26 February 2024

New High-Grade mineralisation discovered North of Koppamurra Resource

New discovery includes similar grades, thickness, and rare earth magnet content to the existing Koppamurra Resource.

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Highlights

- Extensional drilling in a previously untested area up to 25km north of the existing Koppamurra Resource has successfully intersected shallow, high-grade mineralisation
- **High-grade mineralisation intersected includes:**
  - **KM5278,** 2m @ 1,387 ppm Total Rare Earth Oxide (TREO) from 3m, with 18.5% combined Neodymium/Praseodymium (Nd/Pr) and 1.6 % Dysprosium (Dy)
  - **KM5284**, 2m @ 1,169 ppm TREO from 3m, with 21.7% combined Nd/Pr and 2.0% Dy
  - **KM5243**, 5m @ 1,828 ppm TREO from 4m, with 22.4% combined Nd/Pr and 1.9% Dy
  - **KM5223**, 3m @ 1,476 ppm TREO from 4m, with 33.0% combined Nd/Pr and 1.6% Dy
  - **KM5267**, 2m @ 1,425 ppm TREO from 3m, with 23.8% combined Nd/Pr and 2.2% Dy
  - **KM5225,** 5m @ 1,020 ppm TREO from 4m, with 21.7% combined Nd/Pr and 3.2% Dy
- Out of the 184 holes where assays have been received, 82% have returned significant assay results at a 350ppm TREO cut-off
- Approximately 70% of the 4,800 assays sent for analysis have been received, with additional assays from previously untested northern areas expected to arrive next month in March 2024

Engage with this announcement at the AR3 ***investor hub***.

Australian Rare Earths Limited (ASX: AR3) is pleased to announce a third update of assay results from its drilling campaign that commenced in October 2023, aimed at growing and upgrading the Resource at its Koppamurra rare earths project in South Australia.

The drilling program has covered approximately 8,750 meters for 694 holes. It is focused on extending the known mineralisation in an area that has not previously been drill tested and resource definition upgrades in the southern resource area.

The most recent batch of assays received are from the road verge drilling portion of the program targeting resource extension north of the Koppamurra resource. Out of the 184 holes where assays have been received, 82% have returned significant assay results at a 350ppm TREO cut-off with an average grade, thickness and magnet rare earth of 2.1m @ 791ppm TREO with 21.5% combined Nd/Pr & 2.5% Dy. These results are similar to the results that underpin the existing Mineral Resource estimate at Koppamurra and provide further confidence in the potential regional extent of the resource. The road verge drilling has discovered and defined new shallow high-grade mineralisation outside the existing resource area and continues to support the widespread nature of the high-grade mineralisation at Koppamurra (Figure 1).

Approximately 70% of the 4800 assays sent for analysis have now been received, with the remaining 1400 assays expected to arrive during the first quarter of 2024. The pending assays will further inform the extent of mineralisation in previously untested northern extension of the Koppamurra resource (Figure 1).

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AR3 Chief Executive Travis Beinke said:

"We are thrilled to announce drilling in a previously untested area near the Koppamurra Resource has discovered and intersected wide-spread mineralisation at similar grades, thickness and rare earth magnet content to the existing resource. This is a significant development for Australian Rare Earths , and highlights the potential of the wider Koppamurra rare earth province.

Importantly, the new discovery includes shallow, high-grade results spread over a wide area, which is encouraging for the potential for a high-grade subset to be extensive across the province. We are still awaiting assay results, but the initial indications are very positive.

This information will be invaluable as we continue to advance our province development plans, including future exploration and resource definition drill programs. I thank our team for their dedication and hard work in achieving this success."

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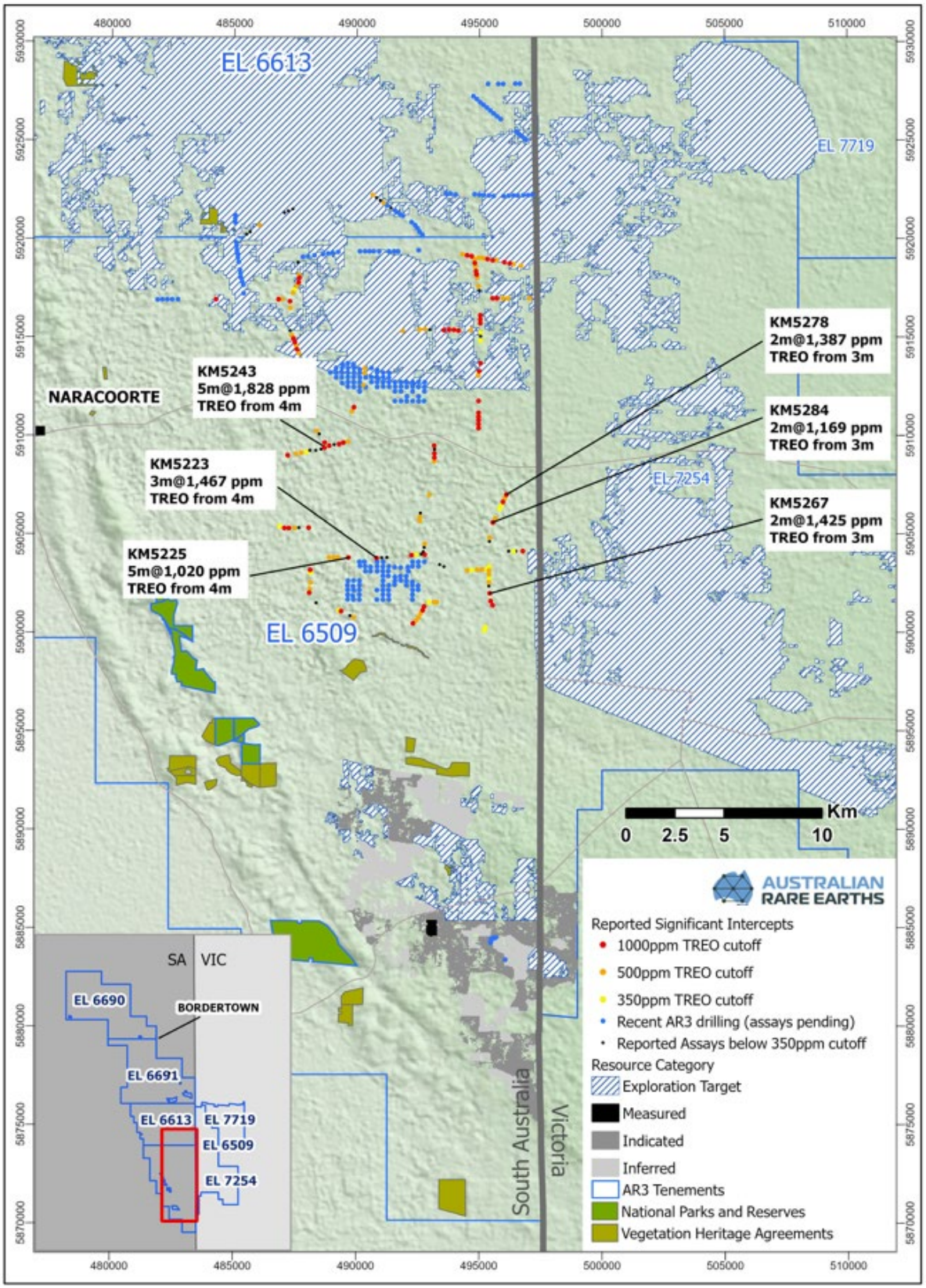

Figure 1 *– Section Location Plan showing areas of recent drilling and significant intercepts*

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About Australian Rare Earths Limited

Australian Rare Earths is committed to the timely exploration and development of its 100% owned, flagship Koppamurra Project, located in South Australia and Victoria. Koppamurra is a prospective ionic clay hosted rare earth deposit, uniquely rich in all the elements required in the manufacture of rare earth permanent magnets which are essential components in electric vehicles, wind turbines and domestic appliances.

