

62.4% NIOBIUM RECOVERY ACHIEVED FOR KAMEELBURG

Highlights

- Recent metallurgical test work by reputable Bureau Veritas Minerals achieved a successful open cycle niobium recovery level of 62.4% for a selected Kameelburg sample.
 - Latest result is in line with recovery levels by developing mining explorers and producers in the global niobium space.
 - Provides solid confidence leading up to planned maiden drilling targeting rich niobium dykes at Kameelburg.
 - Successful completion of track access clearance & underground water supply.
 - Diamond drill rig and relevant personnel preparations rapidly advancing.
 - Niobium maiden drilling targeted for end of Q3, subject to regulatory approvals.
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Aldoro Resources Ltd (“Aldoro”, “The Company”) (ASX: ARN) is pleased to provide an update on the latest niobium recovery testwork completed by Bureau Veritas Minerals, Perth.

KM004B - Metallurgical Process & Result

The initial beneficiation phase comprised of an open cycle of crushing, grinding, magnetic separation, acid wash and floatation.

The sample KM004B (ASX:ARN 6/12/2023) was taken from the main body of the Kameelburg carbonatite (see Figure 1) and consisted of 100mm diameter core from a beforite dyke. SEM analysis on the sample identified ferrocolumbite as the main niobium mineral. The sample was crushed and ground to 53um with 98% pass and washed in a weak acid before desliming, removing the minus 5um material, followed by floatation with selected reagents and collectors.

The processes resulted in an upgrade of the head feed of 0.74% Nb₂O₅ to 5.5% Nb₂O₅, a multiple of 10.6 times with a **62.4% recovery rate** of Nb₂O₅. The recovery rate and upgrade values are considered encouraging in the initial test phase. The forward process will focus on a finer grind and micro floatation to increase the grade and recovery further.

The latest niobium recovery result provides ample confidence leading towards maiden drilling targeting rich niobium dykes at the Kameelburg Niobium-REE Project.

