

UPDATED ANNOUNCEMENT

AMERICAN RARE EARTHS REPORTS HIGHEST GRADES TO DATE AT COWBOY STATE MINE, HALLECK CREEK PROJECT

This is an updated announcement to the one released on 26 November 2024 with additional commentary in JORC Table 1.

Highlights

- Final assay results from the last 5 holes of the 2024 drilling campaign confirm some of the highest-grade Total Rare Earth Oxide (TREO) intersections recorded at the Cowboy State Mine Area.
- Significant high-grade intervals include:
 - HC24-RM046: **148.0 m @ 4,451 ppm TREO**, including **52.5 m @ 5,273 ppm TREO** (maximum 6,198 ppm TREO).
 - HC24-RM048: **161.5 m @ 4,275 ppm TREO**, including **40.5 m @ 5,287 ppm TREO** (maximum 5,869 ppm TREO).
 - HC24-RM049: **90.0 m @ 4,353 ppm TREO**, including **16.5 m @ 5,313 ppm TREO** (maximum 6,049 ppm TREO).
- Results confirm extensive high-grade zones, reinforcing Halleck Creek's position as one of North America's most promising rare earth developments.

American Rare Earths (**ASX: ARR | OTCQX: ARRNF | ADR: AMRRY**) ("**ARR**") through its wholly owned subsidiary Wyoming Rare (USA) Inc. ("**WRI**"), is pleased to announce the final assay results from its 2024 drilling campaign at the Cowboy State Mine ("**CSM**") area within the Halleck Creek Project, Wyoming. These results represent a major milestone in ARR's journey to establish a world-class rare earth resource capable of supporting the U.S. critical mineral supply chains.

Drilling has revealed multiple high-grade intersections exceeding 5,000 ppm TREO, demonstrating the project's upside potential. These findings will underpin updated geological models and resource estimates, paving the way for the next phase of development.

Chris Gibbs, CEO of American Rare Earths, commented:

"These exceptional results showcase Halleck Creek's potential to become a flagship rare earth project for North America. The high-grade TREO zones identified underscore the significant scale and quality of the deposit and strengthen our confidence in the project's future."

"With the U.S. government's strong commitment to securing domestic critical mineral supply chains, Halleck Creek is well positioned to fulfill the US Government's strategic objectives for both the defence industry and an array of economic elements supporting the energy transition. Our recent engagement with BMO Capital Markets and collaborations with industry-leading experts ensure we're strategically aligned to accelerate the development of this world-class asset."

ARR is advancing toward completing an updated resource estimate and Pre-Feasibility Study (PFS) for Halleck Creek in 2025. The Company will continue to progress discussions with potential strategic partners to further unlock the value of this critical asset.

Technical Summary

ALS Global provided results for 492 samples from 5 reverse circulation drill holes. Table A contains the locations and the depths of the five additional holes. The complete assay results from these holes are listed in Appendix B below. Table B summarises the thickness and estimated average TREO grade of samples using at 1,500 ppm TREO cutoff grade, and the maximum grade observed in each drill hole.

Table A – Locations of Additional Reverse Circulation Holes

DHID	Easting	Northing	Collar	Total Length	Azimuth	Dip	Hole Type
HC24-RM046	474,928.81	4,631,862.56	1,785.01	182.50	290.00	-55.00	RC
HC24-RM047	474,931.96	4,631,866.41	1,784.88	144.00	330.00	-55.00	RC
HC24-RM048	475,037.53	4,631,958.60	1,777.92	182.50	270.00	-55.00	RC
HC24-RM049	475,038.94	4,631,962.35	1,777.91	149.00	310.00	-55.00	RC
HC24-RM050	475,149.64	4,632,056.12	1,770.90	182.50	290.00	-45.00	RC
Total				840.50			

Table B - Thickness and Estimated TREO Grade of Samples >= 1,500ppm TREO

DHID	Thickness (m)	Avg TREO (ppm)	Max TREO (ppm)
HC24-RM046	148.0	4,451	6,198
HC24-RM047	10.5	3,130	4,906
HC24-RM048	161.5	4,275	5,869
HC24-RM049	90.0	4,353	6,049
HC24-RM050	109.5	3,631	4,714
Grand Total	519.5	4,180	6,198

Drill holes HC24-RM046, HC24-RM048, and HC24-RM049 intersected high grade REE bearing CQM throughout the holes with granitic dikes, see Figure 2. HC24-RM050 contains a contact between lower grade Red Mountain Pluton (“RMP”) and higher grade RMP clearly differentiating the two domains. Drill hole HC24-RM047 intersected a lobe of non-REE a granitic intrusion related to Mesoproterozoic granite and the Sybille Intrusion to the east and south of Red Mountain.

Geological maps and modelling domains have been updated. We have redefined the extent of the RMP relative to the Sybille intrusive body, and the non-REE bearing Mesoproterozoic granites to the east based on the drilling data. Odessa Resources Ltd have been provided with all the updated geological data and they are currently updating the geological and grade models for Halleck Creek. Odessa Resources are currently working on the update of the in-situ rare earth resources at Halleck Creek and the Cowboy State Mine.

This announcement is authorised for release by the CEO of American Rare Earths.

Further information

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Competent Persons Statement:

The information in this document is based on company work performed in October and November 2024. This work was reviewed and approved for release by Mr Dwight Kinnes (Society of Mining Engineers #4063295RM) who is employed by American Rare Earths and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Kinnes consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

[American Rare Earths](#) (ASX: ARR | OTCQX: ARRNF | ADR: AMRRY) owns Wyoming Rare (USA) Inc. which is focused on the development of the Halleck Creek Project, WY. It also owns La Paz, AZ rare earth deposit. Both can potentially become the largest and most sustainable rare earth projects in North America. The Company is developing environmentally friendly and cost-effective extraction and processing methods to meet the rapidly increasing demand for resources essential to the clean energy transition and US national security. The Company continues to evaluate other exploration opportunities and is collaborating with US Government-supported R&D to develop efficient processing and separation techniques of (REEs) elements to help ensure a renewable future.

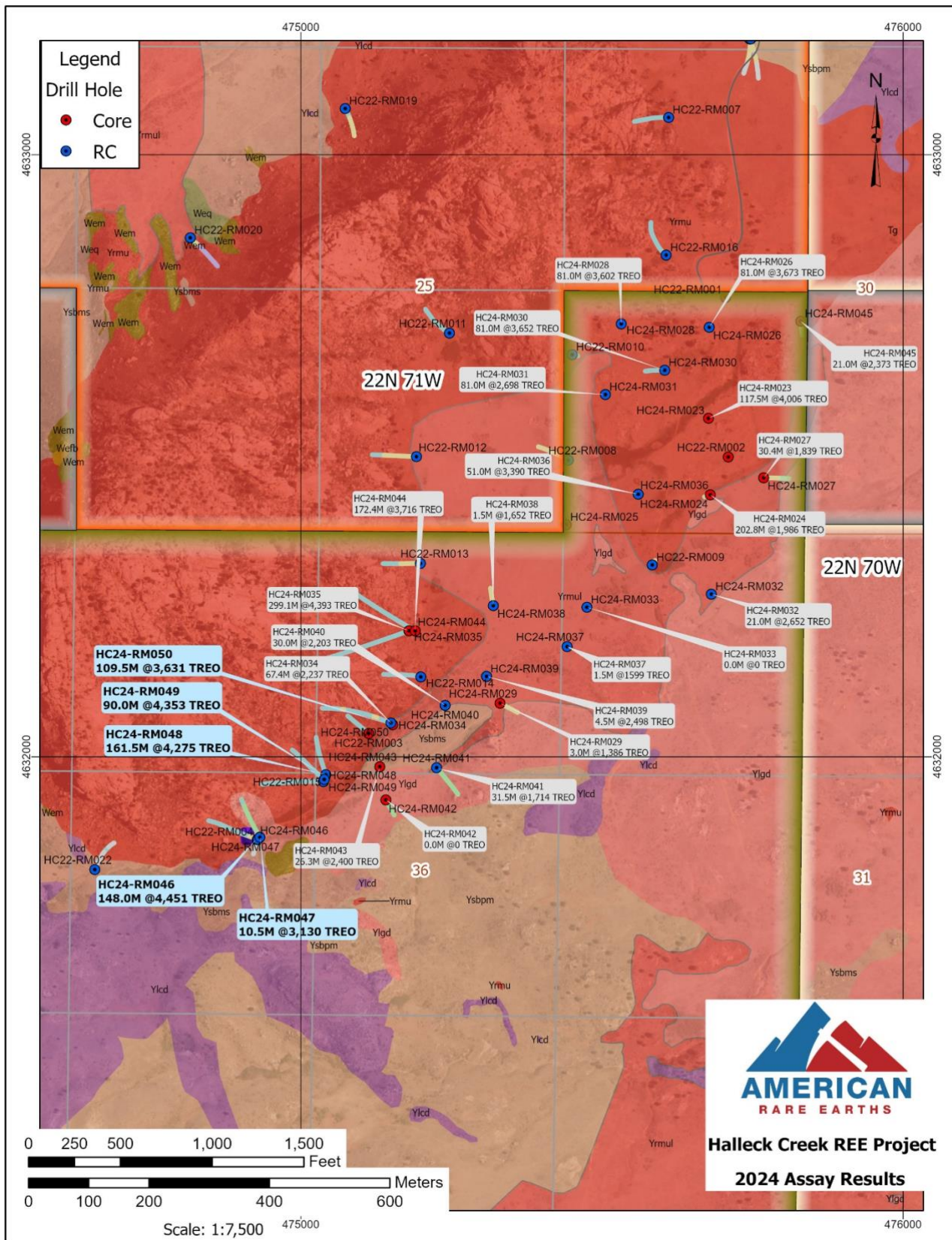


Figure 1 – 2024 Drill Hole Locations and Assay Summaries

2024 Additional Holes

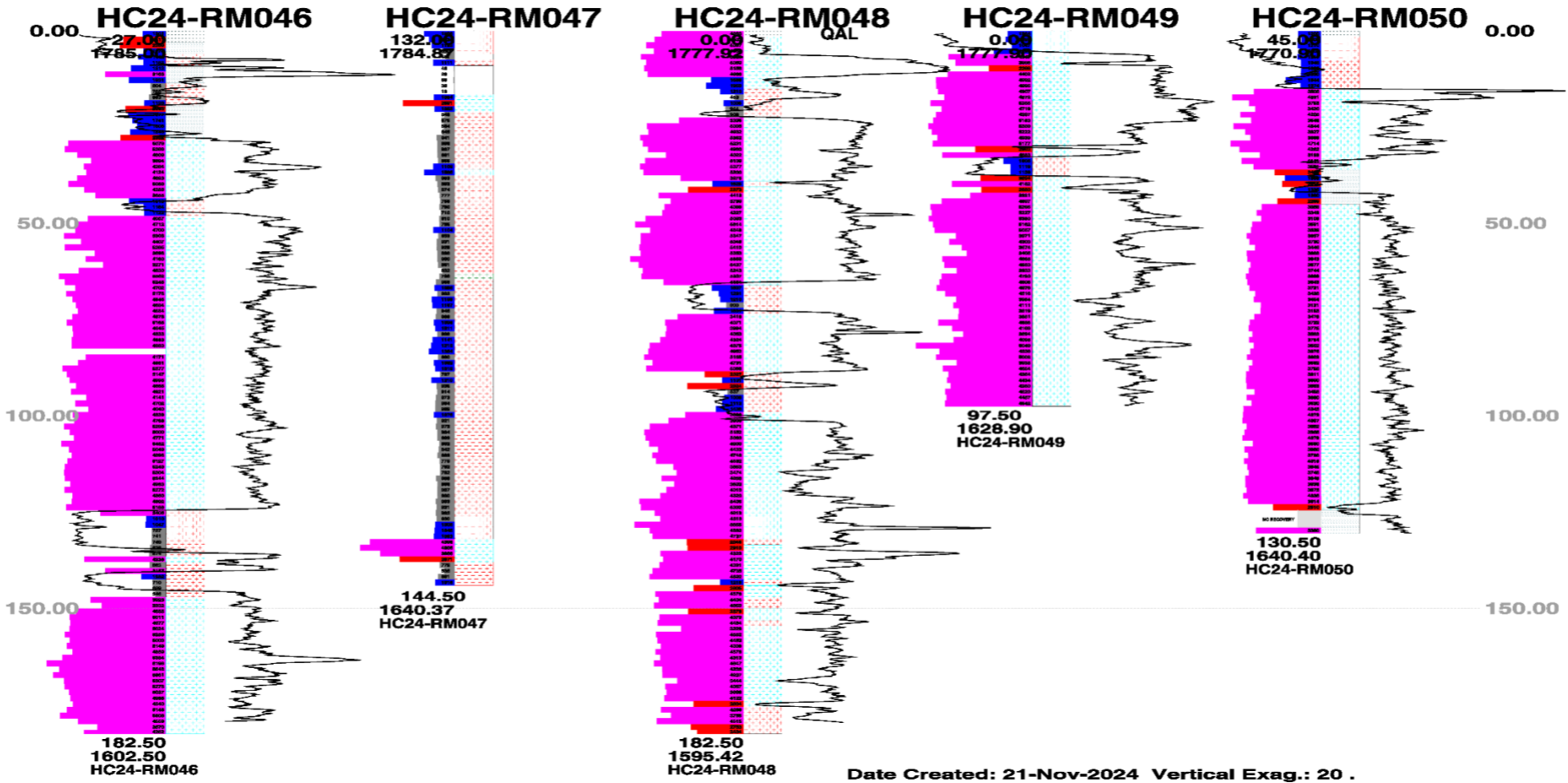


Figure 2 – Fence Diagram of 2024 Additional Holes

APPENDIX A – JORC TABLE 1

Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	WRI drilled 5 additional RC drill holes in the Cowboy State Mine area. 5 reverse circulation holes completed with a total length of 840.5 metres (2,758 feet). 492 RC samples were collected, logged and shipped to ALS global for assay.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	RC samples were collected every 1.5 meters.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	The Red Mountain Pluton (RMP) of the Halleck Creek Rare Earths Project is a distinctly layered monzonitic to syenitic body which exhibits significant and widespread REE enrichment. Enrichment is dependent on allanite abundance, a sorosilicate of the epidote group. Allanite occurs in all three units of the RMP, the clinopyroxene quartz monzonite, the biotite-hornblende quartz syenite, and the fayalite monzonite, in variable abundances.
	<i>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	RC samples were collected using a rotary splitter to prepare three samples across each 1.5 meter interval. Each sample was logged by geologists and given a unique sample ID and prepared for assay.
<i>Drilling techniques</i>	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or another type, whether the core is oriented and if so, by what method, etc.).</i>	WRI drilled 12 reverse circulation drill holes with samples collected using a rotary splitter. All the holes were oriented with downhole surveys collected for each hole

