90	3.80	14.20	2.65	0.60	2.20	0.32	2.00	0.40	1.15	0.15	1.10	10.60	0.16
AA00414	24.30	45.70	5.20	19.80	3.85	0.65	3.00	0.40	1.95	0.34	0.90	0.15	0.95	8.90	0.14
AA00415	82.80	166.00	18.40	69.50	12.20	2.15	9.40	1.44	8.90	1.78	5.20	0.70	4.80	49.70	0.66
AA00416	29.30	60.40	6.00	22.40	4.00	0.90	3.40	0.46	2.55	0.48	1.35	0.15	1.25	12.80	0.18
AA00417	21.70	28.40	4.20	16.70	3.25	0.75	3.20	0.44	2.75	0.56	1.65	0.20	1.65	16.70	0.24
AA00418	14.40	45.20	3.55	14.60	2.80	0.65	2.60	0.40	2.30	0.48	1.40	0.20	1.40	12.80	0.20
AA00419	25.50	28.50	5.65	22.00	3.80	0.95	3.60	0.50	2.90	0.58	1.65	0.20	1.50	16.20	0.22
AA00421	40.40	83.40	8.05	29.40	4.15	0.75	2.40	0.32	1.65	0.32	0.90	0.15	0.95	6.80	0.14
AA00422	49.50	101.00	10.40	39.80	7.05	1.75	5.60	0.84	4.70	0.92	2.45	0.30	2.25	21.60	0.32
AA00423	26.80	105.00	6.00	22.30	4.10	0.95	3.20	0.48	2.80	0.52	1.45	0.20	1.45	11.60	0.20
AA00424	21.20	22.70	4.30	16.50	2.95	0.70	2.80	0.38	2.25	0.44	1.30	0.15	1.15	13.40	0.18
AA00425	18.00	32.80	3.60	13.60	2.55	0.60	2.20	0.36	2.10	0.42	1.25	0.15	1.25	9.10	0.16
AA00426	26.50	61.60	5.80	22.10	4.30	1.10	3.80	0.54	3.40	0.66	1.90	0.25	1.70	17.50	0.24
AA00427	24.30	46.40	5.00	18.40	3.60	0.60	2.80	0.40	2.15	0.42	1.20	0.15	1.20	9.90	0.18
AA00428	16.70	31.10	3.45	12.70	2.20	0.50	1.80	0.26	1.50	0.30	0.80	0.10	0.85	7.00	0.12
AA00429	18.00	33.90	4.15	15.90	3.40	0.80	3.40	0.56	3.45	0.70	2.00	0.30	2.00	17.00	0.28
AA00430	37.50	59.60	7.50	28.00	5.15	1.05	3.80	0.54	2.85	0.54	1.45	0.20	1.30	13.80	0.18
AA00431	64.60	41.50	17.70	73.40	14.90	4.00	11.00	1.54	7.65	1.28	3.40	0.40	3.05	27.20	0.40
AA00432	33.20	63.50	6.95	27.20	4.85	1.20	4.00	0.56	3.20	0.64	1.80	0.25	1.70	17.70	0.24
AA00433	16.70	38.50	3.40	13.10	2.55	0.70	2.40	0.36	2.10	0.44	1.30	0.15	1.05	13.50	0.16
AA00434	12.50	20.20	2.50	9.30	1.75	0.40	1.60	0.24	1.40	0.26	0.80	0.10	0.85	7.80	0.12
AA00435	18.20	62.60	3.40	12.40	2.45	0.60	2.00	0.32	1.95	0.40	1.15	0.15	1.15	9.50	0.16
AA00436	35.10	55.70	6.45	24.10	4.35	1.00	3.60	0.50	2.75	0.54	1.55	0.20	1.45	14.90	0.20
AA00437	26.20	33.10	5.05	19.20	3.45	0.90	3.20	0.44	2.55	0.52	1.45	0.20	1.35	15.30	0.20
AA00438	24.20	41.40	5.10	19.70	3.55	0.80	3.00	0.44	2.45	0.48	1.40	0.15	1.20	13.20	0.18
AA00439	15.00	15.70	3.05	11.40	2.05	0.50	2.00	0.28	1.60	0.32	1.00	0.15	0.90	8.10	0.14
AA00441	23.00	44.70	4.35	15.50	2.90	0.50	2.20	0.32	1.75	0.36	1.05	0.15	1.05	8.30	0.16
AA00442	21.90	68.00	4.85	18.00	3.50	0.75	3.00	0.44	2.55	0.48	1.35	0.20	1.35	12.00	0.18
AA00443	19.50	81.80	5.60	20.10	4.20	1.10	3.00	0.50	2.75	0.50	1.45	0.20	1.45	8.80	0.20
AA00444	12.40	12.10	2.05	8.10	1.35	0.35	1.20	0.16	1.00	0.20	0.60	0.10	0.55	6.80	0.08
AA00445	32.60	74.80	7.25	27.30	5.15	1.25	4.60	0.70	3.90	0.76	2.15	0.30	1.95	22.10	0.36
AA00446	16.60	32.60	3.65	14.00	2.90	0.75	2.60	0.42	2.55	0.52	1.50	0.20	1.50	13.20	0.22
AA00447	16.50	32.60	3.90	16.00	3.50	1.15	3.40	0.52	3.15	0.64	1.85	0.25	1.80	16.10	0.36
AA00448	26.50	55.30	5.65	22.00	4.35	0.90	3.80	0.54	3.10	0.62	1.80	0.25	1.75	16.50	0.28
AA00449	50.70	96.90	10.50	38.60	6.85	1.10	4.60	0.46	1.75	0.24	0.60	0.10	0.55	8.20	0.10
AA00451	27.30	59.60	6.00	23.00	4.75	1.30	4.80	0.74	4.50	0.90	2.55	0.35	2.45	25.20	0.34
AA00452	35.80	65.20	7.30	26.90	5.80	0.90	4.60	0.58	2.65	0.42	1.10	0.15	0.90	11.80	0.14
AA00453	40.90	83.70	10.20	42.20	8.55	2.40	7.20	1.00	5.55	1.02	2.65	0.35	2.15	26.20	0.30
AA00454	40.70	73.20	8.30	31.00	5.70	1.35	4.40	0.64	3.75	0.74	2.15	0.30	2.00	21.60	0.28
AA00455	37.40	43.00	6.40	24.90	4.95	1.75	5.20	0.74	4.25	0.88	2.45	0.30	2.15	29.30	0.32
AA00456	23.10	47.60	4.90	18.50	3.65	0.80	3.20	0.46	2.50	0.46	1.40	0.20	1.30	12.30	0.20
AA00457	82.00	155.00	15.10	55.90	8.95	1.20	5.60	0.52	1.90	0.28	0.65	0.10	0.55	7.30	0.10
AA00458	10.30	21.30	2.65	10.60	2.80	0.75	3.00	0.54	3.55	0.74	2.25	0.30	2.40	20.00	0.34
AA00459	15.30	20.70	3.40	13.10	2.55	0.60	2.40	0.36	2.10	0.42	1.20	0.15	1.05	11.70	0.18
AA00461	67.40	125.00	13.40	50.50	7.40	1.50	4.20	0.40	1.60	0.24	0.65	0.10	0.55	7.10	0.10
AA00462	21.00	34.90	4.20	15.90	3.10	1.00	2.80	0.42	2.30	0.46	1.35	0.15	1.25	12.10	0.20
AA00463	25.90	51.70	5.50	20.30	3.90	0.75	3.00	0.42	2.25	0.42	1.25	0.15	1.25	11.20	0.18
AA00464	13.90	22.70	2.65	9.95	1.85	0.75	1.40	0.18	1.00	0.18	0.50	0.05	0.55	5.40	0.08
AA00465	46.10	83.80	9.25	35.10	6.85	1.45	6.00	0.84	4.60	0.88	2.35	0.30	2.20	23.30	0.32
AA00466	20.70	44.20	5.35	22.20	5.15	1.60	5.00	0.78	4.65	0.92	2.75	0.35	2.50	24.10	0.36
AA00467	41.30	74.40	7.90	29.70	5.60	1.10	4.40	0.62	3.40	0.62	1.85	0.25	1.80	17.50	0.26
AA00468	57.70	97.80	9.95	35.10	5.45	1.55	4.20	0.56	3.00	0.54	1.50	0.20	1.45	15.70	0.22
AA00469	34.60	51.70	5.80	20.80	3.60	1.05	2.80	0.40	2.20	0.44	1.25	0.15	1.10	11.50	0.16
AA00470	16.70	44.70	5.95	25.60	5.70	2.30	5.80	0.92	5.60	1.10	3.05	0.40	2.80	30.30	0.40
AA00471	63.10	105.00	12.00	44.90	7.50	1.75	5.60	0.72	3.65	0.64	1.65	0.20	1.30	16.00	0.20
AA00472	102.00	177.00	21.20	85.40	17.20	3.00	15.40	2.02	10.10	1.76	4.45	0.50	3.30	47.30	0.48
AA00473	48.20	105.00	8.25	27.10	3.90	1.10	2.80	0.36	1.80	0.34	0.90	0.10	0.85	9.40	0.14
AA00474	23.90	45.80	4.55	16.90	3.25	1.10	2.80	0.40	2.25	0.44	1.20	0.15	1.10	11.50	0.18
AA00475	16.30	23.00	3.00	11.10	1.90	0.65	1.60	0.20	1.20	0.22	0.65	0.10	0.65	6.80	0.10
AA00476	95.00	154.00	14.40	48.30	9.15	1.20	4.00	0.50	2.75	0.52	1.45	0.20	1.30	14.10	0.18
AA00477	97.80	184.00	18.10	64.10	6.35	1.30	5.80	0.62	2.65	0.42	1.00	0.10	0.70	9.60	0.12
AA00478	43.90	75.70	8.00	29.60	5.10	1.10	4.00	0.54	2.80	0.54	1.50	0.20	1.35	13.90	0.20
AA00479	37.70	147.00	6.60	24.90	4.25	0.95	3.40	0.46	2.65	0.50	1.45	0.20	1.30	13.30	0.20
AA00481	41.90	85.90	7.20	26.20	3.75	1.25	2.80	0.32	1.45	0.26	0.65	0.10	0.60	7.20	0.10
AA00482	45.20	83.70	8.70	32.80	6.05	1.55	5.00	0.76	4.25	0.80	2.35	0.30	2.10	21.60	0.32

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements					
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m
AA00497	11.60	43.10	2.35	8.65	1.60	0.40	1.40	0.24	1.30	0.24	0.75	0.10	0.75	7.00	0.12
AA00498	20.40	32.30	3.65	14.00	2.45	0.70	2.20	0.30	1.70	0.34	1.00	0.15	1.00	11.10	0.16
AA00499	108.00	179.00	21.20	73.70	11.50	2.65	8.40	1.18	6.15	1.04	2.70	0.35	2.20	27.80	0.30
AA00501	32.20	62.00	6.05	22.60	3.85	0.90	3.00	0.44	2.45	0.48	1.30	0.20	1.25	11.90	0.18
AA00502	43.30	86.70	8.15	30.20	5.05	1.00	3.80	0.52	2.75	0.50	1.40	0.20	1.30	12.10	0.20
AA00503	33.80	61.90	6.45	23.90	4.05	0.65	3.00	0.38	1.85	0.34	0.90	0.10	0.85	8.30	0.14
