



Andromeda Metals Limited ASX: ADN ASX Announcement

10/431 King William Street
Adelaide, SA 5000

Tel: +61 8 7089 9800
ir@andromet.com.au

ABN
75 061 503 375

High Purity Alumina Project Update

Key Highlights:

- Commissioning underway at Andromeda's HPA pilot plant, with testwork to run through Q3 2026
- Commercial 4N HPA samples targeted in H2 2026 for customer qualification
- Builds on 99.9985% HPA purity achieved at laboratory scale
- 2025 Scoping Study confirmed strong economics and low-cost production potential
- Potential upside from by-products including silica and gallium
- Supports Andromeda's broader HPA commercialisation strategy

Andromeda Metals Limited (ASX: **ADN**) (**Andromeda**, the **Company**) is pleased to provide an update on its High Purity Alumina (**HPA**) project, aimed to commercialise the critical mineral production using high-quality Great White kaolin as feedstock in its proprietary process (**HPA Project**).

The HPA Project pilot plant¹ has now been assembled, with commissioning underway and pilot testwork expected to continue through Q3 2026. This marks a key milestone in Andromeda's transition toward continuous process production of HPA and the planned generation of commercial samples for customer qualification in H2 2026.

Andromeda is advancing a next-generation HPA supply chain, independent of traditional aluminium markets, leveraging its high-quality, low-impurity Great White kaolin as feedstock and innovative processing pathway. The pilot plant project is the first step in scaling the Company's proprietary processing technology, which has already demonstrated HPA purity of 99.9985% at laboratory scale.

The value adding potential, of this HPA opportunity, was highlighted in the Company's 2025 Scoping Study², which showed strong project economics and the potential for Andromeda to be highly competitive globally, particularly on cost of production and capital intensity.

With pilot plant commissioning now underway, Andromeda has entered the next phase of its HPA commercialisation strategy, progressing toward customer qualification, future feasibility studies and broader market entry initiatives.

¹ Refer ADN ASX dated 7 October 2025 titled *HPA Project – Next phase of commercialisation underway*.

² Refer ADN ASX dated 18 September 2025 titled *HPA Scoping Study demonstrates market-leading economics of Andromeda's innovative technology*; all material assumptions and technical parameters underpinning the estimates and forecast financial information continue to apply and have not materially changed.



HPA Pilot Plant Progress Update

Commissioning of the HPA pilot plant follows the successful design, manufacture, delivery and construction of key metallurgical components, together with the production and initial processing of refined Great White kaolin feedstock to be used in the testwork.

The HPA pilot testwork program is expected to:

- Produce HPA using a continuous process, transitioning from the batch processing used at laboratory scale;
- Generate commercial samples of 4N HPA for evaluation by potential customers; and
- Prove scalability of the proprietary process to support engineering design of a commercial facility for future feasibility studies.

Analysis of by-products

As advised in the Scoping Study, in addition to commercial samples of 4N HPA, the pilot plant testwork will also generate by-product materials for further analysis and assessment of potential value.

Importantly, the 2025 HPA Scoping Study did not incorporate any potential revenue from the sale of by-products and instead assumed costs associated with their disposal. The pilot testwork will, however, generate by-product materials that will be further characterised and assessed for potential commercial applications. Accordingly, there is potential for these materials to provide an additional value pathway, subject to the outcomes of ongoing testwork and evaluation.

Amorphous Silica

A key by-product stream produced during testwork is expected to comprise amorphous silica, which will be characterized and assessed for potential commercial applications. Amorphous silica, also known as precipitated silica, is widely used in the rubber industry and as a high-value agricultural fertiliser.

Potential recovery of additional valuable by-products

The efficacy of Andromeda's proprietary process is underpinned by the exceptional quality of its kaolin feedstock sourced from the Great White Project (**GWP**). The XRF assay results of the Great White kaolin feedstock provided for the HPA testwork (refer to Table 1) demonstrates that the feed material consistently exhibits high alumina (Al_2O_3) content, accompanied by very low levels of deleterious elements such as calcium (Ca), potassium (K), magnesium (Mg) and sodium (Na). This favourable chemical profile of the Great White kaolin feedstock is a key advantage, as it supports efficient downstream processing and the production of high-purity end products.

Table 1. XRF analyses of kaolin feedstock sourced from the GWP for the HPA testwork

SAMPLE	PP-FS-A (%)	PP-FS-B (%)	SAMPLE	PP-FS-A (%)	PP-FS-B (%)
Al_2O_3	38.37	38.55	MnO	<0.01	<0.01
BaO	0.02	0.02	Na_2O	0.01	0.01
CaO	0.04	0.04	P_2O_5	0.06	0.06
Cr_2O_3	<0.01	<0.01	SiO_2	46.73	46.99
Fe_2O_3	0.34	0.35	SrO	<0.01	0.01
K_2O	0.32	0.31	TiO_2	0.45	0.46
MgO	0.09	0.1	LOI	13.7	13.69



In addition to the primary alumina content, multi-element assays indicate the presence of gallium in the Great White kaolin feedstock. (refer to Table 2). Further testwork will assess whether gallium or other minor elements may be recoverable as part of the Company's process flowsheet.

