ASX RELEASE

4 FEBRUARY 2025

WEST ARUNTA PROJECT

FIRST FERRONIOBIUM PRODUCED FROM LUNI

Highlights

- **Excellent results from the first conversion testwork completed on refined concentrate from Luni:**

  Ferroniobium Sample 65.7% Nb, 24.3% Fe

- **This demonstrates the final stage in a conventional process flowsheet and completes proof-of-concept testwork to produce ferroniobium**
- **Ferroniobium is the most established market for niobium products, accounting for approximately 90% of global niobium consumption**
- **A broad range of metallurgical testwork and studies are ongoing across the beneficiation, refining and conversion processing stages, along with testwork to assess the production of other high-value niobium products**

Figure 1: Ferroniobium produced from conversion testwork

WA1 Resources Ltd (ASX: WA1) (**WA1** or **the Company**) is pleased to announce results from continued metallurgical testwork undertaken on niobium concentrate from Luni at the 100% owned West Arunta Project in Western Australia.

WA1's Managing Director, Paul Savich, commented:

"To have progressed from our first process testwork to the production of a small amount of ferroniobium in just over one year is an incredible achievement and demonstrates the amenability of Luni's mineralisation to a conventional ferroniobium flowsheet.

"With the data from this proof-of-concept work now covering the entire conventional ferroniobium process flowsheet, we are continuing with a range of testwork programs as well as expanding testing to produce other high-value niobium products.

"We are also progressing beneficiation testwork on drillhole samples from a broader area of the northeastern focus zone with the aim of defining an envelope of mineralisation which supports our development ambitions."

Niobium Industry Metallurgy Overview

Ferroniobium production at existing operations currently involves concentration of ore, primarily via flotation (**Stage 1: Beneficiation**), and intermediate processing (**Stage 2: Refining**) to produce a concentrate grading between ~50-60% Nb_2O_5[1]. This concentrate is then, most commonly, converted to ferroniobium (FeNb, ~65% Nb), via conventional aluminothermic conversion (**Stage 3: Conversion**).

Ferroniobium accounts for around 90% of a total global niobium market of approximately 125,000tpa[2].

Figure 2 utilises publicly available information to present simplified ferroniobium process flowsheets from the three existing niobium operations.

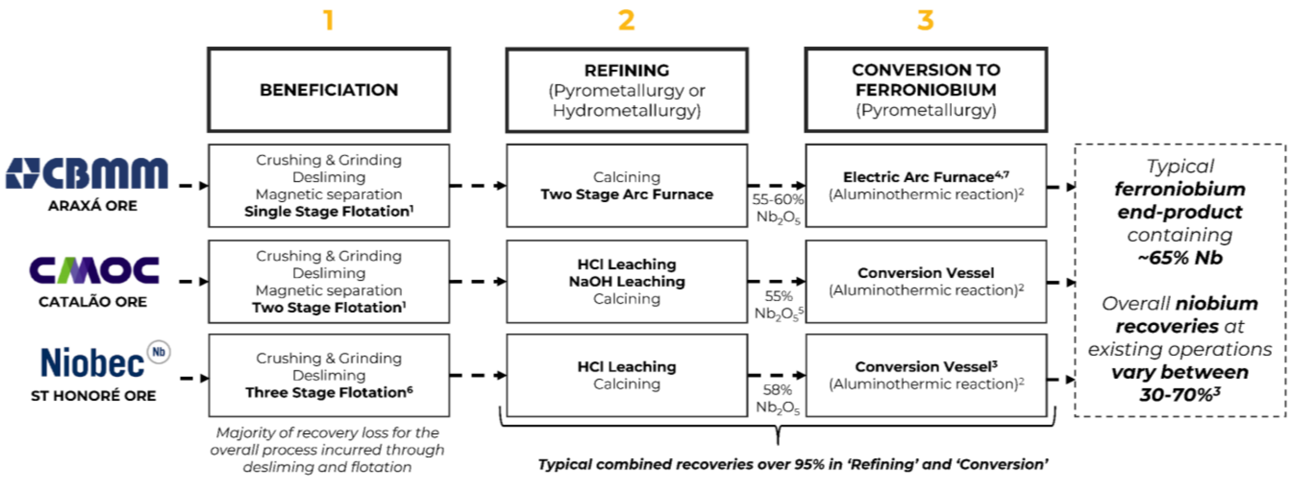

Figure 2: Simplified, adapted process flowsheets for the three existing operations

