ASX and Media Release
28 February 2024

FURTHER NIOBIUM ASSAYS OF UP TO 8.36% Nb_2O_5 AT KAMEELBURG

Highlights

- **Additional niobium dyke sampling along Kameelburg outcrop reveals assays up to 8.36% Nb_2O_5**
- **Geological mapping to date indicates multiple dykes up to 200m**
- **QEMSCAN results on two metallurgical samples identifies three main REE bearing minerals and niobium oxide.**
- **Seven metallurgical samples to be analysed using SEM and interpreted by highly experienced mineralogist**
- **Plans for maiden niobium and REE diamond drilling progressing well, with track clearance and water preparations being advanced**

Aldoro Resources Ltd ("**Aldoro**", "**The Company"**) (**ASX: ARN**) is pleased to announce the results from the additional rock chip samples (see ASX:ARN 8 February 2024) taken along strike of the niobium rich mafic intrusives which have previously assayed from **5 % to 9 % Nb_2O_5** (see ASX release dated 27 Dec 2023). The seven samples recently taken reported Nb_2O_5 from **1.78 - 8.36**% from the SW Margin dykes which were interpreted to intermittently strike over 200m with multiple narrow dykes, result locations shown in Figure 1 and Table 1.

SAMPLE_ID	Location	Easting	Northing	RL	Nb2O5 ppm	Nb2O5 (%)
24KMRK0001	SW Margin	629947	7702141	1459	30,813	3.08
24KMRK0002	SW Margin	629930	7702138	1458	17,785	1.78
24KMRK0003	SW Margin	629918	7702068	1457	32,321	3.23
24KMRK0004	SW Margin	629899	7702072	1456	24,443	2.44
24KMRK0005	SW Margin	629884	7701964	1453	83,557	8.36
24KMRK0006	SW Margin	629922	7701988	1455	44,428	4.44
24KMRK0007	SW Margin	629890	7702066	1455	24,400	2.44
24KMRK0010	NW Flank	630605	7703260	1586	13,686	1.37
24KMRK0011	NW Flank	630480	7703042	1652	7,690	0.77