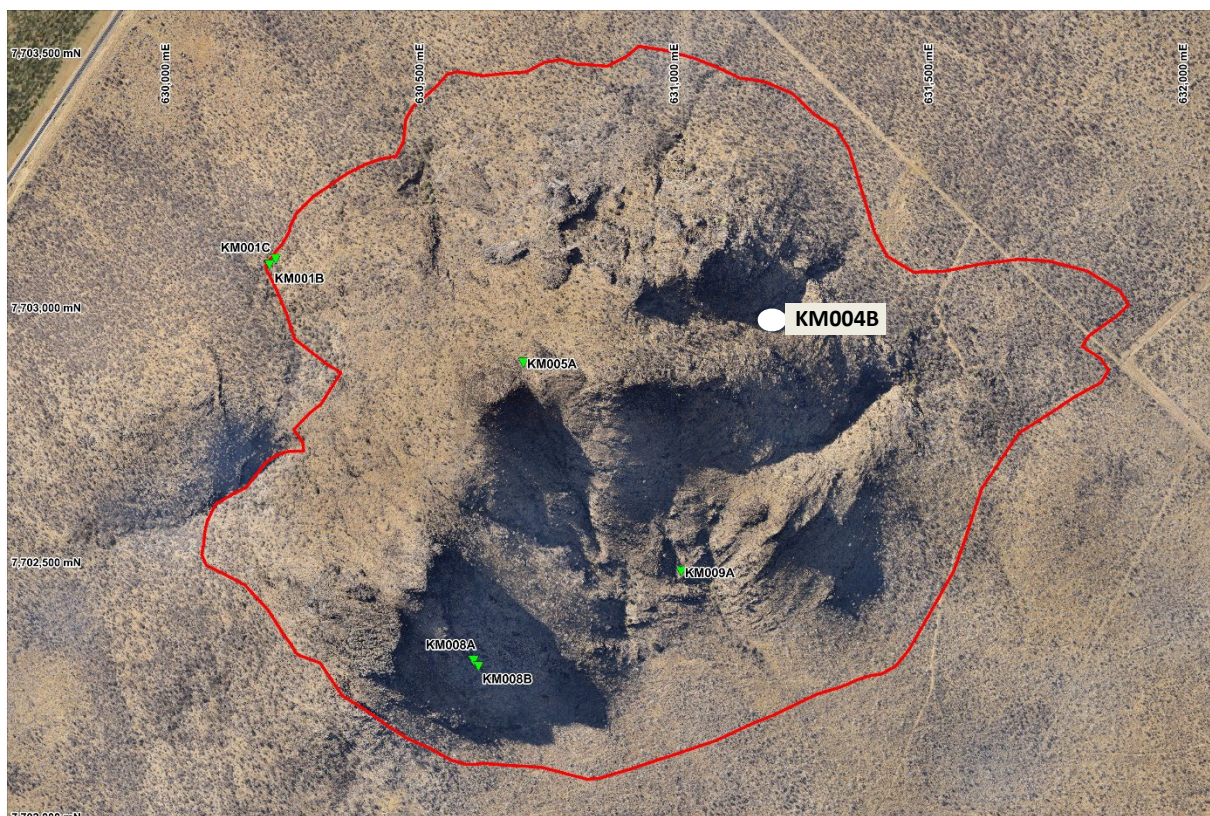


Figure 1: Niobium sample KM004B sample location, carbonatite outline in red.

Advancing the Maiden Niobium Drilling at Kameelburg

The current campaign in prominent scale geological mapping and rock chip sampling will form the basis in targeting drill collars for the upcoming maiden diamond drilling programme. The initial diamond drilling programme will primarily focus on the Kameelburg niobium rich dykes, located at the south-west periphery of the large Kameelburg carbonatite.

Track access clearance toward the niobium dykes, along with water bore drilling, has successfully been completed. At this stage, preparations for diamond drill rig and relevant personnel are advancing, with the initial drill programme targeted to commence at the end of Q3 subject to regulatory approvals.

This Announcement has been approved for release by the Board of Aldoro Resources Ltd