See Table 4 for full details of source documents for the above information

Conversion Process Overview

At existing niobium operations, conversion of refined niobium concentrate to ferroniobium is undertaken through pyrometallurgical processes. This involves an aluminothermic reaction generated by mixing niobium concentrate with iron (either oxide or metallic form), aluminium and fluxing agents, and smelting this mixture in either a conversion vessel or electric arc furnace. The aluminium added to the mixture acts as a reductant and the fluxing agents lower the melting temperatures of the metals. This results in a reaction which is exothermic and generates the heat required to smelt the niobium and iron to form ferroniobium.

The conversion can be conducted in either a standard conversion vessel or electric arc furnace. The key difference is the conversion vessel relies solely on the heat generated from the aluminothermic reaction, whereas the electric arc furnace uses external power to supplement some of the aluminium required for the reaction.

Notes 1. *Gibson. C.E., Kelebek. S, and Aghamirian.M: 'Niobium Oxide Mineral Flotation: A Review of Relevant Literature and the Current State of Industrial Operations' International Journal of Mineral Processing (2015)*

2. *Internal company estimated production figures adapted from: USGS 2024 Commodity Summary, CMOC Website at https://en.cmoc.com/html/Business/BRA-Nb-P/ viewed on 31/1/2025 & CBMM 2023 Sustainability Report*

Metallurgical Discussion - Luni Niobium Deposit

The testwork results reported herein involved converting refined niobium concentrate from Luni (generated in refining testwork, see ASX announcement dated *7 October 2024*) to ferroniobium through conventional processes in a standard conversion vessel, similar to those utilised at the existing niobium operations.

This testwork complements the previously announced testwork conducted on the beneficiation and refining stages of the flowsheet (see ASX announcements dated *19 June*, *7 October* and *9 December 2024*) and completes the final stage in proof-of-concept testing utilising a conventional ferroniobium flowsheet (Figure 3).

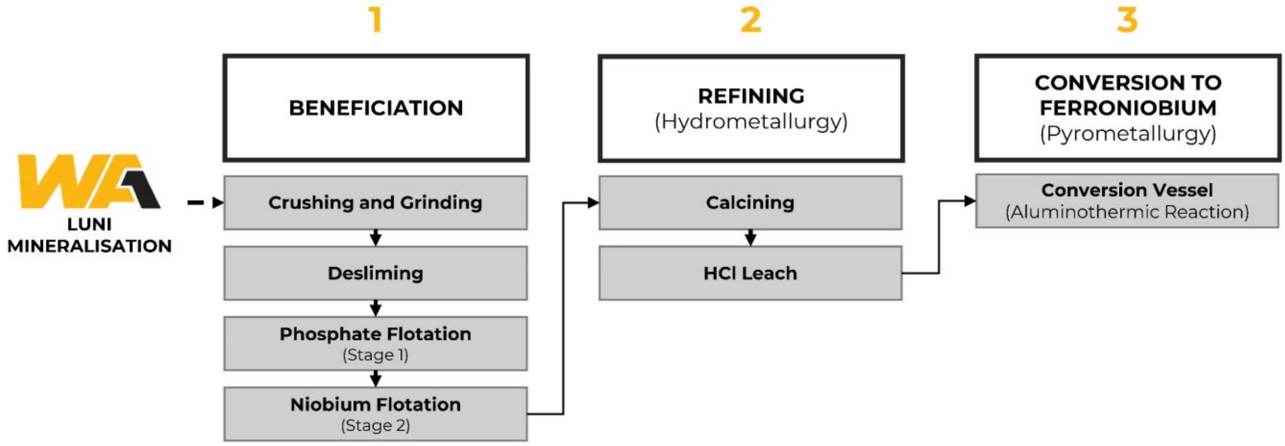

Figure 3: Simplified, process flowsheet to producing ferroniobium

Conversion Testwork Program

The primary objective of this testwork was to provide an initial, proof-of-concept demonstration of the final stage in the conventional process used to produce ferroniobium (Stage 3: Conversion) from Luni mineralisation.