The Company is focused on executing a growth strategy that will ensure AR3 is positioned to become an independent and sustainable source of rare earths, playing a pivotal role in the global transition to a green economy.

https://investorhub.ar3.com.au/link/LPZXge

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JORC Table 1

Section 1 Sampling Techniques and Data		
Criteria	**Explanation**	**Comment**
Sampling techniques	*Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 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. 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.,*	*RC Aircore drilling methods were used obtain samples from the October-December 2021, February-April 2022, September-December 2022 February- June 2023, and October-December 2023 drilling programs.* *The following information covers the sampling process:* • *All air core samples were collected from the rotary splitter mounted at the bottom of the cyclone using a pre-numbered calico bag and plastic UV sample bag. The samples were geologically logged at 1 m intervals using the marked calico sample which averaged ~1.5 kg in mass.* • *A handheld Olympus Vanta XFR Analyser was used to assess the geochemistry of the air core samples in the field. The XRF analysis provided a full suite of mineral elements for characterising the lithological units.* • *XRF readings were downloaded from the XRF Analyser at the end of each day and uploaded to the Australian Rare Earths Azure Data Studio database.* • *Field duplicates were taken at a rate of ~1:34 and inserted blindly into the sample batches.* • *At the laboratory, the samples were oven dried at 105 degrees for a minimum of 24 hours and secondary crushed to 3 mm fraction and then pulverised to 90% passing 75 µm. Excess residue was maintained for storage while the rest of the sample placed in 8x4 packets and sent to the central weighing laboratory. The samples were submitted for analysis using XRF-ICP-MS method.* • *A laboratory repeat was taken at ~ 1 in 21 samples;* • *Commercially obtained standards were*

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	submarine nodules) may warrant disclosure of detailed information.	*inserted by the laboratory at a rate of ~ 1 in 9 into the sample sequence.*
Drilling techniques	*Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc).*	• *Drilling was completed using a Mcleod or Wallis air ore drill rig (Landcruiser 6x6 or similar) for the drilling.* • *Aircore drilling is a form of reverse circulation drilling where the sample is collected at the face and returned inside the inner tube. The drill cuttings are removed by injection of compressed air into the hole via the annular area between the inner tube and the drill rod.* • *Aircore drill rods used were 3 m long.* • *NQ diameter (76 mm) drill bits and rods were used.* • *All aircore drill holes were vertical with depths varying between 2 m and 36 m.*
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.*	• *Drill sample recovery for aircore is monitored by recording sample condition descriptions where 'Poor' to 'Very Poor' were used to identify any samples recovered which were potentially not representative of the interval drilled.* • *A comment was included where water injection was required to recover the sample from a particular interval. The use of water injection can potentially bias a sample and very little water injection was required during this drilling program.* • *No significant loses of samples were observed due to the shallow drilling depths (<36 m).* • *The rotary splitter was set to an approximate 20% split, which produced approximately 1.5 kg sample for each meter interval.* • *The 1.5 kg sample was collected in a pre-numbered calico bags and the remaining 80% (5 kg to 8 kg) was collected in plastic UV bags labelled with the hole number and sample interval.* • *At the end of each drill rod, the drill string is cleaned by blowing down with air to remove any clay and silt potentially built up in the sample pipes and cyclone.*

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		• *No relationship exists between sample recovery and grade.*
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	• *All aircore samples collected in calico bags were logged for lithology, colour, cement type, hardness, percentage rock estimate, sorting, and any relevant comments such as moisture, sample condition, or vegetation.* • *Geological logging data for all drill holes was qualitatively logged onto Microsoft Excel spreadsheet using a Panasonic Toughbook with validation rules built into the spreadsheet including specific drop-down menus for each variable. The data was uploaded to the Australian Rare Earths Azure Data Studio database.* • *Every drill hole was logged in full and logging was undertaken with reference to a drilling template with codes prescribed and guidance to ensure consistent and systematic data collection*
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all cores taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality, and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half*	• *1 m aircore sample interval were homogenised within the cyclone and the rotary splitter was set to an approximate 20% split producing around 1.5 kg sample for each metre interval.* • *The 1.5 kg sample was collected in a pre-numbered calico bag and the 80% (5 kg to 8 kg) portion was collected in plastic UV bags labelled with hole identity and interval.* • *Duplicates were generally taken within the clay lithologies above the basement as this is the likely zone of REE enrichment. These duplicate samples were normally collected by using a second calico bag and placing it under the rotary splitter collecting a 20% split but due to the difficulties of placing a second calico bag under the rotary splitter during sample collection, some duplicates were collected by hand from the plastic UV bags which captured the other 80% of the material recovered from any particular interval.* • *The material in the plastic UV bags was mixed up and every attempt to take as representative sample of the material as*

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	sampling. *Whether sample sizes are appropriate to the grain size of the material being sampled.*	*possible by hand was made and then placed in a pre-numbered calico bag.* • *The 1.5 kg sample collected in the calico bag was logged by the geologist onsite. The logged samples were placed in polyweave bags and sent to Naracoorte base at the end of each day. The polyweave bags were then placed on pallets and dispatched to Bureau Veritas laboratory in Adelaide in Bulka Bags.* • *The remaining 80% split from the aircore interval was stored for future reference.* • *Field duplicates of all the samples were completed at a frequency of ~1 in 34 samples. Field standards were inserted into the sample sequence at a frequency of ~1:57. Standard reference Material (SRM) samples were inserted into the sample batches at a frequency rate of 1 per 10 samples by the laboratory and a repeat sample was taken at a rate of 1 per 21 samples.* • *A rig geologist oversaw the sampling and logging process while a second geologist selected samples for analysis based on the logging descriptions and Pxrf analysis. Clay rich sample and those adjacent to the limestone basement contact were selected for assay. REEs are known to be contained within the clay component of the sediment package based on analysis of XRF data and previous exploration work.*
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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*	• *The detailed geological logging of samples provides lithology (clay component) and proximity to the limestone basement which is sufficient for the purpose of determining the mineralised zone.* • *The 1.5 kg aircore samples were assayed by Bureau Veritas laboratory in Wingfield, Adelaide, South Australia, which is considered the Primary laboratory.* • *The samples were initially oven dried at 105 degrees Celsius for 24 hours. Samples were secondary crushed to 3 mm fraction and the weight recorded. The sample was then pulverised to 90% passing 75 µm. Excess residue was maintained for storage while*

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	derivation, etc. *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.*	*the rest of the sample placed in 8x4 packets and sent to the central weighing laboratory.* • *All weighed samples were then analysed using the Multiple Elements Fusion/Mixed Acid Digest analytical method;* • *ICP Scan (Mixed Acid Digest – Lithium Borate Fusion) Samples are digested using a mixed acid digest and also fused with Lithium Borate to ensure all elements are brought into solution. The digests are then analysed for the following elements (detection Limits shown): Al (100) As (1) Ba (1) Be (0.5) Ca(100) Ce (0.1) Co (1) Cr (10) Dy (0.05) Er (0.05) Eu(0.05) Fe(100) Gd (0.2) Ho (0.02) K (100) La (0.5) Lu (0.02) Mg (100) Mn (2) Na (100) Nd (0.05) Ni (2) Pr (0.2) S (50) Sc (1) Si (100) Sm(0.05) Sr (0.5) Th (0.1) Ti (50) Tm (0.2) U (0.1) V (5) Y (0.1) Yb (0.05) Zr (1)* • *Field duplicates were collected and submitted at a frequency of ~1 per 34 samples.* • *Bureau Veritas completed its own internal QA/QC checks that included a Laboratory repeat every 21st sample and a standard reference sample every 9th sample prior to the results being released.* • *Analysis of QA/QC samples show the laboratory data to be of acceptable accuracy and precision;* • Australian Rare Earths submitted field standards at a frequency of ~1:57 samples. • Australian Rare Earths requested BV insert blank washes at a frequency of 1:40 samples. These blank washes were inserted in the sample sequence behind samples which were thought to be mineralized to ensure that no contamination from higher grade samples was occurring. Frequency of blank samples totaled 1 in 24 samples. *The adopted QA/QC protocols are acceptable for this stage of test work. The sample preparation and assay techniques used are industry standard and provide a total analysis.*
Verification	*The verification of*	• *All results are checked by the company's*

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of sampling and assaying	*significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	*Technical Director.* • *Field based geological logging for drill holes was entered directly into an Excel spreadsheet format with validation rules built into the spreadsheet including specific drop-down menus for each variable. This digital data was then uploaded to the Australian Rare Earths Azure Data Studio database.* • *Assay data was received in digital format from the laboratory and was uploaded Australian Rare Earths Azure Data Studio database.* • *Field and laboratory duplicate data pairs of each batch are plotted to identify potential quality control issues.* • *Standard Reference Material sample results are checked from each sample batch to ensure they are within tolerance (<3SD) and that there is no bias.* • *The field and laboratory data was exported and imported into Datamine by IHC Robbins which is appropriate for this stage in the program. Data validation criteria are included to check for overlapping sample intervals, end of hole match between 'Lithology', 'Sample', 'Survey' files and other common errors.* • *Assay data yielding elemental concentrations for rare earths (REE) within the sample are converted to their stoichiometric oxides (REO) in a calculation performed within the database using the conversion factors in the below table.* • *Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations have been used for reporting throughout this report:* • *Note that Y2O3 is included in the TREO, HREO and CREO calculation.* ***TREO** = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3+ Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3+ Y2O3* ***CREO** = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3*

