

# 262 METERS OF NIOBIUM MINERALISATION CONFIRMED WITH LINE 4 ASSAYS AT KAMEELBURG CARBONATITE

#### Highlights

- Assays received for Line 4 confirm the entire 262 meters of the line is mineralised with Niobium at an average grade of 0.52% Nb<sub>2</sub>O<sub>5</sub>.
- Line 4 assays highlighted by:
  - 94 meters at 0.93% Nb<sub>2</sub>O<sub>5</sub> including:
  - $\circ$  30 meters at 1.2% Nb<sub>2</sub>O<sub>5</sub>
- Line 4 assays are all surface assays. A diamond drill hole has been scheduled as part of the current drilling program to test the Niobium grade at depth at Line 4.
- The current diamond drilling program will allow the Company to better understand the resource potential of the carbonatite in addition to grade at depth while paving the foundation for the next stage of resource drilling.
- Further assays and associated Rare Earth assay suite to follow once received.
- Currently Nb<sub>2</sub>O<sub>5</sub> trades at US\$57,000/tonne and the value of ore containing 0.15% Nb<sub>2</sub>O<sub>5</sub> is equivalent to 1 gram per tonne of gold (Au).

Aldoro Resources Ltd ("Aldoro", "The Company") (ASX: ARN) is pleased to advise that the assay results for Line 4 of the pre-drill chip sampling program have been received and have confirmed Niobium mineralisation <u>extends across the entire 262 meter sampling line</u> at an average grade of 0.52%  $Nb_2O_5$ .

Line 4 also had some **exceptional surface intercepts** which are highlighted as follows:

- 94 meters at 0.93% Nb<sub>2</sub>O<sub>5</sub> including:
- $\circ$  30 meters at 1.2% Nb<sub>2</sub>O<sub>5</sub>

The previous low density rock chip sampling program which was conducted on a 100m x 100m grid over the Kameelburg carbonatite revealed a large  $Nb_2O_5$  geochemical anomaly. Prior to committing to undertake a drilling program on the carbonatite, Aldoro conducted a magnetic survey in addition to a pre-drill trenching program to eliminate the risk of selective sampling when utilising the results of the geotechnical surveys to identify a drilling target. See ARN: ASX announcement 31 October 2024.



**Figure 1:** Nb<sub>2</sub>O<sub>5</sub> content over Line 4.





As shown in Figure 1, there is a 150m high grade zone with the average grade of 0.77% Nb<sub>2</sub>O<sub>5</sub>. Of note is the 70 m intersection with average grade of 1.0% Nb<sub>2</sub>O<sub>5</sub> including 38m over 1% Nb<sub>2</sub>O<sub>5</sub> being an average of 1.317% Nb<sub>2</sub>O<sub>5</sub>. A full summary of assay results for Line 4 are provided in Figure 3.

Niobium is currently a highly regarded commodity and is classified as a strategic element by several governments including the USA, Japan and European Union. On a comparative basis Niobium (Nb<sub>2</sub>O<sub>5</sub>) currently trades at US\$57,000/tonne and the value of ore containing 0.15% Nb<sub>2</sub>O<sub>5</sub> is equivalent to 1 gram per tonne of gold (Au).

## **Pre-Drill Trenching Program**

The Company has completed the initial 7 sampling lines that formed the pre-drill trenching program. This program has now been extended to 22 sampling lines with the aim of evaluating the geochemical anomalies in addition to providing more reliable information for the current diamond drilling program. The location of Line 4 is illustrated in Figure 2 below.



Figure 2. Sampling line locations versus magnetic signature

Chip samples for Lines 1, 3, 5 and 6 have been received by the assay laboratory (Center of Modern Analysis and Testing Central South University) and results for  $Nb_2O_5$  and the associated rare earth suite of elements will be reported once received. The Line 4 assay results for  $Nb_2O_5$  are presented in Table 1. The  $Nb_2O_5$  values were back-calculated from Nb content from the assay report.