Table 1 Analytical Niobium results

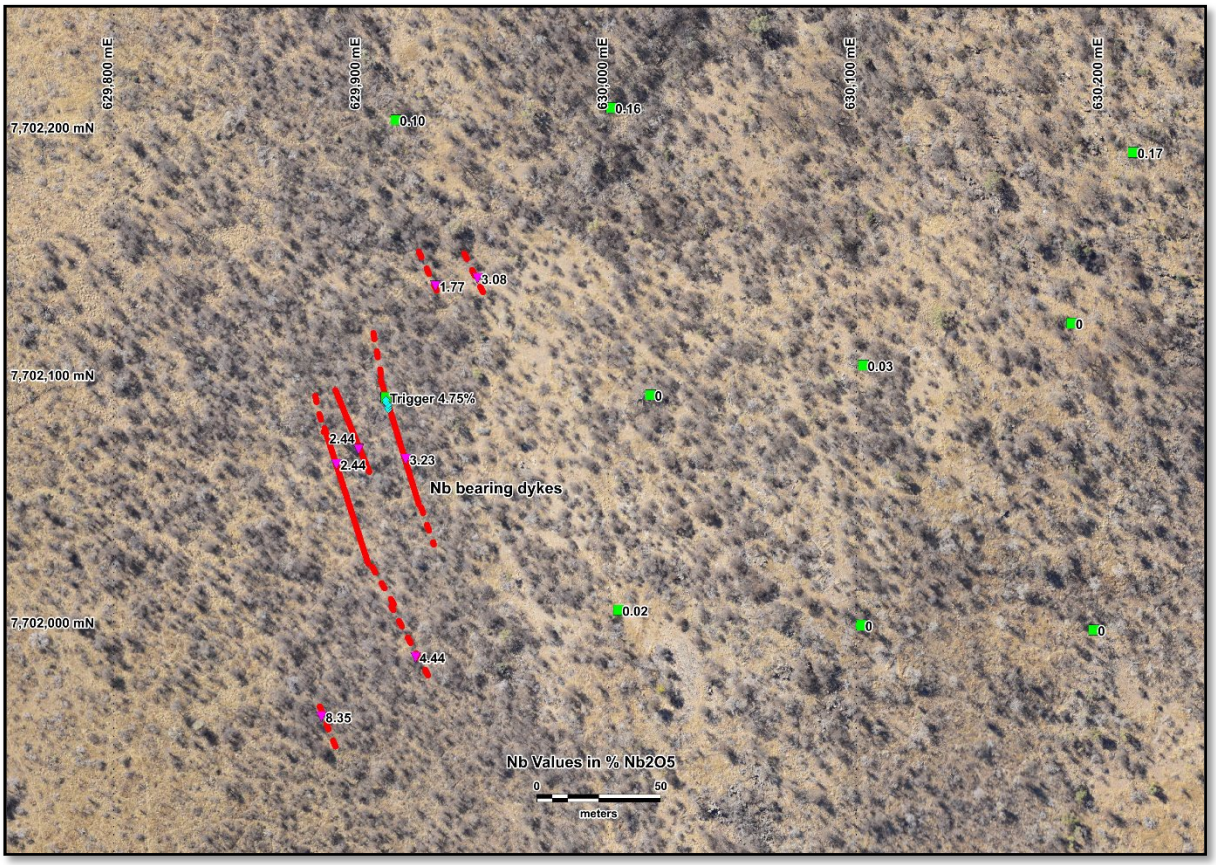

Figure 1: SW Margin recent Nb_2O_5 results from the dykes in carbonatite fenite zone. Datum WGS84_33 South

Figure 2: NW Flank Analytical Nb_2O_5 results. Datum WGS84_33 South

Metallurgical Investigations Progressing

Two metallurgical samples, KM004B and KM008A, were investigated via QEMSCAN, an automated mineralogy and petrological scanner that reveals the grain size and mineral distribution in the disaggregated sample. Recently received QEMSCAN results identified a suite of 22 minerals as listed in Table 2.

Mineral	Description
Fe Ox/OH	Includes undifferentiated magnetite, hematite, goethite
Mn Oxides	Includes cryptomelane, marokite
Ti Oxides	Includes trace rutile
Nb Oxides	Includes Niobium Oxides
Calcite	Includes calcite
Dolomite/Ankerite	Includes dolomite/ankerite
Strontianite	Includes strontianite
MgMnFe Carbonate	Includes magnesite-siderite-rhodochrosite carbonates
Norsethite	Includes norsethite (BaMg carbonate)
Apatite	Includes apatite
Monazite	Includes monazite
Ancylite	Includes possible ancylite
Bastnasite	Includes possible bastnasite
Other Phosphates	Includes other CaMn phosphates
Quartz	Includes quartz
Feldspars	Includes plagioclase and K-feldspar
Micas	Includes biotite and muscovite
Magnesioriebeckite	Includes magnesioriebeckite
Mn Silicates	Includes rhodonite and pyroxmangite
Other Silicates	Includes other silicates occurring in trace amounts
Sulphides	Includes pyrite, pyrrhotite and sphalerite
Sulphates	Includes barite
Others	Includes any other mineral not listed above and occurring in trace amounts

Table 2: List of minerals identified by QEMSCAN

Both samples were found to be dominated by carbonates with a range of compositions. KM004B contains mostly calcite and dolomite/ankerite with minor strontianite, whereas KM008A contains dolomite/ankerite, strontianite and magnesite/siderite/rhodochrosite. Apatite is moderately abundant in KM004B and only occurs in trace amounts in KM008A.

The REE minerals consist of three minerals: monazite, ancylite and bastnasite. The grain size of these REE minerals for these two samples is fine relative to particle size. Nb oxide was also detected. The QEMSCAN mass size data is summarised in Table 3.

Summary		KM004B	KM008A
Particle Size Est P80 (µm)		70	65
REE Combined	Mineral Mass (%)	1.3	6.0
	Ce Deportment (mass %)	95.1	99.7
	Est. P80 Grain Size (µm)	30	33
	Mineral Liberated (%)	19	23
Monazite	Mineral Mass (%)	0.8	2.1
	Ce Deportment (mass %)	70.4	42.8
	Est. P80 Grain Size (µm)	28	36
	Mineral Liberated (%)	12	22
Ancylite	Mineral Mass (%)	0.3	2.5
	Ce Deportment (mass %)	17.5	31.6
	Est. P80 Grain Size (µm)	26	23
	Mineral Liberated (%)	12	8
Bastnasite	Mineral Mass (%)	0.1	1.3
	Ce Deportment (mass %)	7.2	25.3
	Est. P80 Grain Size (µm)	14	29
	Mineral Liberated (%)	2	18
Carbonates	Mineral Mass (%)	69.1	71.5
	Sr Deportment (mass %)	96.7	91.1
	Est. P80 Grain Size (µm)	63	58
	Mineral Liberated (%)	89	83
Oxides	Mineral Mass (%)	11.8	3.2
	Fe Deportment (mass %)	66.0	14.4
	Est. P80 Grain Size (µm)	51	30
	Mineral Liberated (%)	50	27
Silicates	Mineral Mass (%)	5.1	18.8
	Si Deportment (mass %)	85.0	81.7
	Est. P80 Grain Size (µm)	42	53
	Mineral Liberated (%)	44	80

Table 3: REE minerals and mineral masses.