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		LREO *= La2O3 + CeO2 + Pr6O11 + Nd2O3* ***HREO*** *= Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3+ Lu2O3 + Y2O3 NdPr = Nd2O3 + Pr6O11* ***TREO-Ce*** *= TREO - CeO2* ***NdPr*** *= Nd + Pr* Element Oxide / Oxide Factor CeO2 1.2284 Dy2O3 1.1477 Er2O3 1.1435 Eu2O3 1.1579 Gd2O3 1.1526 Ho2O3 1.1455 La2O3 1.1728 Lu2O3 1.1371 Nd2O3 1.1664 Pr6O11 1.2082 Sc2O3 1.5338 Sm2O3 1.1596 Tb4O7 1.1762 ThO2 1.1379 Tm2O3 1.1421 U3O8 1.1793 Y2O3 1.2699 Yb2O3 1.1387
Location of data points	*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.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	• *Down hole surveys for shallow vertical aircore drill holes are not required.* • *The drill hole collars were located using a GPS unit to identify the positions of the drill holes in the field. The handheld GPS has an accuracy of +/-5m in the horizontal.* • *The datum used is GDA2020/MGA Zone 54.* • *Topographic data over the southern area of the resource (including all Inferred/Indicated/Measured resource areas) is derived from a fixed wing LiDAR survey flown in May 2022 by Aerometrex using their RIEGL VQ-780ii sensor. The LiDAR survey data was captured at a minimum 25 points per meter and flown at*

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		a height of 591m to ensure ~10cm vertical accuracy. • *Topographic DTM surface over the northern area of the resource (Frances Exploration Target area) is derived from DGPS drill collar positions at this stage of exploration and the RL has been corrected using An Australian wide SRTM. The 1 second SRTM Level 2 Derived Smoothed Digital Elevation Model (DEM-S) is derived from the 2000 SRTM. The DEM-S has a ~30m grid which has been adaptively smoothed to improve the representation of the surface shape and is the preferred method for shape and vertical accuracy from STRM products. The smoothing process estimated typical improvements in the order of 2-3 m. This would make the DEM-S accuracy to be of approximately 5 m.* • *The accuracy of the locations is sufficient for this stage of exploration.*
Data spacing and distribution	*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.*	• *The holes were largely drilled at between 100 m and 400 m spacings along accessible road verges.* • *Drill spacing within paddocks and forested areas was largely completed at 100 m to 120 m spacings, with a small portion of holes drilled at 60 m spacings.* • *The drilling of aircore holes was conducted to determine the regional prospectivity of the wider Koppamurra Project area and for the purposes of generating a mineral resource estimate.* • *No sample compositing has been applied.*
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key*	• *The Koppamurra mineralisation is interpreted to be hosted in flat lying clays that are horizontal. Undulation of the clay unit is influenced by the weathered limestone basement below.* • *All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.* • *The Koppamurra drilling was oriented perpendicular to the strike of mineralisation defined by previous*

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	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	*exploration and current geological interpretation.* • *The strike of the mineralisation is north south, and the high grades follow a northwest-southeast trend.* • *All drill holes were vertical, and the orientation of the mineralisation is relatively horizontal.* • *The orientation of the drilling is considered appropriate for testing the lateral and vertical extent of mineralisation without any bias.*
Sample security	*The measures taken to ensure sample security.*	• *After logging, the samples in calico bags were tied and placed into polyweave bags, labelled with the drill hole and sample numbers contained within the polyweave and transported to the base of operations, Naracoorte, at the end of each day.* • *The samples were then placed on pallets ready for transport and remained in a secure compound until transport had been arranged. Pallets were labelled and then 'shrink-wrapped' by the transport contractor prior to departure from the Naracoorte base to the analytical laboratory.* • *Samples for analysis were logged against pallet identifiers and a chain of custody form created.* • *Transport to the analytical laboratory was undertaken by an agent for the TOLL Logistics Group, and consignment numbers were logged against the chain of custody forms.* • *The laboratory inspected the packages and did not report tampering of the samples and provided a sample reconciliation report for each sample dispatch.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• *Internal reviews were undertaken by AR3's Exploration Manager and Technical Director during the drilling, sampling, and geological logging process and throughout the sample collection and dispatch process to ensure AR3's protocols were followed.* • *A review of the database was also*

		undertaken by Wallbridge Gilbert Aztec (WGA) – Consulting Engineers.

Section 2 Reporting of Exploration Results		
Criteria	**Explanation**	**Comment**
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	*Koppamurra Project comprises of a granted South Australian Exploration Licences (EL), EL6509, EL6613, EL6690, EL6691, EL6942, and EL6943 along with Victorian EL007254 and EL007719 covering a combined area of ~6,300 km2 which is in good standing.* *EL6509 is within 100m of a Glen Roy Conservation Park and the Naracoorte Caves National Park, the latter of which is excised from the tenement. The License area contains several small Extractive Mineral Leases (EML) held by others, Native Vegetation Heritage Agreement areas, as well as the Deadman's Swamp Wetlands which are wetlands of national importance.* *A Native Title Claim by the First Nations of the South East #1 has been registered but is yet to be determined. The claim area includes the areas covered by EL's 6509, 6613, 6690 and 6691.* *The exploration work was completed on the tenements (EL 6509 and EL6613) in South Australia and (EL007254 and EL007719) in Victoria which are 100% owned by the company Australian Rare Earths Ltd.* *The Exploration License EL6509 original date of grant was 15/09/2020 with an expiry date of 14/09/2028.* *The Exploration License EL6613 original date of grant was 06/07/2021 with an expiry date of 05/07/2027.* *The Exploration License EL6690 original date of grant was 02/11/2021 with an expiry date of 01/11/2027.*

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		The Exploration License EL6691 original date of grant was 02/11/2021 with an expiry date of 01/11/2027. *The Exploration License EL6942 original date of grant was 17/10/2023 with an expiry date of 16/10/2029.* *The Exploration License EL6943 original date of grant was 17/10/2023 with an expiry date of 16/10/2029.* *The Exploration License EL007254 original date of grant was 29/04/2021 with an expiry date of 28/04/2024.* *The Exploration License EL007719 original date of grant was 29/08/2022 with an expiry date of 28/08/2027.* *Details regarding royalties are discussed in chapter 3.4 of Australian Rare Earths Prospectus dated 7 May 2021.*
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	*Exploration activities by other exploration companies in the area have not previously targeted or identified REE mineralisation.* *Historical exploration activities in the vicinity of Koppamurra include investigations for coal, gold and base metals, uranium, and heavy mineral sands.* *Historical exploration by other parties is detailed in Chapter 7 of Australian Rare Earths Prospectus dated 7 May 2021.*
Geology	*Deposit type, geological setting and style of mineralisation.*	*The Koppamurra deposit is interpreted to contain analogies to ion adsorption ionic clay REE deposits. REE mineralisation at Koppamurra is hosted by clayey sediments interpreted to have been deposited onto a limestone base (Gambier Limestone) and accumulated in an interdunal, lagoonal or estuarine environment.* *A dedicated research program investigating the source of the REE at Koppamurra is ongoing, with no definitive source of the REE confirmed to date although preliminary results of this study have ruled out the alkali volcanics in south-eastern Australia which was originally*

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		considered. *Mineralogical test work conducted on clay sample from the project area established that the dominant clay minerals are smectite and kaolin, and that the few REE-rich minerals detected during the SEM investigation are not considered inconsistent with the suggestion that a significant proportion of REE are distributed in the material as adsorbed elements on clay and iron oxide surfaces.* *There are several known types of regolith hosted REE deposits including, ion adsorption clay deposits, alluvial and placer deposits. Whilst Koppamurra shares similarities with both ion adsorption clay deposits and volcanic ash fall placer deposits, there are also several differences, highlighting the need for further work before a genetic model for REE mineralisation at Koppamurra can be confirmed.* *There is insufficient geological work undertaken to determine any geological disruptions, such as faults or dykes, that may cause variability in the mineralisation.*
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *- easting and northing of the drill hole collar* *- elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *- dip and azimuth of the hole* *- down hole length and interception depth* *- hole length.* *If the exclusion of this information is justified on*	*The material information for drill holes relating to this report are contained within Appendices of this release.*

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	the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	*No metal equivalents have been used.* *Significant intercepts are calculated using downhole sample length weighted averages and a lower cut-off grade of 325 ppm TREO-CeO2.* *A full list of drill holes with significant intercepts >325 ppm TREO-CeO2 can be found in the appendices of this release.*
Relationship between mineralisation widths and intercept lengths	*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 not known and only the down hole lengths are reported, there should be a clear statement to this*	*All intercepts reported are down hole lengths.* *The mineralisation is interpreted to be flat lying. Morphology of the mineralised unit is influenced by the morphology of the undulating limestone basement below. Drilling is vertical perpendicular to mineralisation. Any internal variations to REE distribution within the horizontal layering was not defined, therefore the true width is considered not known.*

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	effect (eg 'down hole length, true width not known').	
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	*Diagrams are included in the body of this release.*
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	*This release contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.*
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	*All known relevant exploration data has been reported in this release.*
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or*	*AR3 intend to continue to define the Koppamurra resource during 2023 and 2024. This will include (but not limited to)*

	large-scale step-out drilling). *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	*drilling, assay, ground based geophysical surveys and further metallurgical testwork.*