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Core recoveries were calculated by WRI geologists. RC samples were collected via a continuous rotary sample splitter.
	<i>Measures are taken to maximise sample recovery and ensure the representative nature of the samples.</i>	Core recoveries were calculated by WRI geologists. RC samples were collected by a continuous rotary sample splitter. RC assays results were cross-referenced against geophysical logs as a qualitative measure of how representative each is.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	There is not a relationship between sample recovery and sample bias. Allanite occurs as phenocrysts in a plutonic body.
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	All rock samples were geologically and geotechnically logged WRI geologists familiar with the deposit. Lithology, alteration, geotechnical parameters were recorded for each sample.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Logging of rock samples are quantitative adhering to methods established by WRI.
	<i>The total length and percentage of the relevant intersections logged.</i>	Rare earth mineralization occurs across the rocks of the RMP. All lengths of RMP material are relevant.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	ALS global is splitting the core into two halves.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	RC samples were collected using a rotary splitter into three samples.

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	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	All core samples were dry. Sample preparation: 1kg samples split to 250g for pulverising to -75 microns. Sample analysis: 0.5g charge assayed by ICP-MS technique.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.</i>	WRI geologists added blanks, CRM and identified duplicate samples across each drill hole using establish company standards.
	<i>Measures are taken to ensure that the sampling is representative of the in situ material collected, including, for instance, results for field duplicate/second-half sampling.</i>	WRI geologists added blanks, CRM and identified duplicate samples across each drill hole using establish company standards.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Allanite is generally well distributed across the core and the sample sizes are representative of the fine grain size of the Allanite.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	ALS uses a 5-acid digestion and 32 elements by lithium borate fusion and ICP-MS (ME-MS71h). For quantitative results of all elements, including those encapsulated in resistive minerals. These assays include all rare earth elements.
	<i>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.</i>	XRF readings were collected for qualitative indications in the field. XRF was not used for quantitative purposes.
	<i>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.</i>	WRI geologists added blanks, CRM and identified duplicate samples across each drill hole using establish company standards.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Surface samples have not yet been verified by independent personnel.
	<i>The use of twinned holes.</i>	Twinned holes have not been used. Assays results have been cross-referenced within geophysical logs as a means of qualitative verification.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data entry was performed by ARR personnel and checked by ARR geologists. All field logs were scanned and uploaded to company file servers. All photographs were also uploaded to the file server daily. All scanned documents are cross-referenced and directly available from the database. Assay data from the surface samples was imported into the database directly from electronic spreadsheets sent to ARR from ALS.
	<i>Discuss any adjustment to assay data.</i>	Assay data is stored in the database in elemental form. Reporting of oxide values are calculated in the database using the molar mass of the element and the oxide.
<i>Location of data points</i>	<i>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.</i>	Preliminary drill hole locations were determined using handheld GPS units. Final drill hole location will be surveyed by a professional land surveyor.
	<i>Specification of the grid system used.</i>	The grid system used to compile data was NAD83 Zone 13N.
	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 10 ft (3 m).
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Drill hole locations vary between 100 and 300 meters.

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	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Geostatistical analysis of previous drilling data indicates that the drill hole spaced defined for the 2024 program is appropriate for minor resource and reserve estimation procedures.
	<i>Whether sample compositing has been applied.</i>	Composite have not been applied.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Mineralization at Halleck Creek is a function of fractional crystallization of allanite in syenitic rocks of the Red Mountain Pluton. Mineralization is not structurally controlled and exploration drilling to date does not reveal any preferential mineralization related to geologic structures.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Mineralization is not structurally controlled and exploration drilling to date does not reveal any preferential mineralization related to geologic structures. There is not a relationship between structure and mineralization.
<i>Sample security</i>	<i>The measures are taken to ensure sample security.</i>	All samples were in the direct control of company geologists until dispatched to ALS Global. Transport to ALS is handling using licenced and bonded carriers.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audits or reviews have been conducted to date. However, sampling techniques are consistent with industry standards.

Section 2 Reporting of Exploration Results

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

Criteria	<i>JORC Code explanation</i>	Commentary
Mineral tenement and land tenure status	<i>Type, reference name/number, location and ownership, including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	ARR controls 365 unpatented federal lode claims and 4 Wyoming State mineral licenses covering 8,124 acres (3,288 ha).
	<i>The security of the tenure held at the time of reporting and any known impediments to obtaining a licence to operate in the area.</i>	No impediments to holding the claims exist. To maintain the claims an annual holding fee of \$165/claim is payable to the BLM. To maintain the State leases minimum rental payments of \$1/acre for 1-5 years; \$2/acre for 6-10 years; and \$3/acre if held for 10 years or longer.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Prior to sampling by WIM on behalf of Blackfire Minerals and Zenith there was no previous sampling by any other groups within the ARR claim and Wyoming State Lease blocks.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	The REE's occur within Allanite which occurs as a variable constituent of the Red Mountain Pluton. The occurrence can be characterised as a disseminated type rare earth deposit.
Drill hole Information	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i>	Appendix B contains the assay results received to date from ALS
	<i>easting and northing of the drill hole collar</i>	The surveyed locations and orientations of the drill holes are included in the release.
	<i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>dip and azimuth of the hole</i>	
	<i>downhole length and interception depth</i>	
	<i>Hole length.</i>	
<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the</i>	No drilling data has been excluded from the results.	

Section 2 Reporting of Exploration Results

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

Criteria	<i>JORC Code explanation</i>	Commentary
	<i>understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	No cut-offs have been applied to the data
	<i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	Assays are representative of each sample.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is unknown and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	Allanite mineralization observed at Halleck Creek occurs uniformly throughout the CQM and BHS rocks of within the Red Mountain Pluton. Therefore, the geometry of mineralisation does not vary with drill hole orientation or angle within homogeneous rock types.
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.</i>	Location information is presented the text above
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i>	ALS Global performed analytical analysis of each sample. The tables above show extents of mineralized thickness in each hole received to date.

Section 2 Reporting of Exploration Results

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

Criteria	<i>JORC Code explanation</i>	Commentary
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported, including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<p>In hand specimen this rock is a red colored, hard and dense granite with areas of localised fracturing. The rock shows significant iron staining and deep weathering.</p> <p>Microscopic description: In hand specimen the samples represent light colored, fairly coarse-grained granitic rock composed of visible secondary iron oxide, amphibole, opaques, clear quartz and pink to white colored feldspar. All of the specimens show moderate to strong weathering and fracturing. Allanite content is variable from trace to 2%. Rare Earths are found within the Allanite.</p> <p>Historical metallurgical testing consisted of concentrating the Allanite by both gravity and magnetic separation. The current program employs sequential high gradient magnetic separation and flotation to produce a concentrate suitable for downstream rare earth elements extraction.</p>
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further drilling is planned to increase the area of the project, and to increase confidence levels of resources. Geological mapping and surface sampling will also be performed to define and prioritize drilling targets.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Additional drilling and channel sampling is planned in new exploration areas and to increase resource confidence levels.

Appendix B – 2024 Assay Results of Additional Holes

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM046	0.00	1.50	RC	1,201	193	335	1,008	215	484	55	217	37	108	6	28	4	22	4	10	1	9	1	1,329	24	4
HC24-RM046	1.50	3.00	RC	2,211	312	602	1,899	405	936	101	390	67	169	8	50	7	37	7	17	2	13	2	1,385	41	5
HC24-RM046	3.00	4.50	RC	2,389	301	663	2,088	446	1,022	113	436	71	163	8	50	7	36	6	15	2	12	2	1,594	49	6
HC24-RM046	4.50	6.00	RC	1,173	186	333	987	208	472	55	215	37	102	5	28	4	22	4	10	1	9	1	901	33	6
HC24-RM046	6.00	7.50	RC	1,442	252	413	1,190	245	566	65	265	49	139	7	38	5	29	5	14	2	11	2	1,641	31	5
HC24-RM046	7.50	9.00	RC	1,182	241	351	941	188	435	54	223	41	131	9	35	5	28	5	13	2	11	2	1,810	33	7
HC24-RM046	9.00	10.50	RC	1,813	271	507	1,542	324	747	86	331	54	149	11	41	6	30	5	13	2	12	2	1,749	52	8
HC24-RM046	10.50	12.00	RC	3,163	275	823	2,888	671	1,431	155	554	77	145	8	52	7	30	5	13	2	11	2	593	101	15
HC24-RM046	12.00	13.50	RC	1,931	232	501	1,699	381	846	92	332	48	133	4	35	5	24	4	12	2	11	2	1,302	72	13
HC24-RM046	13.50	15.00	RC	804	172	205	632	141	306	35	129	21	107	3	18	3	17	3	10	1	9	1	1,029	41	13
HC24-RM046	15.00	16.50	RC	758	154	197	604	133	292	33	125	21	93	4	18	3	15	3	8	1	8	1	1,240	34	10
HC24-RM046	16.50	18.00	RC	883	171	226	712	161	345	39	143	24	105	4	20	3	17	3	9	1	8	1	1,316	33	8
HC24-RM046	18.00	19.50	RC	1,129	200	287	929	207	459	51	182	30	119	4	25	4	20	4	11	2	10	1	1,661	42	12
HC24-RM046	19.50	21.00	RC	2,093	356	606	1,737	349	829	99	392	68	194	13	56	8	39	7	18	2	16	3	3,377	41	7
HC24-RM046	21.00	22.50	RC	1,977	340	582	1,637	326	774	93	377	67	185	14	53	7	38	7	17	2	15	2	3,188	34	6
HC24-RM046	22.50	24.00	RC	1,741	369	523	1,372	253	645	80	331	63	206	11	55	8	41	7	19	2	17	3	3,566	29	7
HC24-RM046	24.00	25.50	RC	1,506	303	448	1,203	230	566	70	285	52	164	12	46	7	34	6	16	2	14	2	2,377	27	6
HC24-RM046	25.50	27.00	RC	1,846	283	534	1,563	314	753	88	349	59	151	12	46	6	32	5	14	2	13	2	2,033	35	6
HC24-RM046	27.00	28.50	RC	2,352	283	666	2,069	437	1,005	116	444	67	145	13	51	7	32	5	14	2	12	2	2,209	51	7
HC24-RM046	28.50	30.00	RC	5,079	403	1,369	4,676	1,061	2,303	257	930	125	199	15	84	10	47	8	19	2	16	3	1,851	97	10
HC24-RM046	30.00	31.50	RC	5,266	387	1,417	4,879	1,129	2,389	268	962	131	187	15	85	10	46	7	18	2	15	2	1,688	96	8
HC24-RM046	31.50	33.00	RC	4,609	377	1,267	4,232	976	2,045	231	862	118	185	14	80	10	46	7	17	2	14	2	1,520	88	9
HC24-RM046	33.00	34.50	RC	3,894	351	1,086	3,543	799	1,707	193	739	105	174	14	73	9	40	7	16	2	14	2	1,358	76	9
HC24-RM046	34.50	36.00	RC	4,264	404	1,180	3,860	867	1,873	212	793	115	201	14	83	11	49	8	19	2	15	2	1,249	84	9
HC24-RM046	36.00	37.50	RC	4,124	401	1,131	3,723	836	1,812	203	764	108	210	11	77	10	46	8	19	2	16	2	1,378	93	14
HC24-RM046	37.50	39.00	RC	4,623	394	1,254	4,229	980	2,051	233	848	117	199	13	82	10	46	7	18	2	15	2	1,675	93	9
HC24-RM046	39.00	40.50	RC	5,059	442	1,382	4,617	1,060	2,236	253	938	130	222	14	92	11	50	8	22	3	17	3	1,884	99	9
HC24-RM046	40.50	42.00	RC	4,255	366	1,152	3,889	884	1,904	212	781	108	186	12	75	9	42	7	17	2	14	2	1,601	88	11
HC24-RM046	42.00	43.50	RC	3,655	347	979	3,308	761	1,615	178	661	93	180	12	66	8	39	7	17	2	14	2	1,884	72	11
HC24-RM046	43.50	45.00	RC	1,919	368	535	1,551	325	741	87	338	60	206	10	55	8	42	7	19	3	16	2	2,290	42	10
HC24-RM046	45.00	46.50	RC	1,164	434	357	730	118	314	45	203	50	254	9	54	9	50	9	24	3	19	3	2,931	17	9
HC24-RM046	46.50	48.00	RC	1,122	341	334	781	140	353	46	199	43	197	8	44	7	39	7	19	2	16	2	2,188	25	11