The metallurgical bench testing is ongoing in developing techniques to recover the Nb and REE metals. The QEMSCAN results differ from the Historical TIMA results with the difference possibly due to variation in sample lithology.

The Company has commissioned Diamantina Laboratories, a highly regarded mineralogist Dr Roger Townend, to conduct a SEM study of the REE and Nb minerals using representative splits from the full seven samples. Dr Townend's analysis is expected to provide a better understanding of the mineralisation and will allow for better discrimination of the processes required to liberate the REE and Nb.

Geological Mapping & Drilling

Geological mapping continues in March and will include selected rock chip sampling for targeting drill collars for a maiden 2000m NQ diamond drilling programme to follow. Concurrently water bores are planned to be drilled and a main access track will be cut to facilitate the drilling.

Kameelburg Geology Reference Map

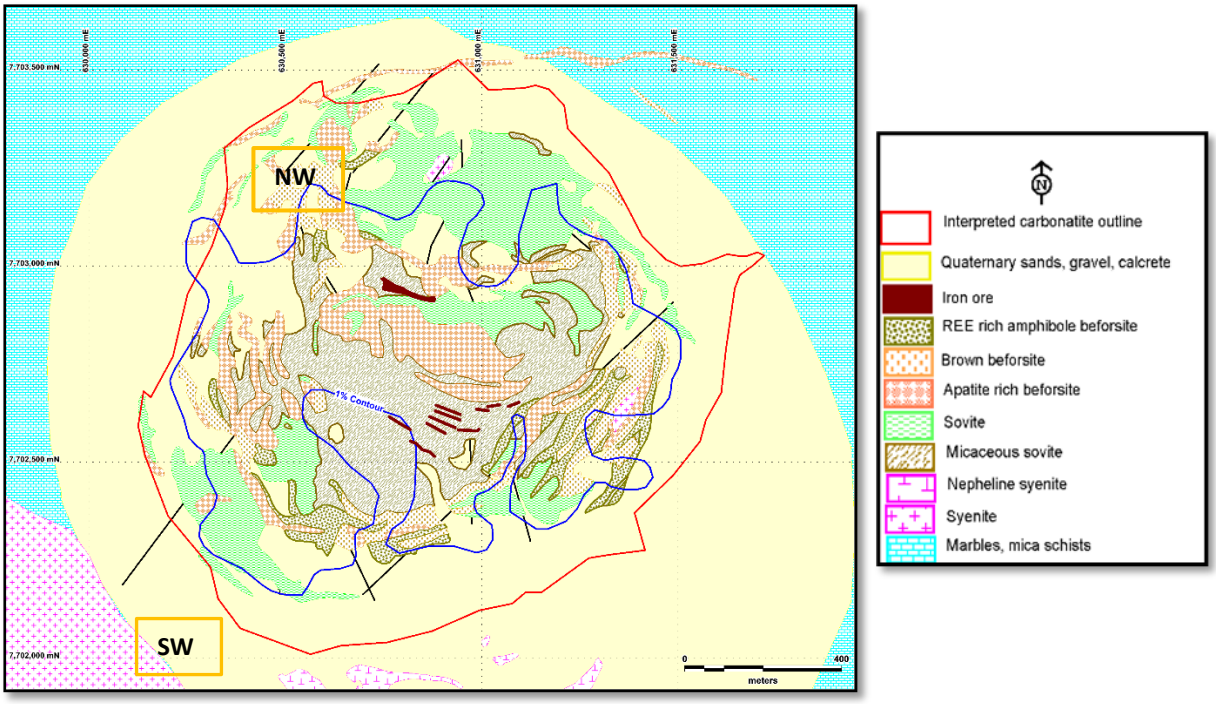

Figure 3: Geological Map of the Kameelburg Carbonatite derived from published data (after Prins, 1981) with >1% TREO contour. **Datum is UTM WGS84 zone 33.**