AA00504	20.50	40.10	4.35	16.00	3.00	0.65	2.40	0.34	1.85	0.36	1.05	0.15	1.00	9.00	0.16
AA00505	27.90	58.30	5.35	19.00	3.00	0.70	2.20	0.30	1.65	0.32	0.85	0.10	0.75	8.60	0.12
AA00506	7.60	13.20	1.90	8.70	2.20	0.75	2.60	0.44	2.85	0.58	1.65	0.20	1.60	15.40	0.24
AA00507	110.00	181.00	18.40	64.10	9.15	2.00	6.40	0.78	3.80	0.64	1.65	0.20	1.20	18.10	0.18
AA00508	42.00	79.00	8.45	32.40	5.70	1.60	4.60	0.64	3.55	0.68	1.85	0.25	1.65	18.20	0.22
AA00509	44.80	74.20	7.55	27.40	4.45	1.05	3.20	0.42	2.20	0.42	1.15	0.15	1.00	12.00	0.14
AA00510	67.00	108.00	9.95	35.30	5.80	1.25	4.60	0.64	3.55	0.64	1.85	0.25	1.60	18.90	0.24
AA00511	144.00	400.00	27.60	93.40	14.80	2.80	11.00	1.40	7.50	1.38	3.80	0.45	3.05	40.40	0.42
AA00512	75.20	70.50	12.20	43.20	6.85	1.80	5.20	0.68	3.40	0.56	1.55	0.20	1.25	14.50	0.18
AA00513	51.70	140.00	9.45	35.60	6.35	1.60	5.60	0.80	4.55	0.90	2.55	0.35	2.20	25.50	0.32
AA00514	129.00	231.00	23.70	82.50	12.00	1.65	6.40	0.60	2.25	0.36	0.85	0.10	0.55	10.10	0.10
AA00515	25.70	56.10	4.85	16.90	2.65	0.95	1.60	0.20	1.00	0.18	0.50	0.05	0.50	4.90	0.08
AA00516	82.20	174.00	15.20	55.60	8.80	1.55	6.20	0.78	3.90	0.70	1.95	0.25	1.65	19.70	0.24
AA00517	42.20	495.00	8.35	31.20	5.85	1.75	4.20	0.56	2.90	0.48	1.20	0.15	0.95	9.70	0.14
AA00518	60.90	87.50	10.40	38.50	6.30	1.45	5.40	0.76	4.10	0.76	2.05	0.25	1.75	24.00	0.26
AA00519	73.50	82.40	11.20	42.00	6.90	1.65	6.40	0.86	4.65	0.90	2.40	0.30	1.75	34.10	0.28
AA00521	102.00	174.00	16.40	57.20	7.05	1.65	4.00	0.40	1.70	0.26	0.70	0.10	0.60	8.00	0.10
AA00522	186.00	314.00	31.50	97.70	11.70	1.85	6.40	0.72	3.10	0.54	1.55	0.20	1.20	15.10	0.20
AA00523	48.40	84.20	8.75	32.40	5.30	1.15	4.40	0.58	3.30	0.64	1.80	0.20	1.55	18.50	0.22
AA00524	12.20	18.00	2.45	9.30	1.70	0.45	1.60	0.20	1.25	0.24	0.70	0.10	0.70	7.50	0.10
AA00525	102.00	173.00	16.90	58.30	8.35	1.30	5.40	0.68	3.25	0.62	1.75	0.20	1.45	18.20	0.20
AA00526	59.90	82.70	9.55	35.20	5.45	1.30	4.80	0.68	3.70	0.72	2.05	0.25	1.80	23.60	0.26
AA00527	35.40	50.20	5.75	20.20	2.95	0.90	2.00	0.24	1.10	0.18	0.55	0.05	0.50	5.40	0.08
AA00528	54.30	89.60	9.25	32.80	5.00	1.25	3.40	0.44	2.15	0.40	1.15	0.15	1.00	10.80	0.16
AA00529	14.50	25.40	2.70	10.50	2.25	0.55	2.00	0.30	1.60	0.30	0.75	0.10	0.65	7.60	0.10
AA00530	38.70	68.40	7.75	29.60	6.05	1.25	5.00	0.70	3.50	0.62	1.70	0.20	1.45	16.40	0.20
AA00531	44.90	85.80	8.65	32.90	6.05	1.35	4.80	0.68	3.60	0.68	1.90	0.25	1.65	16.80	0.24
AA00532	44.40	57.60	7.30	27.50	4.65	1.20	4.20	0.56	3.10	0.60	1.70	0.20	1.35	19.80	0.20
AA00533	33.10	57.80	5.80	21.50	3.95	0.95	3.40	0.48	2.75	0.54	1.60	0.20	1.50	15.50	0.22
AA00534	80.40	109.00	14.10	52.00	8.40	2.25	7.00	0.98	5.45	1.08	3.05	0.40	2.55	33.50	0.38
AA00535	42.70	66.30	7.20	26.00	4.25	1.05	3.20	0.44	2.45	0.48	1.35	0.20	1.25	13.00	0.18
AA00536	22.20	43.90	4.35	14.60	2.80	0.65	2.20	0.34	1.85	0.38	1.05	0.15	1.00	9.50	0.16
AA00537	31.00	50.50	5.30	16.50	2.70	0.85	2.00	0.26	1.50	0.28	0.85	0.10	0.75	7.90	0.12
AA00538	75.80	118.00	11.90	35.40	4.90	1.15	3.00	0.36	1.85	0.34	1.00	0.15	0.90	8.90	0.16
AA00539	34.90	55.90	6.10	19.20	3.25	1.00	2.20	0.30	1.65	0.28	0.80	0.10	0.70	6.80	0.12
AA00541	127.00	109.00	19.60	64.10	9.65	2.75	7.00	0.82	4.10	0.74	2.05	0.25	1.60	18.70	0.22
AA00542	53.50	108.00	10.50	34.90	6.80	1.55	5.60	0.82	4.80	0.92	2.65	0.35	2.25	24.50	0.34
AA00543	34.90	46.50	6.00	21.10	3.75	0.90	3.60	0.48	2.75	0.54	1.55	0.20	1.25	18.80	0.20
AA00544	22.60	46.80	4.40	14.40	2.75	0.75	2.00	0.28	1.55	0.28	0.85	0.10	0.80	7.00	0.12
AA00545	79.30	131.00	14.00	45.70	7.65	1.20	5.60	0.68	3.35	0.60	1.65	0.20	1.30	17.80	0.22
AA00546	49.30	83.80	9.30	31.00	5.70	1.15	4.80	0.62	3.50	0.64	1.85	0.25	1.60	17.60	0.24
AA00547	36.60	54.30	6.35	21.60	4.00	0.90	3.60	0.48	2.70	0.52	1.55	0.20	1.30	14.90	0.22
AA00548	25.50	46.10	4.85	16.10	3.10	0.65	2.60	0.38	2.10	0.42	1.20	0.15	1.05	11.60	0.18
AA00549	64.10	106.00	10.80	33.60	5.15	1.15	3.60	0.46	2.25	0.42	1.25	0.15	1.10	11.70	0.20
AA00551	43.90	76.80	7.55	24.10	4.10	1.20	3.20	0.42	2.30	0.44	1.25	0.15	1.10	11.80	0.18
AA00552	40.00	58.00	7.05	23.20	4.00	0.85	3.20	0.42	2.35	0.44	1.25	0.15	1.05	12.80	0.16
AA00553	80.00	129.00	14.60	46.30	7.65	1.75	5.60	0.76	4.20	0.78	2.30	0.30	2.10	21.50	0.32
AA00554	24.30	32.30	4.15	13.90	2.70	0.65	2.40	0.38	2.25	0.46	1.35	0.20	1.40	10.40	0.22
AA00555	24.80	42.60	4.90	16.30	2.95	0.70	2.40	0.36	2.00	0.40	1.20	0.15	1.00	10.30	0.16
AA00556	35.40	39.40	5.60	18.40	3.25	0.75	2.60	0.38	2.10	0.42	1.25	0.15	1.10	11.30	0.18
AA00557	31.90	106.00	5.40	16.90	2.85	0.60	2.00	0.28	1.45	0.28	0.80	0.10	0.75	7.10	0.12
AA00558	32.30	48.00	5.35	20.00	3.35	0.70	3.00	0.38	2.10	0.44	1.20	0.15	1.10	13.70	0.18
AA00559	53.10	76.40	9.45	31.80	5.65	1.30	5.00	0.62	3.45	0.66	1.90	0.25	1.55	20.20	0.24
AA00561	72.80	129.00	14.80	53.80	10.60	2.30	8.80	1.14	6.40	1.24	3.70	0.50	3.45	32.10	0.56
AA00562	50.90	91.60	10.90	40.10	8.75	1.65	7.80	1.08	6.55	1.38	4.50	0.65	5.00	30.80	0.88
AA00563	43.50	55.50	7.65	26.40	5.50	1.80	6.60	1.02	6.80	1.54	4.50	0.55	3.40	56.30	0.56
AA00564	45.00	71.30	8.00	26.90	5.05	1.60	4.20	0.60	2.95	0.56	1.45	0.20	1.00	14.30	0.18
AA00565	54.00	92.40	9.65	32.00	5.70	1.05	4.60	0.62	3.20	0.58	1.70	0.20	1.50	17.40	0.22
AA00566	68.90	134.00	16.60	62.10	14.80	3.75	14.00	2.12	12.30	2.36	6.50	0.85	5.35	56.50	0.78
AA00567	263.00	534.00	53.70	194.00	29.70	4.20	27.60	3.44	19.70	3.80	9.60	1.20	7.90	105.00	1.18
AA00568	64.10	92.80	11.70	39.50	7.00	1.55	5.60	0.74	4.10	0.80	2.25	0.30	1.85	23.70	0.30
AA00569	52.20	64.40	7.70	23.90	3.90	1.20	3.20	0.42	2.35	0.48	1.45	0.20	1.20	15.80	0.20
AA00570	90.20	420.00	19.30	64.80	12.10	2.85	9.00	1.16	6.30	1.14	3.20	0.40	2.70	28.90	0.42
AA00571	24.00	66.20	5.45	19.80	3.90	1.05	3.00	0.46	2.50	0.46	1.35	0.20	1.40	8.80	0.20
AA00572	34.10	56.00	6.55	23.10	4.50	1.15	3.80	0.54	3.10	0.60	1.70	0.25	1.65	16.20	0.26
AA00573	33.00	39.30	5.75	19.80	3.70	1.15	3.40	0.48	2.65	0.56	1.60	0.20	1.40	18.00	0.24
AA00574	20.20	34.90	4.60	17.10	3.85	1.15	3.80	0.62	3.85	0.82	2.60	0.40	2.70	20.50	0.44
AA00575	91.90	160.00	17.80	63.20	12.90	3.20	11.60	1.60	9.00	1.74	5.00	0.65	4.00	56.80	0.64
AA00576	52.80	97.30	10.90	39.40	8.95	2.15	8.80	1.32	8.10	1.58	4.65	0.60	3.95	45.00	0.60
AA00577	84.60	103.00	15.10	52.80	10.50	2.80	10.20	1.48	8.65	1.80	5.15	0.65	4.25	57.30	0.70
AA00578	24.80	43.00	5.10	17.60	3.50	1.05	2.80	0.38	2.00	0.40	1.15	0.15	1.00	11.30	0.16
AA00579	75.														