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Appendix Drill Hole Collars

Hole ID	East (m)	North (m)	RL (m ASL)	Drill Method	Down Hole Width (mm)	Total Depth EOH (m)	Azimuth	Dip Direction
KM5201	492301	5900453	84.6	Aircore	76	7	0	-90
KM5202	492435	5900607	85.5	Aircore	76	8	0	-90
KM5203	492519	5900770	85.6	Aircore	76	8	0	-90
KM5204	492615	5900968	85.1	Aircore	76	6	0	-90
KM5205	492697	5901132	83.3	Aircore	76	8	0	-90
KM5206	492754	5901314	84.1	Aircore	76	7	0	-90
KM5207	492939	5901530	86.4	Aircore	76	6	0	-90
KM5208	493155	5901530	84.6	Aircore	76	6	0	-90
KM5209	493273	5901529	85.7	Aircore	76	9	0	-90
KM5210	495312	5903217	91.5	Aircore	76	9	0	-90
KM5211	495117	5903201	92.1	Aircore	76	15	0	-90
KM5212	494912	5903186	92	Aircore	76	6	0	-90
KM5213	494707	5903171	91.2	Aircore	76	5	0	-90
KM5214	494508	5903154	89.1	Aircore	76	6	0	-90
KM5215	493559	5903335	88.4	Aircore	76	4	0	-90
KM5216	493387	5903448	88.3	Aircore	76	5	0	-90
KM5217	492775	5903954	95.2	Aircore	76	9	0	-90
KM5218	492640	5903985	96.6	Aircore	76	6	0	-90
KM5219	492427	5903955	93.7	Aircore	76	5	0	-90
KM5220	492246	5903927	95.3	Aircore	76	7	0	-90
KM5221	491233	5903810	93.7	Aircore	76	16	0	-90
KM5222	491029	5903790	92.6	Aircore	76	10	0	-90
KM5223	490812	5903772	90.4	Aircore	76	9	0	-90
KM5224	489664	5903800	84.3	Aircore	76	9	0	-90
KM5225	489668	5903798	84.4	Aircore	76	9	0	-90
KM5226	489253	5903796	83.3	Aircore	76	4	0	-90
KM5227	489083	5903796	82.1	Aircore	76	7	0	-90
KM5228	488877	5903797	82.2	Aircore	76	11	0	-90
KM5229	486864	5905382	81.3	Aircore	76	9	0	-90
KM5230	487052	5905300	81.3	Aircore	76	6	0	-90
KM5231	487248	5905299	82	Aircore	76	8	0	-90
KM5232	487480	5905299	85.9	Aircore	76	6	0	-90
KM5233	487653	5905314	83.8	Aircore	76	17	0	-90
KM5234	488046	5905315	80.3	Aircore	76	12	0	-90
KM5235	488887	5909481	86.9	Aircore	76	10	0	-90
KM5236	489085	5909540	87	Aircore	76	24	0	-90
KM5237	489277	5909569	88.7	Aircore	76	11	0	-90
KM5238	489455	5909636	88.7	Aircore	76	11	0	-90
KM5239	489646	5909693	89.4	Aircore	76	12	0	-90
KM5240	488364	5910241	87.4	Aircore	76	10	0	-90
KM5241	488476	5910077	86.8	Aircore	76	12	0	-90
KM5242	488695	5909631	86.2	Aircore	76	10	0	-90
KM5243	488683	5909378	85.3	Aircore	76	9	0	-90
KM5244	488543	5909296	84.8	Aircore	76	15	0	-90
KM5245	488332	5909246	84.8	Aircore	76	23	0	-90
KM5246	488094	5909243	84.7	Aircore	76	9	0	-90
KM5247	487950	5909160	85.9	Aircore	76	6	0	-90
KM5248	487743	5909127	88.7	Aircore	76	6	0	-90
KM5249	487522	5909070	88.1	Aircore	76	5	0	-90
KM5250	487188	5908991	83.5	Aircore	76	15	0	-90
KM5251	492718	5904099	97	Aircore	76	7	0	-90
KM5252	493157	5909485	97.1	Aircore	76	9	0	-90
KM5253	493169	5909288	96.9	Aircore	76	9	0	-90
KM5254	493173	5909086	95.8	Aircore	76	9	0	-90
KM5255	493170	5908871	95.7	Aircore	76	9	0	-90
KM5256	493159	5908687	96.4	Aircore	76	12	0	-90
KM5257	492966	5906978	91.9	Aircore	76	8	0	-90
KM5258	492595	5906056	90	Aircore	76	6	0	-90
KM5259	492587	5905862	89.8	Aircore	76	7	0	-90
KM5260	492581	5905665	89.2	Aircore	76	9	0	-90
KM5261	492782	5904509	90.3	Aircore	76	13	0	-90
KM5262	492755	5904320	91.8	Aircore	76	9	0	-90
KM5263	495206	5900092	97.3	Aircore	76	12	0	-90
KM5264	495248	5900273	94.8	Aircore	76	9	0	-90
KM5265	495549	5901375	93.3	Aircore	76	15	0	-90
KM5266	495468	5901599	97.2	Aircore	76	12	0	-90
KM5267	495432	5901984	94.4	Aircore	76	10	0	-90
KM5268	495396	5902350	91.8	Aircore	76	13	0	-90
KM5269	495398	5902547	91.3	Aircore	76	9	0	-90
KM5270	495397	5902746	91.1	Aircore	76	12	0	-90
KM5271	495398	5902943	90.7	Aircore	76	12	0	-90
KM5272	495397	5903155	91.2	Aircore	76	13	0	-90
KM5273	495399	5903346	92.8	Aircore	76	7	0	-90
KM5274	496769	5904134	98.7	Aircore	76	12	0	-90
KM5275	496490	5904133	97.3	Aircore	76	13	0	-90
KM5276	496394	5904132	96.9	Aircore	76	9	0	-90
KM5277	496200	5904131	95.8	Aircore	76	10	0	-90
KM5278	496107	5906988	97.5	Aircore	76	9	0	-90
KM5279	496035	5906805	96.7	Aircore	76	12	0	-90
KM5280	495965	5906627	96.3	Aircore	76	11	0	-90
KM5281	495889	5906432	96.1	Aircore	76	10	0	-90
KM5282	495824	5906262	96.4	Aircore	76	15	0	-90
KM5283	495642	5905799	96.8	Aircore	76	10	0	-90
KM5284	495550	5905583	96.7	Aircore	76	9	0	-90
KM5285	495414	5904811	97.2	Aircore	76	9	0	-90
KM5286	495412	5904616	97.1	Aircore	76	9	0	-90
KM5287	488115	5903179	79.7	Aircore	76	9	0	-90
KM5288	488117	5903014	81.8	Aircore	76	9	0	-90
KM5289	488119	5902527	79.3	Aircore	76	9	0	-90
KM5290	488101	5902206	82	Aircore	76	9	0	-90