ELEMENTS				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nb	Nd	Pr	Sm	Tb	Tm	Y	Yb	TREO	Nb2O5
UNITS				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DETECTION				0.5	0.1	0.1	0.1	0.1	0.1	0.2	0.1	10	0.1	0.1	0.1	0.1	0.1	0.5	0.1		
Sample_ID	Easting	Northing	RL	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS	FP6/MS		
24KMRK0001	629947	7702141	1459	625.6	5.5	1.9	5.8	11.9	0.8	313	0.2	21540	195.1	59.3	22.6	1.2	0.2	19.6	1.5	1,519	30,813
24KMRK0002	629930	7702138	1458	1831.6	38.6	11.5	32.5	75.6	5.7	813	0.6	12433	739.8	199.4	112.4	8.5	1.1	137.8	5.2	4,819	17,785
24KMRK0003	629918	7702068	1457	66.9	1.3	0.5	1.1	2.6	0.2	45	X	22594	22.7	6.6	4	0.3	X	5.6	0.5	189	32,321
24KMRK0004	629899	7702072	1456	6.4	0.5	0.2	0.1	0.5	X	3	X	17087	3.1	0.8	0.6	X	X	2.2	0.2	21	24,443
24KMRK0005	629884	7701964	1453	23.1	0.9	0.4	0.4	1.2	0.2	10.5	X	58411	8.3	2.3	1.7	0.2	X	4.6	0.4	65	83,557
24KMRK0006	629922	7701988	1455	57.8	1.7	0.7	1	2.7	0.3	36	X	31058	19.7	5.8	3.6	0.3	X	7.3	0.4	165	44,428
24KMRK0007	629890	7702066	1455	6.8	0.2	X	X	0.2	X	5.8	X	17057	2.5	0.7	0.4	X	X	0.8	0.1	21	24,400
24KMRK0008	630463	7703167	1584	16407.1	41.3	3.9	77.5	162.4	3.5	12742.9	0.2	444	3385.6	1254.5	308.9	14.2	0.3	70.5	1.4	41,365	635
24KMRK0009	630513	7703163	1585	1638.1	23.6	7.1	30.3	63.7	3.4	713.6	0.6	262	746.8	187.5	114.8	5.4	0.9	86	5	4,351	375
24KMRK0010	630605	7703260	1586	3484.5	54	14.6	71	150.9	7.1	1482.8	1.1	9567	1548.7	399.8	243.4	13.8	1.7	173.8	9.3	9,185	13,686
24KMRK0011	630480	7703042	1652	2958.9	32.5	10.2	43.7	91.7	4.4	1367.8	1.1	5376	1180.2	323.2	161.8	8.1	1.2	107.2	7.6	7,561	7,690

Table 3: Full Lanthanide and Nb assay data

References

Prins (1981): Figure 18.9 page 18-23, Section 18.4 Ondurakorume Carbonatite Complex by V.J. Verwoerd. Geological Survey of Namibia Publication: The Geology of Namibia, Vol3: Palaeozoic to Cenozoic by R.McG.Miller

About Aldoro Resources

Aldoro Resources Ltd is an ASX-listed (***ASX: ARN***) mineral exploration and development company. Aldoro has a portfolio of critical minerals including rare earth, lithium, rubidium and base metal projects. The Company's suite of projects include the Kameelburg Nb and REE Project in Namibia, the Wyemandoo lithium-rubidium-tungsten project, the Niobe lithium-rubidium-tantalum Project and the Narndee Igneous Complex in Western Australia.

Disclaimer

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Aldoro operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside Aldoro's control.

Aldoro does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Aldoro, its Directors, employees, advisors or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as of the date of this announcement.

This announcement is not an offer, invitation or recommendation to subscribe for or purchase securities by Aldoro. Nor does this announcement constitute investment or financial product advice (nor tax, accounting or legal advice) and is not intended to be used for the basis of making an investment decision. Investors should obtain their own advice before making any investment decision.

Competent Person Statement

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). It has been compiled and assessed under the supervision of Mark Mitchell, technical director for Aldoro Resources Ltd. Mr Mitchell is a Member of the Australasian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Mitchell consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

This announcement has been approved for release to the ASX by the Board of Aldoro Resources

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (eg' reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• **Rock samples** were collected from outcrop/subcrop of the targeted dyke. At each site approximately 1-5kg of the targeted lithology was collected. Each sample was bagged and tagged (internally and labelled externally). • **Data recording**. At each site pertinent geological and location information was recorded on datasheets, which were later entered into digital spread sheets. Each site was photographed covering each sample site and a general view of the terrain. • Each sample was crushed, pulverised and subsampled (Intertek SP02) and a charge fused with lithium borate and an ICP-MS finish (FP6). Prep work was conducted at Intertek's Tsumeb laboratory before being exported to their Perth laboratory for analysis.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	• No drilling reported.
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.*	• No drilling reported. .
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.*	• No drilling reported.