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements						
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m	
AA00602	58.40	80.20	9.10	33.60	5.80	1.45	5.00	0.70	3.90	0.74	2.15	0.30	2.00	19.60	0.30	
AA00603	64.60	102.00	11.50	43.40	7.65	1.50	6.00	0.76	4.05	0.74	2.05	0.25	1.70	19.00	0.26	
AA00604	63.70	163.00	10.70	39.80	8.05	2.40	7.00	1.06	6.25	1.22	3.50	0.45	2.80	33.50	0.42	
AA00605	179.00	86.80	37.60	125.00	20.80	5.05	14.20	1.88	9.60	1.68	4.50	0.55	3.60	39.40	0.52	
AA00606	38.40	52.90	5.75	20.60	3.15	1.20	2.60	0.34	2.05	0.48	1.55	0.25	1.75	14.40	0.30	
AA00607	43.70	62.10	7.15	25.40	4.60	1.00	3.80	0.60	3.80	0.80	2.35	0.35	2.25	15.80	0.32	
AA00608	99.70	150.00	16.00	55.20	8.45	1.55	6.00	0.74	3.70	0.66	1.70	0.20	1.30	16.30	0.20	
AA00609	61.10	104.00	10.80	35.10	5.50	1.30	4.20	0.48	2.60	0.50	1.35	0.20	1.40	13.50	0.24	
AA00610	60.00	96.40	9.90	35.50	5.75	1.25	4.80	0.68	3.80	0.72	2.15	0.30	1.85	19.90	0.30	
AA00611	59.90	90.60	10.30	38.60	6.95	1.95	5.80	0.84	4.80	0.94	2.55	0.35	2.20	25.30	0.34	
AA00612	45.50	70.60	8.00	29.90	5.45	1.20	4.80	0.66	4.15	0.84	2.55	0.35	2.30	21.90	0.36	
AA00613	51.40	77.10	8.30	29.80	4.80	1.10	3.60	0.50	2.80	0.54	1.55	0.20	1.55	14.70	0.24	
AA00614	60.00	82.20	9.10	30.90	4.50	1.15	3.00	0.38	1.90	0.36	1.00	0.10	0.85	9.30	0.14	
AA00615	215.00	373.00	37.50	108.00	13.80	1.65	7.80	0.82	3.60	0.58	1.55	0.15	1.05	14.30	0.16	
AA00616	53.50	111.00	8.70	29.90	4.70	1.15	3.40	0.44	2.35	0.44	1.30	0.15	1.10	11.40	0.20	
AA00617	69.90	73.20	10.60	38.20	5.75	1.30	5.20	0.66	3.50	0.72	2.00	0.25	1.65	23.00	0.26	
AA00618	51.90	87.80	8.65	31.10	5.35	1.05	4.60	0.62	3.55	0.70	2.00	0.25	1.65	20.20	0.26	
AA00619	67.90	99.20	11.60	44.60	8.60	1.80	7.80	1.08	6.25	1.26	3.65	0.50	3.35	34.80	0.52	
AA00621	50.50	76.00	8.25	31.30	4.55	1.25	3.20	0.40	2.05	0.40	1.10	0.15	1.00	10.80	0.16	
AA00622	43.30	64.20	7.40	26.70	4.60	0.90	3.60	0.48	2.55	0.48	1.45	0.20	1.25	12.90	0.20	
AA00623	61.00	98.30	9.70	34.90	5.90	1.20	5.00	0.62	3.45	0.64	1.85	0.25	1.55	18.50	0.24	
AA00624	73.10	105.00	11.70	41.40	6.85	1.45	5.40	0.62	3.05	0.54	1.55	0.20	1.20	15.40	0.20	
AA00625	47.60	64.90	7.95	29.60	5.25	1.30	4.40	0.58	3.25	0.62	1.65	0.20	1.45	16.30	0.22	
AA00626	81.50	114.00	13.50	48.00	8.20	1.60	5.80	0.74	3.80	0.64	1.70	0.20	1.40	16.20	0.20	
AA00627	46.20	74.70	6.65	23.50	3.60	0.70	2.60	0.36	1.90	0.38	1.10	0.15	1.00	10.00	0.16	
AA00628	14.70	23.60	3.70	15.10	3.55	1.05	3.60	0.60	3.65	0.74	2.15	0.30	1.95	19.00	0.34	
AA00629	57.10	109.00	9.80	34.60	5.45	1.10	4.40	0.56	3.05	0.58	1.70	0.25	1.55	16.40	0.24	
AA00630	50.60	72.40	8.40	29.60	4.95	1.05	4.00	0.52	2.85	0.54	1.60	0.20	1.45	14.80	0.22	
AA00631	12.40	20.10	2.75	10.70	2.30	0.85	2.20	0.36	2.20	0.46	1.30	0.20	1.20	11.80	0.18	
AA00632	208.00	380.00	49.30	166.00	24.70	4.75	16.40	1.92	8.80	1.42	3.45	0.40	2.30	37.40	0.32	
AA00633	20.90	31.70	4.10	15.60	3.20	0.90	3.20	0.50	2.90	0.60	1.80	0.25	1.65	16.70	0.26	
AA00634	78.40	89.00	15.20	52.60	9.90	2.55	8.40	1.24	6.85	1.30	3.60	0.50	3.35	30.00	0.50	
AA00635	80.10	130.00	16.10	61.30	13.50	2.80	12.60	1.86	10.70	2.08	5.85	0.75	4.90	56.20	0.72	
AA00636	37.20	53.50	6.65	24.00	4.50	0.90	3.80	0.50	2.50	0.46	1.30	0.15	1.00	14.20	0.16	
AA00637	77.60	81.90	11.80	41.90	6.30	1.55	5.40	0.62	3.35	0.64	1.80	0.20	1.30	25.80	0.22	
AA00638	71.00	111.00	12.20	43.10	6.90	1.40	5.40	0.68	3.75	0.74	2.05	0.30	1.80	20.00	0.28	
AA00639	145.00	210.00	22.40	72.70	9.75	1.55	6.20	0.64	2.85	0.48	1.35	0.15	1.05	13.70	0.18	
AA00641	41.40	69.10	6.95	24.00	4.05	0.80	3.00	0.38	1.95	0.38	1.05	0.15	0.90	9.50	0.14	
AA00642	107.00	198.00	20.50	75.90	14.30	2.50	11.80	1.46	7.50	1.46	4.30	0.55	3.90	40.20	0.64	
AA00643	176.00	180.00	32.70	104.00	17.00	3.70	14.00	1.76	9.05	1.70	4.60	0.55	3.45	50.40	0.52	
AA00644	17.20	37.10	4.35	17.40	4.05	1.10	4.00	0.62	3.75	0.76	2.20	0.30	2.00	19.80	0.30	
AA00645	45.70	66.00	8.60	30.30	5.20	1.20	4.00	0.52	2.80	0.52	1.55	0.20	1.35	15.10	0.20	
AA00646	69.60	107.00	12.10	42.70	7.10	1.05	5.40	0.66	3.40	0.62	1.65	0.20	1.35	17.30	0.20	
AA00647	129.00	355.00	27.90	83.10	12.30	2.20	8.20	0.92	4.45	0.82	2.15	0.25	1.65	25.00	0.26	
AA00648	60.40	96.40	10.80	37.30	6.00	1.20	4.80	0.62	3.20	0.62	1.85	0.25	1.65	16.80	0.26	
AA00649	37.60	47.50	7.35	26.10	4.30	0.85	2.80	0.36	1.90	0.36	1.05	0.15	1.00	8.30	0.14	
AA00651	41.10	57.30	7.15	25.60	4.45	1.00	3.40	0.48	2.55	0.50	1.45	0.20	1.30	14.30	0.20	
AA00652	49.60	81.00	8.65	29.90	5.15	0.90	3.80	0.50	2.60	0.44	1.20	0.15	1.00	11.60	0.16	
AA00653	73.30	141.00	12.80	42.60	6.50	0.90	4.40	0.48	2.30	0.40	1.10	0.15	1.00	9.90	0.16	
AA00654	11.10	21.60	3.50	15.70	4.45	1.35	5.40	0.90	6.00	1.32	3.90	0.55	3.60	35.70	0.56	
AA00655	30.00	60.00	6.30	22.70	4.05	0.85	3.20	0.46	2.50	0.48	1.35	0.20	1.15	11.50	0.18	
AA00656	21.60	30.50	3.70	13.10	2.25	0.45	1.80	0.26	1.45	0.30	0.90	0.10	0.80	10.20	0.12	
AA00657	21.50	18.60	3.10	10.50	1.90	0.45	1.60	0.22	1.20	0.22	0.65	0.10	0.60	6.20	0.10	
AA00658	316.00	2990.00	82.30	270.00	44.40	10.30	29.20	3.76	18.70	3.10	7.70	0.95	5.85	60.80	0.76	
AA00659	67.60	103.00	11.50	41.00	6.65	1.50	6.00	0.80	4.40	0.84	2.45	0.30	1.95	30.30	0.32	
AA00661	58.50	137.00	10.70	38.60	5.85	1.15	4.00	0.52	2.75	0.50	1.55	0.20	1.35	13.30	0.20	
AA00662	63.20	96.40	10.50	33.30	4.95	1.00	3.40	0.44	2.15	0.40	1.15	0.15	1.00	11.10	0.16	
AA00663	36.70	63.60	7.40	28.00	5.55	1.05	4.60	0.60	3.20	0.58	1.55	0.20	1.20	14.80	0.18	
AA00664	31.40	56.10	5.70	20.00	3.60	0.90	2.80	0.36	1.95	0.36	1.00	0.10	0.85	9.20	0.14	
AA00665	90.20	156.00	16.10	54.20	8.40	1.10	5.20	0.52	2.10	0.36	0.95	0.10	0.80	8.90	0.12	
AA00666	45.90	69.90	7.80	26.20	4.35	1.05	3.40	0.42	2.20	0.42	1.15	0.15	1.00	10.90	0.16	
AA00667	55.40	124.00	10.70	37.90	6.45	1.25	5.40	0.72	3.90	0.74	2.15	0.30	1.85	20.40	0.30	
AA00668	56.10	89.00	9.75	32.60	5.05	1.00	3.80	0.44	2.20	0.40	1.15	0.15	1.00	10.10	0.16	
AA00669	71.30	121.00	13.90	50.90	8.70	1.45	6.40	0.72	3.55	0.60	1.55	0.15	1.00	15.90	0.16	
AA00670	70.60	106.00	12.70	45.10	7.60	1.50	6.40	0.84	4.70	0.90	2.55	0.35	2.15	29.10	0.32	
AA00671	61.80	103.00	11.60	40.70	6.90	1.15	5.60	0.70	3.70	0.66	1.85	0.25	1.65	18.70	0.24	
AA00672	21.60	49.90	4.30	14.60	2.55	0.45	2.00	0.28	1.45	0.26	0.80	0.10	0.75	7.10	0.10	
AA00673	25.40	58.60	5.50	19.50	3.50	0.70	3.20	0.42	2.40	0.44	1.15	0.15	1.05	11.80	0.16	
AA00674	20.50	31.00	4.95	21.90	5.50	1.75	7.00	1.10	7.20	1.46	4.25	0.60	3.95	44.30	0.56	
AA00675	280.00	322.00	49.30	153.00	22.10	4.45	17.80	2.08	10.50	1.82	4.75	0.60	3.70	49.20	0.50	
AA00676	18.90	31.90	4.50	17.00	3.10	0.70	3.00	0.40	2.25	0.42	1.20	0.15	0.95	12.80	0.14	
AA00677	45.50	75.60	8.75	30.70	5.30	0.95	4.40	0.56	2.85	0.52	1.40	0.20	1.40	14.10	0.20	
AA00678	34.60	41.30	5.20	17.70	3.00	0.60	2.80	0.36	1.90	0.38	1.05	0.15	0.90	11.50	0.12	
AA00679	14.40	40.60	3.60	13.80	2.90	0.65	3.00	0.42	2.45	0.48	1.30	0.20	1.25	12.60	0.18	
AA00681	34.90	49.10	6.85	25.30	4.45	1.00	4.20	0.54	3.00	0.58	1.65	0.25	1.45	17.00	0.22	
AA00682	59.10	103.00	14.00	51.10	9.00	1.75	8.00	1.08	5.80	1.10	3.05	0.40	2.60	29.40	0.38	