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM046	48.00	49.50	RC	4,057	366	1,062	3,691	866	1,812	195	722	96	194	11	68	8	41	7	18	2	15	2	2,107	91	11
HC24-RM046	49.50	51.00	RC	4,712	335	1,257	4,377	1,017	2,150	236	860	114	168	11	72	9	38	6	15	2	12	2	2,080	90	8
HC24-RM046	51.00	52.50	RC	4,700	337	1,269	4,363	1,011	2,131	234	869	118	161	12	78	9	39	6	15	2	13	2	1,965	102	14
HC24-RM046	52.50	54.00	RC	5,303	421	1,448	4,882	1,111	2,383	267	983	138	205	15	93	11	49	8	19	2	16	3	2,317	105	12
HC24-RM046	54.00	55.50	RC	4,407	369	1,207	4,038	930	1,953	219	823	113	183	13	78	9	43	7	17	2	15	2	1,803	89	15
HC24-RM046	55.50	57.00	RC	5,265	455	1,463	4,810	1,086	2,328	263	990	143	220	16	102	12	55	9	21	2	16	2	2,323	100	12
HC24-RM046	57.00	58.50	RC	3,698	374	1,049	3,324	721	1,609	180	700	114	184	11	78	10	45	8	19	2	15	2	1,736	75	15
HC24-RM046	58.50	60.00	RC	4,160	500	1,203	3,660	783	1,750	202	790	135	248	13	103	13	63	11	24	3	19	3	1,965	77	13
HC24-RM046	60.00	61.50	RC	3,271	403	938	2,868	609	1,382	157	614	106	206	10	76	10	51	9	21	3	15	2	1,655	69	13
HC24-RM046	61.50	63.00	RC	4,530	526	1,304	4,004	880	1,898	217	865	144	272	12	104	13	65	11	25	3	18	3	2,046	80	12
HC24-RM046	63.00	64.50	RC	5,562	652	1,600	4,910	1,078	2,328	268	1,060	176	338	15	126	17	79	14	33	4	23	3	3,026	94	13
HC24-RM046	64.50	66.00	RC	5,245	638	1,512	4,607	997	2,193	253	995	169	329	15	121	16	79	14	33	4	24	3	2,756	88	10
HC24-RM046	66.00	67.50	RC	4,702	604	1,364	4,098	877	1,947	225	895	154	314	13	114	15	75	13	31	4	22	3	3,053	86	13
HC24-RM046	67.50	69.00	RC	5,178	577	1,483	4,601	1,004	2,199	253	980	165	297	14	115	15	70	12	28	3	20	3	2,337	90	12
HC24-RM046	69.00	70.50	RC	4,846	556	1,380	4,290	935	2,058	235	912	150	281	14	112	14	69	12	28	3	20	3	2,175	84	9
HC24-RM046	70.50	72.00	RC	4,684	567	1,346	4,117	881	1,972	224	889	151	295	14	109	14	68	12	28	3	21	3	2,019	81	11
HC24-RM046	72.00	73.50	RC	4,584	556	1,310	4,028	871	1,929	219	864	145	284	14	108	14	68	12	28	3	22	3	2,303	80	10
HC24-RM046	73.50	75.00	RC	4,878	613	1,392	4,265	912	2,051	231	916	155	320	14	115	15	75	13	31	4	23	3	2,371	82	10
HC24-RM046	75.00	76.50	RC	5,165	619	1,465	4,546	984	2,187	248	965	162	324	14	116	15	75	13	31	4	23	4	2,431	89	12
HC24-RM046	76.50	78.00	RC	4,845	593	1,376	4,252	916	2,045	231	909	151	315	13	107	14	71	13	30	4	23	3	2,229	81	13
HC24-RM046	78.00	79.50	RC	4,833	587	1,369	4,246	921	2,039	230	906	150	310	14	107	14	69	13	30	4	23	3	2,155	80	11
HC24-RM046	79.50	81.00	RC	4,883	602	1,388	4,281	936	2,045	233	913	154	315	14	111	15	73	13	31	4	23	3	2,242	82	10
HC24-RM046	81.00	82.50	RC	4,883	597	1,371	4,286	942	2,058	233	902	151	314	14	111	14	71	13	30	4	23	3	2,411	81	10
HC24-RM046	82.50	84.00	RC	No Sample																					
HC24-RM046	84.00	85.50	RC	4,171	542	1,170	3,629	779	1,757	197	766	130	287	13	96	13	64	12	28	4	22	3	2,229	70	11
HC24-RM046	85.50	87.00	RC	4,561	582	1,284	3,979	869	1,910	214	842	144	307	13	106	14	70	12	30	4	23	3	2,600	75	12
HC24-RM046	87.00	88.50	RC	5,377	648	1,522	4,729	1,045	2,254	259	1,003	168	343	15	118	16	76	14	33	4	25	4	2,485	88	12
HC24-RM046	88.50	90.00	RC	5,147	623	1,460	4,524	991	2,162	248	962	161	328	14	114	15	74	13	33	4	24	4	2,242	86	11
HC24-RM046	90.00	91.50	RC	4,995	612	1,421	4,383	962	2,088	237	939	157	323	14	111	15	73	13	31	4	24	4	2,107	82	11
HC24-RM046	91.50	93.00	RC	4,665	574	1,315	4,091	887	1,972	224	864	144	301	13	107	14	69	12	29	4	22	3	1,844	77	11
HC24-RM046	93.00	94.50	RC	4,921	577	1,384	4,344	936	2,107	237	910	154	302	14	107	14	69	12	29	4	23	3	2,013	81	10
HC24-RM046	94.50	96.00	RC	4,141	515	1,172	3,626	783	1,744	198	773	128	276	12	90	12	61	11	26	3	21	3	1,783	70	11
HC24-RM046	96.00	97.50	RC	4,702	566	1,316	4,136	905	1,996	225	864	146	300	13	103	14	67	12	28	4	22	3	1,851	78	11

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM046	97.50	99.00	RC	4,040	491	1,145	3,549	786	1,689	193	756	125	255	13	91	12	59	11	25	3	19	3	1,553	67	10
HC24-RM046	99.00	100.50	RC	4,839	584	1,364	4,255	936	2,039	230	900	150	309	14	106	14	70	12	29	4	23	3	2,013	79	11
HC24-RM046	100.50	102.00	RC	4,768	588	1,339	4,180	923	2,002	227	884	144	309	14	108	14	70	13	30	4	23	3	2,060	80	12
HC24-RM046	102.00	103.50	RC	5,296	633	1,488	4,663	1,036	2,230	254	980	163	331	14	116	15	76	14	33	4	26	4	2,229	87	12
HC24-RM046	103.50	105.00	RC	5,000	609	1,417	4,391	968	2,094	240	934	155	319	14	113	15	73	13	31	4	24	3	1,925	84	11
HC24-RM046	105.00	106.50	RC	4,771	593	1,333	4,178	914	2,015	227	876	146	315	14	106	14	70	13	31	4	23	3	1,898	76	10
HC24-RM046	106.50	108.00	RC	5,452	649	1,551	4,803	1,053	2,291	265	1,026	168	343	15	118	15	77	14	34	4	25	4	2,431	87	11
HC24-RM046	108.00	109.50	RC	5,049	621	1,428	4,428	964	2,125	242	939	158	328	14	112	15	74	13	32	4	25	4	2,019	81	11
HC24-RM046	109.50	111.00	RC	4,898	582	1,395	4,316	975	2,033	235	924	149	304	13	106	14	73	13	30	4	22	3	1,810	79	11
HC24-RM046	111.00	112.50	RC	5,127	602	1,452	4,525	1,000	2,162	244	965	154	316	14	110	15	74	13	30	4	23	3	2,073	79	11
HC24-RM046	112.50	114.00	RC	5,249	625	1,489	4,624	1,040	2,187	249	988	160	333	14	112	15	77	13	31	4	23	3	2,357	82	11
HC24-RM046	114.00	115.50	RC	5,304	627	1,516	4,677	1,043	2,211	254	1,010	159	331	14	114	15	78	13	32	4	23	3	2,175	84	10
HC24-RM046	115.50	117.00	RC	5,244	612	1,507	4,632	1,014	2,205	253	996	164	317	14	116	15	79	13	30	4	21	3	2,006	84	9
HC24-RM046	117.00	118.50	RC	4,963	555	1,431	4,408	978	2,088	239	945	158	278	13	113	15	74	12	27	3	17	3	1,830	81	9
HC24-RM046	118.50	120.00	RC	5,272	560	1,541	4,712	1,040	2,223	256	1,024	169	269	14	124	16	76	12	25	3	18	3	2,019	89	10
HC24-RM046	120.00	121.50	RC	4,860	441	1,417	4,419	970	2,101	239	958	151	203	14	103	12	57	9	20	3	17	3	2,148	87	9
HC24-RM046	121.50	123.00	RC	4,892	362	1,381	4,530	1,036	2,168	241	948	137	166	15	85	10	45	7	16	2	14	2	2,357	93	7
HC24-RM046	123.00	124.50	RC	5,188	302	1,454	4,886	1,125	2,352	261	1,012	136	131	14	80	8	37	6	12	2	10	2	2,323	103	6
HC24-RM046	124.50	126.00	RC	3,405	151	878	3,254	800	1,597	169	614	74	65	11	38	4	17	3	6	1	5	1	1,661	78	4
HC24-RM046	126.00	127.50	RC	1,010	134	281	876	198	414	48	187	29	71	8	20	3	14	3	7	1	6	1	2,864	19	3
HC24-RM046	127.50	129.00	RC	1,047	153	303	894	191	419	49	201	34	82	8	24	3	16	3	8	1	7	1	3,201	18	4
HC24-RM046	129.00	130.50	RC	737	154	221	583	116	265	33	142	27	86	7	21	3	16	3	8	1	8	1	3,823	13	5
HC24-RM046	130.50	132.00	RC	741	153	221	588	118	268	33	142	27	85	7	21	3	16	3	8	1	8	1	3,634	11	3
HC24-RM046	132.00	133.50	RC	749	156	223	593	120	270	33	143	27	87	7	21	3	17	3	8	1	8	1	3,661	12	4
HC24-RM046	133.50	135.00	RC	826	167	244	659	134	302	37	157	29	93	7	23	3	18	3	9	1	9	1	4,052	14	5
HC24-RM046	135.00	136.50	RC	874	127	244	747	166	354	41	159	27	65	8	19	3	14	3	7	1	6	1	1,232	27	7
HC24-RM046	136.50	138.00	RC	4,238	253	1,139	3,985	943	1,941	207	788	106	114	12	61	7	31	5	11	1	10	1	1,445	88	6
HC24-RM046	138.00	139.50	RC	863	110	232	753	171	364	40	154	24	62	3	16	2	12	2	5	1	6	1	513	58	15
HC24-RM046	139.50	141.00	RC	3,157	153	806	3,004	739	1,480	153	565	67	74	7	34	4	17	3	6	1	6	1	987	80	10
HC24-RM046	141.00	142.50	RC	1,282	151	340	1,131	258	552	59	228	34	81	8	23	3	16	3	8	1	7	1	2,364	31	6
HC24-RM046	142.50	144.00	RC	710	148	211	562	113	257	31	136	25	82	7	20	3	16	3	8	1	7	1	2,985	14	4
HC24-RM046	144.00	145.50	RC	689	142	203	547	111	251	30	131	24	79	7	19	3	15	3	7	1	7	1	3,066	16	5
HC24-RM046	145.50	147.00	RC	546	99	146	447	103	210	24	94	16	51	10	12	2	10	2	5	1	5	1	1,979	14	5