Gallium (Ga) is a strategically important metal considered a critical mineral due to its use in advanced and defence technologies, and severe supply-chain concentration and geopolitical vulnerability.

Gallium is used in advanced electronics and semiconductors, such as those used in data warehouses to support the increasing adoption of artificial intelligence (AI), as well as aerospace and defence systems.

The refining and primary supply of gallium is extremely concentrated, with China controlling 99 percent of the world's primary gallium, and its geopolitical vulnerability evidenced by export controls placed on gallium being imposed by China to the US in July 2023, which escalated in December 2024 to an outright ban on gallium exports to the United States (later suspended).

Gallium is considered a critical mineral in Australia³, the United States⁴, the European Union⁵ as well as also listed as critical or strategic by Japan, South Korea, the UK and India³, and included as a Critical Raw Material in NATO defence-critical materials assessments⁶, reflecting its importance across allied technology and defence supply chains.

Table 2. Multi-element analyses of kaolin feedstock sourced from the GWP for the HPA testwork

Element	PP-FS-A (ppm)	PP-FS-B (ppm)		PP-FS-A (ppm)	PP-FS-B (ppm)
Ba	152.5	152	Sr	53	50
Ce	181	178	Ta	1	1
Cr	15	15	Tb	0.77	0.74
Cs	0.36	0.4	Th	16.7	16.8
Dy	4.51	4.28	U	2.07	2.1
Er	2.07	1.86	V	26	25
Eu	1.27	1.12	W	3	2.9
Ga	34.2	35.9	Y	18.6	17.9
Gd	5.43	5.63	Yb	1.64	1.62
Ge	1.7	1.8	Zr	96	95
Hf	2.84	2.8	As	0.1	0.1
Ho	0.73	0.78	Bi	0.03	0.03
La	94.2	93.1	Hg	<0.005	<0.005
Lu	0.21	0.2	In	0.013	0.013
Nb	14.7	14.7	Re	0.001	<0.001
Nd	57	55.4	Sb	<0.05	<0.05
Pr	18	17.75	Sc	2.2	2.3
Rb	11.7	13.1	Se	0.2	<0.2
Sm	8.39	9	Te	0.03	0.02

³ Refer to the Australia's Critical Minerals List: [Australia's Critical Minerals List and Strategic Materials List | Department of Industry Science and Resources](#)

⁴ Refer to the United States' Critical Minerals List: [Final 2025 List of Critical Minerals | US Federal Register](#)

⁵ Refer to the European Union's Critical Minerals List: [European Critical Raw Materials Act | European Commission](#)

⁶ Refer to the NATO's List of Critical Raw Materials: [NATO releases list of 12 defence-critical raw materials | NATO News](#)



Sn	14.2	5.1	Tl	<0.02	<0.02
Tm	0.28	0.26			

The ability to potentially recover minor elements such as Gallium represents an additional value pathway and reinforces the strategic importance of Andromeda's resource. This dual advantage of high-purity alumina production combined with by-product recovery potential may further enhance the overall economics and scalability of the HPA development.

Sarah Clarke, Andromeda's Acting CEO said:

"This is an exciting period for Andromeda, with the commencement of commissioning of the HPA pilot plant marking the culmination of several years of focused research and development into producing HPA from our high-quality kaolin.

"Through this work, we have assessed a range of processing pathways, leading to the development of our proprietary HPA process, which has the potential to position Andromeda as a globally competitive, low-cost producer of HPA products, using our low-carbon processing technology.

"The commissioning of the HPA pilot plant supports us leveraging the exceptional quality of our Great White kaolin to produce commercial samples of HPA for targeted customer engagement, while advancing our pathway to commercial production.

"Importantly, our proprietary processing technology not only represents an opportunity for the efficient extraction of HPA, but also for other critical minerals contained within the high-quality kaolin feedstock sourced from Andromeda's Great White Project."

Next Steps

Following commissioning of the pilot plant, Andromeda will progress pilot-scale testwork through Q3 2026, targeting the production of commercial 4N HPA samples in H2 2026 for customer qualification. The results from the pilot program are expected to support future feasibility studies, further assess potential by-product value streams, and advance the Company's broader HPA commercialisation strategy.

This announcement has been approved for release by the Board of Andromeda Metals Limited.