AA00683	55.30	82.70	10.50	35.70	5.80	1.10	4.40	0.52	2.65	0.48	1.25	0.15	1.20	12.60</		

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements					
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m
AA00706	29.50	39.20	4.40	15.40	2.85	0.65	2.80	0.38	2.15	0.40	1.10	0.15	1.15	10.60	0.16
AA00707	23.80	38.30	4.65	16.50	2.85	0.60	2.60	0.34	1.95	0.36	1.05	0.15	0.95	9.40	0.14
AA00708	7.50	38.80	1.70	6.30	1.20	0.30	1.20	0.18	1.10	0.20	0.60	0.10	0.70	5.60	0.08
AA00709	105.00	192.00	19.30	68.00	10.80	1.70	8.80	1.06	5.35	0.96	2.50	0.35	2.05	28.80	0.28
AA00710	9.00	12.60	2.00	7.50	1.40	0.30	1.40	0.18	1.10	0.20	0.60	0.10	0.60	5.60	0.08
AA00711	50.10	81.70	9.45	33.30	5.70	1.10	4.80	0.58	3.10	0.56	1.55	0.20	1.40	15.90	0.20
AA00712	22.20	36.90	2.70	8.10	1.40	0.30	1.20	0.18	1.00	0.20	0.60	0.10	0.70	4.90	0.10
AA00713	35.10	128.00	6.15	20.50	3.30	0.90	2.80	0.34	1.80	0.32	0.95	0.15	0.95	8.60	0.14
AA00714	22.20	29.30	4.45	16.50	3.00	0.60	2.80	0.38	2.10	0.42	1.20	0.15	1.10	13.40	0.18
AA00715	7.10	15.20	1.60	5.75	1.15	0.25	1.00	0.14	0.85	0.16	0.45	0.05	0.55	3.90	0.08
AA00716	62.20	121.00	12.20	42.60	6.60	1.00	5.00	0.60	3.05	0.56	1.55	0.25	1.60	13.80	0.22
AA00717	65.40	64.20	11.30	42.30	6.95	1.55	6.40	0.78	4.40	0.86	2.40	0.35	2.10	30.60	0.36
AA00718	61.30	90.10	11.70	42.40	7.10	1.50	5.80	0.72	3.80	0.68	1.85	0.25	1.75	20.20	0.28
AA00719	12.30	23.60	2.80	10.00	1.80	0.50	1.60	0.22	1.20	0.22	0.60	0.10	0.65	5.50	0.08
AA00721	74.90	116.00	13.70	48.90	7.05	1.55	4.80	0.48	2.10	0.34	0.95	0.10	0.85	9.90	0.14
AA00722	55.00	103.00	10.50	35.80	5.75	1.25	4.40	0.52	2.65	0.48	1.35	0.20	1.35	11.80	0.20
AA00723	79.80	116.00	12.10	39.20	5.05	1.30	3.60	0.42	2.15	0.42	1.20	0.20	1.30	12.00	0.20
AA00724	42.00	64.40	8.05	29.40	5.20	1.20	4.80	0.64	3.80	0.70	2.05	0.30	1.95	20.00	0.28
AA00725	20.70	33.80	4.30	15.90	2.75	0.55	2.60	0.36	2.15	0.42	1.20	0.20	1.25	12.00	0.18
AA00726	79.50	114.00	13.50	45.20	6.70	1.20	5.00	0.58	2.85	0.50	1.40	0.20	1.30	13.40	0.18
AA00727	233.00	396.00	47.50	148.00	20.90	3.20	16.00	1.70	7.35	1.24	3.10	0.35	2.20	42.30	0.36
AA00728	49.30	84.00	8.80	30.00	4.60	0.70	3.40	0.38	2.00	0.34	1.00	0.15	0.85	10.00	0.12
AA00729	16.10	27.40	3.40	12.00	2.05	0.45	1.80	0.24	1.35	0.24	0.75	0.10	0.75	7.30	0.10
AA00730	20.70	41.30	4.75	17.50	3.40	0.70	3.20	0.44	2.65	0.52	1.40	0.20	1.40	12.70	0.20
AA00731	9.50	15.20	2.00	7.05	1.25	0.30	1.20	0.14	0.85	0.18	0.45	0.05	0.55	4.60	0.08
AA00732	39.90	55.80	7.65	27.90	4.75	1.10	4.60	0.60	3.40	0.66	1.85	0.25	1.60	21.40	0.24
AA00733	11.50	14.00	1.90	6.60	1.15	0.25	1.00	0.14	0.80	0.16	0.45	0.05	0.55	4.60	0.08
AA00734	146.00	90.20	35.20	108.00	16.60	3.00	11.40	1.36	6.65	1.10	2.95	0.40	2.55	29.00	0.34
AA00735	26.40	49.10	5.30	18.90	3.15	0.65	2.80	0.38	2.15	0.40	1.10	0.15	1.05	11.30	0.16
AA00736	26.00	57.50	5.45	20.30	3.80	0.90	3.80	0.50	2.90	0.58	1.60	0.20	1.40	16.70	0.22
AA00737	53.30	81.70	8.10	27.60	4.15	1.00	3.80	0.46	2.50	0.48	1.30	0.20	1.10	15.10	0.18
AA00738	18.90	23.30	3.60	12.90	2.20	0.60	2.20	0.28	1.65	0.32	1.00	0.15	1.00	10.50	0.16
AA00739	18.90	18.20	3.65	14.00	2.55	0.60	2.80	0.38	2.15	0.44	1.20	0.15	1.15	15.60	0.18
AA00741	18.10	33.50	4.55	18.30	4.25	1.25	4.80	0.74	4.65	0.94	2.65	0.40	2.65	27.60	0.40
AA00742	35.10	46.20	6.80	25.00	4.40	1.05	4.20	0.54	3.05	0.58	1.60	0.20	1.40	17.20	0.20
AA00743	48.70	71.20	8.95	31.40	5.70	1.05	5.20	0.70	4.30	0.82	2.40	0.35	2.45	22.90	0.38
AA00744	34.90	58.30	7.40	27.80	5.70	1.40	5.60	0.82	4.80	0.92	2.55	0.35	2.40	25.80	0.34
AA00745	62.30	81.50	11.80	42.30	6.95	1.45	6.40	0.82	4.40	0.84	2.35	0.30	1.90	31.00	0.28
AA00746	55.10	78.70	9.95	34.70	5.60	0.90	4.80	0.56	2.90	0.54	1.45	0.20	1.20	15.30	0.20
AA00747	54.80	85.20	9.50	34.00	5.85	1.45	5.80	0.78	4.35	0.84	2.40	0.30	2.00	30.30	0.30
AA00748	126.00	214.00	24.60	85.70	14.40	2.30	12.40	1.66	9.15	1.72	4.65	0.60	3.75	53.30	0.54
AA00749	59.40	95.70	10.90	38.70	7.25	1.35	6.60	0.86	4.90	0.94	2.55	0.35	2.00	31.90	0.28
AA00751	24.30	40.90	4.75	17.00	2.85	0.60	2.60	0.34	1.80	0.36	1.00	0.15	0.90	9.60	0.16
AA00752	5.60	14.20	1.35	4.90	0.90	0.20	0.80	0.12	0.65	0.14	0.35	0.03	0.30	3.90	0.06
AA00753	72.70	124.00	15.60	58.20	10.80	1.95	9.20	1.16	6.10	1.04	2.65	0.35	2.00	32.00	0.28
AA00754	14.10	32.30	3.60	13.70	3.15	0.65	3.20	0.50	3.20	0.62	1.80	0.25	1.85	16.50	0.26
AA00755	11.10	20.30	2.25	7.90	1.40	0.30	1.20	0.16	0.85	0.16	0.45	0.05	0.40	4.40	0.08
AA00756	59.90	103.00	10.80	35.80	5.60	1.10	4.20	0.52	2.70	0.48	1.30	0.20	1.25	13.20	0.20
AA00757	70.40	79.50	12.10	43.50	7.05	1.60	6.40	0.84	4.65	0.90	2.40	0.35	2.00	34.00	0.30
AA00758	57.80	93.90	9.70	32.70	5.00	1.20	4.20	0.52	2.80	0.52	1.40	0.20	1.30	15.80	0.20
AA00759	36.60	61.70	7.15	24.60	4.20	0.90	3.60	0.48	2.70	0.50	1.45	0.20	1.30	13.30	0.20
AA00761	40.80	72.30	7.95	27.10	4.45	0.90	3.60	0.48	2.65	0.50	1.35	0.20	1.40	13.20	0.20
AA00762	79.40	70.80	12.30	43.40	6.70	1.75	6.60	0.84	4.50	0.90	2.45	0.30	1.95	35.30	0.30
AA00763	51.10	77.20	8.75	29.50	4.65	1.00	4.20	0.52	2.80	0.52	1.45	0.20	1.35	16.50	0.24
AA00764	60.20	94.80	10.70	35.50	5.40	1.00	4.00	0.48	2.40	0.42	1.20	0.15	1.05	11.60	0.16
AA00765	31.80	49.20	6.05	23.40	4.25	1.20	4.00	0.56	3.35	0.68	1.90	0.25	1.80	18.00	0.24
AA00766	110.00	199.00	18.60	58.00	8.50	1.55	6.40	0.82	4.10	0.72	1.85	0.25	1.40	19.20	0.20
AA00767	44.20	68.80	8.15	27.40	4.50	1.05	3.80	0.48	2.55	0.46	1.25	0.15	1.15	12.40	0.18
AA00768	30.20	47.60	5.95	20.80	3.65	0.55	3.20	0.42	2.40	0.42	1.25	0.20	1.20	11.20	0.18
AA00769	49.50	86.60	9.20	31.80	5.25	1.15	4.60	0.58	3.20	0.58	1.55	0.20	1.30	14.80	0.20
AA00770	64.70	77.70	13.70	48.40	7.00	1.50	5.20	0.58	2.80	0.50	1.30	0.20	1.10	13.30	0.16
AA00771	56.70	106.00	10.90	38.90	6.40	1.25	5.80	0.74	3.95	0.74	2.00	0.25	1.70	24.30	0.26
AA00772	81.80	93.00	13.50	49.80	8.20	1.75	8.20	1.06	5.85	1.18	3.15	0.40	2.35	48.60	0.36
AA00773	38.70	66.30	8.00	28.10	5.60	0.95	5.80	1.04	7.00	1.44	4.20	0.65	4.00	41.20	0.58
AA00774	35.20	52.50	6.20	21.20	3.40	1.10	2.80	0.36	2.00	0.38	1.05	0.15	1.00	11.50	0.18
AA00775	53.30	78.70	10.10	34.90	5.55	1.20	4.60	0.54	2.70	0.48	1.20	0.15	1.00	13.00	0.16
AA00776	84.70	126.00	15.40	53.90	8.25	1.50	7.00	0.88	4.65	0.86	2.30	0.30	2.00	27.20	0.32
AA00777	59.70	91.20	11.00	40.20	6.90	1.50	6.40	0.86	4.75	0.90	2.45	0.35	2.05	29.00	0.30
AA00778	23.60	33.90	4.45	15.90	3.05	0.85	3.00	0.42	2.55	0.50	1.35	0.20	1.30	13.20	0.18
AA00779	56.10	97.10	11.00	39.10	6.10	1.20	4.80	0.60	3.25	0.64	1.80	0.20	1.45	17.20	0.20
AA00781	23.30	44.50	4.65	16.30	2.95	0.65	2.60	0.36	2.05	0.38	1.05	0.15	0.95	9.50	0.14
AA00782	37.20	126.00	5.80	24.30	6.10	2.30	9.20	1.62	11.60	2.58	7.85	1.15	7.55	76.70	1.16
AA00783	28.00	28.90	6.00	19.90	3.40	1.10	2.60	0.38	2.15	0.40	1.10	0.15	1.15	7.90	0.16
AA00784	40.80	68.00	7.25	24.80	4.10	1.00	3.40	0.44	2.50	0.48	1.35	0.20	1.25	13.30	0.20
AA00785	29.90	64.70	5.85	20.80	3.75	0.95	3.20	0.44	2.40	0.44	1.20	0.15	1.10	10.60	0.16
AA00786	17.70	34.70	3.80	13.30	2.45	0.50	2.20	0.30	1.75	0.34	0.95	0.15	0.95	8.90	0.14
AA00787	48.40	81.40	8.75	29.70	4.95	0.85	3.80	0.50	2.65	0.48	1.30	0.20	1.20	12.10	0.20
AA00788	28.30	49.20	5.15	18.30</											