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core 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 sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No drilling reported. • The rock chip sampling the techniques applied are appropriate for initial investigations. They are not intended to be used is any resource calculations. • The quality control procedures for the rock sampling are considered good in respect to the use of duplicates and standards which were used to measure the repeatability and consistency of the analytical results. • While the measure of representativity is somewhat biased with small samples based on dominate lithology present for the purposes of exploration potential (not resource calculations) the sampling is consider adequate. • The 1-5kg rock samples are appropriate given the dykes mineral grainsize. The soil sample size is appropriate given the amount of material sieved to get the sufficient fine material.
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 derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The rock samples were consigned to Intertek's Tsumeb facility before being shipped to Intertek's Genalysis Laboratory in Perth for Lithium Borate Fusion and ICP-MS finish. These techniques are considered appropriate given the refractory nature of REE in conventional total acid leaches. It is unknown what assay techniques were used for the drill samples. • No handheld instrument data is reported.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• No drilling reported.

Criteria	JORC Code explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	
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.*	• The datum used the WGS84-33S, • A Hitachi pXRF X-MET8000 Expert GEO unit with inbuilt GPS was used for location data
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 rock sampling was targeted on the outcropping dyke of interest from historical data. • The surface sampling is adequate for delineating the 2D spread of any mineralisation but makes no interpretation of the vertical extent of mineralisation. The results must not be considered in any context of mineral grade or resource estimation. Therefore, no resource inferences can be made. The drilling data is not sufficient to indicate any continuity of mineralisation at depth. • No mineral compositing has been done for the surface samples, but for the drill samples some composition was done based on lithology.
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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The grid rock sampling makes no consideration of any structures other than the dyke extending in country rock. • No drilling reported.
Sample security	• *The measures taken to ensure sample security.*	• Samples collected by inhouse geologists and lodged with the laboratory under strict export/import procedures. .
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No sampling audit reviews are mentioned in the open file reports

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.*	• Exclusive Prospecting Licences EPL 7372. 7373 and 7895 are under JV agreement. No native title, wilderness or National Parks impacted. Licences are on local pastoral licences, sub surface minerals owned by the state. • All three EPL are held by the related agreement parties. All three licences have renewals pending, as this is their first renewal period no impediments are envisaged. All necessary documents to fulfil the renewal process have been lodged, and are compliant with the various Acts and regulations, so the renewals should be a mere formality.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous relevant exploration was undertaken by: AMCOR (1960s-70s), results are not quoted in this release. • Kinloch Resources Limited (2012-2016), trigger results are quoted in this release and considered reliable as the author of this release took the samples.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Kameelburg Project is located in the northern Central Damara Orogenic Belt in Namibia and covers the Cretaceous Kameelburg Carbonatite plug and associated radial dykes intruding precursor syenites in the older host Neoproterozoic marbles and schists. The plug is approximately 1.4km in diameter and rises up to 275m above the surrounding peneplain. The intrusion consists of an initial pre-curser phase of nepheline syenite/syenite followed by two sovite and three beforsite phases with remanent rafts of volcanic breccia and syenite, the vestiges of earlier intrusive phases. The country rock consists of marbles, quartzite's, mica schists of the Damara Supergroup. Rare earth metals are known to occur in all five phases with higher concentrations in the more magnesium and iron rich beforesites. The REE mineralisation style is consistent with fractionated carbonatite intrusive plugs.

Criteria	JORC Code explanation	Commentary

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 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.*
		• Rock results tabulated in the report have co-ordinates the RL's are derived by the DTM.
		• No drilling reported.
		• No pertinent information has been excluded in this release.

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 weighting or averaging techniques or truncations are undertaken in the rock sampling. • No data aggregation methods were used other than combining the lanthanide oxide values to get TREO.. • No metal equivalents have been used.
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 effect (eg 'down hole length, true width not known').*	• No relationships between mineralisation widths and intercepts have been made. • No comment on the geometry of the mineralisation has been made. • No drilling conducted.
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.*	• Appropriate location and geology maps are presented in the body of the announcement

Criteria	JORC Code explanation	Commentary
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.*	• All historical (Triger) rock assays have been provided, on the carbonatite and off the carbonatite see ASX:ARN 23 March 2023.
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.*	• No other data apart from surface exploration data is presented in this release including the available metallurgical.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or 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.*	• Short term future work plans involve detailed mapping sampling to reveal the high REE and Nb systems in the Carbonatite Complex. This will allow the placement of drill collars. • Diagrams of future work are not provided as the review is required first.