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM046	147.00	148.50	RC	3,923	254	1,077	3,669	867	1,763	194	745	100	115	12	59	7	31	5	11	1	11	2	2,141	80	7
HC24-RM046	148.50	150.00	RC	3,332	241	914	3,091	726	1,486	163	631	85	113	12	52	6	29	5	11	1	10	2	2,263	65	7
HC24-RM046	150.00	151.50	RC	4,685	353	1,308	4,332	1,002	2,076	231	895	128	161	14	83	10	44	7	16	2	14	2	2,681	85	7
HC24-RM046	151.50	153.00	RC	5,011	507	1,437	4,504	1,009	2,137	241	962	155	248	14	107	13	66	11	24	3	18	3	2,357	85	10
HC24-RM046	153.00	154.50	RC	4,977	518	1,413	4,459	1,013	2,113	240	941	152	260	13	105	13	67	11	25	3	18	3	2,161	87	9
HC24-RM046	154.50	156.00	RC	5,024	566	1,430	4,458	1,000	2,113	240	951	154	295	13	106	14	71	12	28	3	21	3	1,959	85	8
HC24-RM046	156.00	157.50	RC	5,259	594	1,485	4,665	1,057	2,211	251	987	159	310	14	111	15	73	13	29	4	22	3	1,952	84	9
HC24-RM046	157.50	159.00	RC	5,003	591	1,426	4,412	980	2,094	237	946	155	304	15	112	15	73	13	31	4	21	3	1,911	85	10
HC24-RM046	159.00	160.50	RC	5,149	576	1,462	4,573	1,005	2,193	245	975	155	291	15	112	15	72	13	30	4	21	3	1,898	87	9
HC24-RM046	160.50	162.00	RC	4,859	554	1,383	4,305	961	2,045	228	923	148	281	14	108	15	69	12	29	3	20	3	1,851	84	11
HC24-RM046	162.00	163.50	RC	5,384	614	1,528	4,770	1,043	2,291	256	1,017	163	316	15	117	16	76	14	32	4	21	3	2,249	90	10
HC24-RM046	163.50	165.00	RC	6,198	797	1,784	5,401	1,185	2,555	291	1,166	204	408	15	157	21	102	18	41	5	26	4	1,783	113	13
HC24-RM046	165.00	166.50	RC	5,548	627	1,594	4,921	1,087	2,334	263	1,065	172	315	15	127	16	78	14	32	4	22	4	2,310	96	11
HC24-RM046	166.50	168.00	RC	5,861	636	1,676	5,225	1,152	2,494	282	1,116	181	320	15	129	17	80	14	33	4	21	3	2,046	98	11
HC24-RM046	168.00	169.50	RC	5,307	607	1,530	4,700	1,026	2,236	251	1,017	170	306	15	123	16	76	13	31	4	20	3	1,891	91	10
HC24-RM046	169.50	171.00	RC	5,278	589	1,498	4,689	1,044	2,236	250	1,001	158	300	15	114	15	74	13	30	4	21	3	1,675	93	10
HC24-RM046	171.00	172.50	RC	5,037	601	1,442	4,436	965	2,119	237	958	157	310	15	114	15	75	13	31	4	21	3	1,688	85	10
HC24-RM046	172.50	174.00	RC	4,966	602	1,410	4,364	969	2,076	233	932	154	312	15	112	15	76	13	31	4	21	3	1,709	82	9
HC24-RM046	174.00	175.50	RC	4,840	591	1,383	4,249	932	2,021	228	917	151	300	15	116	15	72	13	32	4	21	3	1,844	83	10
HC24-RM046	175.50	177.00	RC	5,148	599	1,475	4,549	1,013	2,150	243	983	160	307	15	115	15	74	13	32	4	21	3	1,837	87	10
HC24-RM046	177.00	178.50	RC	5,508	633	1,575	4,875	1,079	2,316	263	1,045	172	324	16	121	16	79	14	34	4	22	3	2,168	90	10
HC24-RM046	178.50	180.00	RC	4,559	549	1,304	4,010	877	1,910	217	863	143	283	14	104	14	67	12	29	3	20	3	1,553	77	10
HC24-RM046	180.00	181.50	RC	3,570	453	1,016	3,117	680	1,486	169	672	110	238	11	82	11	54	10	24	3	17	3	1,695	69	13
HC24-RM046	181.50	182.50	RC	4,262	515	1,208	3,747	841	1,775	200	800	131	265	13	97	13	64	11	27	3	19	3	1,770	75	10
HC24-RM047	0.00	1.50	RC	1,596	234	436	1,362	290	667	72	286	47	131	7	35	5	26	5	12	2	9	2	1,493	33	4
HC24-RM047	1.50	3.00	RC	1,324	211	358	1,113	240	542	59	233	39	122	5	30	4	23	4	11	1	9	2	1,385	36	5
HC24-RM047	3.00	4.50	RC	1,193	181	327	1,012	223	485	55	213	36	105	5	26	3	20	4	9	1	7	1	1,078	34	5
HC24-RM047	4.50	6.00	RC	650	98	180	552	128	256	30	118	20	56	3	14	2	10	2	5	1	4	1	523	14	3
HC24-RM047	6.00	7.50	RC	451	75	130	376	85	170	21	86	14	44	2	11	1	8	1	4	1	3	0	365	9	3
HC24-RM047	7.50	9.00	RC	1,111	166	317	945	202	447	51	211	34	94	5	26	3	18	3	9	1	6	1	993	23	4
HC24-RM047	9.00	10.50	RC	46	10	14	36	8	15	2	9	2	7	0	1	0	1	0	1	0	0	0	42	1	0
HC24-RM047	10.50	12.00	RC	29	9	8	20	5	8	1	5	1	7	0	1	0	1	0	0	0	0	0	34	0	0
HC24-RM047	12.00	13.50	RC	66	17	18	49	10	23	3	11	2	11	0	2	0	2	0	1	0	1	0	34	11	4

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM047	13.50	15.00	RC	30	7	9	23	5	10	1	6	1	5	0	1	0	1	0	0	0	0	0	28	2	1
HC24-RM047	15.00	16.50	RC	19	5	5	14	3	6	1	3	1	4	0	1	0	0	0	0	0	0	0	11	1	2
HC24-RM047	16.50	18.00	RC	1,084	154	305	930	202	442	50	203	33	87	5	23	3	16	3	8	1	7	1	1,013	40	8
HC24-RM047	18.00	19.50	RC	2,691	226	730	2,465	550	1,215	130	500	70	120	6	43	5	25	4	11	1	9	2	1,094	90	19
HC24-RM047	19.50	21.00	RC	1,053	251	324	802	152	359	47	201	43	137	10	37	5	28	5	13	2	12	2	2,742	25	8
HC24-RM047	21.00	22.50	RC	549	146	158	403	80	183	23	96	21	85	4	18	3	15	3	8	1	8	1	890	27	11
HC24-RM047	22.50	24.00	RC	675	160	191	515	105	239	29	118	24	94	4	20	3	17	3	9	1	8	1	919	37	13
HC24-RM047	24.00	25.50	RC	564	141	162	423	84	195	25	99	20	82	4	17	3	15	3	8	1	7	1	756	36	12
HC24-RM047	25.50	27.00	RC	645	157	183	488	99	225	28	113	23	92	4	19	3	16	3	9	1	9	1	848	40	13
HC24-RM047	27.00	28.50	RC	941	178	247	763	175	362	42	156	28	105	4	22	3	18	4	10	1	10	1	1,181	36	10
HC24-RM047	28.50	30.00	RC	898	175	239	723	162	343	40	151	27	103	4	22	3	18	4	10	1	9	1	1,150	38	12
HC24-RM047	30.00	31.50	RC	907	163	236	744	172	356	40	149	27	96	4	21	3	17	3	9	1	8	1	1,154	37	11
HC24-RM047	31.50	33.00	RC	891	170	235	721	164	343	39	149	26	100	4	21	3	18	4	9	1	9	1	1,141	36	11
HC24-RM047	33.00	34.50	RC	855	163	222	692	159	330	37	142	24	98	4	20	3	16	3	9	1	8	1	1,062	36	11
HC24-RM047	34.50	36.00	RC	1,109	195	296	914	206	437	49	189	33	110	5	27	4	21	4	11	1	10	2	1,540	35	9
HC24-RM047	36.00	37.50	RC	1,585	240	440	1,345	293	644	73	285	50	129	8	39	5	27	5	13	2	10	2	2,371	30	6
HC24-RM047	37.50	39.00	RC	993	181	263	812	182	389	45	167	29	104	5	24	3	19	4	10	1	10	1	1,313	36	11
HC24-RM047	39.00	40.50	RC	893	170	238	723	162	343	40	150	28	101	4	22	3	17	3	9	1	9	1	1,187	34	10
HC24-RM047	40.50	42.00	RC	874	169	229	705	159	337	38	146	25	101	4	21	3	17	3	9	1	9	1	1,013	34	10
HC24-RM047	42.00	43.50	RC	777	152	203	625	142	298	34	128	23	91	3	18	3	15	3	9	1	8	1	994	34	11
HC24-RM047	43.50	45.00	RC	755	148	195	607	138	292	33	122	22	88	3	18	3	15	3	8	1	8	1	890	36	12
HC24-RM047	45.00	46.50	RC	790	169	212	621	135	294	35	133	24	100	4	21	3	17	4	9	1	9	1	1,125	32	9
HC24-RM047	46.50	48.00	RC	710	142	192	568	125	269	32	120	22	83	3	18	3	15	3	8	1	7	1	991	26	8
HC24-RM047	48.00	49.50	RC	810	155	213	655	148	313	36	134	24	92	3	20	3	16	3	8	1	8	1	987	30	9
HC24-RM047	49.50	51.00	RC	785	147	203	638	147	306	35	128	22	87	3	18	3	15	3	8	1	8	1	991	30	8
HC24-RM047	51.00	52.50	RC	1,104	192	290	912	203	443	49	185	32	113	4	24	4	20	4	11	1	10	1	1,308	36	11
HC24-RM047	52.50	54.00	RC	853	166	227	687	154	326	38	143	26	100	3	20	3	17	3	9	1	9	1	1,127	29	10
HC24-RM047	54.00	55.50	RC	931	184	252	747	163	355	41	159	29	109	4	23	3	20	4	10	1	9	1	1,260	31	8
HC24-RM047	55.50	57.00	RC	929	181	249	748	167	354	42	156	29	107	4	23	3	19	4	10	1	9	1	1,163	32	10
HC24-RM047	57.00	58.50	RC	896	167	237	729	163	350	40	148	28	99	4	21	3	18	3	9	1	8	1	1,213	30	8
HC24-RM047	58.50	60.00	RC	900	172	240	728	163	346	40	152	27	102	4	22	3	18	4	9	1	8	1	1,221	28	7
HC24-RM047	60.00	61.50	RC	861	165	231	696	155	330	38	146	27	98	3	22	3	17	3	9	1	8	1	1,135	43	13
HC24-RM047	61.50	63.00	RC	632	129	170	503	112	236	28	107	20	77	3	15	2	13	3	7	1	7	1	840	39	14

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM047	63.00	64.50	RC	796	158	214	638	141	303	35	135	24	92	4	20	3	17	3	9	1	8	1	1,089	25	7
HC24-RM047	64.50	66.00	RC	968	182	257	786	175	376	43	163	29	108	4	23	3	19	4	10	1	9	1	1,358	29	7
HC24-RM047	66.00	67.50	RC	1,056	185	276	871	200	419	48	173	31	108	4	24	4	20	4	10	1	9	1	1,151	36	9
HC24-RM047	67.50	69.00	RC	903	172	242	731	162	348	40	152	29	101	4	22	3	18	4	9	1	9	1	1,136	29	7
HC24-RM047	69.00	70.50	RC	1,196	217	315	979	219	472	53	200	35	126	5	28	4	23	5	11	2	11	2	1,513	34	7
HC24-RM047	70.50	72.00	RC	1,167	202	302	965	213	475	53	188	36	119	4	26	4	21	4	11	2	10	1	1,634	30	7
HC24-RM047	72.00	73.50	RC	946	174	252	772	172	369	43	159	29	102	4	22	3	18	4	10	1	9	1	1,412	26	7
HC24-RM047	73.50	75.00	RC	988	183	264	805	179	386	45	164	31	107	4	23	4	20	4	10	1	9	1	1,547	29	7
HC24-RM047	75.00	76.50	RC	1,095	214	293	881	191	423	50	183	34	126	5	26	4	22	4	12	2	11	2	1,824	28	7
HC24-RM047	76.50	78.00	RC	1,011	202	274	809	177	383	46	170	33	119	5	24	4	21	4	11	2	10	2	1,810	26	6
HC24-RM047	78.00	79.50	RC	908	166	239	742	168	356	42	149	27	99	4	20	3	18	3	9	1	8	1	1,425	26	6
HC24-RM047	79.50	81.00	RC	1,141	240	314	901	189	427	51	196	38	142	5	29	4	25	5	14	2	12	2	2,114	27	7
HC24-RM047	81.00	82.50	RC	1,213	242	330	971	209	463	54	205	40	142	5	30	5	26	5	13	2	12	2	2,141	30	7
HC24-RM047	82.50	84.00	RC	1,354	236	369	1,118	237	542	63	234	42	137	5	31	5	25	5	13	2	11	2	2,222	34	8
HC24-RM047	84.00	85.50	RC	860	160	227	700	158	335	39	141	27	93	4	21	3	17	3	9	1	8	1	1,378	23	5
HC24-RM047	85.50	87.00	RC	1,082	208	293	874	191	416	51	181	35	121	5	26	4	22	4	12	2	10	2	1,918	27	5
HC24-RM047	87.00	88.50	RC	1,019	192	272	827	183	396	47	169	32	113	4	24	4	20	4	11	2	9	1	1,668	27	5
HC24-RM047	88.50	90.00	RC	767	142	203	625	138	301	36	127	23	85	3	17	3	14	3	8	1	7	1	1,070	28	8
HC24-RM047	90.00	91.50	RC	1,210	199	306	1,011	230	500	55	191	35	117	4	25	4	21	4	11	2	10	1	1,472	40	11
HC24-RM047	91.50	93.00	RC	935	180	246	755	171	360	42	153	29	107	4	22	3	19	4	10	1	9	1	1,378	28	8
HC24-RM047	93.00	94.50	RC	914	153	235	761	178	367	41	149	26	92	3	19	3	16	3	8	1	7	1	1,233	31	8
HC24-RM047	94.50	96.00	RC	973	171	253	802	185	386	45	157	29	100	4	21	3	19	4	10	1	8	1	1,249	33	9
HC24-RM047	96.00	97.50	RC	994	173	258	821	188	396	45	163	29	102	4	22	3	18	4	10	1	8	1	1,308	30	8
HC24-RM047	97.50	99.00	RC	999	179	260	820	188	393	46	163	30	107	4	22	3	18	4	10	1	9	1	1,358	30	7
HC24-RM047	99.00	100.50	RC	1,076	180	272	896	206	440	49	171	30	107	4	23	3	19	4	10	1	8	1	1,526	33	7
HC24-RM047	100.50	102.00	RC	921	168	243	753	169	361	43	152	28	101	4	21	3	17	3	9	1	8	1	1,391	30	7
HC24-RM047	102.00	103.50	RC	973	175	255	798	181	383	45	159	30	103	4	22	3	18	4	10	1	9	1	1,348	29	6
HC24-RM047	103.50	105.00	RC	904	164	238	740	168	354	41	149	28	97	4	21	3	17	3	9	1	8	1	1,304	28	6
HC24-RM047	105.00	106.50	RC	899	163	237	736	166	353	41	148	28	97	4	20	3	17	3	9	1	8	1	1,412	25	5
HC24-RM047	106.50	108.00	RC	802	152	215	650	145	308	36	135	26	90	4	19	3	15	3	9	1	7	1	1,364	21	3
HC24-RM047	108.00	109.50	RC	842	147	222	695	159	332	39	139	26	87	4	18	3	15	3	8	1	7	1	1,308	26	5
HC24-RM047	109.50	111.00	RC	889	169	233	720	162	345	40	146	27	101	4	21	3	17	4	9	1	8	1	1,398	32	9
HC24-RM047	111.00	112.50	RC	779	149	201	630	144	303	35	125	23	89	3	18	3	15	3	8	1	8	1	1,218	32	9