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements					
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m
AS81006	37.60	81.50	7.55	25.30	4.50	1.05	4.00	0.48	2.85	0.50	1.50	0.20	1.55	15.10	0.24
AS81007	49.50	116.00	10.80	37.20	6.80	1.05	5.60	0.70	3.60	0.64	1.75	0.25	1.70	17.40	0.26
AS81008	32.30	75.10	6.90	22.80	4.25	0.70	3.40	0.44	2.40	0.42	1.35	0.20	1.25	12.00	0.20
AS81009	27.50	50.70	5.10	17.00	3.20	0.60	2.80	0.38	2.05	0.38	1.15	0.15	1.20	12.00	0.20
AS81010	27.40	70.60	5.60	18.30	3.40	0.55	2.60	0.38	2.05	0.46	1.15	0.20	1.25	10.20	0.18
AS81011	38.90	78.70	8.10	27.00	4.95	0.95	4.00	0.56	3.15	0.62	1.80	0.25	1.65	13.50	0.24
AS81012	52.10	110.00	11.00	37.70	6.95	1.25	6.00	0.82	4.70	0.82	2.40	0.35	2.15	23.60	0.32
AS81013	37.90	83.20	8.20	28.70	5.65	1.15	5.00	0.70	4.00	0.70	2.25	0.30	2.00	20.00	0.30
AS81014	138.00	258.00	25.60	82.40	12.50	1.60	8.00	0.88	4.25	0.68	1.90	0.25	1.85	19.80	0.28
AS81015	39.30	82.60	8.45	28.90	5.45	1.05	4.60	0.60	3.30	0.56	2.00	0.25	1.90	16.80	0.24
AS81016	50.10	104.00	10.00	33.30	5.85	0.90	4.60	0.58	3.25	0.54	1.75	0.25	1.70	17.00	0.26
AS81017	27.00	55.40	5.45	18.30	3.15	0.65	2.60	0.36	1.95	0.36	1.10	0.15	1.10	11.20	0.18
AS81018	45.30	94.50	9.35	30.90	5.30	1.05	4.40	0.60	3.50	0.64	1.95	0.30	1.75	19.20	0.28
AS81019	48.20	127.00	10.20	34.10	5.95	1.10	4.40	0.56	2.95	0.48	1.40	0.20	1.35	12.90	0.22
AS81020	47.80	101.00	9.90	33.70	6.20	1.10	5.40	0.78	4.10	0.74	2.30	0.35	2.30	21.10	0.36
AS81021	36.60	77.50	7.70	26.00	4.90	0.85	4.20	0.56	3.00	0.54	1.55	0.25	1.70	16.00	0.24
AS81022	41.70	77.10	8.00	26.80	4.60	0.90	3.60	0.44	2.45	0.42	1.25	0.20	1.15	12.30	0.20
AS81023	34.70	80.10	7.35	24.50	4.50	0.80	3.60	0.48	2.85	0.54	1.55	0.25	1.55	14.60	0.24
AS81024	53.40	119.00	10.20	32.80	5.55	0.85	4.40	0.56	2.95	0.54	1.45	0.20	1.45	14.00	0.22
AS81026	21.40	47.90	4.30	14.30	2.55	0.55	2.20	0.28	1.80	0.32	0.95	0.15	1.05	9.10	0.16
AS81027	28.20	57.70	5.90	20.60	4.15	0.90	4.00	0.60	3.70	0.68	2.20	0.30	2.30	20.40	0.36
AS81028	28.50	67.30	6.20	21.20	4.05	0.90	3.60	0.50	2.95	0.54	1.60	0.25	1.75	15.90	0.24
AS81029	30.40	60.00	6.35	22.00	3.90	0.85	3.40	0.46	2.65	0.48	1.45	0.20	1.40	14.30	0.22
AS81030	30.80	62.70	6.40	21.30	4.15	0.75	3.40	0.46	2.55	0.46	1.45	0.20	1.45	13.80	0.22
AS81031	45.70	91.50	9.00	29.60	4.85	1.05	4.00	0.54	2.80	0.50	1.50	0.20	1.50	14.60	0.22
AS81032	47.90	102.00	9.75	31.30	5.60	1.05	4.60	0.62	3.40	0.62	1.95	0.30	1.85	18.30	0.30
AS81033	51.80	110.00	10.20	33.00	5.60	0.90	4.60	0.62	3.65	0.64	2.00	0.30	1.90	19.60	0.30
AS81034	47.40	102.00	9.65	31.80	5.60	1.05	4.60	0.62	3.45	0.64	1.95	0.25	2.05	18.80	0.28
AS81035	61.00	93.10	12.60	42.00	7.05	1.35	5.20	0.66	3.50	0.62	1.80	0.25	1.75	17.80	0.26
AS81036	38.70	93.50	8.45	28.70	5.55	0.90	4.60	0.64	3.30	0.60	1.80	0.25	1.75	16.40	0.26
AS81037	39.80	91.80	8.30	28.40	5.25	1.05	4.40	0.56	3.20	0.54	1.55	0.25	1.55	15.70	0.24
AS81038	43.40	92.40	9.00	30.30	5.45	0.95	4.40	0.60	3.35	0.56	1.75	0.25	1.70	16.70	0.26
AS81039	40.20	98.40	8.30	27.20	5.05	0.90	4.00	0.54	2.95	0.54	1.55	0.25	1.60	14.60	0.24
AS81040	33.90	81.60	6.85	23.10	4.20	0.75	3.60	0.48	2.75	0.48	1.55	0.25	1.55	14.00	0.22
AS81042	39.50	116.00	8.05	26.00	4.60	0.90	3.60	0.50	2.95	0.50	1.55	0.25	1.60	12.90	0.24
AS81043	53.40	109.00	9.85	32.10	5.40	0.85	4.20	0.56	3.00	0.52	1.55	0.25	1.55	14.40	0.24
AS81044	39.70	93.60	8.90	31.60	6.45	1.50	6.20	0.86	5.10	0.90	2.70	0.35	2.55	24.70	0.36
AS81045	43.60	98.20	8.75	28.80	5.05	0.95	4.20	0.56	2.95	0.52	1.60	0.25	1.55	14.60	0.24
AS81046	28.30	62.60	5.95	20.40	3.95	0.75	3.60	0.46	2.65	0.46	1.50	0.20	1.45	14.20	0.22
AS81047	71.20	144.00	16.40	60.70	10.40	1.65	7.40	1.30	6.35	1.46	3.35	0.45	2.85	36.00	0.40
AS81048	48.00	90.10	9.75	33.20	5.50	0.95	4.00	0.62	2.90	0.64	1.55	0.20	1.40	16.10	0.22
AS81049	55.30	101.00	11.40	39.70	7.25	1.00	5.00	0.78	3.60	0.78	2.00	0.25	1.60	20.20	0.26
AS81051	41.40	77.80	8.40	28.10	5.00	0.80	4.00	0.56	3.20	0.64	1.85	0.25	1.70	15.80	0.26
AS81052	52.60	98.40	11.00	38.90	6.85	1.25	5.20	0.86	4.35	0.96	2.20	0.30	1.90	24.60	0.28
AS81053	81.30	148.00	16.60	61.20	10.90	1.70	8.00	1.22	6.10	1.14	2.55	0.35	2.50	28.50	0.36
AS81054	67.40	111.00	13.20	47.40	8.45	1.90	6.80	1.16	6.00	1.38	3.40	0.45	3.20	36.20	0.48
AS81055	80.40	158.00	16.40	59.00	10.20	1.40	6.80	1.00	4.45	1.00	2.15	0.30	1.90	23.30	0.30
AS81056	40.00	80.50	8.45	29.90	5.25	1.10	3.80	0.60	3.00	0.68	1.60	0.20	1.50	16.90	0.22
AS81057	44.70	78.30	8.45	29.90	5.15	0.95	3.60	0.56	2.70	0.60	1.40	0.20	1.35	15.00	0.20
AS81058	57.70	105.00	11.00	37.00	6.15	1.15	4.40	0.72	3.40	0.72	1.70	0.25	1.60	18.40	0.26
AS81059	35.80	66.70	7.65	27.10	5.15	0.90	4.20	0.72	3.55	0.84	2.00	0.25	1.85	22.20	0.28
AS81060	44.70	80.10	8.75	30.40	5.20	1.10	3.80	0.56	2.80	0.62	1.45	0.20	1.40	15.30	0.22
AS81061	44.90	86.80	9.00	31.90	5.20	0.85	3.60	0.56	2.75	0.62	1.50	0.20	1.40	15.80	0.22
AS81062	46.50	86.60	9.35	33.00	5.50	1.00	3.80	0.62	3.20	0.68	1.60	0.20	1.55	17.60	0.24
AS81063	30.10	54.30	6.65	24.80	4.65	1.10	4.00	0.72	3.70	0.86	2.05	0.30	2.05	22.00	0.30
AS81064	48.40	92.30	10.00	35.30	6.00	1.20	4.40	0.72	3.60	0.82	1.95	0.25	1.85	19.80	0.28
AS81065	61.20	116.00	12.30	42.00	7.05	1.15	5.20	0.82	4.00	0.88	2.10	0.30	2.00	22.20	0.30
AS81066	49.10	91.20	9.75	33.10	5.60	1.15	4.20	0.66	3.15	0.72	1.70	0.25	1.55	17.60	0.26
AS81067	37.40	83.80	8.10	28.20	4.90	0.90	3.60	0.58	2.95	0.66	1.55	0.25	1.55	16.60	0.24
AS81068	178.00	299.00	30.90	102.00	14.40	2.80	8.00	1.04	4.65	0.82	1.70	0.20	1.35	16.90	0.18
AS81069	44.00	94.00	9.50	34.20	6.15	1.00	4.20	0.70	3.30	0.72	1.80	0.25	1.75	16.90	0.26
AS81070	35.00	72.80	7.15	24.80	4.15	0.80	3.00	0.46	2.40	0.52	1.20	0.20	1.25	12.90	0.18
AS81071	32.80	67.60	6.85	24.60	4.45	0.90	3.40	0.52	2.60	0.56	1.55	0.20	1.40	14.50	0.20
AS81072	39.30	72.30	8.20	29.00	5.35	1.00	4.00	0.62	3.20	0.70	1.80	0.25	1.75	18.20	0.24
AS81073	40.90	87.00	8.60	29.90	5.45	1.00	4.00	0.62	3.15	0.68	1.65	0.20	1.55	16.60	0.24
AS81074	36.40	79.60	7.45	25.60	4.35	0.75	3.20	0.46	2.30	0.54	1.30	0.20	1.30	12.80	0.20
AS81076	52.00	95.00	9.75	33.60	5.50	1.00	3.80	0.60	2.95	0.64	1.55	0.20	1.55	15.90	0.24
AS81077	44.30	83.20	8.75	30.80	5.40	0.85	4.00	0.58	2.80	0.60	1.45	0.20	1.30	15.10	0.20
AS81078	38.60	76.70	8.25	29.20	5.25	0.90	3.80	0.60	2.90	0.64	1.55	0.20	1.50	15.90	0.24
AS81079	44.20	81.70	9.35	33.20	5.40	1.30	4.20	0.70	3.30	0.74	1.80	0.25	1.55	18.60	0.26
AS81080	46.50	90.10	9.35	33.00	5.50	1.00	4.00	0.62	3.05	0.66	1.60	0.25	1.55	17.50	0.24
AS81082	25.00	46.70	5.05	17.00	3.35	0.50	2.60	0.38	2.05	0.38	1.05	0.15	0.95	10.10	0.14
AS81083	49.40	85.30	9.70	32.90	5.65	1.15	4.80	0.66	3.80	0.80	2.25	0.30	1.95	23.80	0.30
AS81084	47.80	93.00	9.60	31.70	5.65	1.00	4.20	0.56	2.95	0.58	1.60	0.20	1.45	15.30	0.22
AS81085	48.60	90.50	10.30	35.40	6.85	1.25	6.00	0.70	3.80	0.72	2.05	0.25	1.80	20.50	0.28
AS81086	39.00	81.10	8.40	29.70	5.20	1.00	3.80	0.58	2.95	0.64	1.60	0.20	1.50	15.00	0.22
AS81087	32.10	59.90	6.65	23.10	4.10	0.85	3.20	0.50	2.40	0.54	1.30	0.20	1.25	13.50	0.20
AS81088	50.30	96.10</													

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements						