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KM5291	488081	5902016	81.1	Aircore	76	9	0	-90
KM5292	488362	5901507	79.5	Aircore	76	12	0	-90
KM5293	489283	5901130	80.7	Aircore	76	8	0	-90
KM5294	489380	5901071	81.5	Aircore	76	8	0	-90
KM5295	489733	5900855	85.2	Aircore	76	9	0	-90
KM5296	489884	5900765	84	Aircore	76	12	0	-90
KM5297	494953	5913048	105.2	Aircore	76	13	0	-90
KM5298	494989	5913261	107.4	Aircore	76	15	0	-90
KM5299	495053	5913658	109	Aircore	76	18	0	-90
KM5300	495043	5914827	110.1	Aircore	76	18	0	-90
KM5301	495041	5915043	109.6	Aircore	76	24	0	-90
KM5302	495042	5915229	108.4	Aircore	76	25	0	-90
KM5303	495040	5915695	106	Aircore	76	17	0	-90
KM5304	495039	5915907	105.7	Aircore	76	12	0	-90
KM5305	495039	5916099	104.8	Aircore	76	15	0	-90
KM5306	495535	5916960	106.8	Aircore	76	19	0	-90
KM5307	495727	5916963	107.9	Aircore	76	21	0	-90
KM5308	495955	5916963	107.5	Aircore	76	18	0	-90
KM5309	496139	5916963	107.2	Aircore	76	19	0	-90
KM5310	497042	5916968	107.2	Aircore	76	12	0	-90
KM5311	497039	5916968	107.2	Aircore	76	12	0	-90
KM5312	494986	5917365	105.2	Aircore	76	21	0	-90
KM5313	494969	5917578	104.4	Aircore	76	18	0	-90
KM5314	494914	5918010	108.8	Aircore	76	16	0	-90
KM5315	494879	5918178	107.3	Aircore	76	12	0	-90
KM5316	494861	5918353	108.1	Aircore	76	13	0	-90
KM5317	494838	5918579	107.7	Aircore	76	14	0	-90
KM5318	494816	5918759	107.6	Aircore	76	15	0	-90
KM5319	494805	5918943	110.8	Aircore	76	15	0	-90
KM5320	496018	5918796	106.9	Aircore	76	15	0	-90
KM5321	496237	5918743	107.7	Aircore	76	12	0	-90
KM5322	496400	5918703	108.3	Aircore	76	12	0	-90
KM5323	496697	5918621	106.1	Aircore	76	12	0	-90
KM5324	495693	5918918	107.6	Aircore	76	15	0	-90
KM5325	495533	5918903	107.4	Aircore	76	15	0	-90
KM5326	495325	5918954	107.8	Aircore	76	18	0	-90
KM5327	495141	5918998	108.2	Aircore	76	15	0	-90
KM5328	494972	5919038	107.3	Aircore	76	15	0	-90
KM5329	494686	5919105	107.7	Aircore	76	15	0	-90
KM5330	494495	5919154	106.6	Aircore	76	12	0	-90
KM5331	494301	5919200	106.7	Aircore	76	12	0	-90
KM5332	491883	5915300	100.9	Aircore	76	15	0	-90
KM5333	492555	5915378	103.8	Aircore	76	15	0	-90
KM5334	492784	5915406	105.5	Aircore	76	12	0	-90
KM5335	492976	5915372	105	Aircore	76	21	0	-90
KM5336	493556	5915354	103.5	Aircore	76	18	0	-90
KM5337	493553	5915354	103.5	Aircore	76	18	0	-90
KM5338	493756	5915374	105.4	Aircore	76	15	0	-90
KM5339	493959	5915358	105.5	Aircore	76	21	0	-90
KM5340	494145	5915321	106.2	Aircore	76	18	0	-90
KM5341	494645	5915346	107.9	Aircore	76	24	0	-90
KM5342	494966	5911754	102.9	Aircore	76	15	0	-90
KM5343	494964	5911158	100	Aircore	76	12	0	-90
KM5344	494965	5910955	101.1	Aircore	76	12	0	-90
KM5345	494964	5910773	101.3	Aircore	76	15	0	-90
KM5346	494967	5910573	100.2	Aircore	76	15	0	-90
KM5347	494967	5910368	100.2	Aircore	76	15	0	-90
KM5348	490326	5913429	96.6	Aircore	76	15	0	-90
KM5349	490310	5913181	98	Aircore	76	15	0	-90
KM5350	490268	5912551	101.6	Aircore	76	21	0	-90
KM5351	489888	5911432	94.3	Aircore	76	12	0	-90
KM5352	489809	5911229	93.4	Aircore	76	15	0	-90
KM5353	487766	5913674	85.6	Aircore	76	12	0	-90
KM5354	487747	5913861	86.9	Aircore	76	18	0	-90
KM5355	487652	5914167	89	Aircore	76	18	0	-90
KM5356	487557	5914373	90	Aircore	76	15	0	-90
KM5357	487521	5914553	90.3	Aircore	76	12	0	-90
KM5358	487474	5914727	90.2	Aircore	76	18	0	-90
KM5359	487411	5914924	89.2	Aircore	76	15	0	-90
KM5360	487341	5915100	89.1	Aircore	76	15	0	-90
KM5361	487340	5915098	89.1	Aircore	76	15	0	-90
KM5362	487292	5915322	91	Aircore	76	15	0	-90
KM5363	487281	5916472	90.5	Aircore	76	18	0	-90
KM5364	487278	5916809	93	Aircore	76	15	0	-90
KM5365	486960	5916917	90.1	Aircore	76	15	0	-90
KM5366	486806	5916916	88.7	Aircore	76	15	0	-90
KM5367	487591	5918790	87.9	Aircore	76	15	0	-90
KM5368	487634	5918145	86.5	Aircore	76	18	0	-90
KM5369	487653	5918003	86.7	Aircore	76	18	0	-90
KM5370	487626	5917773	86.5	Aircore	76	18	0	-90
KM5371	487546	5917593	86.1	Aircore	76	21	0	-90
KM5372	487463	5917414	86.3	Aircore	76	21	0	-90
KM5373	487389	5917243	87.2	Aircore	76	21	0	-90
KM5374	484256	5916904	88.3	Aircore	76	15	0	-90
KM5375	485499	5920212	85.9	Aircore	76	12	0	-90
KM5376	485640	5920325	88.4	Aircore	76	15	0	-90
KM5377	486025	5920682	89.8	Aircore	76	15	0	-90
KM5378	487044	5921301	89.4	Aircore	76	12	0	-90
KM5379	487198	5921391	89.2	Aircore	76	15	0	-90
KM5380	487383	5921491	89.8	Aircore	76	15	0	-90
KM5381	490649	5922209	90.5	Aircore	76	12	0	-90
KM5382	490803	5922070	90	Aircore	76	15	0	-90
KM5383	490945	5921943	89.9	Aircore	76	12	0	-90

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KM5384	491092	5921809	89.7	Aircore	76	26	0	-90
KM5385	491092	5921809	89.7	Aircore	76	15	0	-90
KM5386	491391	5921548	90.1	Aircore	76	12	0	-90
KM5387	491556	5921411	90.4	Aircore	76	12	0	-90
KM5388	491870	5921157	91.1	Aircore	76	15	0	-90
KM5389	492222	5920828	89.4	Aircore	76	15	0	-90
KM5390	492360	5920695	91	Aircore	76	18	0	-90
KM5391	492468	5920522	92	Aircore	76	9	0	-90
KM5392	492555	5920342	93.4	Aircore	76	15	0	-90
KM5393	492553	5920349	93.4	Aircore	76	15	0	-90
KM5394	492675	5920188	93.9	Aircore	76	15	0	-90
KM5395	487799	5919067	89.4	Aircore	76	12	0	-90
KM5396	488006	5919101	94	Aircore	76	12	0	-90
KM5397	488261	5919145	92.4	Aircore	76	12	0	-90
KM5398	488619	5919204	88.3	Aircore	76	15	0	-90
KM5399	489012	5919275	87.9	Aircore	76	9	0	-90
KM5400	490127	5919346	88.1	Aircore	76	12	0	-90
KM5401	490329	5919349	90.3	Aircore	76	18	0	-90
KM5402	482471	5916897	81.2	Aircore	76	15	0	-90
KM5403	482270	5916897	80.2	Aircore	76	12	0	-90
KM5404	482070	5916899	79.2	Aircore	76	12	0	-90
KM5405	481872	5916894	79	Aircore	76	12	0	-90
KM5406	482697	5916902	83.2	Aircore	76	12	0	-90
KM5407	485381	5917221	91.7	Aircore	76	15	0	-90
KM5408	485364	5917630	90.3	Aircore	76	18	0	-90
KM5409	485323	5917817	90.2	Aircore	76	18	0	-90
KM5410	485269	5918006	90.8	Aircore	76	15	0	-90
KM5411	485245	5918200	89.6	Aircore	76	12	0	-90
KM5412	485218	5918413	87.6	Aircore	76	12	0	-90
KM5413	485178	5918806	86.3	Aircore	76	12	0	-90
KM5414	485146	5919032	85	Aircore	76	15	0	-90
KM5415	485126	5919221	83.2	Aircore	76	12	0	-90
KM5416	485107	5919388	82.1	Aircore	76	27	0	-90
KM5417	485087	5919601	82.6	Aircore	76	15	0	-90
KM5418	485064	5919801	85.2	Aircore	76	12	0	-90
KM5419	485042	5920796	85.9	Aircore	76	18	0	-90
KM5420	485035	5921001	84.6	Aircore	76	15	0	-90
KM5421	485037	5921183	83.6	Aircore	76	12	0	-90
KM5422	488825	5919240	88.2	Aircore	76	15	0	-90
KM5423	489230	5919311	88.6	Aircore	76	15	0	-90
KM5424	489228	5919311	88.6	Aircore	76	15	0	-90
KM5425	490515	5919346	92	Aircore	76	12	0	-90
KM5426	490682	5919351	89.2	Aircore	76	12	0	-90
KM5427	490902	5919346	91	Aircore	76	12	0	-90
KM5428	491299	5919346	93	Aircore	76	12	0	-90
KM5429	491518	5919349	92.7	Aircore	76	18	0	-90
KM5430	491681	5919351	92.7	Aircore	76	12	0	-90
KM5431	492520	5919403	90.2	Aircore	76	6	0	-90
KM5432	491229	5921684	90	Aircore	76	15	0	-90
KM5433	491717	5921277	90.5	Aircore	76	12	0	-90
KM5434	493631	5922295	98.6	Aircore	76	15	0	-90
KM5435	493813	5922270	99.9	Aircore	76	15	0	-90
KM5436	494990	5922223	106.6	Aircore	76	18	0	-90
KM5437	494792	5922244	103.3	Aircore	76	15	0	-90
KM5438	494030	5922238	100.4	Aircore	76	12	0	-90
KM5439	497160	5922217	101.3	Aircore	76	18	0	-90
KM5440	496988	5922210	102.6	Aircore	76	15	0	-90
KM5441	496782	5922202	101.9	Aircore	76	12	0	-90
KM5442	496557	5922191	99.5	Aircore	76	15	0	-90
KM5443	496383	5922183	102.3	Aircore	76	12	0	-90
KM5444	496186	5922175	104.9	Aircore	76	18	0	-90
KM5445	495981	5922164	104.2	Aircore	76	18	0	-90
KM5446	495576	5922163	107.9	Aircore	76	24	0	-90
KM5447	495383	5922183	106	Aircore	76	21	0	-90
KM5448	495386	5922183	106	Aircore	76	18	0	-90
KM5449	495175	5922204	107.3	Aircore	76	18	0	-90
KM5450	496486	5925439	100.1	Aircore	76	9	0	-90
KM5451	496622	5925300	100.4	Aircore	76	9	0	-90
KM5452	496761	5925153	100.9	Aircore	76	9	0	-90
KM5453	496899	5925007	100.2	Aircore	76	9	0	-90
KM5454	495855	5926064	99.2	Aircore	76	9	0	-90
KM5455	495714	5926212	98.3	Aircore	76	9	0	-90
KM5456	495576	5926357	97.9	Aircore	76	9	0	-90
KM5457	495441	5926499	98.4	Aircore	76	9	0	-90
KM5458	495295	5926649	98.7	Aircore	76	9	0	-90
KM5459	495163	5926787	99.4	Aircore	76	9	0	-90
KM5460	495031	5926927	100.8	Aircore	76	9	0	-90
KM5461	494883	5927081	100.5	Aircore	76	12	0	-90
KM5462	494749	5927222	102.1	Aircore	76	9	0	-90
KM5463	495342	5927850	102	Aircore	76	15	0	-90
KM5464	495763	5927852	102.7	Aircore	76	15	0	-90
KM5465	495959	5927854	102.3	Aircore	76	18	0	-90
KM5466	496451	5927861	103.1	Aircore	76	18	0	-90
KM5467	496642	5927866	103.7	Aircore	76	15	0	-90
KM5468	490311	5903586	87.4	Aircore	76	9	0	-90
KM5469	490118	5903589	84	Aircore	76	9	0	-90
KM5470	490571	5903329	88.2	Aircore	76	9	0	-90
KM5471	490355	5903351	89.3	Aircore	76	9	0	-90
KM5472	490144	5903381	88.7	Aircore	76	9	0	-90
KM5473	490577	5903111	89.7	Aircore	76	9	0	-90
KM5474	490358	5903108	90	Aircore	76	9	0	-90
KM5475	490835	5903350	89	Aircore	76	9	0	-90
KM5476	491081	5903583	88	Aircore	76	9	0	-90