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM047	112.50	114.00	RC	762	150	198	612	138	294	34	123	23	90	3	18	3	15	3	8	1	8	1	1,329	30	9
HC24-RM047	114.00	115.50	RC	762	140	195	622	143	300	34	122	23	83	4	17	2	14	3	8	1	7	1	1,195	32	8
HC24-RM047	115.50	117.00	RC	958	185	252	773	172	371	44	157	29	111	4	23	3	19	4	10	1	9	1	1,452	36	10
HC24-RM047	117.00	118.50	RC	888	174	241	714	155	339	41	150	29	103	4	21	3	18	4	10	1	9	1	1,594	27	7
HC24-RM047	118.50	120.00	RC	907	183	242	724	163	341	42	150	28	108	5	23	3	19	4	10	1	9	1	1,506	29	8
HC24-RM047	120.00	121.50	RC	900	170	233	730	169	348	40	145	28	101	4	21	3	17	3	10	1	9	1	1,294	36	10
HC24-RM047	121.50	123.00	RC	993	195	271	798	178	373	45	170	32	113	6	25	4	20	4	11	1	10	1	1,661	27	7
HC24-RM047	123.00	124.50	RC	931	189	250	742	166	349	42	155	30	109	6	25	4	19	4	11	1	9	1	1,580	24	7
HC24-RM047	124.50	126.00	RC	983	183	256	800	185	380	45	161	29	108	5	24	3	18	4	10	1	9	1	1,533	29	7
HC24-RM047	126.00	127.50	RC	930	171	246	759	174	359	43	155	28	102	4	22	3	17	3	10	1	8	1	1,445	29	7
HC24-RM047	127.50	129.00	RC	1,008	176	257	832	197	399	45	161	30	104	4	23	3	18	3	10	1	9	1	1,348	35	9
HC24-RM047	129.00	130.50	RC	1,045	188	269	857	201	410	47	168	31	111	4	24	4	19	4	11	1	9	1	1,452	33	7
HC24-RM047	130.50	132.00	RC	1,083	204	283	879	203	418	49	176	33	121	5	26	4	21	4	11	1	10	1	1,486	29	5
HC24-RM047	132.00	133.50	RC	4,398	557	1,229	3,841	834	1,861	204	808	134	290	11	106	14	69	12	28	3	21	3	2,891	83	10
HC24-RM047	133.50	135.00	RC	4,906	632	1,395	4,274	910	2,064	230	916	154	330	12	120	16	79	13	32	4	23	3	3,580	94	12
HC24-RM047	135.00	136.50	RC	3,866	476	1,063	3,390	739	1,658	180	696	117	248	11	89	12	58	10	24	3	18	3	2,877	76	10
HC24-RM047	136.50	138.00	RC	2,871	317	776	2,554	552	1,271	135	516	80	164	7	61	8	37	7	16	2	13	2	1,851	76	9
HC24-RM047	138.00	139.50	RC	779	130	208	649	142	316	35	134	22	74	3	18	3	14	3	7	1	6	1	719	42	8
HC24-RM047	139.50	141.00	RC	536	108	137	428	96	208	23	86	15	64	2	13	2	11	2	6	1	6	1	551	43	10
HC24-RM047	141.00	142.50	RC	881	166	230	715	159	346	38	146	26	99	3	21	3	17	3	9	1	9	1	1,058	37	10
HC24-RM047	142.50	144.00	RC	1,016	181	261	835	188	409	44	166	28	106	3	24	4	19	4	10	1	9	1	1,132	39	10
HC24-RM048	0.00	1.50	RC	4,260	462	1,176	3,798	793	1,898	199	786	122	230	13	92	12	57	10	23	3	19	3	1,790	80	8
HC24-RM048	1.50	3.00	RC	4,602	509	1,299	4,093	904	1,965	220	870	134	259	15	100	13	62	10	25	3	19	3	1,634	75	8
HC24-RM048	3.00	4.50	RC	5,057	555	1,439	4,502	997	2,150	242	963	150	277	15	113	15	69	12	27	3	21	3	1,790	82	9
HC24-RM048	4.50	6.00	RC	4,664	515	1,315	4,149	910	2,002	222	878	137	258	14	103	14	64	11	25	3	20	3	1,986	90	11
HC24-RM048	6.00	7.50	RC	5,323	565	1,493	4,758	1,046	2,303	251	1,001	157	284	15	114	15	69	12	28	3	22	3	2,269	94	11
HC24-RM048	7.50	9.00	RC	5,060	550	1,424	4,510	989	2,180	239	952	150	277	15	110	14	69	11	27	3	21	3	2,236	85	8
HC24-RM048	9.00	10.50	RC	5,156	555	1,456	4,601	1,012	2,217	246	973	153	277	15	113	15	69	12	27	3	21	3	2,073	88	10
HC24-RM048	10.50	12.00	RC	4,986	462	1,381	4,524	1,007	2,205	240	933	139	225	14	98	12	57	9	23	3	18	3	2,148	91	9
HC24-RM048	12.00	13.50	RC	1,688	374	497	1,314	249	619	73	313	60	206	8	57	8	43	8	21	3	17	3	3,418	31	9
HC24-RM048	13.50	15.00	RC	1,950	327	551	1,623	325	792	87	356	63	178	9	52	7	38	7	17	2	15	2	2,864	37	9
HC24-RM048	15.00	16.50	RC	1,210	243	351	967	194	453	54	225	41	136	7	35	5	26	5	13	2	12	2	2,958	27	10
HC24-RM048	16.50	18.00	RC	453	100	130	353	70	166	20	81	16	58	2	13	2	11	2	5	1	5	1	758	41	6

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM048	18.00	19.50	RC	1,035	195	300	840	172	393	46	194	35	107	7	29	4	21	4	11	1	10	1	2,729	26	7
HC24-RM048	19.50	21.00	RC	944	192	273	752	153	351	42	175	31	107	7	27	4	21	4	10	1	10	1	2,918	19	7
HC24-RM048	21.00	22.50	RC	908	216	269	692	129	321	40	169	33	123	7	28	4	23	4	12	2	11	2	2,810	15	8
HC24-RM048	22.50	24.00	RC	3,336	261	893	3,075	731	1,486	163	610	85	127	13	55	6	29	5	12	2	10	2	2,026	66	8
HC24-RM048	24.00	25.50	RC	5,006	385	1,386	4,621	1,085	2,205	251	945	135	182	15	90	10	45	8	17	2	14	2	1,911	93	10
HC24-RM048	25.50	27.00	RC	4,932	470	1,390	4,462	1,038	2,101	240	937	146	232	15	100	12	55	10	22	3	18	3	2,033	84	9
HC24-RM048	27.00	28.50	RC	5,362	557	1,501	4,805	1,093	2,291	262	1,000	159	282	16	114	14	66	12	26	3	21	3	2,019	91	10
HC24-RM048	28.50	30.00	RC	5,231	572	1,469	4,659	1,078	2,193	254	979	155	292	15	115	14	67	12	28	4	22	3	1,999	89	11
HC24-RM048	30.00	31.50	RC	4,960	548	1,397	4,412	1,011	2,082	244	931	144	282	15	108	13	65	12	27	3	20	3	1,688	87	11
HC24-RM048	31.50	33.00	RC	4,022	465	1,116	3,557	817	1,689	193	739	119	242	13	88	11	54	10	23	3	18	3	1,452	73	11
HC24-RM048	33.00	34.50	RC	5,109	555	1,440	4,554	1,055	2,137	249	959	154	287	15	109	13	65	12	27	3	21	3	1,972	89	10
HC24-RM048	34.50	36.00	RC	5,377	582	1,505	4,795	1,098	2,273	262	1,007	155	302	15	114	14	67	12	29	4	22	3	2,323	91	11
HC24-RM048	36.00	37.50	RC	5,200	572	1,448	4,628	1,074	2,187	253	965	149	297	15	111	14	67	12	28	4	21	3	2,215	88	10
HC24-RM048	37.50	39.00	RC	3,276	407	895	2,869	658	1,370	153	593	95	221	10	70	9	45	9	20	3	17	3	1,329	71	14
HC24-RM048	39.00	40.50	RC	1,625	228	435	1,397	314	677	75	283	48	127	6	35	5	24	5	12	2	10	2	643	47	14
HC24-RM048	40.50	42.00	RC	2,873	351	790	2,522	576	1,203	137	523	83	189	9	62	8	39	7	18	2	15	2	1,140	63	12
HC24-RM048	42.00	43.50	RC	4,413	511	1,236	3,902	889	1,849	212	821	131	265	14	98	12	60	11	26	3	19	3	1,749	76	11
HC24-RM048	43.50	45.00	RC	3,789	440	1,045	3,349	766	1,597	181	694	111	234	11	81	10	49	9	22	3	18	3	1,513	72	10
HC24-RM048	45.00	46.50	RC	4,099	469	1,143	3,630	846	1,707	198	758	121	244	12	90	11	55	10	23	3	18	3	1,499	75	12
HC24-RM048	46.50	48.00	RC	4,227	453	1,175	3,774	881	1,781	204	784	124	233	12	89	11	52	10	23	3	17	3	1,439	79	11
HC24-RM048	48.00	49.50	RC	5,093	533	1,428	4,560	1,057	2,150	249	955	149	276	13	107	13	62	11	25	3	20	3	1,844	93	11
HC24-RM048	49.50	51.00	RC	5,614	579	1,575	5,035	1,158	2,383	277	1,052	165	301	15	115	14	67	12	27	4	21	3	1,959	96	10
HC24-RM048	51.00	52.50	RC	4,849	530	1,346	4,319	997	2,051	234	895	142	273	14	105	12	63	11	26	3	20	3	1,702	86	11
HC24-RM048	52.50	54.00	RC	5,347	560	1,493	4,787	1,107	2,266	262	997	155	288	15	112	14	65	12	27	3	21	3	1,857	89	9
HC24-RM048	54.00	55.50	RC	5,348	571	1,494	4,777	1,098	2,266	259	998	156	291	16	116	14	67	12	28	3	21	3	1,884	91	10
HC24-RM048	55.50	57.00	RC	5,410	578	1,516	4,832	1,107	2,291	262	1,014	158	298	15	115	14	68	12	28	4	21	3	2,209	91	10
HC24-RM048	57.00	58.50	RC	5,353	556	1,503	4,797	1,098	2,273	265	1,004	157	286	15	112	13	64	12	27	3	21	3	2,134	93	11
HC24-RM048	58.50	60.00	RC	5,869	603	1,644	5,266	1,214	2,494	286	1,102	170	309	15	122	15	71	13	29	4	22	3	2,425	99	10
HC24-RM048	60.00	61.50	RC	5,437	550	1,515	4,887	1,127	2,322	265	1,016	157	282	15	112	13	64	11	26	3	21	3	2,155	93	10
HC24-RM048	61.50	63.00	RC	5,243	523	1,461	4,720	1,097	2,236	260	979	148	263	15	109	13	61	11	25	3	20	3	1,932	89	10
HC24-RM048	63.00	64.50	RC	5,307	499	1,473	4,808	1,113	2,291	260	993	151	254	14	104	12	57	10	24	3	18	3	1,965	97	11
HC24-RM048	64.50	66.00	RC	4,164	442	1,140	3,722	861	1,781	202	760	118	230	11	86	10	50	9	22	3	18	3	2,634	78	11
HC24-RM048	66.00	67.50	RC	1,637	377	479	1,260	245	585	72	297	61	215	8	56	8	41	8	20	3	16	2	3,499	25	7