The results presented herein were generated from testwork undertaken at a reputable laboratory in Perth, under the supervision of WA1 metallurgical staff.

The test was designed to convert refined Luni niobium concentrate, using a mixture of conventional additives, to form ferroniobium. The test also aimed to demonstrate that key remaining impurities in the concentrate could be removed as slag from the desired end-product.

A total of 0.5 kg of clean concentrate, generated from previously reported refining testwork (see ASX announcement dated *7 October 2024*) was composited and used as the sample input for this testwork. Details of the head assay and original drillhole sample location of the composite are presented in Table 2 and Table 3.

The refined niobium concentrate sample was blended with iron oxide, aluminium powder and fluxing agents. The conversion test was then undertaken and the reaction completed within a minute from ignition. The smelted materials were then left to cool naturally, before being separated and crushed, with samples of the matte and slag then split for assay analysis.

A short video of the conversion reaction is available on the Company's website at www.wa1.com.au.

Testwork Results

This test was proof-of-concept in nature and has demonstrated the ability for refined concentrate from Luni's mineralisation to be converted to ferroniobium utilising a conventional aluminothermic reaction process. The test has also demonstrated the ability of this process to remove key impurities in the refined concentrate, with those elements reporting to the slag.

The test returned a **ferroniobium sample grading 65.7% niobium and 24.3% iron** (refer to Table 1 for full assay results).

Typical specifications for commercial ferroniobium ranges between 63.5-67.5% niobium, with the majority of the remaining material being iron (28-32% Fe). Other key elements generally assessed by ferroniobium end-users (i.e. steel producers) are silicon, aluminium, phosphorus, carbon and lead.

Figure 4: Conversion vessel with ferroniobium cooling following the test

Assay analysis of the testwork sample reported all elements within acceptable limits for what is generally considered standard grade ferroniobium, other than aluminium and iron. It is noted that additional aluminium was added during this first conversion testwork to enhance the likelihood that the phase reaction would complete. Future testwork programs will aim to refine the mixture of iron and aluminium added in the conversion stage to deliver typical target specifications for commercial ferroniobium products.

Table 1: Ferroniobium sample assays from the conversion test

	Nb (%)	Fe (%)	Ta (%)	Mn (%)	S (%)	Si (%)	Al (%)	P (%)	C (%)	Sn (%)	Pb (%)	U (ppm)	Th (ppm)
Ferroniobium Product	65.69	24.29	0.04	0.76	0.04	1.73	4.37	0.21	<0.10	0.02	<0.01	3	2

Percentages rounded to two decimal points

The bench-scale nature of the testwork means there are inherent differences and factors to be considered when making comparison to larger-scale testwork and commercial-scale production.

The niobium recovery in this testwork was 84%, which exceeded expectations considering the scale of the test and the anticipated inefficiency of utilising a small crucible. At existing niobium operations, recoveries in the conversion stage are typically over 95%. Future testwork programs will incorporate further evaluation and optimisation of conversion recoveries.

WA1's Niobium Processing Advisor, Clovis Sousa, commented:

"The response of Luni's mineralisation throughout concentration, refining and conversion processes is impressive. Both the quality of the results and timing to achieve them has been

surprising. Following the results from the beneficiation and refining testwork, I was confident about the success of the conversion.

"We used additional aluminium to ensure an effective reaction, however achieving these results in the first trial is outstanding."

Ongoing & Future Testwork Programs

A broad range of metallurgical testwork and studies on mineralisation from Luni are ongoing across the beneficiation, refining and conversion stages. The key objective of ongoing testwork is to continue to derisk and optimise the currently envisaged flowsheet and ultimately provide confidence in the ability to process a significant portion of the deposit to underpin the Company's development ambitions.