Sample ID	Easting	Northing	Nb <sub>2</sub> O <sub>5</sub> (%)	Sample ID	Easting	Northing	Nb <sub>2</sub> O <sub>5</sub> (%)	Sample ID	Easting	Northing	Nb <sub>2</sub> O <sub>5</sub> (%)
G5441	630997	7702660	0.19	G5485	630996	7702739	0.04	G5529	631005	7702822	1.14
G5442	630997	7702663	0.23	G5486	630996	7702741	0.10	G5530	631006	7702825	0.83
G5443	630998	7702664	0.13	G5487	630996	7702742	0.16	G5531	631005	7702826	0.89
G5444	630999	7702665	0.07	G5488	630997	7702744	0.13	G5532	631006	7702827	0.66
G5445	630999	7702666	0.11	G5489	630995	7702747	0.19	G5533	631006	7702830	1.29
G5446	630998	7702669	0.19	G5490	630996	7702750	0.14	G5534	631007	7702832	0.62
G5447	630998	7702672	0.19	G5491	630996	7702752	0.11	G5535	631009	7702833	0.70
G5448	630999	7702673	0.10	G5492	630996	7702754	0.14	G5536	631006	7702835	0.66
G5449	630998	7702674	0.10	G5493	630996	7702755	0.20	G5537	631006	7702836	1.65
G5450	630998	7702675	0.10	G5494	630996	7702756	0.23	G5538	631007	7702838	0.99
G5451	630995	7702677	0.23	G5495	630996	7702757	0.14	G5539	631008	7702839	1.76
G5452	630998	7702678	0.14	G5496	630996	7702759	0.29	G5540	631010	7702840	1.50
G5453	630998	7702680	0.11	G5497	630995	7702760	0.90	G5541	631010	7702840	1.79
G5454	631003	7702682	0.11	G5498	631000	7702763	0.96	G5542	631010	7702842	1.36
G5455	631000	7702683	0.21	G5499	631000	7702764	0.23	G5543	631010	7702843	0.96
G5456	631002	7702684	0.26	G5500	631000	7702766	0.26	G5544	631006	7702845	0.82
G5457	630999	7702686	0.19	G5501	631000	7702766	1.23	G5545	631008	7702847	0.87
G5458	630996	7702690	0.19	G5502	631000	7702771	0.74	G5546	631010	7702850	1.34
G5459	630998	7702693	0.36	G5503	630998	7702773	0.11	G5547	631010	7702853	0.74
G5460	630997	7702696	0.19	G5504	630998	7702776	0.29	G5548	631010	7702854	0.82
G5461	630997	7702699	0.27	G5505	631000	7702778	0.11	G5549	631009	7702855	1.24
G5462	630999	7702670	0.29	G5506	631000	7702780	0.19	G5550	631003	7702856	1.22
G5463	630998	7702703	0.33	G5507	631000	7702781	0.30	G5551	631006	7702860	1.07
G5464	630996	7702704	0.20	G5508	631002	7702783	0.63	G5552	631005	7702862	0.49
G5465	630997	7702705	0.19	G5509	631000	7702785	0.56	G5553	631006	7702864	0.73
G5466	630996	7702706	0.29	G5510	631001	7702787	0.77	G5554	631004	7702866	0.99
G5467	630997	7702707	0.10	G5511	631000	7702799	0.56	G5555	631004	7702868	0.36
G5468	630996	7702708	0.13	G5512	631002	7702791	0.39	G5556	631005	7702869	0.87
G5469	630996	7702710	0.17	G5513	631002	7702793	0.72	G5557	631006	7702870	0.62
G5470	630997	7702713	0.13	G5514	631001	7702796	0.63	G5558	631006	7702871	0.33
G5471	630997	7702714	0.13	G5515	631001	7702797	0.40	G5559	631006	7702872	0.72
G5472	630996	7702716	0.13	G5516	631002	7702799	0.37	G5560	631006	7702873	0.40
G5473	630997	7702719	0.07	G5517	631003	7702800	0.51	G5561	631006	7702873	0.34
G5474	630995	7702721	0.11	G5518	631002	7702801	1.04	G5562	631006	7702874	0.43
G5475	630995	7702723	0.13	G5519	631000	7702802	0.86	G5563	631007	7702876	1.60
G5476	630996	7702725	0.19	G5520	631003	7702803	1.23	G5564	631007	7702879	1.39
G5477	630997	7702726	0.13	G5521	631003	7702803	0.94	G5565	631004	7702883	1.14
G5478	630996	7702728	0.06	G5522	631002	7702806	0.80	G5566	631004	7702885	0.69
G5479	630997	7702729	0.30	G5523	631002	7702807	0.60	G5567	631000	7702888	0.37
G5480	630996	7702730	0.11	G5524	631004	7702808	0.87	G5568	631000	7702890	0.24
G5481	630999	7702731	0.16	G5525	631005	7702809	0.69	G5569	631000	7702892	0.66
G5482	630995	7702732	0.13	G5526	631004	7702812	0.46	G5570	631001	7702894	0.14
G5483	630996	7702735	0.13	G5527	631005	7702815	1.04	G5571	631000	7702897	0.47
G5484	630996	7702737	0.34	G5528	631005	770218	0.77				