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM048	67.50	69.00	RC	1,291	279	385	1,012	202	461	58	244	47	157	8	41	6	30	6	15	2	12	2	3,661	23	7
HC24-RM048	69.00	70.50	RC	1,210	231	347	979	206	455	55	222	41	129	8	33	4	25	5	12	2	11	2	3,485	21	7
HC24-RM048	70.50	72.00	RC	900	186	261	714	145	330	40	169	30	104	9	25	3	19	4	10	1	10	1	2,783	16	6
HC24-RM048	72.00	73.50	RC	1,531	174	420	1,357	297	662	73	282	43	90	10	30	4	18	3	9	1	8	1	1,770	33	6
HC24-RM048	73.50	75.00	RC	3,418	272	929	3,146	718	1,535	166	636	91	136	11	55	6	30	5	13	2	12	2	1,770	66	8
HC24-RM048	75.00	76.50	RC	4,071	284	1,102	3,787	875	1,849	198	758	107	135	12	64	7	32	5	13	2	12	2	1,709	76	8
HC24-RM048	76.50	78.00	RC	3,994	293	1,080	3,701	850	1,812	198	736	105	142	11	63	7	34	6	14	2	12	2	1,601	82	12
HC24-RM048	78.00	79.50	RC	4,053	303	1,092	3,750	863	1,836	199	745	107	150	11	64	7	34	6	14	2	13	2	1,641	98	12
HC24-RM048	79.50	81.00	RC	4,324	322	1,187	4,002	932	1,929	213	808	120	152	13	73	8	38	6	15	2	13	2	1,803	74	7
HC24-RM048	81.00	82.50	RC	4,875	349	1,346	4,526	1,050	2,180	243	918	135	161	15	83	9	41	7	16	2	13	2	1,709	85	7
HC24-RM048	82.50	84.00	RC	4,952	351	1,364	4,601	1,051	2,236	246	938	130	162	15	83	9	41	7	16	2	14	2	1,533	91	7
HC24-RM048	84.00	85.50	RC	5,165	370	1,447	4,795	1,105	2,297	259	989	145	175	14	86	10	44	7	16	2	14	2	1,621	91	7
HC24-RM048	85.50	87.00	RC	4,731	369	1,328	4,362	986	2,101	233	906	136	173	14	86	9	44	7	17	2	15	2	1,298	90	8
HC24-RM048	87.00	88.50	RC	5,066	424	1,431	4,642	1,055	2,217	250	973	147	208	14	93	11	50	8	19	3	16	2	1,412	98	11
HC24-RM048	88.50	90.00	RC	2,027	248	545	1,779	391	875	95	360	58	137	6	40	5	27	5	13	2	11	2	782	51	8
HC24-RM048	90.00	91.50	RC	1,101	217	306	884	191	415	48	192	38	123	5	30	4	24	4	12	2	11	2	751	35	10
HC24-RM048	91.50	93.00	RC	2,924	332	821	2,592	577	1,241	141	545	88	172	10	63	8	39	7	16	2	13	2	1,154	64	9
HC24-RM048	93.00	94.50	RC	837	198	235	639	131	298	36	144	30	116	5	25	4	21	4	11	1	10	1	586	23	6
HC24-RM048	94.50	96.00	RC	1,008	223	273	785	169	371	43	168	34	132	5	27	4	24	5	12	2	11	1	704	26	6
HC24-RM048	96.00	97.50	RC	1,112	240	301	872	189	412	48	185	38	142	5	30	5	25	5	13	2	11	2	750	27	7
HC24-RM048	97.50	99.00	RC	1,438	266	373	1,172	259	574	62	233	44	156	5	35	5	29	5	15	2	12	2	878	25	6
HC24-RM048	99.00	100.50	RC	3,038	434	803	2,604	599	1,259	139	520	87	247	8	65	9	48	9	23	3	19	3	1,952	43	7
HC24-RM048	100.50	102.00	RC	3,905	481	1,076	3,424	763	1,652	183	708	118	257	11	85	11	56	10	25	3	20	3	1,965	61	7
HC24-RM048	102.00	103.50	RC	4,871	508	1,368	4,363	982	2,088	238	907	148	254	15	106	13	62	10	24	3	18	3	1,668	84	9
HC24-RM048	103.50	105.00	RC	5,152	521	1,469	4,631	1,034	2,205	251	982	159	257	15	114	13	64	11	24	3	17	3	1,925	88	10
HC24-RM048	105.00	106.50	RC	5,083	529	1,442	4,554	1,004	2,187	246	960	157	265	15	110	13	66	11	25	3	18	3	1,560	88	11
HC24-RM048	106.50	108.00	RC	4,900	528	1,376	4,372	961	2,113	233	919	146	267	14	107	13	65	11	26	3	19	3	1,567	88	10
HC24-RM048	108.00	109.50	RC	4,433	494	1,235	3,939	896	1,879	212	818	134	259	12	93	12	59	10	25	3	18	3	1,499	83	8
HC24-RM048	109.50	111.00	RC	4,746	568	1,326	4,178	932	2,002	225	874	145	298	13	107	13	69	12	29	4	20	3	2,229	89	11
HC24-RM048	111.00	112.50	RC	4,532	538	1,274	3,994	887	1,910	214	844	139	284	13	100	13	64	11	27	3	20	3	1,729	84	10
HC24-RM048	112.50	114.00	RC	3,653	396	994	3,257	740	1,578	175	660	104	206	11	76	9	46	8	19	3	16	2	847	76	10
HC24-RM048	114.00	115.50	RC	3,474	399	961	3,075	684	1,486	165	638	102	209	12	73	9	47	8	20	3	16	2	1,108	62	9
HC24-RM048	115.50	117.00	RC	4,256	483	1,175	3,773	861	1,806	202	778	126	253	13	90	12	57	10	24	3	18	3	1,255	76	11

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM048	117.00	118.50	RC	3,602	423	992	3,179	705	1,542	170	654	108	222	12	78	10	50	9	21	3	16	2	1,358	66	9
HC24-RM048	118.50	120.00	RC	4,010	468	1,097	3,542	797	1,714	191	721	119	247	13	87	11	55	10	22	3	17	3	1,749	70	8
HC24-RM048	120.00	121.50	RC	4,320	530	1,196	3,790	847	1,824	209	784	126	282	12	95	13	64	11	27	3	20	3	2,128	78	11
HC24-RM048	121.50	123.00	RC	5,405	633	1,509	4,772	1,071	2,285	263	989	164	330	13	121	16	77	14	32	4	22	4	2,256	93	11
HC24-RM048	123.00	124.50	RC	5,332	682	1,499	4,650	1,021	2,230	257	977	165	361	13	126	17	83	15	35	4	24	4	2,918	91	12
HC24-RM048	124.50	126.00	RC	4,619	534	1,274	4,085	917	1,972	224	835	137	279	13	101	13	65	11	27	3	19	3	1,391	79	10
HC24-RM048	126.00	127.50	RC	4,313	539	1,198	3,774	842	1,812	211	780	129	287	13	98	13	65	11	27	3	19	3	1,580	74	10
HC24-RM048	127.50	129.00	RC	5,655	689	1,577	4,966	1,101	2,389	273	1,033	170	364	13	130	17	84	15	34	4	24	4	2,614	103	13
HC24-RM048	129.00	130.50	RC	4,862	619	1,362	4,243	946	2,027	234	888	148	323	13	116	15	77	13	31	4	23	4	1,905	89	12
HC24-RM048	130.50	132.00	RC	4,737	578	1,324	4,159	924	1,996	228	867	144	305	13	106	14	71	12	29	4	21	3	1,614	87	11
HC24-RM048	132.00	133.50	RC	2,946	380	791	2,566	570	1,259	141	510	86	204	9	65	9	45	8	20	3	15	2	1,243	70	14
HC24-RM048	133.50	135.00	RC	2,910	399	800	2,511	557	1,211	138	518	87	217	9	66	9	48	8	20	3	16	3	1,204	67	13
HC24-RM048	135.00	136.50	RC	4,323	529	1,193	3,794	834	1,843	207	780	130	286	11	93	12	64	11	26	3	20	3	1,398	86	15
HC24-RM048	136.50	138.00	RC	4,170	549	1,168	3,621	795	1,738	201	757	130	292	12	97	13	67	12	29	4	20	3	1,540	79	13
HC24-RM048	138.00	139.50	RC	4,381	549	1,223	3,832	847	1,843	211	797	134	293	12	98	13	68	11	28	3	20	3	1,425	78	11
HC24-RM048	139.50	141.00	RC	4,735	581	1,324	4,154	919	1,996	229	865	145	309	13	105	14	71	12	29	4	21	3	1,648	84	11
HC24-RM048	141.00	142.50	RC	4,892	609	1,357	4,283	945	2,070	234	882	152	324	13	111	15	74	13	31	4	21	3	1,661	83	11
HC24-RM048	142.50	144.00	RC	1,216	177	337	1,039	221	506	58	216	38	98	3	29	4	21	4	9	1	7	1	486	53	16
HC24-RM048	144.00	145.50	RC	2,605	339	726	2,266	487	1,102	125	474	78	182	7	59	8	41	7	18	2	13	2	998	67	14
HC24-RM048	145.50	147.00	RC	4,578	562	1,278	4,016	888	1,935	220	834	139	296	13	102	14	71	12	28	3	20	3	1,513	81	11
HC24-RM048	147.00	148.50	RC	4,404	540	1,219	3,864	864	1,861	211	795	133	288	12	96	13	67	12	27	3	19	3	1,486	78	11
HC24-RM048	148.50	150.00	RC	4,650	567	1,310	4,083	923	1,935	226	855	144	300	13	102	14	71	12	28	4	20	3	1,688	82	11
HC24-RM048	150.00	151.50	RC	2,879	354	789	2,525	551	1,235	138	514	87	192	8	61	8	42	8	18	2	13	2	1,085	63	10
HC24-RM048	151.50	153.00	RC	4,379	521	1,232	3,858	860	1,843	213	808	134	276	12	94	13	64	11	26	3	19	3	1,472	83	11
HC24-RM048	153.00	154.50	RC	4,464	527	1,247	3,937	870	1,898	217	818	134	279	12	96	13	65	11	26	3	19	3	1,540	88	11
HC24-RM048	154.50	156.00	RC	3,229	406	899	2,823	626	1,357	155	587	98	216	10	71	10	49	9	20	3	16	2	1,075	69	15
HC24-RM048	156.00	157.50	RC	4,552	546	1,287	4,006	889	1,910	224	843	140	290	12	99	13	67	12	27	3	20	3	1,466	82	11
HC24-RM048	157.50	159.00	RC	4,462	531	1,254	3,931	870	1,886	216	822	137	281	12	97	13	66	11	26	3	19	3	1,520	81	11
HC24-RM048	159.00	160.50	RC	4,309	536	1,210	3,773	828	1,812	208	790	135	291	12	93	13	64	11	27	3	19	3	1,378	77	12
HC24-RM048	160.50	162.00	RC	4,576	544	1,277	4,032	905	1,929	220	837	141	291	12	97	13	66	11	27	4	20	3	1,547	81	12
HC24-RM048	162.00	163.50	RC	4,313	519	1,216	3,794	842	1,812	210	797	133	279	12	91	12	64	11	25	3	19	3	1,459	79	11
HC24-RM048	163.50	165.00	RC	4,647	546	1,297	4,101	911	1,972	227	848	143	290	12	99	13	66	12	28	3	20	3	1,547	86	10
HC24-RM048	165.00	166.50	RC	4,236	478	1,175	3,758	853	1,800	207	772	126	254	11	87	12	58	10	23	3	17	3	1,405	82	8