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m	
AS81110	43.70	82.40	8.85	32.90	5.70	1.05	4.80	0.64	3.25	0.62	1.60	0.25	1.55	16.40	0.24	
AS81111	77.40	117.00	14.10	55.70	9.95	2.45	11.80	1.64	9.70	2.20	5.85	0.80	4.90	71.20	0.78	
AS81112	68.40	125.00	13.20	50.00	8.95	1.70	7.60	1.02	5.35	1.02	2.50	0.35	2.50	24.20	0.38	
AS81113	37.10	68.70	7.65	29.40	5.15	1.10	4.60	0.64	3.20	0.62	1.65	0.25	1.55	16.30	0.24	
AS81114	38.40	71.30	7.75	28.70	5.15	1.10	4.60	0.64	3.30	0.64	1.65	0.25	1.60	16.50	0.24	
AS81115	39.90	82.60	8.15	30.20	5.15	1.20	4.60	0.64	3.45	0.68	1.85	0.25	1.70	17.40	0.26	
AS81116	59.60	106.00	10.70	37.50	6.05	1.10	4.80	0.64	3.05	0.56	1.50	0.20	1.50	14.20	0.24	
AS81117	43.60	84.50	8.65	31.60	5.65	1.05	4.80	0.68	3.55	0.66	1.70	0.25	1.70	16.40	0.26	
AS81118	35.00	66.10	6.75	24.30	4.05	0.90	3.40	0.46	2.55	0.50	1.35	0.20	1.40	12.60	0.20	
AS81119	42.00	81.00	8.55	32.40	6.05	1.10	5.20	0.66	3.25	0.60	1.60	0.20	1.55	16.20	0.24	
AS81120	48.20	89.90	9.70	34.80	5.60	1.35	4.80	0.64	3.35	0.64	1.70	0.25	1.50	16.80	0.24	
AS81121	43.90	83.40	8.75	32.20	5.40	1.20	4.80	0.68	3.40	0.66	1.80	0.25	1.60	16.90	0.26	
AS81122	37.80	75.00	8.05	30.40	5.30	1.20	4.80	0.68	3.60	0.68	1.80	0.25	1.75	17.40	0.26	
AS81123	52.80	99.40	10.90	43.00	7.95	1.75	7.40	1.06	5.55	1.12	2.95	0.40	2.85	27.40	0.44	
AS81124	58.20	108.00	11.90	45.60	8.60	1.85	7.60	1.18	5.25	0.98	2.65	0.40	2.90	23.50	0.44	
AS81126	54.20	102.00	10.60	40.20	7.05	1.45	6.60	0.92	4.90	0.98	2.70	0.35	2.50	27.90	0.38	
AS81127	57.70	114.00	11.40	41.10	7.15	1.20	6.00	0.86	4.45	0.86	2.30	0.30	2.30	19.60	0.34	
AS81128	42.00	79.20	8.30	30.30	5.30	0.95	4.60	0.64	3.35	0.64	1.70	0.25	2.00	17.00	0.26	
AS81129	56.50	98.50	10.40	38.00	6.65	1.35	5.80	0.78	3.95	0.78	2.00	0.25	1.80	18.60	0.26	
AS81130	25.10	44.70	4.90	17.90	3.15	0.65	2.80	0.40	2.00	0.40	1.05	0.15	1.10	10.40	0.16	
AS81131	50.40	93.90	9.70	35.70	6.05	1.25	5.40	0.76	4.10	0.84	2.20	0.30	2.00	22.60	0.30	
AS81132	65.30	119.00	13.00	47.10	7.85	1.55	6.20	0.88	4.70	0.90	2.20	0.30	1.95	22.60	0.30	
AS81133	42.90	79.30	8.65	31.60	5.25	1.10	4.60	0.58	3.30	0.66	1.65	0.25	1.70	16.80	0.26	
AS81134	52.90	94.80	10.40	39.20	6.80	1.35	5.80	0.76	3.95	0.76	2.00	0.25	1.90	19.10	0.28	
AS81135	37.40	75.10	8.15	32.40	6.50	1.40	6.60	1.02	5.95	1.24	3.40	0.50	3.40	29.30	0.52	
AS81136	58.80	102.00	11.70	45.60	8.20	1.75	7.60	1.04	5.35	1.08	2.70	0.35	2.50	29.30	0.40	
AS81137	56.10	112.00	12.80	52.80	11.00	2.05	10.60	1.38	6.45	1.18	2.80	0.40	2.95	27.30	0.52	
AS81138	79.80	134.00	13.70	46.10	7.15	1.00	5.60	0.76	3.80	0.68	1.65	0.20	1.55	17.50	0.24	
AS81139	36.90	67.20	7.25	27.20	4.90	1.05	4.40	0.58	3.40	0.66	1.85	0.25	1.90	17.20	0.28	
AS81140	21.90	39.40	4.55	15.80	3.20	0.85	3.20	0.44	2.65	0.52	1.50	0.20	1.55	14.70	0.24	
AS81142	42.00	82.00	9.05	30.60	5.15	1.35	4.40	0.58	3.55	0.62	1.85	0.25	1.70	18.90	0.26	
AS81143	78.50	129.00	15.30	49.80	7.75	1.70	5.80	0.70	3.65	0.66	1.70	0.25	1.80	16.00	0.26	
AS81144	46.70	87.40	9.50	32.50	5.70	1.10	5.00	0.64	3.55	0.68	1.80	0.25	1.80	18.90	0.26	
AS81145	51.70	85.40	10.20	35.70	6.85	1.85	7.00	0.96	5.90	1.14	3.25	0.45	3.15	34.50	0.48	
AS81146	40.20	81.00	8.85	31.90	6.20	1.40	6.20	0.88	5.30	1.10	3.15	0.45	3.30	31.20	0.50	
AS81147	50.60	91.20	10.60	37.10	7.00	1.45	6.60	0.88	5.00	0.94	2.70	0.40	2.80	26.90	0.42	
AS81148	62.50	178.00	13.10	44.90	8.20	1.45	7.00	0.86	4.55	0.78	2.10	0.30	2.15	21.40	0.32	
AS81149	50.20	87.10	9.15	30.00	4.75	0.80	4.00	0.50	2.85	0.54	1.50	0.20	1.55	16.00	0.24	
AS81151	40.20	76.00	8.20	28.20	5.05	1.00	4.00	0.58	3.20	0.62	1.80	0.25	1.70	16.20	0.24	
AS81152	48.00	88.40	9.20	31.40	5.80	1.25	5.00	0.70	4.05	0.82	2.30	0.30	2.15	21.20	0.32	
AS81153	33.80	58.50	6.75	23.10	4.20	0.95	4.00	0.56	3.55	0.70	2.00	0.30	2.00	20.70	0.32	
AS81154	61.40	114.00	11.90	38.70	6.40	1.10	5.00	0.62	3.45	0.60	1.75	0.25	1.75	17.60	0.26	
AS81155	85.70	140.00	18.50	65.90	13.20	3.20	12.40	1.64	9.50	1.72	4.70	0.65	4.50	53.10	0.66	
AS81156	83.90	153.00	16.40	55.30	10.10	1.60	8.60	1.04	5.75	1.04	2.90	0.40	2.80	29.70	0.42	
AS81157	53.90	73.70	10.40	37.00	6.85	1.85	7.00	0.92	5.45	1.10	3.10	0.40	2.85	33.00	0.44	
AS81158	35.40	68.80	7.25	24.50	4.55	1.00	4.20	0.56	3.30	0.60	1.70	0.25	1.70	18.40	0.26	
AS81159	37.00	70.00	7.30	24.20	4.00	0.95	3.40	0.46	2.60	0.48	1.30	0.20	1.20	13.80	0.18	
AS81160	41.60	77.80	8.20	26.90	4.55	0.95	3.80	0.50	2.95	0.54	1.55	0.25	1.60	15.80	0.26	
AS81161	42.90	76.60	8.10	25.60	3.95	0.80	3.40	0.42	2.40	0.50	1.40	0.20	1.40	14.00	0.20	
AS81162	36.20	67.20	7.10	23.50	4.10	0.85	3.40	0.42	2.40	0.48	1.30	0.20	1.30	14.10	0.20	
AS81163	41.40	76.30	8.50	27.80	4.75	1.10	4.00	0.54	3.00	0.54	1.55	0.25	1.55	16.20	0.24	
AS81164	41.30	84.20	8.40	27.50	4.65	0.95	3.80	0.46	2.60	0.50	1.35	0.20	1.25	14.20	0.20	
AS81165	34.40	64.70	6.95	22.70	4.00	0.80	3.20	0.42	2.55	0.48	1.30	0.20	1.30	14.00	0.22	
AS81166	37.50	69.70	7.30	23.90	4.15	0.90	3.60	0.44	2.60	0.50	1.50	0.20	1.40	14.30	0.22	
AS81167	44.80	84.10	8.65	28.50	4.90	0.95	4.00	0.50	2.85	0.50	1.45	0.20	1.45	14.50	0.22	
AS81168	38.90	76.40	8.10	27.60	5.05	1.10	4.60	0.60	3.45	0.66	1.90	0.25	1.80	18.70	0.28	
AS81169	32.50	64.80	6.55	21.80	3.75	0.95	3.20	0.42	2.50	0.48	1.35	0.20	1.35	14.00	0.22	
AS81170	49.90	104.00	10.10	33.60	6.10	0.95	5.20	0.62	3.50	0.60	1.80	0.25	1.85	18.10	0.28	
AS81171	116.00	235.00	23.30	78.40	14.20	1.95	11.60	1.34	6.80	1.16	2.95	0.40	2.60	31.80	0.42	
AS81172	40.40	93.90	8.50	29.30	5.45	1.05	4.80	0.60	3.50	0.66	1.80	0.25	1.95	17.40	0.28	
AS81173	62.50	120.00	12.50	43.20	7.85	1.35	6.60	0.86	4.80	0.80	2.25	0.30	2.15	22.00	0.34	
AS81177	31.10	88.50	6.00	19.80	3.70	0.90	3.20	0.42	2.50	0.46	1.30	0.20	1.35	13.10	0.20	
AS81178	62.30	120.00	12.50	42.40	7.80	1.70	6.60	0.86	5.00	0.90	2.45	0.35	2.45	23.90	0.38	
AS81179	30.60	60.50	6.50	22.40	4.40	1.00	4.00	0.56	3.30	0.66	1.80	0.25	1.90	18.40	0.28	
AS81180	47.40	80.00	8.95	29.80	5.30	1.10	4.60	0.62	3.50	0.68	1.85	0.25	1.80	19.90	0.28	
AS81183	52.60	87.90	9.30	30.30	5.15	1.00	4.60	0.58	3.40	0.66	1.80	0.25	1.75	18.70	0.26	
AS81184	43.10	80.10	8.65	28.50	4.90	1.10	4.40	0.60	3.50	0.66	1.90	0.25	1.85	18.80	0.28	
AS81193	47.70	82.60	8.50	28.90	5.20	1.60	5.80	0.88	5.85	1.24	3.70	0.50	3.50	39.30	0.52	
AS81194	43.60	83.40	8.60	27.70	4.75	1.00	4.00	0.50	2.80	0.50	1.40	0.20	1.45	14.20	0.22	
AS81195	44.10	97.30	9.15	33.90	5.90	1.15	4.80	0.62	3.55	0.68	2.05	0.25	1.65	17.20	0.28	
AS81204	40.30	80.00	7.95	25.80	4.25	0.85	3.40	0.44	2.45	0.46	1.30	0.20	1.35	13.00	0.20	
AS81174	45.20	96.80	10.50	39.10	8.00	1.55	7.00	0.94	5.10	0.94	2.85	0.40	2.55	23.60	0.40	
AS81176	57.30	115.00	12.50	45.20	8.85	1.55	7.40	0.98	5.45	0.96	2.90	0.40	2.35	24.50	0.38	
AS81182	38.40	72.50	7.60	26.20	4.70	0.95	3.80	0.56	3.15	0.62	1.80	0.25	1.65	15.50	0.26	
AS81185	54.70	110.00	11.70	41.90	7.75	1.45	6.40	0.82	4.20	0.80	2.05	0.30	1.70	18.40	0.28	
AS81186	48.80	97.40	10.50	37.60	6.60	1.20	5.00	0.68	3.75	0.68	2.10	0.30	1.85	17.80	0.28	
AS81187	42.90	86.80	8.95	30.90	5.75	1.15	4.60	0.64	3.60	0.66	1.95	0.30	1.85	16.60	0.30	
AS81188	48.															