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KM5477	490840	5903585	89.1	Aircore	76	9	0	-90
KM5478	491078	5903346	88.9	Aircore	76	9	0	-90
KM5479	491319	5903350	86.2	Aircore	76	9	0	-90
KM5480	491300	5903113	87.6	Aircore	76	11	0	-90
KM5481	491299	5902864	88.4	Aircore	76	12	0	-90
KM5482	491070	5902871	87.8	Aircore	76	12	0	-90
KM5483	491078	5903108	89.5	Aircore	76	12	0	-90
KM5484	490839	5903109	90.6	Aircore	76	12	0	-90
KM5485	491555	5903306	86.4	Aircore	76	12	0	-90
KM5486	491795	5903302	93	Aircore	76	12	0	-90
KM5487	492275	5903586	89.7	Aircore	76	9	0	-90
KM5488	492518	5903582	94.8	Aircore	76	9	0	-90
KM5489	492761	5903586	91.5	Aircore	76	12	0	-90
KM5490	492520	5903348	92.3	Aircore	76	9	0	-90
KM5491	492279	5903346	92.7	Aircore	76	9	0	-90
KM5492	492085	5903332	93.2	Aircore	76	9	0	-90
KM5493	492117	5903102	92.3	Aircore	76	12	0	-90
KM5494	491785	5902855	88.9	Aircore	76	9	0	-90
KM5495	491565	5902820	87.4	Aircore	76	9	0	-90
KM5496	491563	5902616	87.7	Aircore	76	9	0	-90
KM5497	491793	5902645	86.3	Aircore	76	12	0	-90
KM5498	492034	5902863	92.6	Aircore	76	12	0	-90
KM5499	492034	5902626	93.1	Aircore	76	12	0	-90
KM5500	492276	5902574	92.7	Aircore	76	21	0	-90
KM5501	492037	5902387	87.5	Aircore	76	9	0	-90
KM5502	492276	5902389	90.9	Aircore	76	9	0	-90
KM5503	492512	5902383	88.4	Aircore	76	6	0	-90
KM5504	492512	5902386	88.4	Aircore	76	6	0	-90
KM5505	492509	5902154	88.8	Aircore	76	9	0	-90
KM5506	492284	5902146	88.4	Aircore	76	9	0	-90
KM5507	492277	5901912	87.8	Aircore	76	9	0	-90
KM5508	492278	5901667	85.7	Aircore	76	12	0	-90
KM5509	491559	5902429	86.2	Aircore	76	12	0	-90
KM5510	491317	5902389	87.4	Aircore	76	12	0	-90
KM5511	491078	5902382	86.7	Aircore	76	15	0	-90
KM5512	491078	5902149	85.5	Aircore	76	9	0	-90
KM5513	491311	5902148	84.6	Aircore	76	12	0	-90
KM5514	491313	5901902	85.2	Aircore	76	9	0	-90
KM5515	491318	5901669	85.5	Aircore	76	12	0	-90
KM5516	491080	5901672	84.7	Aircore	76	9	0	-90
KM5517	491080	5901909	85.1	Aircore	76	12	0	-90
KM5518	490833	5901671	85.3	Aircore	76	9	0	-90
KM5519	490118	5901906	85.2	Aircore	76	6	0	-90
KM5520	490122	5901665	85.5	Aircore	76	9	0	-90
KM5521	489847	5901871	82.8	Aircore	76	9	0	-90
KM5522	489871	5901670	84.3	Aircore	76	9	0	-90
KM5523	489643	5901681	83.7	Aircore	76	9	0	-90
KM5524	489640	5901907	81.3	Aircore	76	12	0	-90
KM5525	489860	5902341	85.5	Aircore	76	12	0	-90
KM5526	489644	5902152	82.6	Aircore	76	12	0	-90
KM5527	489885	5902149	84.7	Aircore	76	12	0	-90
KM5528	490117	5902385	86.3	Aircore	76	12	0	-90
KM5529	490117	5902158	85.5	Aircore	76	9	0	-90
KM5530	490829	5902148	86.2	Aircore	76	9	0	-90
KM5531	490118	5902626	87.5	Aircore	76	15	0	-90
KM5532	489881	5902634	86.3	Aircore	76	9	0	-90
KM5533	489646	5902624	84.9	Aircore	76	9	0	-90
KM5534	489631	5902389	84.3	Aircore	76	9	0	-90
KM5535	491072	5902627	88.2	Aircore	76	12	0	-90
KM5536	490117	5912230	95.9	Aircore	76	24	0	-90
KM5537	490117	5912467	99.3	Aircore	76	18	0	-90
KM5538	490118	5912713	100.7	Aircore	76	18	0	-90
KM5539	490124	5912940	99.2	Aircore	76	9	0	-90
KM5540	490118	5913187	97.4	Aircore	76	18	0	-90
KM5541	490113	5913346	95	Aircore	76	18	0	-90
KM5542	489858	5913626	93.3	Aircore	76	15	0	-90
KM5543	489880	5913412	93.2	Aircore	76	15	0	-90
KM5544	489879	5913194	95	Aircore	76	18	0	-90
KM5545	489877	5912958	94.1	Aircore	76	15	0	-90
KM5546	489877	5912712	94	Aircore	76	12	0	-90
KM5547	489874	5912469	94.5	Aircore	76	15	0	-90
KM5548	489640	5912473	94.6	Aircore	76	17	0	-90
KM5549	489636	5912707	95.2	Aircore	76	12	0	-90
KM5550	489641	5912954	95.8	Aircore	76	15	0	-90
KM5551	489638	5913187	92.9	Aircore	76	18	0	-90
KM5552	489638	5913429	91.7	Aircore	76	18	0	-90
KM5553	489635	5913665	93.7	Aircore	76	15	0	-90
KM5554	489411	5913632	92.7	Aircore	76	12	0	-90
KM5555	489404	5913434	92.2	Aircore	76	15	0	-90
KM5556	489401	5913192	93.1	Aircore	76	15	0	-90
KM5557	489395	5912947	95.2	Aircore	76	18	0	-90
KM5558	489404	5912644	95.1	Aircore	76	12	0	-90
KM5559	489156	5912949	92.7	Aircore	76	15	0	-90
KM5560	489164	5913423	92.4	Aircore	76	15	0	-90
KM5561	489161	5913192	92.3	Aircore	76	12	0	-90
KM5562	488924	5913210	91.1	Aircore	76	15	0	-90
KM5563	490354	5913434	96.6	Aircore	76	15	0	-90
KM5564	490598	5913427	95.3	Aircore	76	15	0	-90
KM5565	490831	5913332	96.6	Aircore	76	12	0	-90
KM5566	491074	5913199	97.7	Aircore	76	15	0	-90
KM5567	491315	5913184	96.5	Aircore	76	12	0	-90
KM5568	491313	5912944	96.2	Aircore	76	15	0	-90
KM5569	491079	5912952	98.5	Aircore	76	18	0	-90