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM048	166.50	168.00	RC	4,207	492	1,170	3,715	842	1,775	205	767	126	260	12	89	12	60	10	25	3	18	3	1,325	78	11
HC24-RM048	168.00	169.50	RC	3,444	411	950	3,033	674	1,468	166	623	102	221	10	70	10	49	9	21	3	16	2	1,143	65	9
HC24-RM048	169.50	171.00	RC	4,057	504	1,139	3,553	807	1,683	198	743	122	260	12	93	13	63	11	26	3	20	3	1,312	82	11
HC24-RM048	171.00	172.50	RC	3,998	484	1,116	3,514	806	1,664	195	728	121	252	11	89	12	60	10	25	3	19	3	1,275	86	14
HC24-RM048	172.50	174.00	RC	4,122	493	1,149	3,629	821	1,732	201	756	119	257	11	91	12	61	10	26	3	19	3	1,364	89	11
HC24-RM048	174.00	175.50	RC	2,604	379	727	2,225	496	1,056	123	471	79	203	11	64	9	45	8	20	2	15	2	1,405	56	10
HC24-RM048	175.50	177.00	RC	4,288	564	1,201	3,724	843	1,763	207	779	132	297	11	102	14	69	12	30	4	22	3	1,851	81	11
HC24-RM048	177.00	178.50	RC	3,765	433	1,038	3,332	772	1,585	184	681	110	225	12	79	11	52	9	23	3	16	3	1,925	78	9
HC24-RM048	178.50	180.00	RC	4,515	530	1,255	3,985	923	1,886	220	823	133	276	12	98	13	66	11	27	3	21	3	1,891	92	13
HC24-RM048	180.00	181.50	RC	2,753	353	743	2,400	534	1,172	132	483	79	193	8	58	8	41	7	19	2	15	2	1,155	83	15
HC24-RM048	181.50	182.50	RC	2,404	359	660	2,045	453	983	114	425	70	194	10	57	8	43	8	20	2	15	2	1,405	66	18
HC24-RM049	0.00	1.50	RC	1,264	324	422	940	225	335	63	266	51	185	9	47	7	35	6	17	2	14	2	2,641	18	6
HC24-RM049	1.50	3.00	RC	1,399	290	420	1,109	236	490	66	268	49	166	8	40	6	31	6	16	2	13	2	3,255	29	8
HC24-RM049	3.00	4.50	RC	1,047	206	305	841	175	387	47	195	37	115	7	29	4	22	4	12	2	9	2	2,864	25	6
HC24-RM049	4.50	6.00	RC	1,997	200	557	1,797	401	866	99	376	55	101	10	37	5	22	4	10	1	9	1	1,790	44	6
HC24-RM049	6.00	7.50	RC	4,347	348	1,199	3,999	908	1,941	217	818	115	168	13	76	9	40	7	17	2	14	2	1,979	82	8
HC24-RM049	7.50	9.00	RC	3,996	365	1,135	3,631	806	1,744	198	766	117	177	12	79	10	44	7	18	2	14	2	1,567	77	8
HC24-RM049	9.00	10.50	RC	2,266	240	636	2,026	444	979	111	425	67	124	6	47	6	27	5	13	2	9	1	954	75	11
HC24-RM049	10.50	12.00	RC	4,402	498	1,252	3,904	860	1,867	213	830	134	251	13	99	13	62	10	26	3	18	3	1,884	80	10
HC24-RM049	12.00	13.50	RC	4,992	558	1,415	4,434	971	2,131	245	937	150	284	14	110	15	68	11	29	3	21	3	2,100	88	10
HC24-RM049	13.50	15.00	RC	4,995	544	1,408	4,451	985	2,137	245	938	146	277	14	107	14	65	11	29	3	21	3	2,188	89	10
HC24-RM049	15.00	16.50	RC	4,907	550	1,389	4,357	953	2,094	241	923	146	281	14	107	14	65	11	30	4	21	3	2,073	86	10
HC24-RM049	16.50	18.00	RC	4,572	504	1,294	4,068	907	1,941	226	861	133	258	13	98	13	61	10	26	3	19	3	1,871	85	11
HC24-RM049	18.00	19.50	RC	5,285	581	1,490	4,704	1,051	2,248	261	987	157	295	15	114	15	70	12	31	4	22	3	2,073	92	10
HC24-RM049	19.50	21.00	RC	4,719	530	1,332	4,189	932	2,002	230	884	141	273	14	102	14	63	11	27	3	20	3	1,763	84	11
HC24-RM049	21.00	22.50	RC	4,997	551	1,396	4,446	1,016	2,113	241	931	145	288	15	103	13	66	11	28	3	21	3	1,945	85	10
HC24-RM049	22.50	24.00	RC	5,153	561	1,449	4,592	1,051	2,174	249	963	155	292	15	103	14	68	12	29	4	21	3	1,763	86	10
HC24-RM049	24.00	25.50	RC	5,389	557	1,494	4,832	1,116	2,303	262	995	156	288	14	106	14	67	12	28	4	21	3	1,688	90	10
HC24-RM049	25.50	27.00	RC	5,222	555	1,468	4,667	1,075	2,205	253	982	152	287	15	104	13	68	12	28	4	21	3	1,776	88	11
HC24-RM049	27.00	28.50	RC	4,939	546	1,392	4,393	1,016	2,064	241	924	148	287	14	101	13	66	11	28	3	20	3	1,790	84	9
HC24-RM049	28.50	30.00	RC	5,177	504	1,442	4,673	1,067	2,236	255	967	148	258	15	100	12	60	10	25	3	18	3	1,925	91	9
HC24-RM049	30.00	31.50	RC	2,963	322	812	2,641	595	1,278	142	542	84	170	12	56	7	37	6	17	2	13	2	2,263	54	8
HC24-RM049	31.50	33.00	RC	4,683	382	1,297	4,301	1,024	2,033	234	883	127	192	13	78	9	44	8	18	2	16	2	1,695	89	9

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM049	33.00	34.50	RC	1,505	241	433	1,264	272	590	70	283	49	133	8	36	5	26	5	13	2	11	2	2,648	28	7
HC24-RM049	34.50	36.00	RC	1,119	190	323	929	199	431	52	211	36	105	8	27	4	20	4	10	1	9	2	2,627	22	5
HC24-RM049	36.00	37.50	RC	1,139	183	336	956	202	442	54	220	38	98	9	27	4	20	4	10	1	9	1	2,567	20	5
HC24-RM049	37.50	39.00	RC	2,694	231	742	2,463	568	1,184	134	503	74	116	11	46	6	25	4	11	1	10	1	1,979	49	7
HC24-RM049	39.00	40.50	RC	4,182	309	1,156	3,873	925	1,836	211	791	110	151	12	65	8	36	6	15	2	12	2	1,574	78	8
HC24-RM049	40.50	42.00	RC	2,650	315	712	2,335	543	1,122	124	471	75	175	8	48	7	35	6	17	2	15	2	1,743	51	9
HC24-RM049	42.00	43.50	RC	3,221	275	891	2,946	688	1,406	160	605	87	137	10	55	7	32	5	13	2	12	2	1,225	77	14
HC24-RM049	43.50	45.00	RC	4,697	395	1,315	4,302	1,000	2,045	235	889	133	192	13	86	10	48	8	19	2	14	3	1,709	84	8
HC24-RM049	45.00	46.50	RC	5,295	516	1,506	4,779	1,102	2,248	261	1,009	159	259	14	107	13	64	10	25	3	18	3	1,898	91	9
HC24-RM049	46.50	48.00	RC	5,227	562	1,483	4,665	1,060	2,205	256	987	157	291	14	108	14	69	12	28	3	20	3	1,743	89	10
HC24-RM049	48.00	49.50	RC	5,380	569	1,508	4,811	1,107	2,279	262	1,007	156	298	14	106	14	69	12	29	3	21	3	1,878	91	12
HC24-RM049	49.50	51.00	RC	5,162	541	1,442	4,621	1,070	2,187	250	963	151	286	14	100	13	65	11	27	3	19	3	1,540	86	9
HC24-RM049	51.00	52.50	RC	5,087	512	1,420	4,575	1,060	2,168	246	955	146	265	14	98	12	61	10	26	3	20	3	1,227	87	21
HC24-RM049	52.50	54.00	RC	3,971	398	1,087	3,573	820	1,720	192	730	111	211	11	73	9	45	8	20	3	16	2	1,041	77	11
HC24-RM049	54.00	55.50	RC	4,303	437	1,186	3,866	887	1,855	208	794	122	228	12	81	10	52	9	22	3	17	3	1,181	77	10
HC24-RM049	55.50	57.00	RC	3,674	384	1,008	3,290	744	1,591	178	672	105	200	12	72	9	44	8	20	2	15	2	1,004	72	12
HC24-RM049	57.00	58.50	RC	3,405	386	943	3,019	686	1,443	166	626	98	206	10	68	9	44	8	20	3	16	2	1,137	72	12
HC24-RM049	58.50	60.00	RC	4,665	498	1,312	4,167	953	1,972	226	881	135	263	13	92	11	59	10	25	3	19	3	1,385	87	10
HC24-RM049	60.00	61.50	RC	4,583	502	1,278	4,081	939	1,935	220	851	136	264	13	92	12	59	10	26	3	20	3	1,398	87	15
HC24-RM049	61.50	63.00	RC	3,933	423	1,092	3,510	813	1,664	190	729	114	224	11	79	10	49	9	21	3	15	2	1,086	79	13
HC24-RM049	63.00	64.50	RC	4,720	502	1,313	4,218	958	2,021	228	874	137	258	13	96	12	62	10	26	3	19	3	1,266	84	10
HC24-RM049	64.50	66.00	RC	4,806	507	1,345	4,299	982	2,045	234	898	140	262	13	98	12	61	10	26	3	19	3	1,341	86	10
HC24-RM049	66.00	67.50	RC	4,976	496	1,388	4,480	1,027	2,137	240	933	143	253	14	96	12	60	10	26	3	19	3	1,129	90	11
HC24-RM049	67.50	69.00	RC	4,516	471	1,239	4,045	930	1,941	218	827	129	247	13	88	11	54	9	24	3	19	3	1,098	80	9
HC24-RM049	69.00	70.50	RC	3,954	412	1,096	3,542	823	1,683	192	732	112	215	12	76	10	50	9	20	3	15	2	951	69	8
HC24-RM049	70.50	72.00	RC	4,111	445	1,137	3,666	806	1,787	201	755	117	227	13	87	11	53	9	22	3	17	3	963	74	8
HC24-RM049	72.00	73.50	RC	3,819	434	1,079	3,385	735	1,634	188	714	114	222	12	83	11	52	9	22	3	17	3	1,082	71	9
HC24-RM049	73.50	75.00	RC	3,851	412	1,094	3,439	759	1,646	190	728	116	212	12	78	10	50	9	21	3	15	2	979	73	8
HC24-RM049	75.00	76.50	RC	4,886	521	1,391	4,365	970	2,082	249	917	147	265	13	102	13	65	11	27	3	19	3	1,351	90	11
HC24-RM049	76.50	78.00	RC	4,168	461	1,185	3,707	821	1,769	205	786	126	237	12	86	11	57	10	24	3	18	3	1,193	77	12
HC24-RM049	78.00	79.50	RC	3,594	404	999	3,190	700	1,548	178	661	103	208	12	77	10	47	8	21	3	16	2	1,087	70	9
HC24-RM049	79.50	81.00	RC	4,095	477	1,134	3,618	803	1,750	199	745	121	250	11	89	12	57	10	24	3	18	3	1,790	81	8
HC24-RM049	81.00	82.50	RC	6,049	754	1,728	5,295	1,149	2,530	300	1,128	188	397	13	142	20	92	16	37	5	28	4	2,594	111	13

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM049	82.50	84.00	RC	4,836	543	1,359	4,293	944	2,070	237	896	146	279	13	105	14	66	11	27	4	21	3	1,479	93	10
HC24-RM049	84.00	85.50	RC	5,002	611	1,412	4,391	949	2,119	245	924	154	319	14	114	16	73	13	31	4	23	4	1,851	93	10
HC24-RM049	85.50	87.00	RC	3,935	473	1,107	3,462	753	1,671	193	728	117	246	12	87	12	57	10	24	3	19	3	1,405	72	8
HC24-RM049	87.00	88.50	RC	4,654	535	1,323	4,119	915	1,959	228	875	142	277	13	103	14	64	11	27	3	20	3	1,493	85	10
HC24-RM049	88.50	90.00	RC	4,364	519	1,219	3,845	858	1,843	211	804	129	269	12	99	13	62	11	26	3	21	3	1,466	83	10
HC24-RM049	90.00	91.50	RC	4,434	513	1,246	3,921	876	1,873	214	826	132	267	12	98	13	61	10	26	3	20	3	1,472	82	11
HC24-RM049	91.50	93.00	RC	4,250	473	1,179	3,777	849	1,818	207	778	125	241	12	93	12	57	10	24	3	18	3	1,317	80	10
HC24-RM049	93.00	94.50	RC	4,520	502	1,273	4,018	898	1,922	220	840	138	258	12	95	13	62	11	26	3	19	3	1,452	88	12
HC24-RM049	94.50	96.00	RC	4,457	517	1,271	3,940	878	1,867	222	834	139	268	12	97	13	63	11	27	3	20	3	1,371	86	11
HC24-RM049	96.00	97.50	RC	4,542	504	1,283	4,038	901	1,929	228	843	137	260	12	96	13	62	11	25	3	19	3	1,398	87	10
HC24-RM050	0.00	1.50	RC	1,200	195	334	1,005	212	485	56	215	37	107	7	29	4	22	4	10	2	9	1	1,297	24	3
HC24-RM050	1.50	3.00	RC	1,006	199	301	807	171	361	47	191	37	106	13	30	4	22	4	10	1	8	1	1,810	19	3
HC24-RM050	3.00	4.50	RC	1,210	242	393	968	204	404	61	253	46	122	16	39	6	27	5	12	2	11	2	2,438	19	4
HC24-RM050	4.50	6.00	RC	1,108	250	352	858	165	373	52	224	44	133	12	39	5	27	5	13	2	12	2	3,539	19	5
HC24-RM050	6.00	7.50	RC	1,215	278	386	937	179	409	57	243	49	152	10	42	6	31	6	14	2	13	2	4,242	21	6
HC24-RM050	7.50	9.00	RC	1,048	271	342	777	146	324	49	213	45	151	9	40	6	29	5	14	2	13	2	4,093	17	5
HC24-RM050	9.00	10.50	RC	1,030	225	320	805	155	359	48	205	38	121	9	35	5	24	5	12	2	10	2	3,512	18	4
HC24-RM050	10.50	12.00	RC	1,050	217	322	833	162	378	49	206	38	119	7	32	5	24	4	11	2	11	2	2,648	25	5
HC24-RM050	12.00	13.50	RC	1,844	305	549	1,539	297	735	85	358	64	165	9	50	7	35	6	16	2	13	2	4,228	31	5
HC24-RM050	13.50	15.00	RC	1,074	250	344	824	145	369	49	216	45	134	9	39	5	29	5	13	2	12	2	2,985	17	5
HC24-RM050	15.00	16.50	RC	3,506	452	1,024	3,054	639	1,456	166	678	115	234	11	86	11	54	9	23	3	18	3	3,931	53	8
HC24-RM050	16.50	18.00	RC	4,621	344	1,276	4,277	985	2,064	234	874	120	167	11	78	9	39	6	16	2	14	2	1,432	98	9
HC24-RM050	18.00	19.50	RC	3,753	294	1,021	3,459	785	1,695	188	695	96	144	10	63	8	34	5	14	2	12	2	1,179	76	8
HC24-RM050	19.50	21.00	RC	3,420	285	945	3,135	706	1,523	170	645	91	142	10	60	7	32	5	13	2	12	2	1,268	75	10
HC24-RM050	21.00	22.50	RC	4,205	328	1,147	3,877	897	1,879	210	780	111	161	13	69	8	38	6	16	2	13	2	1,547	93	9
HC24-RM050	22.50	24.00	RC	3,648	289	994	3,359	773	1,634	181	673	98	140	12	60	8	34	6	14	2	11	2	1,412	75	8
HC24-RM050	24.00	25.50	RC	4,544	350	1,247	4,194	953	2,045	228	847	121	169	13	75	9	42	7	17	2	14	2	1,493	90	9
HC24-RM050	25.50	27.00	RC	3,927	306	1,073	3,621	843	1,750	195	730	103	145	14	66	8	37	6	14	2	12	2	1,432	79	8
HC24-RM050	27.00	28.50	RC	3,688	293	1,005	3,395	767	1,664	185	681	98	142	13	62	7	34	6	14	2	11	2	1,533	75	9
HC24-RM050	28.50	30.00	RC	4,714	402	1,298	4,312	984	2,088	231	879	130	199	13	85	10	48	8	19	2	16	2	2,040	97	11
HC24-RM050	30.00	31.50	RC	4,262	363	1,164	3,899	897	1,892	210	784	116	177	13	76	9	45	7	18	2	14	2	1,695	91	9
HC24-RM050	31.50	33.00	RC	3,193	284	868	2,909	651	1,431	157	583	87	137	12	59	7	34	6	14	2	11	2	1,722	68	8
HC24-RM050	33.00	34.50	RC	4,141	364	1,126	3,777	874	1,830	204	757	112	184	12	72	9	44	7	18	2	14	2	2,107	90	10