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements						
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m	
AS81214	22.60	43.10	4.80	17.10	3.30	0.55	2.60	0.36	2.05	0.36	1.00	0.15	1.05	8.30	0.16	
AS81215	102.00	251.00	23.90	91.60	17.60	2.35	13.80	1.58	7.50	1.30	3.50	0.45	3.00	32.50	0.48	
AS81216	58.70	94.90	12.10	44.00	8.15	1.90	8.00	1.24	7.65	1.58	4.95	0.65	4.15	47.20	0.68	
AS81217	57.10	108.00	11.60	39.70	6.95	1.25	5.40	0.76	4.25	0.80	2.45	0.35	2.15	20.30	0.34	
AS81218	55.20	107.00	11.10	38.20	6.50	1.20	5.00	0.66	3.75	0.70	2.05	0.30	1.85	18.30	0.30	
AS81219	58.70	114.00	12.10	42.70	7.40	1.25	6.00	0.76	4.10	0.70	1.95	0.25	1.75	17.10	0.28	
AS81220	92.40	195.00	18.60	59.50	8.50	1.40	5.40	0.66	3.50	0.60	1.75	0.25	1.65	16.20	0.24	
AS81221	48.00	93.20	9.70	33.30	5.80	1.15	4.60	0.64	3.70	0.68	2.05	0.25	1.85	17.80	0.26	
AS81222	46.20	93.00	9.70	34.00	6.05	1.15	4.80	0.62	3.30	0.58	1.65	0.20	1.45	14.50	0.22	
AS81223	21.60	48.90	4.70	16.70	2.95	0.70	2.40	0.32	1.75	0.30	0.90	0.15	0.85	8.10	0.12	
AS81224	44.50	90.20	9.25	32.20	5.55	0.90	4.00	0.52	2.80	0.52	1.45	0.20	1.35	12.80	0.20	
AS81226	46.80	97.20	10.00	35.10	6.10	1.10	4.40	0.56	3.05	0.52	1.50	0.20	1.45	13.10	0.22	
AS81227	71.90	139.00	14.60	51.60	8.85	1.65	7.20	0.94	5.15	0.96	2.90	0.40	2.70	24.20	0.44	
AS81228	59.70	123.00	13.20	48.30	9.55	1.80	8.20	1.08	5.90	1.08	3.30	0.50	3.10	27.50	0.48	
AS81229	65.70	116.00	14.00	48.70	9.15	1.50	7.80	1.04	5.55	0.98	2.75	0.40	2.45	23.70	0.38	
AS81230	49.80	97.30	10.20	34.50	5.85	1.05	4.60	0.60	3.45	0.66	1.80	0.25	1.75	16.50	0.28	
AS81231	74.10	160.00	15.90	54.90	9.15	1.60	7.20	0.96	5.15	0.90	2.55	0.35	2.15	22.90	0.34	
AS81232	57.60	104.00	11.40	38.80	6.50	1.40	4.80	0.64	3.70	0.66	1.85	0.25	1.65	17.50	0.28	
AS81233	42.30	81.00	8.75	30.50	5.50	1.10	4.40	0.64	4.00	0.72	2.05	0.30	1.90	17.90	0.28	
AS81234	50.90	102.00	11.00	38.10	6.95	1.45	6.00	0.78	4.65	0.86	2.40	0.35	2.15	22.40	0.34	
AS81235	32.90	65.10	6.80	23.60	4.20	0.85	3.20	0.46	2.60	0.46	1.40	0.20	1.25	11.90	0.20	
AS81236	86.00	94.50	15.40	54.50	9.40	2.30	8.60	1.18	7.20	1.40	4.10	0.55	3.65	39.80	0.58	
AS81237	34.20	67.10	7.20	24.90	4.40	0.95	3.60	0.50	2.90	0.54	1.60	0.25	1.55	14.10	0.24	
AS81238	42.50	85.60	9.45	34.20	6.55	1.30	5.40	0.70	4.10	0.72	2.10	0.30	1.95	18.40	0.28	
AS81239	37.80	76.80	8.50	31.70	5.95	1.25	4.80	0.66	3.75	0.70	2.00	0.30	1.80	17.20	0.28	
AS81240	56.80	114.00	12.70	47.00	8.80	1.60	7.80	0.98	5.30	0.98	2.90	0.40	2.70	25.50	0.42	
AS81242	53.00	93.10	10.90	38.70	6.95	1.50	6.20	0.82	4.70	0.88	2.55	0.35	2.35	22.80	0.36	
AS81243	68.90	131.00	13.60	45.20	7.20	1.25	5.20	0.68	3.75	0.68	1.95	0.25	1.80	18.90	0.28	
AS81244	69.70	136.00	13.60	46.20	7.20	1.25	6.20	0.78	4.40	0.84	2.30	0.35	2.20	19.70	0.34	
AS81245	45.10	90.50	9.75	34.30	6.30	1.15	5.40	0.70	4.20	0.78	2.30	0.35	2.10	19.60	0.34	
AS81246	41.80	79.00	8.00	27.40	4.55	0.90	3.60	0.48	2.70	0.50	1.50	0.20	1.50	14.50	0.22	
AS81247	56.50	113.00	11.10	37.80	5.90	1.10	4.60	0.62	3.50	0.72	2.05	0.30	1.95	18.00	0.32	
AS81248	40.90	72.80	7.85	26.80	4.80	0.90	3.60	0.48	2.80	0.58	1.45	0.20	1.30	12.40	0.20	
AS81249	45.90	105.00	9.55	33.80	6.10	1.15	5.20	0.74	4.05	0.78	2.40	0.35	2.50	20.10	0.36	
AS81251	63.30	129.00	14.30	47.70	8.15	1.75	6.80	0.86	4.75	0.88	2.65	0.40	2.45	21.80	0.32	
AS81252	55.10	110.00	12.30	42.70	7.90	1.60	7.00	0.94	5.05	0.94	2.85	0.40	2.60	24.00	0.36	
AS81253	56.30	112.00	12.30	44.60	8.15	1.50	6.60	0.84	4.65	0.86	2.50	0.35	2.25	21.20	0.34	
AS81254	51.00	102.00	11.20	41.00	7.90	1.25	6.60	0.86	4.70	0.84	2.35	0.30	2.15	20.90	0.32	
AS81255	36.10	98.10	7.55	26.60	4.35	0.80	3.20	0.42	2.35	0.44	1.30	0.20	1.20	10.70	0.18	
AS81256	54.90	108.00	11.60	40.80	7.30	1.30	6.00	0.76	4.20	0.74	2.20	0.30	1.90	18.20	0.30	
AS81257	57.30	112.00	12.90	46.80	9.30	1.90	8.60	1.08	6.05	1.24	3.35	0.45	2.85	30.10	0.46	
AS81258	50.70	102.00	10.70	37.60	6.65	1.05	5.40	0.68	3.70	0.68	1.95	0.25	1.80	17.20	0.28	
AS81259	62.50	130.00	13.60	50.50	10.10	1.90	8.60	1.06	5.75	0.94	2.65	0.35	2.30	23.80	0.36	
AS81260	41.40	83.80	8.85	31.30	5.85	1.00	4.80	0.64	3.80	0.72	2.10	0.30	1.95	18.00	0.30	
AS81261	44.70	90.60	9.20	32.10	5.65	1.15	4.60	0.62	3.60	0.66	2.05	0.30	1.75	16.80	0.28	
AS81262	51.10	109.00	10.60	38.90	6.85	1.15	5.40	0.68	3.80	0.68	1.85	0.25	1.75	16.50	0.26	
AS81263	26.90	53.70	5.65	20.40	3.70	0.75	3.00	0.38	2.10	0.38	1.15	0.15	1.05	9.70	0.16	
AS81264	75.90	168.00	15.80	57.80	10.20	1.80	8.60	1.06	5.50	1.00	2.85	0.35	2.40	24.60	0.38	
AS81265	50.50	122.00	10.70	37.30	6.50	1.05	5.00	0.64	3.35	0.56	1.70	0.25	1.55	14.10	0.24	
AS81266	27.80	56.20	5.85	21.00	3.65	0.85	3.80	0.38	2.20	0.38	1.15	0.15	1.05	10.00	0.16	
AS81267	44.30	95.00	9.45	32.80	5.70	1.00	4.40	0.60	3.40	0.64	1.85	0.25	1.80	15.70	0.28	
AS81268	46.90	99.40	9.95	34.60	6.30	1.10	5.00	0.64	3.75	0.70	2.05	0.30	1.85	17.60	0.30	
AS81269	48.80	106.00	9.90	34.50	6.05	0.95	4.60	0.60	3.40	0.64	1.95	0.25	1.90	16.50	0.30	
AS81270	43.80	92.70	9.10	31.40	5.30	0.90	4.00	0.52	2.95	0.54	1.60	0.25	1.55	12.90	0.24	
AS81271	59.90	267.00	12.10	40.50	6.70	0.75	4.80	0.56	3.00	0.50	1.40	0.20	1.30	12.10	0.20	
AS81272	48.50	101.00	9.95	34.20	6.05	1.05	4.80	0.64	3.70	0.66	2.00	0.25	1.75	16.80	0.28	
AS81273	39.50	84.50	8.20	28.60	5.00	0.85	3.80	0.48	2.70	0.50	1.45	0.20	1.30	12.30	0.20	
AS81274	25.30	56.40	5.35	18.50	3.30	0.60	2.60	0.34	2.05	0.36	1.10	0.15	1.00	9.30	0.14	
AS81276	32.00	66.70	7.00	25.90	5.25	1.00	4.60	0.60	3.00	0.54	1.45	0.20	1.30	13.10	0.20	
AS81277	36.50	78.10	7.45	26.60	4.55	0.80	3.40	0.44	2.35	0.44	1.30	0.20	1.20	10.40	0.20	
AS81278	40.40	64.10	8.25	29.00	5.35	1.05	4.20	0.56	3.05	0.56	1.65	0.20	1.45	14.10	0.22	
AS81279	39.80	88.70	8.35	29.70	5.30	0.90	4.20	0.54	3.25	0.60	1.80	0.25	1.65	14.60	0.26	
AS81280	35.40	76.10	7.25	25.70	4.55	0.70	3.60	0.44	2.50	0.44	1.35	0.20	1.35	11.20	0.22	
AS81282	45.60	98.70	9.55	34.00	6.30	1.40	5.20	0.74	4.20	0.78	2.35	0.30	2.30	19.30	0.34	
AS81283	61.80	115.00	12.10	40.90	6.80	1.05	5.40	0.66	3.80	0.68	1.90	0.25	1.70	17.00	0.26	
AS81284	57.50	107.00	10.90	36.00	5.75	1.00	4.20	0.56	3.55	0.56	1.60	0.20	1.45	13.90	0.22	
AS81285	60.60	114.00	11.80	39.00	6.45	1.05	5.00	0.62	3.30	0.58	1.70	0.20	1.45	15.30	0.24	
AS81286	60.60	115.00	11.60	40.40	6.55	1.15	5.00	0.64	3.80	0.66	2.00	0.25	1.85	17.20	0.30	
AS81287	49.50	97.50	10.80	39.30	7.50	1.50	6.80	0.94	5.50	1.04	3.50	0.45	2.90	26.80	0.46	
AS81288	36.60	81.60	7.55	26.50	4.50	0.75	3.60	0.44	2.55	0.46	1.35	0.20	1.25	11.20	0.18	
AS81289	46.10	92.80	9.25	32.20	5.65	1.10	4.60	0.58	3.45	0.62	1.80	0.25	1.65	15.50	0.26	
AS81290	48.70	97.10	9.75	34.50	5.80	0.85	4.60	0.58	3.10	0.56	1.60	0.20	1.40	13.60	0.22	
AS81291	46.80	92.80	9.20	31.60	5.25	0.70	3.80	0.46	2.60	0.46	1.45	0.20	1.25	11.20	0.18	
AS81292	39.40	82.20	7.85	27.90	4.85	0.90	3.80	0.50	2.80	0.50	1.45	0.20	1.30	13.00	0.20	
AS81293	43.40	83.60	8.50	29.10	4.95	1.00	3.80	0.50	2.95	0.52	1.55	0.20	1.45	13.80	0.22	
AS81294	65.40	185.00	14.50	52.10	9.40	1.85	7.20	0.90	4.75	0.84	2.35	0.30	2.05	18.60	0.30	
AS81295	36.90	103.00	8.30	31.50	5.65	1.35	4.60	0.62	3.45	0.60	1.75	0.25	1.65	13.30	0.24	

Sample ID	Light Rare Earth Elements									Heavy Rare Earth Elements					
	La_pp m	Ce_pp m	Pr_pp m	Nd_pp m	Sm_pp m	Eu_pp m	Gd_pp m	Tb_pp m	Dy_pp m	Ho_pp m	Er_pp m	Tm_pp m	Yb_pp m	Y_pp m	Lu_pp m
AS81318	47.30	138.00	9.50	33.70	5.80	1.10	4.80	0.62	3.60	0.66	1.95	0.25	1.80	17.10	0.30
AS81319	41.10	86.70	8.75	31.10	5.60	1.00	4.40	0.60	3.40	0.64	1.85	0.25	1.80	15.30	0.26
AS81320	50.90	102.00	9.65	34.20	6.00	1.05	5.20	0.68	3.80	0.60	1.80	0.25	1.65	14.70	0.24
AS81321	64.20	119.00	11.90	41.00	6.60	0.90	5.60	0.64	3.40	0.56	1.65	0.20	1.40	14.10	0.22
AS81322	40.20	77.30	7.70	26.80	4.70	1.05	4.20	0.54	3.30	0.58	1.70	0.25	1.55	14.20	0.24
AS81323	28.30	55.30	5.60	19.40	3.50	0.60	3.20	0.38	2.00	0.34	1.00	0.15	0.90	8.50	0.14
AS81324	21.90	48.10	4.30	14.70	2.60	0.50	2.20	0.28	1.60	0.26	0.80	0.10	0.80	6.70	0.12
AS81326	43.20	80.90	8.55	30.30	5.15	1.15	4.80	0.64	3.80	0.66	2.10	0.30	1.85	17.00	0.28
AS81327	64.20	123.00	11.50	37.60	5.75	0.60	4.20	0.52	2.70	0.44	1.25	0.20	1.10	11.00	0.18
AS81328	63.40	113.00	11.60	39.20	6.30	1.00	5.40	0.68	3.65	0.60	1.75	0.25	1.65	15.00	0.24
AS81329	80.50	207.00	13.60	45.70	7.35	0.85	6.40	0.74	3.85	0.60	1.60	0.20	1.25	13.80	0.20