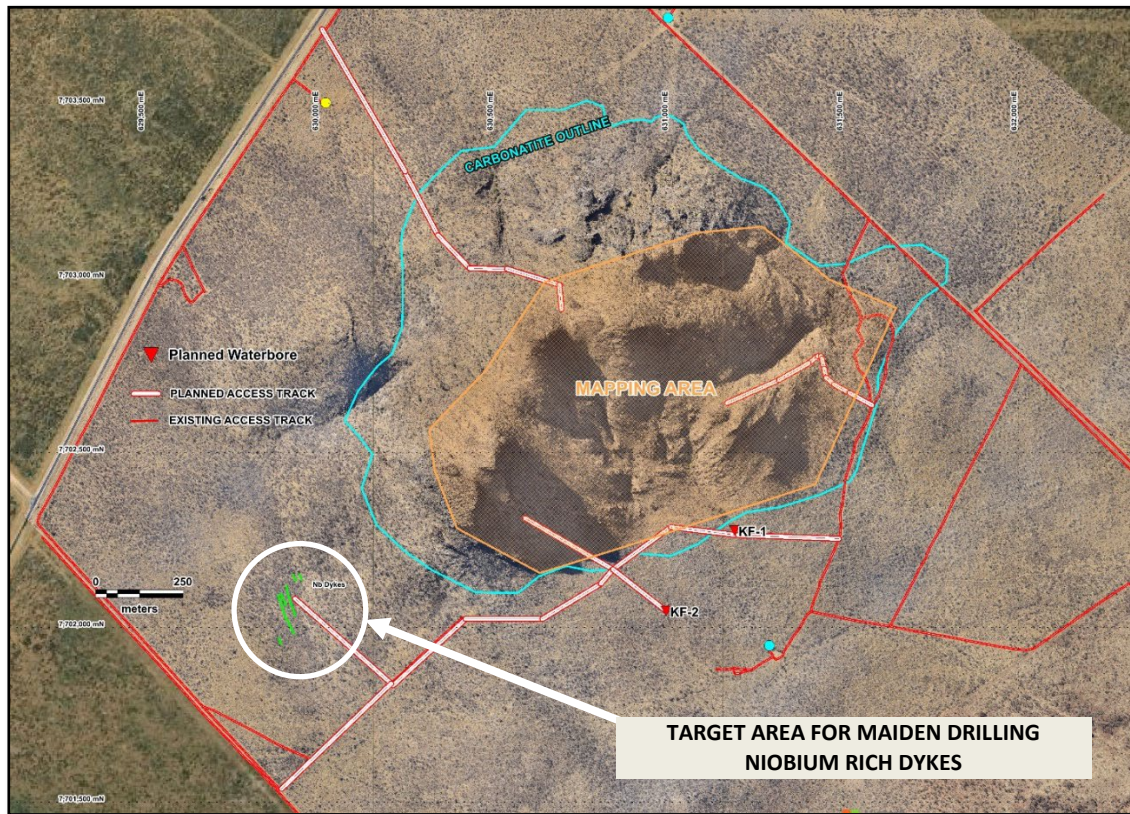


Figure 2: Drill Planning, access tracks and water bores

Kameelburg Geology Reference Map

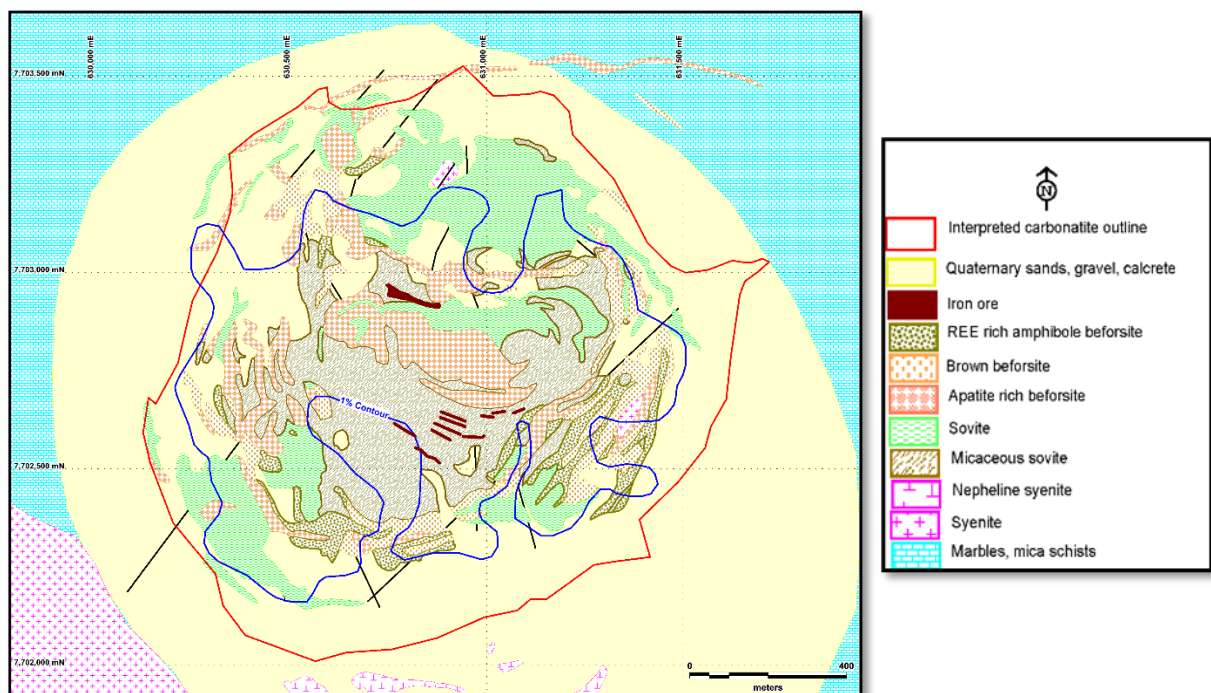


Figure 3: Geological Map of the Kameelburg Carbonatite derived from published data (after Prins, 1981) with >1% TREO contour. Datum is UTM WGS84 zone 33.