Beneficiation Testwork: The Company is progressing beneficiation testwork and studies for a variety of purposes, including optimisation of the flotation reagent regime, assessing the impact of site water on flotation and derisking the feed variability by testing additional drillholes from a broader area of the northeastern focus zone at Luni ahead of a detailed variability program. Opportunities for further investigation and optimisation in the beneficiation stage include comminution, classification, equipment selection and use of other physical beneficiation techniques.

Refining and Conversion Testwork: Further optionality and optimisation testing of the refining and conversion stages is also being conducted to assess the most optimal path to meet a variety of concentrate and end-product specifications. This work includes the assessment of producing other high-value niobium products, including niobium oxide for potential application in the super alloy and battery markets.

The testwork and studies being conducted across these three process stages are designed to support flowsheet development, initial mine planning and various other workstreams and assessments. The outcomes of these programs and other future testwork programs will be continually reviewed and assessed to inform the Company's pre-development activities.

ENDS

This Announcement has been authorised for market release by the Board of WA1 Resources Ltd.

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Competent Person Statement
The information in this announcement that relates to metallurgical testwork results is based on information compiled by Mr. Roy Gordon who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Gordon is a full-time employee of WA1 Resources Ltd and has sufficient experience which is relevant to the information and activities under consideration to qualify as competent to compile and report such information. Mr. Gordon consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

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About WA1

WA1 Resources Ltd is an S&P/ASX 300 company based in Perth, Western Australia and trades under the code WA1.

WA1's objective is to discover and develop tier 1 assets, including the Luni niobium deposit, in Australia's underexplored regions and create value for all stakeholders. We believe we can have a positive impact on the remote communities within the lands on which we operate. We will execute our exploration and development using a proven leadership team which has a successful track record of working in WA's most remote regions.

Forward-Looking Statements

This ASX Release may contain certain "forward-looking statements" which may be based on forward-looking information that are subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. For a more detailed discussion of such risks and other factors, see the Company's Prospectus and Annual Reports, as well as the Company's other ASX Releases. Readers should not place undue reliance on forward-looking information. The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this ASX Release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Table 2: Collar location of drillhole (metallurgical sample)

Hole ID	Drill Type	Easting	Northing	RL (m)	Dip (Degrees)	Azimuth (Degrees)	Depth (m)
LUDD23030	DD	437496	7540710	382	-60	180	126.2

Table 3: Niobium concentrate assays

	Nb_2O_5 (%)	Fe_2O_3 (%)	Ta (%)	SiO_2 (%)	CaO (%)	Al_2O_3 (%)	P_2O_5 (%)	SrO (%)	U (ppm)	Th (ppm)	Pb (%)
Feed Concentrate*	66.17	13.44	0.02	2.63	2.55	0.74	0.31	7.40	179	373	0.09

** Feed Concentrate has been composited and re-analysed from earlier beneficiation testwork*

Table 4: Sources for the internally generated schematic in Figure 2 above

Note	Source
	All information derived from Henrique. P: 'Production of niobium: Overview of processes from the mine to products' Journal of Mining and Metallurgy. (2022) unless referenced below.
1	Gibson, C.E: 'Niobium Oxide Mineral Flotation: A Review of Relevant Literature and the Current State of Industrial Operations' International Journal of Mineral Processing. (2015)
2	Shikik. A: 'A review on extractive metallurgy of tantalum and niobium' Journal of Metallurgy. (2020)
3	IAMGOLD Corporation, NI 43-101 Technical Report, Update on Niobec Expansion. (2013)
4	CBMM Infographic, viewed at <https://cbmm.com/assets/infographic/en/index.html> on 13/2/2024
5	China Molybdenum Co., Ltd. 'Major Transaction Acquisition of Angle America PLC's Niobium and Phosphates Businesses'. (2016)
6	One of Niobec's flotation steps is completed after HCl leaching
7	Does not include niobium pentoxide production steps, outputs or recoveries