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM050	34.50	36.00	RC	3,521	301	957	3,220	734	1,572	172	646	96	148	13	61	7	36	6	14	2	12	2	1,580	75	8
HC24-RM050	36.00	37.50	RC	2,404	263	670	2,141	474	1,033	117	448	69	134	12	49	6	30	5	13	2	10	2	1,607	51	6
HC24-RM050	37.50	39.00	RC	1,868	218	474	1,650	396	810	85	310	49	115	11	36	5	25	4	11	1	9	1	1,425	39	6
HC24-RM050	39.00	40.50	RC	2,015	255	558	1,760	381	857	95	367	60	131	11	44	6	30	5	13	2	11	2	1,857	41	6
HC24-RM050	40.50	42.00	RC	1,335	185	375	1,150	247	553	63	245	42	97	9	31	4	21	4	9	1	8	1	1,520	35	9
HC24-RM050	42.00	43.50	RC	1,380	224	401	1,156	242	544	64	259	47	116	11	37	5	26	5	12	2	9	1	2,040	27	7
HC24-RM050	43.50	45.00	RC	2,269	253	626	2,016	444	981	109	415	67	130	11	45	6	29	5	13	2	10	2	1,864	46	7
HC24-RM050	45.00	46.50	RC	3,089	275	843	2,814	639	1,370	153	567	85	137	12	55	7	31	5	13	2	11	2	1,479	66	8
HC24-RM050	46.50	48.00	RC	3,349	296	911	3,053	687	1,499	164	612	91	146	11	59	8	36	6	14	2	12	2	1,425	74	8
HC24-RM050	48.00	49.50	RC	3,108	301	841	2,807	632	1,376	151	563	85	153	11	58	7	35	6	15	2	12	2	1,364	71	8
HC24-RM050	49.50	51.00	RC	3,591	336	972	3,255	740	1,591	173	654	97	171	12	64	8	40	7	17	2	13	2	1,560	79	9
HC24-RM050	51.00	52.50	RC	3,639	346	993	3,293	753	1,597	176	666	101	175	12	67	8	42	7	17	2	14	2	1,601	82	9
HC24-RM050	52.50	54.00	RC	3,857	385	1,059	3,472	780	1,689	187	706	110	196	12	74	10	46	8	19	2	16	2	1,979	83	10
HC24-RM050	54.00	55.50	RC	3,730	364	1,008	3,366	758	1,652	178	672	106	184	13	71	9	43	8	18	2	14	2	1,857	81	10
HC24-RM050	55.50	57.00	RC	3,446	345	934	3,101	699	1,517	167	624	94	177	12	66	8	41	7	17	2	13	2	1,763	73	9
HC24-RM050	57.00	58.50	RC	3,868	390	1,053	3,478	787	1,695	186	698	112	197	13	76	10	47	8	20	2	15	2	2,033	82	10
HC24-RM050	58.50	60.00	RC	3,843	384	1,049	3,459	778	1,689	186	699	107	194	13	74	10	47	8	19	2	15	2	2,019	78	10
HC24-RM050	60.00	61.50	RC	3,677	383	996	3,294	740	1,615	176	660	103	195	13	73	10	47	8	19	2	14	2	1,810	77	9
HC24-RM050	61.50	63.00	RC	3,744	384	1,032	3,360	751	1,634	180	686	109	194	13	73	10	47	8	20	2	15	2	1,743	77	8
HC24-RM050	63.00	64.50	RC	3,888	391	1,057	3,497	809	1,689	187	703	109	198	13	76	10	48	8	19	2	15	2	1,749	79	9
HC24-RM050	64.50	66.00	RC	3,843	400	1,060	3,443	753	1,689	185	704	112	200	13	78	10	49	9	20	3	16	2	1,797	77	10
HC24-RM050	66.00	67.50	RC	3,731	396	1,013	3,335	771	1,609	175	672	108	201	12	77	10	48	8	20	3	15	2	1,797	72	8
HC24-RM050	67.50	69.00	RC	3,436	363	933	3,073	706	1,486	162	621	98	185	12	71	9	43	7	18	2	14	2	1,601	68	10
HC24-RM050	69.00	70.50	RC	3,494	381	977	3,113	702	1,492	170	642	107	189	12	75	10	48	8	19	3	15	2	1,824	73	11
HC24-RM050	70.50	72.00	RC	3,131	338	867	2,793	626	1,351	153	567	96	170	11	65	9	42	7	17	2	13	2	1,594	65	10
HC24-RM050	72.00	73.50	RC	3,153	349	875	2,804	625	1,357	152	573	97	178	11	65	9	44	7	17	2	14	2	1,540	64	11
HC24-RM050	73.50	75.00	RC	3,478	372	966	3,106	698	1,499	169	636	104	185	12	72	10	47	8	19	2	15	2	1,675	71	9
HC24-RM050	75.00	76.50	RC	3,722	400	1,028	3,322	751	1,603	179	677	112	204	12	76	10	50	8	20	3	15	2	1,925	72	9
HC24-RM050	76.50	78.00	RC	3,775	415	1,052	3,360	768	1,603	184	688	117	208	12	81	11	52	8	21	3	16	3	2,019	74	10
HC24-RM050	78.00	79.50	RC	3,583	398	985	3,185	724	1,535	172	647	107	200	12	77	10	49	8	20	3	16	3	1,918	70	9
HC24-RM050	79.50	81.00	RC	3,754	398	1,029	3,356	758	1,628	182	677	111	203	12	76	10	49	8	20	2	16	2	1,763	74	10
HC24-RM050	81.00	82.50	RC	3,502	390	977	3,112	702	1,492	171	642	105	195	12	75	10	49	8	20	3	15	3	1,722	72	10
HC24-RM050	82.50	84.00	RC	3,676	407	1,020	3,269	724	1,585	178	670	112	208	12	77	10	50	8	20	3	16	3	1,898	72	9

DHID	From	To	Sample Type	TREO	HREO	MREO	LREO	La2O3	Ce2O3	Pr6O11	Nd2O3	Sm2O3	Y2O3	Eu2O3	Gd2O3	Tb4O7	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	ZrO2	ThO2	UO2
HC24-RM050	84.00	85.50	RC	3,862	427	1,078	3,435	775	1,646	186	709	119	219	12	80	11	53	8	21	3	17	3	1,864	75	9
HC24-RM050	85.50	87.00	RC	3,582	404	995	3,178	714	1,529	173	653	109	206	12	75	10	50	8	21	3	16	3	1,743	70	9
HC24-RM050	87.00	88.50	RC	3,758	415	1,042	3,343	765	1,597	182	685	114	215	12	77	10	51	8	21	3	16	2	1,702	75	8
HC24-RM050	88.50	90.00	RC	3,911	439	1,088	3,472	793	1,658	188	713	120	223	12	83	11	56	9	22	3	17	3	2,006	76	9
HC24-RM050	90.00	91.50	RC	3,890	435	1,074	3,455	794	1,652	188	704	117	223	12	81	11	54	9	22	3	17	3	1,830	77	9
HC24-RM050	91.50	93.00	RC	3,883	430	1,075	3,453	779	1,664	187	706	117	218	12	82	11	54	9	21	3	17	3	1,925	76	9
HC24-RM050	93.00	94.50	RC	3,458	383	965	3,075	688	1,480	168	632	107	196	10	71	10	48	8	20	3	15	2	1,682	67	9
HC24-RM050	94.50	96.00	RC	3,880	414	1,075	3,466	795	1,658	188	708	117	211	12	79	10	52	8	21	3	16	2	1,817	81	9
HC24-RM050	96.00	97.50	RC	3,620	398	1,003	3,222	732	1,548	175	656	111	201	11	76	10	51	8	20	3	16	2	1,688	73	8
HC24-RM050	97.50	99.00	RC	4,043	432	1,114	3,611	812	1,750	195	734	120	218	12	83	11	54	9	22	3	17	3	1,783	78	10
HC24-RM050	99.00	100.50	RC	4,079	445	1,133	3,634	830	1,738	197	744	125	227	12	84	11	56	9	22	3	18	3	1,911	77	10
HC24-RM050	100.50	102.00	RC	4,097	432	1,126	3,665	829	1,775	196	743	122	218	12	83	11	54	9	22	3	17	3	1,817	78	10
HC24-RM050	102.00	103.50	RC	3,882	425	1,079	3,457	780	1,664	188	707	118	213	12	81	11	55	9	21	3	17	3	1,722	76	11
HC24-RM050	103.50	105.00	RC	3,965	429	1,098	3,536	808	1,695	192	722	119	217	12	82	11	54	9	21	3	17	3	1,695	77	10
HC24-RM050	105.00	106.50	RC	4,078	433	1,131	3,645	836	1,744	198	745	122	217	12	84	11	55	9	22	3	17	3	1,770	79	11
HC24-RM050	106.50	108.00	RC	3,560	404	990	3,156	715	1,511	172	651	107	204	12	77	10	50	8	20	3	17	3	1,716	71	15
HC24-RM050	108.00	109.50	RC	3,988	443	1,110	3,545	807	1,695	193	728	122	225	12	84	11	56	9	22	3	18	3	1,938	78	10
HC24-RM050	109.50	111.00	RC	3,796	417	1,053	3,379	773	1,615	182	692	117	213	12	78	10	52	8	21	3	17	3	1,736	75	10
HC24-RM050	111.00	112.50	RC	4,015	433	1,104	3,582	817	1,726	192	728	119	218	13	83	11	54	9	22	3	17	3	1,864	80	9
HC24-RM050	112.50	114.00	RC	3,845	427	1,062	3,418	756	1,664	185	698	115	217	12	80	11	53	9	22	3	17	3	1,553	74	8
HC24-RM050	114.00	115.50	RC	3,745	417	1,039	3,328	749	1,603	181	682	113	212	12	79	10	53	8	21	3	17	2	1,553	72	8
HC24-RM050	115.50	117.00	RC	3,945	444	1,097	3,501	800	1,671	190	722	118	227	13	83	11	56	9	22	3	17	3	1,743	77	8
HC24-RM050	117.00	118.50	RC	3,938	436	1,085	3,502	787	1,695	191	710	119	221	13	83	11	54	9	22	3	17	3	1,756	77	8
HC24-RM050	118.50	120.00	RC	3,873	437	1,069	3,436	767	1,664	182	708	115	222	13	83	11	53	9	23	3	17	3	1,621	78	7
HC24-RM050	120.00	121.50	RC	4,036	449	1,114	3,587	812	1,726	193	737	119	229	14	86	11	54	9	23	3	17	3	1,776	85	8
HC24-RM050	121.50	123.00	RC	3,814	388	1,040	3,426	779	1,664	182	695	106	199	11	75	10	47	8	19	2	15	2	1,641	83	8
HC24-RM050	123.00	124.50	RC	2,510	320	686	2,190	469	1,079	116	453	73	170	9	55	7	37	7	17	2	14	2	1,378	52	6
HC24-RM050	124.50	126.00	RC	No Sample																					
HC24-RM050	126.00	127.50	RC	No Sample																					
HC24-RM050	127.50	129.00	RC	No Sample																					
HC24-RM050	129.00	130.50	RC	3,380	385	931	2,995	670	1,449	160	617	99	199	12	73	9	46	8	19	2	15	2	1,553	67	9