# Table 1. Line 4 sample assays

Figure 3 presents a comparison of  $Nb_2O_5$  values from Line 4 with nearby samples collected between 2012 and 2013.







Figure 3. Nb<sub>2</sub>O<sub>5</sub> values of Line 4 samples and rock chips between 2012 and 2013

Authorised for and on behalf of the Board,

Sarah Smith Company Secretary





#### **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 REE & Niobium Project in Namibia, the Wyemandoo lithium-rubidium-tungsten project, the Niobe lithium-rubidium-tantalum project and the Narndee Igneous Comples project 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.

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In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above-mentioned announcement.

#### **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) by Dr Minlu Fu. It has been reviewed by Mr. Yuanjian Zhu who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Zhu is Principal Consultant (Resource Geology) at SRK Consulting (Australasia) Pty Ltd 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 Zhu consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.





# JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant</li> </ul>	<ul> <li>Chip samples were evenly collected along the sampling line at two-metre intervals, using a hammer to obtain fresh rock.</li> <li>Each sample is composed of material from at least eight different rocks, with a total weight ranging from 2 to 3 kg.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	Not applicable.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	Not applicable.
Logging	<ul> <li>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.</li> </ul>	All samples are all carbonatite and therefore not logged.





Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Chip samples were collected on site and send to a local laboratory for sample preparation.</li> <li>The samples are dried at 60 degrees Celsius for a maximum of 4 hours. They are then crushed to ensure 90% passes through a 2 mm sieve. A 250-gram portion is split using a riffle splitter for pulverizing. Pulverizing is carried out to achieve 90% passing through a 75-micron sieve.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples were assayed at Center of Modern Analysis and Testing Central South University in Changsha, China.</li> <li>ICP-OES was used.</li> <li>One blank, one CRM, and one pulp duplicate were inserted for every set of 20 samples.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Sample results were compared with nearby rock chips collected between 2012 and 2013, and the results shows consistency.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> </ul>	<ul> <li>Garmin eTrex 201x handheld GPS was used for point location surveys.</li> <li>The coordinate system used is WGS 84 UTM Zone 33S.</li> </ul>





Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Samples were collected continuously at 2-m intervals.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Samples were collected on the surface continuously and without bias.</li> <li>The structural orientation is not relevant for this type of sampling.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples were sent by registered courier from site to China.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews conducted.





#### Section 2 Reporting of Exploration Results

## (Criteria listed in section 1 also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>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.</li> <li>All three licences have successful renewal in August 2024.</li> <li>Recently, the transfer of the Kameelburg Prospecting Licenses EPL 7372, 7373 &amp; 7895 to the Aldoro JV operating company "Kameelburg Exploration Mining (Pty) Ltd" was completed successfully.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous relevant exploration includes:         <ul> <li>AMCOR (1960s-1970s): Surface rock sampling, drilling 11 holes, and collecting bulk samples.</li> <li>Kinloch Resources Limited (2012-2016): Detailed grid rock chip and regolith sampling, hyperspectral surveying, spectral scanning, geological mapping, and metallurgical tests for P<sub>2</sub>O<sub>5</sub>.</li> </ul> </li> </ul>
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





Criteria	JORC Code explanation	Commentary		
		mineralisation style is consistent with fractionated carbonatite intrusive plugs.		
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</li> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Not applicable.		
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	• Not applicable.		
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known 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').</li> </ul>	Not applicable.		
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being	Please refer to the report		





Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	All relative information has been provided in the report
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.	<ul> <li>No other meaningful or material results to report.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Subsequent drilling will be conducted based on the assay results.</li> </ul>