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

CRITERIA	COMMENTARY
Sampling techniques	▪ Geological information and metallurgical testwork samples referred to in this ASX Announcement were derived from diamond drilling programs. ▪ Core samples were collected with a diamond drill rig and were PQ core diameter. ▪ The core was logged and photographed onsite and then transported to Bureau Veritas in Perth for cutting and sampling. Whole core was sampled for metallurgical testwork in its entirety to preserve sample integrity and maximise sample mass. ▪ At Bureau Veritas, the core was selected and composited based on assays from RC twin samples, pXRF analysis of intervals and geological logging to identify mineralised zones and domains. Mineralised core was composited in its entirety within the selected domains.
Drilling techniques	▪ Diamond holes were drilled with PQ3 (83mm) rods. PQ core was triple tubed to improve core recovery.
Drill sample recovery	▪ The composite for the metallurgical testwork program reported covered an interval from 48 to 75.8m depth. ▪ Additional laboratory assays were undertaken on the samples submitted for the testwork and showed good alignments to the drill assays.
Logging	▪ All samples used for the metallurgical testwork were geologically logged to a detail level that supported the metallurgical studies. ▪ The samples were logged qualitatively and quantitatively in nature for geology, alteration, and mineralisation by the Company's geological personnel. Drill logs were recorded digitally and have been verified. ▪ Detailed logging of the diamond core was completed onsite.
Sub-sampling techniques and sample preparation	▪ At Bureau Veritas, the entire core composite (refer to Tables 2 and 3) was stage crushed to P100 3.35mm, blended and homogenised, and subsequently split into charges for various testwork programs. Approximately 130kg was dispatched to SGS Lakefield for beneficiation testwork. ▪ Subsequent to beneficiation, flotation concentrate samples were received by Nagrom and composited in their entirety to provide approximately 1.2kg feedstock for refining testwork. The concentrate composite was homogenised and subsampled into charges for head assay, and calcine/leach testwork. ▪ Several small scale refining tests were completed to identify suitable parameters for refining. After which, approximately 0.5kg of concentrate was processed to generate the main feedstock for the smelting testwork. ▪ The refined concentrate was dried prior to mixing with reactants for the aluminothermic conversion.

CRITERIA	COMMENTARY
Quality of assay data and laboratory tests	▪ Unless otherwise noted, all assays reported are those conducted by Nagrom, using a combination of fused-bead XRF, Leco and ICP-MS for solid samples, and ICP-OES and ICP-MS for solution samples ▪ A specialised sample/flux ratio and fusion technique was employed to ensure the matte sample was completely dissolved in the fused bead during preparation. This was undertaken to account for any reactions between sample and platinum-ware. ▪ Standard laboratory QAQC was undertaken and monitored by the laboratory and mass balances for each test reported by Nagrom were reconciled against the feed grade. This is subsequently reviewed by WA1 upon receipt of results. ▪ Verification of the ferroniobium assay was undertaken at two separate external laboratories to verify the metal analysis. The results of these checks generally agreed with the Nagrom analysis.
Verification of sampling and assaying	▪ Mineralised intersections have been verified against the downhole geology and pXRF analysis. ▪ Logging and sampling data was recorded digitally in the field.
Location of data points	▪ Drillhole collars were initially surveyed and recorded using a handheld GPS. Drill collars are then surveyed with DGPS system at appropriate stages of the program. ▪ All co-ordinates are provided in the MGA94 UTM Zone 52 co-ordinate system with an estimated horizontal accuracy of ±0.008m and an estimated vertical accuracy of ±0.015m for the DGPS system. ▪ Azimuth and dip of the drillholes is recorded after completion of the hole using a gyro. A reading is taken every 30m with an assumed accuracy of ±1 degree azimuth and ±0.3 degree dip.
Data spacing and distribution	▪ See drillhole table for hole position and details.
Orientation of data in relation to geological structure	▪ The orientation of the oxide-enriched mineralisation is interpreted to be sub-horizontal and derived from weathering of primary mineralisation. The orientation of primary mineralisation is poorly constrained due to the limited number of drillholes that have penetrated to depth. ▪ See drillhole table for hole details and the text of this announcement for discussion regarding the orientation of holes. ▪ Drillholes were designed based on interpretation from modelled geophysical data and results from drilling to date. ▪ Oxide mineralisation is currently interpreted as a sub horizontal unit.
Sample security	▪ Sample security is not considered a significant risk with WA1 staff present during collection. ▪ All geochemical samples were collected and logged by WA1 staff, and delivered to the laboratory
Audits or reviews	▪ The program and data is reviewed on an ongoing basis by senior WA1 personnel.