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 Project in Namibia, the Wyemadoo 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.

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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.

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.	- Drilling conducted using a Hilti portable drill with a 100mm diameter diamond core barrel. - Individual core lengths up to 1m were collected for bench tests. - Multiple holes drilled at each site to obtain the fresher material. - Samples collected from multiple sites across the carbonatite
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).	Diamond core, holes were vertical into selected sites.
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.	- Core lengths varied due to breakage at weakness in the 1m core. - Multiple sites taken across the Carbonatite targeting the beforosite facies. - No relationship was established 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.	- No detailed logging across the 1m interval only a rock classification. - Logging was considered quantitative in nature.

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.	- Core was kept whole for metallurgical purposes. - The core sampling and the techniques applied are appropriate for metallurgical investigations. They are intended to be used is TREE and Nb recovery purposes. - The quality control procedures for the core sampling are considered appropriate. - Due to the small number of metallurgical samples these are not considered representative and not used in resource calculations, the sampling is considered adequate. - The size of the samples is considered appropriate for bench testing.
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 core samples were consigned to Bureau Veritas Laboratory in Perth for bench testing which includes crushing homogenising for head assay analysis by laser ablation ICP MS. - Standards are not considered relevant to the metallurgical process.
Verification of sampling and assaying	- The verification of 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.	No verification sampling required as the samples are for bench testing for REE and Nb extraction.

Criteria	JORC Code explanation	Commentary
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, - Orthophotos were acquired using a digital camera mounted in a fixed wing aircraft. Ground control points were used for Topographic control
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 metallurgical samples were targeted using historical analytical data, site evaluation (wide outcrop with limited surface alteration). - The core samples are designed for developing a metal recovery flow sheet that is scalable. The results are 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 core.
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 core sites were based on the various befor-site phases for designing a metallurgical extraction process for REE and Nb. - The type of drilling and scope of the sampling is not aimed at identifying key mineralisation structural orientations.
Sample security	The measures taken to ensure sample security.	Samples were collected by company personnel and chaperoned until freighted by DHL to Bureau Veritas.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit reviews were conducted

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	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,	Exclusive Prospecting Licence EPL 7373 is held by Aldoro's JV partner Logan Exploration and Investments CC, the licence is currently being renewed. No native title, wilderness or National

Criteria	JORC Code explanation	Commentary
<i>land tenure status</i>	<i>historical sites, wilderness or national park and environmental settings.</i> <i>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.</i>	Parks impacted. Licences are on local pastoral licences, sub surface minerals owned by the state. All three Project EPL's 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.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	- Previous relevant exploration was undertaken by: AMCOR (1960s-70s), results are not quoted in this release. - Kinloch Resources Limited (2012-2016), results are not quoted in this release
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	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-cursor phase of nepheline syenite/syenite followed by two sovite and three beforosite 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.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i>	- Rock assay results have previously been tabulated, see ASX:ARN 20 March 2023) in the report have co-ordinates the RL's are derived by the handheld GPS the DEM values are yet to be allocated. - Drilling information is supplied in the text. All holes were short vertical holes designed to collect enough material for bench testing.

Criteria	JORC Code explanation	Commentary
	○ 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.	• 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. • No data aggregation methods were used. • 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. • Conversion of down hole to True width has not been done as no down hole orientation data is available.
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
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.	• Nb calculations use an element to oxide factor of 1.4305 (Nb₂O₅). • All relevant exploration data has been presented
Other substantive	• 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,	• All relevant data has been reported

Criteria	JORC Code explanation	Commentary
<i>exploration data</i>	<i>groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	- The forward work programmes include completing the geological mapping and sampling, modelling for drill collar locations and drilling at both the Nb dykes and the REE rich beforosite dykes. The metallurgical sampling was outlined in the ASX:ARN 26 September 2023. - No diagrams of future work are provided in this release.