AS81330	45.20	83.30	8.70	30.10	5.20	1.10	4.60	0.58	3.35	0.60	1.80	0.25	1.65	15.00	0.26
AS81331	45.80	84.90	10.50	40.60	8.35	2.10	8.80	1.24	7.35	1.32	4.05	0.55	3.40	36.30	0.52
AS81332	60.60	112.00	11.40	40.20	6.65	1.00	6.20	0.74	4.15	0.68	1.95	0.25	1.75	16.40	0.28
AS81333	53.70	100.00	10.20	35.20	5.75	0.95	5.00	0.58	3.05	0.52	1.55	0.20	1.55	13.50	0.22
AS81334	48.40	74.50	8.50	30.30	5.20	1.20	4.80	0.64	3.55	0.66	2.00	0.30	1.85	18.40	0.30
AS81335	49.50	98.40	10.10	34.90	5.95	1.15	5.00	0.64	3.45	0.60	1.70	0.25	1.55	13.80	0.26
AS81336	36.50	68.80	7.55	27.40	5.20	0.75	4.20	0.52	3.25	0.48	1.55	0.20	1.50	12.40	0.24
AS81337	31.00	51.40	5.80	20.40	3.40	0.80	3.20	0.44	2.40	0.42	1.30	0.20	1.20	12.20	0.20
AS81338	90.90	174.00	16.90	57.00	8.85	1.10	7.00	0.80	3.95	0.62	1.75	0.25	1.60	15.40	0.26
AS81339	95.20	178.00	17.40	60.80	9.65	1.00	7.80	0.86	4.15	0.62	1.65	0.25	1.40	15.00	0.22
AS81340	42.90	81.10	7.95	27.80	4.50	0.65	3.60	0.48	2.65	0.46	1.40	0.20	1.40	11.10	0.22
AS81342	46.40	88.10	8.75	30.20	4.95	0.70	4.00	0.52	2.70	0.46	1.40	0.20	1.30	11.70	0.20
AS81343	40.20	169.00	7.85	27.60	4.95	0.90	4.40	0.64	3.90	0.66	2.05	0.30	2.10	16.90	0.32
AS81344	70.90	118.00	14.10	49.60	8.55	1.85	7.60	0.94	5.35	0.88	2.60	0.35	2.10	20.90	0.32
AS81345	50.70	89.50	9.20	32.20	5.25	1.05	4.60	0.58	3.20	0.58	1.70	0.25	1.60	14.90	0.24
AS81346	41.70	85.10	9.40	35.70	7.40	1.85	7.60	1.08	6.30	1.12	3.45	0.45	2.90	28.70	0.46
AS81347	49.10	110.00	9.25	32.10	5.30	1.05	4.60	0.58	3.30	0.58	1.70	0.25	1.55	14.90	0.24
AS81348	47.20	85.90	9.25	33.70	6.15	1.20	5.80	0.70	4.15	0.68	2.10	0.30	2.05	18.00	0.32
AS81349	56.30	106.00	10.80	37.90	6.60	1.15	5.80	0.70	4.00	0.62	1.85	0.25	1.70	16.50	0.28
AS81351	32.30	60.60	6.80	23.80	4.15	0.80	3.80	0.46	2.65	0.46	1.35	0.20	1.25	14.00	0.18
AS81352	32.70	62.70	7.00	23.70	4.15	0.80	3.20	0.42	2.40	0.42	1.20	0.15	1.10	10.90	0.16
AS81353	48.70	91.20	9.15	32.00	5.40	0.90	4.40	0.56	3.25	0.54	1.70	0.25	1.55	13.50	0.24
AS81354	46.90	88.10	8.70	29.80	4.80	0.70	3.80	0.50	2.65	0.46	1.40	0.20	1.35	11.70	0.22
AS81355	38.50	71.30	7.25	25.60	4.40	0.60	3.80	0.46	2.40	0.40	1.20	0.15	1.05	9.60	0.18
AS81356	53.00	101.00	10.20	34.60	5.80	1.00	4.60	0.60	3.30	0.54	1.65	0.25	1.60	13.40	0.24
AS81357	67.90	123.00	13.50	48.10	8.40	1.85	7.40	0.92	5.05	0.84	2.45	0.35	2.15	21.20	0.36
AS81358	40.90	76.10	7.85	27.40	4.85	1.05	4.20	0.56	3.45	0.60	1.85	0.25	1.75	15.90	0.28
AS81359	141.00	257.00	26.20	84.60	14.00	1.05	11.40	1.30	6.20	0.96	2.40	0.30	1.65	23.00	0.26
AS81360	47.30	88.10	8.75	30.30	5.00	0.90	4.20	0.52	2.85	0.48	1.50	0.20	1.50	13.00	0.22
AS81361	79.70	132.00	14.70	48.90	7.85	1.40	6.60	0.78	4.25	0.68	2.10	0.30	1.90	18.20	0.30
AS81362	52.60	97.40	9.85	33.40	5.55	1.00	4.40	0.56	3.15	0.54	1.70	0.25	1.60	13.70	0.24
AS81363	50.20	92.80	10.10	35.00	6.10	1.25	5.40	0.70	3.95	0.66	2.00	0.30	1.90	17.00	0.30
AS81364	73.40	98.40	13.00	49.40	8.25	1.85	9.20	1.10	6.05	1.04	3.10	0.40	2.60	35.20	0.42
AS81365	37.50	69.60	7.35	25.40	4.35	0.75	3.60	0.48	2.60	0.42	1.30	0.20	1.25	11.00	0.20
AS81366	42.30	82.60	8.35	28.60	5.05	1.05	4.40	0.56	2.80	0.54	1.55	0.25	1.55	13.90	0.24
AS81367	71.70	123.00	13.90	47.20	8.20	1.65	7.60	0.92	4.45	0.88	2.45	0.35	2.35	22.60	0.38
AS81368	37.40	81.80	6.80	23.30	3.85	0.70	3.40	0.44	2.05	0.40	1.15	0.15	1.20	10.40	0.18
AS81369	29.50	60.90	5.95	21.00	3.65	0.70	3.40	0.44	2.20	0.44	1.30	0.25	1.30	12.10	0.20
AS81370	53.90	102.00	10.00	34.10	5.60	0.85	4.60	0.58	2.80	0.54	1.55	0.25	1.55	14.50	0.26
AS81371	62.10	248.00	11.40	37.70	5.85	1.15	4.60	0.58	2.80	0.52	1.50	0.20	1.50	12.20	0.22
AS81372	58.10	105.00	9.75	31.90	4.90	0.90	4.00	0.50	2.40	0.44	1.30	0.20	1.20	11.50	0.20
AS81373	51.50	92.00	9.20	30.80	5.05	0.95	4.20	0.52	2.70	0.52	1.55	0.25	1.55	14.70	0.24
AS81374	54.00	96.10	10.10	33.90	5.30	1.10	4.60	0.56	2.85	0.58	1.60	0.25	1.70	15.30	0.26
AS81376	75.70	140.00	14.10	46.80	7.65	1.20	6.60	0.78	3.75	0.72	2.05	0.30	1.85	18.60	0.30
AS81377	63.20	122.00	12.20	43.00	7.30	1.15	6.40	0.76	3.55	0.68	1.80	0.25	1.70	17.20	0.26
AS81378	39.10	61.30	7.40	25.90	4.25	0.90	4.20	0.52	2.50	0.52	1.45	0.20	1.30	14.60	0.22
AS81379	63.90	120.00	12.00	41.10	7.15	1.20	6.80	0.86	4.25	0.80	2.15	0.30	1.85	20.40	0.28
AS81380	107.00	323.00	22.00	77.10	13.70	3.45	12.20	1.46	7.00	1.28	3.40	0.50	3.15	29.30	0.50
AS81382	110.00	185.00	19.70	66.80	10.40	2.35	9.20	1.02	4.70	0.86	2.25	0.30	2.10	20.50	0.34
AS81383	68.50	127.00	12.60	41.90	6.05	1.10	5.00	0.56	2.60	0.46	1.30	0.20	1.20	11.30	0.20
AS81384	41.00	70.90	7.60	25.50	4.20	0.85	3.80	0.50	2.50	0.48	1.35	0.20	1.35	13.20	0.20
AS81385	60.30	179.00	10.60	33.90	5.30	1.10	4.40	0.52	2.55	0.48	1.35	0.20	1.35	12.60	0.20
AS81386	57.70	106.00	10.90	36.70	5.95	0.85	5.20	0.62	2.95	0.54	1.55	0.20	1.45	15.00	0.24
AS81387	49.20	90.50	9.30	31.90	5.40	1.30	5.20	0.68	3.55	0.70	2.10	0.30	2.00	19.60	0.32
AS81388	58.00	106.00	10.60	35.40	5.80	0.95	5.00	0.60	2.85	0.54	1.55	0.25	1.40	14.80	0.24
AS81389	56.80	101.00	10.50	35.70	5.65	1.00	4.80	0.58	2.95	0.58	1.60	0.25	1.60	15.40	0.26
AS81390	65.00	132.00	12.80	44.70	7.25	1.10	6.40	0.74	3.50	0.64	1.70	0.25	1.70	16.40	0.26
AS81391	39.90	81.30	8.10	27.90	4.95	0.95	4.60	0.60	3.10	0.60	1.70	0.25	1.75	15.70	0.28
AS81392	58.80	131.00	12.00	41.50	7.15	1.20	6.60	0.80	3.90	0.74	2.10	0.30	2.10	19.20	0.32
AS81393	42.50	94.10	8.55	29.10	5.05	0.95	4.60	0.60	3.05	0.60	1.70	0.25	1.80	15.20	0.26
AS81394	47.90	98.00	9.40	31.70	5.45	1.05	5.00	0.62	3.10	0.60	1.70	0.25	1.70	15.50	0.28
AS81395	91.50	153.00	13.70	41.50	6.40	1.00	5.40	0.68	3.15	0.60	1.60	0.25	1.55	15.70	0.24
AS81396	50.70	99.60	9.65	33.00	5.35	0.95	4.60	0.58	3.15	0.56	1.60	0.25	1.60	13.90	0.24
AS81397	87.60	163.00	15.40	49.80	7.15	1.20	5.80	0.66	3.15	0.60	1.65	0.25	1.70	15.70	0.26
AS81398	72.60	122.00	13.20	43.70	6.95	1.50	6.40	0.74	3.65	0.72	2.00	0.30	1.95	20.40	0.32
AS81399	51.00	99.60	9.85	33.90	5.80	1.15	5.20	0.64	3.20	0.60	1.70	0.25	1.70	15.80	0.28

Sample ID	Light Rare Earth Elements								Heavy Rare Earth Elements						
	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	Y_ppm	Lu_ppm
AS81422	76.00	146.00	14.00	48.20	7.05	0.95	4.60	0.52	3.05	0.54	1.55	0.20	1.20	13.10	0.20
AS81423	77.90	156.00	17.00	66.30	12.60	2.10	10.60	1.24	7.15	1.40	3.65	0.45	2.90	31.30	0.50
AS81424	55.20	106.00	11.80	44.70	7.85	1.20	6.40	0.76	4.70	0.90	2.60	0.30	2.15	22.90	0.34
AS81426	58.50	94.50	11.00	39.40	6.35	1.10	4.60	0.52	3.10	0.56	1.60	0.20	1.20	14.80	0.20
AS81427	46.80	94.20	9.75	36.10	6.20	1.05	4.80	0.62	3.80	0.76	2.05	0.25	1.75	17.60	0.28
AS81428	48.30	98.40	10.00	37.40	6.70	1.10	5.20	0.64	4.10	0.76	2.05	0.25	1.75	17.00	0.28
AS81429	45.20	80.10	9.85	35.20	6.10	0.90	4.00	0.48	2.70	0.50	1.35	0.15	1.20	11.00	0.18
AS81430	50.30	177.00	8.50	26.00	3.65	0.55	2.20	0.26	1.40	0.26	0.75	0.10	0.60	5.90	0.08
AS81431	47.80	90.70	8.80	30.50	4.75	1.00	3.40	0.42	2.40	0.48	1.30	0.15	1.15	10.70	0.18
AS81432	89.30	161.00	16.40	56.70	8.70	1.10	5.60	0.64	3.45	0.66	1.75	0.20	1.30	15.70	0.20
AS81433	48.60	97.40	10.30	38.80	6.95	1.20	5.80	0.68	4.25	0.82	2.25	0.30	1.75	18.70	0.28
AS81434	35.60	77.90	8.00	29.60	5.50	0.95	4.60	0.60	3.80	0.78	2.20	0.30	1.85	17.80	0.32
AS81435	81.00	180.00	20.10	79.70	15.80	3.35	11.60	1.44	8.15	1.34	3.45	0.40	2.30	25.60	0.32
AS81436	40.90	84.70	8.55	31.60	5.70	0.85	4.40	0.60	3.45	0.68	2.00	0.25	1.65	16.40	0.26
AS81437	52.50	110.00	11.30	42.30	7.60	0.90	5.60	0.66	3.70	0.66	1.75	0.20	1.45	14.50	0.22
AS81438	45.00	107.00	8.90	32.10	5.45	0.95	4.00	0.52	3.25	0.62	1.80	0.25	1.60	15.90	0.24
AS81439	56.60	106.00	10.70	37.10	6.05	0.90	4.20	0.52	3.15	0.58	1.70	0.25	1.50	14.60	0.24
AS81440	43.30	94.30	9.30	34.70	6.60	1.05	5.20	0.66	4.15	0.80	2.20	0.30	1.85	18.80	0.28
AS81442	52.10	103.00	11.70	45.90	8.65	1.70	7.20	0.84	5.10	0.94	2.50	0.30	1.90	21.10	0.30
AS81443	48.20	99.20	10.30	39.60	6.95	1.15	5.20	0.66	4.00	0.78	2.20	0.30	1.85	17.40	0.30
AS81444	51.50	104.00	9.85	36.30	6.25	1.10	5.00	0.58	3.40	0.68	1.90	0.25	1.65	16.50	0.24
AS81445	84.60	231.00	16.90	59.80	9.90	1.35	7.40	0.86	5.10	0.92	2.55	0.30	2.00	20.00	0.30
AS81446	43.60	87.00	9.35	36.10	6.75	1.20	5.80	0.72	4.45	0.88	2.35	0.30	1.95	20.50	0.30
AS81447	52.90	123.00	11.40	41.60	7.55	1.40	5.60	0.68	4.45	0.80	2.25	0.30	1.85	18.30	0.28