Section 2 Reporting of Exploration Results

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

CRITERIA	COMMENTARY
Mineral tenement and land tenure status	▪ All work completed and reported in this ASX Announcement was completed on E80/5173 which is 100% owned by WA1 Resources Ltd. ▪ The Company also currently holds four further granted Exploration Licences and three Exploration Licence Applications within the area of the West Arunta Project.
Exploration done by other parties	▪ The West Arunta Project has had limited historic work completed within the Project area, with the broader area having exploration focused on gold, base metals, diamonds and potash. ▪ Significant previous explorers of the Project area include Beadell Resources and Meteoric Resources. Only one drill hole (RDD01) had been completed within the tenement area by Meteoric in 2009 (located approximately 17km southwest of the Luni deposit), and more recently additional drilling nearby the Project has been completed by Encounter Resources Ltd. ▪ Most of the historic work was focused on the Urmia and Sambhar Prospects with historic exploration (other than RDD01) being limited to geophysical surveys and surface sampling. ▪ Historical exploration reports are referenced within the WA1 Resources Ltd Prospectus dated 29 November 2021 which was released by ASX on 4 February 2022. ▪ Encounter Resources are actively exploring on neighbouring tenements and have reported intersecting similar geology, including carbonatite rocks.
Geology	▪ The West Arunta Project is located within the West Arunta Orogen, representing the western-most part of the Arunta Orogen which straddles the Western Australia-Northern Territory border. ▪ Outcrop in the area is generally poor, with bedrock largely covered by Tertiary sand dunes and spinifex country of the Gibson Desert. As a result, geological studies in the area have been limited, and a broader understanding of the geological setting is interpreted from early mapping as presented on the MacDonald (Wells, 1968) and Webb (Blake, 1977 (First Edition) and Spaggiari et al., 2016 (Second Edition)) 1:250k scale geological map sheets. ▪ The West Arunta Orogen is considered to be the portion of the Arunta Orogen commencing at, and west of, the Western Australia-Northern Territory border. It is characterised by the dominant west-north-west trending Central Australian Suture, which defines the boundary between the Aileron Province to the north and the Warumpi Province to the south. ▪ The broader Arunta Orogen itself includes both basement and overlying basin sequences, with a complex stratigraphic, structural and metamorphic history extending from the Paleoproterozoic to the Paleozoic (Joly et al., 2013).
Drill hole Information	▪ Refer to Table 2 for drill hole details.
Data aggregation methods	▪ Not applicable as drilling results are not being reported in this announcement. ▪ No metal equivalents have been reported.

CRITERIA	COMMENTARY
Relationship between mineralisation widths and intercept lengths	▪ Not applicable as drilling results are not being reported in this announcement.
Diagrams	▪ Refer to figures provided within this ASX announcement.
Balanced reporting	▪ All relevant information has been included and provides an appropriate and balanced representation of the results.
Other substantive exploration data	▪ All meaningful data and information considered material and relevant has been reported.
Further work	▪ Further interpretation of drill data and assay results will be completed over the coming months, including ongoing petrographic and mineralogical analysis. ▪ Planning and implementation of further drilling is in progress and analysis of existing drill samples is ongoing. ▪ Further metallurgical studies are in progress and engineering factors are under consideration. ▪ Work on the project is ongoing on multiple fronts.