For more information about the Company and its projects, please visit our website at www.andromet.com.au or contact:

Manager, Investor Relations & Corporate Affairs

Patrick Sinclair

T: 08 7089 9819

M: 0403 708 431

E: Patrick.Sinclair@andromet.com.au

FORWARD-LOOKING STATEMENTS

This document contains or may contain certain forward-looking statements and comments about future events, that are based on Andromeda's beliefs, assumptions and expectations and on information currently available to management as at the date of this document. Often, but not always, forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "plan", "believes", "estimate", "anticipate", "outlook", and "guidance", or similar expressions. Such statements are only expectations or beliefs and are subject to inherent risks and uncertainties which could cause actual values, results or performance achievements to differ materially from those expressed or implied in this presentation. Where Andromeda expresses or implies an expectation or belief as to future events or results, such expectation



or belief is expressed in good faith and on a reasonable basis. No representation or warranty, express or implied, is made by Andromeda that the matters stated in this presentation will in fact be achieved or prove to be correct. Except as required by law, Andromeda undertakes no obligation to provide any additional or updated information or update any forward-looking statements, whether on a result of new information, future events, results or otherwise. Readers are cautioned against placing undue reliance on forward-looking statements. These forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of Andromeda, the directors, and management of Andromeda.

COMPETENT PERSONS STATEMENT

Information in this announcement that relates to the geochemical analysis of Great White kaolin feedstock is based on information compiled and thoroughly reviewed by Mr Eric Whittaker who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Whittaker is the Chief Geologist of Andromeda Metals Limited and has sufficient experience relevant to the style of mineralisation and the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Whittaker has 30 years of experience in the mining industry. Mr Whittaker consents to the information in the form and context in which it appears. Mr Whittaker holds Performance Rights in the Company and is entitled to participate in Andromeda's employee incentive plan.



JORC Code, 2012 Edition – Table 1 Andromeda HPA – Feedstock for Pilot Plant Trial 2026

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	- Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	The analyses presented were conducted on representative samples from a ~250 kg batch of Great White CRM™ refined kaolin, which will serve as the feedstock for the HPA Pilot Plant Trial.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable - manufactured product
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.	Not applicable - manufactured product
Logging	- Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. - The total length and percentage of the relevant intersections logged.	Not applicable - manufactured product

Criteria	JORC Code explanation	Commentary
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.	• The two samples analysed were sourced from separate sub-batches supplied for the pilot plant trial, to assess variability within the overall batch. • The results indicate that a satisfactory level of homogeneity was achieved across the sub-batches and further demonstrates that the sample sizes and sampling techniques applied were appropriate.
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Samples were submitted to Australian Laboratory Services (ALS) for analytical methods multi-element analyses by methods ME-XRF26 and ME-MS81. • ME-XRF26 is a whole-rock geochemical assay method used to determine major element composition. The technique involves lithium borate fusion of the sample to produce a homogeneous glass disc, which is then directly analysed by X-ray fluorescence (XRF). • ALS ME-MS81 is a multi-element trace analysis technique based on lithium borate fusion followed by Inductively Coupled Plasma Mass Spectrometry (ICP-MS). The sample is fused at high temperature with a lithium borate flux to achieve complete decomposition of all minerals, including refractory phases, before the melt is dissolved and analysed. Full fusion enables determination of total concentrations of trace and minor elements, including rare earth elements (REEs), and other trace metals. • Internal laboratory checks were within acceptable variability
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.	• Data was checked by alternate company personnel.
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.	• Not applicable - manufactured sample




Criteria	JORC Code explanation	Commentary
	• Specification of the grid system used. • Quality and adequacy of 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.	• Not applicable - manufactured sample
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.	• Not applicable - manufactured sample
Sample security	• The measures taken to ensure sample security.	• The Chain of Custody was managed by Andromeda. Double sealed samples were electronically tracked during transport by commercial courier contractors between processing facilities and analytical labs.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No external audits have been undertaken

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.	- The Great White Kaolin Project is located on ML 6532. - The ML 6532 is held by Andromeda Industrial Minerals Pty Ltd, a 100% owned subsidiary of Andromeda Metals Ltd. - There are no known non-government royalties due. - Andromeda owns the freehold land beneath ML 6532. - The underlying land title being freehold has extinguished Native Title. - There are no known heritage sites within the Great White area which preclude exploration or mineral development. - All tenements are secure and compliant with requirements issued by the Government of South Australia's Department for Energy and Mining (DEM) at the date of this report.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable - manufactured product
Geology	Deposit type, geological setting and style of mineralisation.	- Great White Kaolin deposit developed in situ by lateritic weathering of the feldspar-rich Hiltaba Granite. - The Great White kaolin deposit is a sub-horizontal zone of kaolinised granite resting with a sharp contact on unweathered granite. The kaolinised zone is overlain by loosely consolidated Tertiary and Quaternary sediments. - High quality kaolin-halloysite deposits occur extensively across the Great White Project area
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.	Not applicable - manufactured product

Criteria	JORC Code explanation	Commentary
Data aggregation methods	- 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. - 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.	- Analyses have been conducted on a homogenised, manufactured product. - No weighting or averaging techniques have been applied, and no maximum or minimum grade truncations or cut-off grades have been used. - No metal equivalent values have been reported.
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 (e.g. 'down hole length, true width not known').	Not applicable - manufactured product
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.	Not applicable - manufactured product
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.	Comprehensive results are reported.
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.	Not applicable - manufactured product
Further work	- The nature and scale of planned further work (e.g. 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.	Company is to commence a pilot plant operation to validate the HPA process flowsheet on a semi-continuous, end-to-end basis.