KM5570	490836	5913193	95.3	Aircore	76	12	0	-90
KM5571	490839	5912949	99.3	Aircore	76	15	0	-90
KM5572	491081	5912710	99.8	Aircore	76	18	0	-90
KM5573	491313	5912715	97.1	Aircore	76	18	0	-90
KM5574	490830	5912707	97.9	Aircore	76	18	0	-90
KM5575	490599	5912712	99	Aircore	76	18	0	-90
KM5576	490360	5912467	102.4	Aircore	76	21	0	-90
KM5577	490361	5912944	99.1	Aircore	76	12	0	-90
KM5578	490602	5912952	98.5	Aircore	76	18	0	-90
KM5579	490834	5912467	96.6	Aircore	76	15	0	-90
KM5580	491075	5912475	99.3	Aircore	76	12	0	-90
KM5581	491321	5912472	97.8	Aircore	76	9	0	-90
KM5582	491561	5912472	100.2	Aircore	76	12	0	-90
KM5583	491558	5912711	99.1	Aircore	76	18	0	-90
KM5584	491801	5912713	97.6	Aircore	76	18	0	-90
KM5585	491795	5912482	98.6	Aircore	76	15	0	-90
KM5586	492037	5912712	98.1	Aircore	76	18	0	-90
KM5587	492278	5912710	100.4	Aircore	76	15	0	-90
KM5588	492517	5912708	100.8	Aircore	76	18	0	-90
KM5589	492766	5912708	100.8	Aircore	76	12	0	-90
KM5590	492755	5912467	99.3	Aircore	76	18	0	-90
KM5591	492512	5912470	99.2	Aircore	76	18	0	-90
KM5592	492279	5912476	97.8	Aircore	76	21	0	-90
KM5593	492038	5912466	98	Aircore	76	18	0	-90
KM5594	491799	5912231	99.4	Aircore	76	18	0	-90
KM5595	491560	5912225	99.6	Aircore	76	18	0	-90
KM5596	491558	5911745	97.7	Aircore	76	24	0	-90
KM5597	491806	5911748	99	Aircore	76	15	0	-90
KM5598	492034	5911747	100.8	Aircore	76	27	0	-90
KM5599	492527	5911743	101.5	Aircore	76	12	0	-90
KM5600	492753	5911746	104.4	Aircore	76	15	0	-90
KM5601	492278	5911746	101.8	Aircore	76	15	0	-90
KM5602	492521	5911988	102.5	Aircore	76	15	0	-90
KM5603	492041	5911985	98.9	Aircore	76	18	0	-90
KM5604	492277	5912229	102	Aircore	76	18	0	-90
KM5605	492757	5912232	100	Aircore	76	15	0	-90

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Appendix - Significant Intersections

Hole ID	From (m)	To (m)	Width (m)	TREO (ppm)	Pr_6O_{11} ppm	Pr_6O_{11} TREO %	Nd_2O_3 ppm	Nd_2O_3 TREO %	Tb_4O_7 ppm	Tb_4O_7 TREO %	Dy_2O_3 ppm	Dy_2O_3 TREO %
KM5201	4	6	2	873	39	4.5	153	17.5	5	0.5	26	2.9
KM5202	4	5	1	630	40	6.4	141	22.4	4	0.6	20	3.1
KM5203	3	6	3	515	23	4.5	84	16.2	2	0.4	12	2.3
KM5204	3	5	2	669	31	4.6	110	16.5	3	0.5	18	2.6
KM5205	4	6	2	921	42	4.6	152	16.5	4	0.4	20	2.1
KM5205	0	2	2	396	19	4.7	69	17.4	2	0.5	10	2.5
KM5206	5	6	1	1511	83	5.5	321	21.2	6	0.4	30	2
KM5207	1	4	3	418	21	5	75	17.9	2	0.4	10	2.3
KM5208	2	4	2	432	24	5.7	83	19.2	2	0.4	9	2.2
KM5208	0	1	1	382	19	4.9	73	19.2	2	0.6	12	3.2
KM5209	3	7	4	619	32	5.1	114	18.5	3	0.4	14	2.3
KM5210	4	5	1	376	16	4.4	63	16.9	2	0.6	12	3.1
KM5211	7	8	1	710	32	4.5	102	14.4	3	0.4	17	2.3
KM5212	1	2	1	652	29	4.4	102	15.7	3	0.5	17	2.6
KM5213	1	2	1	411	13	3.1	47	11.5	2	0.4	8	2
KM5214	1	2	1	507	30	5.9	97	19.1	2	0.4	11	2.2
KM5214	3	4	1	371	13	3.6	50	13.5	2	0.5	10	2.6
KM5217	3	5	2	912	41	4.5	139	15.2	4	0.4	21	2.3
KM5219	2	4	2	442	16	3.7	62	14.1	2	0.4	11	2.4
KM5220	2	4	2	1001	42	4.1	138	13.8	4	0.4	19	1.9
KM5223	4	7	3	1476	109	7.4	378	25.6	5	0.3	23	1.6
KM5224	6	7	1	846	35	4.2	122	14.5	4	0.5	21	2.5
KM5225	4	9	5	1020	48	4.7	174	17	6	0.6	33	3.2
KM5226	1	3	2	640	29	4.6	107	16.7	3	0.5	18	2.8
KM5227	0	2	2	630	27	4.3	95	15	3	0.4	15	2.4
KM5228	4	6	2	469	19	4	72	15.3	2	0.5	13	2.9
KM5229	5	7	2	431	24	5.5	84	19.6	2	0.5	10	2.3
KM5230	1	4	3	838	46	5.5	155	18.5	4	0.5	21	2.4
KM5231	2	6	4	663	42	6.4	142	21.4	3	0.5	17	2.5
KM5232	1	4	3	559	27	4.8	101	18	3	0.5	13	2.4
KM5234	8	10	2	866	43	4.9	138	15.9	3	0.4	17	2
KM5235	4	7	3	709	31	4.3	111	15.6	3	0.5	19	2.7
KM5237	4	7	3	748	34	4.6	124	16.6	3	0.4	17	2.2
KM5238	8	9	1	1111	49	4.4	183	16.5	6	0.6	36	3.2
KM5239	5	10	5	604	26	4.4	99	16.4	3	0.4	14	2.4
KM5240	7	9	2	681	29	4.2	113	16.6	3	0.5	16	2.4
KM5242	6	8	2	1735	80	4.6	331	19.1	7	0.4	34	2
KM5243	4	9	5	1828	80	4.4	330	18	7	0.4	35	1.9
KM5247	1	2	1	455	20	4.5	79	17.3	2	0.5	13	2.8
KM5248	1	2	1	653	35	5.3	134	20.5	3	0.5	17	2.6
KM5249	1	4	3	720	38	5.3	138	19.2	3	0.5	18	2.6
KM5250	9	13	4	804	34	4.2	128	15.9	4	0.5	23	2.9
KM5252	5	8	3	785	35	4.5	129	16.4	4	0.5	22	2.8
KM5254	5	6	1	1097	63	5.7	209	19	4	0.4	20	1.8
KM5255	4	6	2	886	42	4.8	144	16.2	3	0.4	18	2.1
KM5256	8	11	3	734	27	3.7	108	14.7	4	0.5	21	2.9
KM5257	4	7	3	682	23	3.3	88	12.9	3	0.4	17	2.5
KM5259	3	5	2	558	32	5.7	105	18.9	3	0.5	16	2.8
KM5260	1	4	3	501	20	4	82	16.4	3	0.5	15	3
KM5261	5	7	2	547	25	4.5	97	17.8	3	0.5	14	2.6

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KM5263	5	7	2	365	16	4.3	60	16.5	2	0.5	10	2.7
KM5264	5	6	1	482	25	5.1	85	17.6	3	0.6	16	3.3
KM5264	3	4	1	375	11	3	42	11.2	1	0.4	8	2.2
KM5265	3	6	3	961	33	3.4	122	12.7	4	0.4	24	2.4
KM5266	8	9	1	1541	85	5.5	321	20.8	8	0.5	41	2.6
KM5267	3	5	2	1425	71	5	268	18.8	6	0.4	31	2.2
KM5269	0	2	2	506	18	3.5	67	13.2	2	0.4	10	2
KM5270	2	4	2	453	24	5.2	90	19.8	2	0.5	12	2.6
KM5271	1	4	3	436	19	4.3	69	15.8	2	0.4	10	2.2
KM5272	2	4	2	585	28	4.8	104	17.8	3	0.5	15	2.5
KM5273	2	4	2	472	24	5	91	19.2	2	0.4	12	2.5
KM5273	0	1	1	350	13	3.8	51	14.6	2	0.4	9	2.5
KM5274	3	5	2	978	41	4.2	148	15.1	4	0.4	19	2
KM5276	4	5	1	433	17	3.9	64	14.8	2	0.4	9	2.1
KM5278	3	5	2	1387	57	4.1	199	14.4	4	0.3	23	1.6
KM5279	6	9	3	648	39	6.1	140	21.7	3	0.4	12	1.9
KM5280	6	10	4	981	44	4.5	172	17.5	5	0.5	27	2.8
KM5281	6	7	1	371	15	4.1	56	15.1	2	0.5	11	3
KM5282	5	8	3	463	20	4.4	69	15	2	0.5	13	2.9
KM5283	1	5	4	597	27	4.5	100	16.7	3	0.5	15	2.5
KM5284	3	5	2	1169	54	4.6	200	17.1	4	0.4	23	2
KM5285	3	7	4	457	22	4.8	85	18.6	2	0.5	12	2.6
KM5285	0	1	1	359	18	5.1	66	18.3	1	0.4	8	2.1
KM5287	2	4	2	1344	65	4.8	257	19.1	6	0.4	30	2.2
KM5288	1	2	1	355	16	4.6	61	17.3	2	0.5	9	2.6
KM5289	2	4	2	532	23	4.3	87	16.4	3	0.5	15	2.8
KM5290	3	4	1	985	53	5.3	196	19.9	4	0.4	22	2.2
KM5291	3	4	1	1410	72	5.1	279	19.8	7	0.5	37	2.6
KM5291	5	6	1	879	43	5	168	19.1	5	0.5	24	2.7
KM5293	2	4	2	434	21	4.8	72	16.5	2	0.4	9	2.1
KM5295	5	8	3	854	41	4.8	151	17.7	4	0.4	23	2.7
KM5296	7	8	1	506	24	4.8	83	16.5	2	0.4	12	2.3
KM5297	8	11	3	495	23	4.7	79	15.9	2	0.4	13	2.7
KM5298	11	14	3	937	43	4.6	166	17.7	4	0.5	24	2.6
KM5299	8	14	6	714	40	5.6	153	21.4	4	0.5	20	2.8
KM5299	1	2	1	381	18	4.8	66	17.4	2	0.5	10	2.7
KM5300	16	17	1	484	24	5	87	17.9	3	0.6	15	3.1
KM5302	21	22	1	471	21	4.4	73	15.6	2	0.5	13	2.7
KM5303	12	15	3	1329	56	4.2	220	16.6	7	0.5	40	3
KM5304	7	8	1	1159	81	7	307	26.5	6	0.5	29	2.5
KM5304	0	1	1	511	23	4.4	83	16.2	3	0.5	15	2.9
KM5305	10	12	2	1175	78	6.7	269	22.9	5	0.4	26	2.2
KM5306	13	17	4	977	45	4.6	178	18.3	5	0.5	27	2.8
KM5307	15	19	4	1815	97	5.3	367	20.2	9	0.5	41	2.3
KM5308	10	11	1	582	27	4.7	98	16.8	2	0.4	13	2.2
KM5309	11	15	4	590	27	4.6	103	17.4	3	0.5	18	3
KM5310	6	9	3	517	23	4.5	86	16.6	2	0.4	12	2.3
KM5311	6	8	2	545	23	4.3	86	15.7	2	0.4	13	2.4
KM5313	7	8	1	915	51	5.6	197	21.6	4	0.5	21	2.3
KM5314	7	9	2	665	23	3.4	83	12.6	3	0.4	16	2.5
KM5315	7	9	2	927	33	3.6	127	13.7	3	0.4	19	2
KM5316	8	10	2	955	39	4.1	152	15.9	4	0.4	22	2.3
KM5317	8	10	2	905	44	4.8	169	18.6	4	0.4	22	2.4

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KM5318	9	12	3	809	36	4.4	135	16.7	4	0.5	23	2.8
KM5319	9	11	2	750	31	4.2	117	15.6	3	0.4	18	2.3
KM5320	8	10	2	1077	34	3.1	120	11.2	4	0.4	23	2.1
KM5321	7	8	1	1398	67	4.8	246	17.6	6	0.4	31	2.2
KM5322	8	9	1	738	33	4.4	115	15.6	3	0.4	15	2.1
KM5323	8	9	1	609	26	4.3	93	15.3	3	0.4	15	2.4
KM5324	10	12	2	731	31	4.3	112	15.4	3	0.4	18	2.4
KM5325	10	12	2	793	37	4.7	134	16.8	4	0.5	20	2.5
KM5326	11	13	2	776	33	4.3	121	15.6	4	0.5	20	2.6
KM5327	11	13	2	792	35	4.5	142	18	4	0.5	20	2.6
KM5328	11	13	2	739	31	4.2	125	16.9	4	0.5	21	2.9
KM5329	10	12	2	974	33	3.4	134	13.8	5	0.5	26	2.6
KM5330	9	10	1	1179	32	2.7	129	11	5	0.4	29	2.4
KM5331	8	9	1	661	26	4	105	15.8	3	0.5	19	2.8
KM5332	10	12	2	491	15	3	61	12.4	3	0.6	17	3.4
KM5333	9	12	3	518	18	3.5	70	13.4	2	0.4	10	2
KM5334	8	11	3	565	20	3.5	75	13.2	2	0.4	12	2.2
KM5336	14	16	2	553	18	3.3	72	13.1	3	0.5	14	2.5
KM5337	9	14	5	1006	57	5.6	215	21.4	5	0.5	29	2.8
KM5338	10	13	3	670	30	4.4	113	16.9	4	0.5	20	3
KM5339	16	19	3	668	35	5.3	131	19.6	3	0.4	14	2.1
KM5340	14	18	4	1073	41	3.8	168	15.7	6	0.5	32	3
KM5341	16	19	3	548	27	4.9	99	18.1	3	0.5	14	2.6
KM5341	0	2	2	385	15	3.9	57	14.8	2	0.4	10	2.6
KM5342	10	13	3	1186	54	4.6	214	18	6	0.5	34	2.9
KM5343	6	7	1	1013	44	4.3	173	17	4	0.4	24	2.4
KM5344	6	10	4	1011	52	5.1	192	19	4	0.4	21	2.1
KM5344	11	12	1	351	18	5.1	65	18.6	1	0.4	7	2
KM5345	10	14	4	1163	57	4.9	208	17.8	4	0.4	21	1.8
KM5346	10	12	2	947	38	4	145	15.3	4	0.5	26	2.7
KM5347	8	11	3	1072	42	3.9	160	14.9	4	0.4	23	2.1
KM5348	11	13	2	555	20	3.6	79	14.2	3	0.5	18	3.3
KM5349	11	12	1	541	23	4.2	90	16.7	3	0.5	15	2.8
KM5350	14	17	3	497	19	3.8	75	15.1	3	0.5	16	3.2
KM5351	8	10	2	1277	58	4.5	223	17.4	5	0.4	26	2.1
KM5352	8	10	2	657	34	5.2	125	19.1	3	0.5	18	2.7
KM5352	0	1	1	351	15	4.3	57	16.2	2	0.4	8	2.3
KM5354	11	14	3	1209	59	4.9	221	18.3	5	0.4	23	1.9
KM5355	13	15	2	484	20	4.2	76	15.8	2	0.5	12	2.5
KM5356	11	12	1	3384	188	5.6	717	21.2	14	0.4	64	1.9
KM5357	10	11	1	560	22	3.9	82	14.6	2	0.4	12	2.2
KM5358	12	14	2	1188	58	4.8	220	18.5	5	0.4	27	2.3
KM5359	11	12	1	1103	63	5.7	241	21.9	4	0.4	21	1.9
KM5360	11	13	2	491	17	3.5	66	13.4	3	0.5	14	2.9
KM5361	11	12	1	783	21	2.7	81	10.4	4	0.5	24	3.1
KM5363	9	11	2	566	28	5	112	19.8	3	0.5	16	2.9
KM5363	12	13	1	483	25	5.3	84	17.4	2	0.3	8	1.6
KM5364	12	13	1	1514	70	4.6	269	17.8	4	0.3	20	1.3
KM5365	9	11	2	603	26	4.3	98	16.2	3	0.6	18	3
KM5366	8	10	2	788	33	4.2	134	17	5	0.6	26	3.3
KM5368	13	15	2	712	24	3.4	91	12.8	4	0.5	20	2.7
KM5368	16	17	1	394	15	3.9	55	14	1	0.3	7	1.8
KM5369	13	14	1	1220	47	3.9	181	14.8	4	0.3	20	1.7

KM5370	15	17	2	1193	41	3.4	154	12.9	4	0.3	20	1.6
KM5371	17	20	3	492	22	4.4	69	14.1	2	0.4	11	2.2
KM5372	17	18	1	402	19	4.8	61	15.2	2	0.4	9	2.2
KM5373	15	16	1	595	27	4.5	91	15.3	3	0.5	17	2.9
KM5374	10	13	3	751	48	6.4	175	23.3	3	0.4	16	2.1
KM5377	6	8	2	543	29	5.3	112	20.6	3	0.5	14	2.6
KM5381	0	5	5	712	20	2.8	73	10.3	3	0.4	16	2.3
KM5384	24	25	1	515	26	5	83	16.1	2	0.4	10	1.9
KM5385	10	11	1	515	26	5.1	91	17.8	2	0.5	12	2.4

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