

Andromeda Metals Limited

ABN: 75 061 503 375

Corporate Details

ASX Code:

ADN (ordinary shares)

ADNOB (listed options)

Cash (31 March 2021):

\$6.702 million

Issued Capital (30 April 2021):

2,160,727,827 ordinary shares

86,320,000 unlisted options

19,750,000 perform. rights

Directors
Rhod Grivas

Non-executive Chairman

James Marsh

Managing Director

Nick Harding

 Executive Director and
Company Secretary

Joe Ranford

Operations Director

Andrew Shearer

Non-executive Director

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Quarterly Report

Period ending 31 March 2021

Summary of Company activities for the March quarter:
Great White Kaolin JV (ADN 75% interest)

- The Mining Lease Application for the Great White Kaolin Project was lodged with the South Australian Department for Energy and Mining on 25 February 2021, representing the achievement of a significant milestone for the Project.
- A legally binding offtake agreement for 5,000tpa of premium ceramic grade product priced at A\$700 per tonne was signed with a Japanese customer.
- Conrad Partners are now directly engaging with high end ceramic users and distributors in China to sign binding offtake agreements for Great White kaolin material following COVID related disruptions.
- Additional samples have been evaluated in Europe, the Middle East and other parts of Asia with potential offtake partners to further de-risk the Project.
- Steady progress is being made with the Definitive Feasibility Study (DFS) with evaluation of an initial 250,000tpa start-up wet-processing plant on site on commencement of operations and increasing this to 500,000tpa capacity in Year 2 as an alternative to a Direct Shipping Ore (DSO) phase moving to processing on site from Year 2 as contemplated under the PFS.
- The DFS will solely focus on production of Great White CRM product for the high-value global ceramic market. Separate studies into the addition of a concrete rheology product and a paint and coating product from material sourced from different parts of the Great White Mineral Resource are planned to be undertaken.
- DFS scheduled for completion by June 2021 with financing options for the joint venture partners to consider in support of a Bankable Feasibility Study (BFS) to enable a Decision to Mine and Final Investment Decision to be made anticipated in the fourth quarter of 2021.

Camel Lake Halloysite Project (ADN 75% interest)

- Helicopter site inspection undertaken by traditional owners to determine areas that can be accessed for surface sampling.

Mount Hope Kaolin Project

- Aircore drilling program completed with significant thicknesses of up to 40 metres of bright white kaolin intersected.

Natural Nanotech Joint Venture (ADN 50% interest)

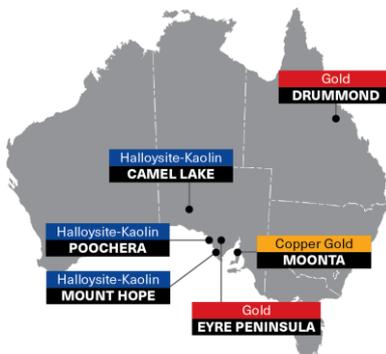
- ARC Linkage Grant for \$350,000 received to investigate the use of halloysite-derived nanocomposite materials for the removal of microplastics from contaminated water systems.

Eyre Peninsula Gold Joint Venture

- Cobra Resources has elected to proceed to Stage 2 under the Joint Venture Agreement.

Corporate

- Cash totaling \$288,000 received during the quarter relating to the exercise of unlisted options.



James Marsh

30 April 2021

The Board and management of Andromeda Metals Limited (ASX: ADN, Andromeda, the Company) is pleased to provide a summary of the Company's activities for the quarter ended 31 March 2021.

Great White Kaolin Project

The Great White Kaolin Project covers two main geographic areas of interest, both situated in the western province of South Australia (Figure 1). The current main area of focus for the Project is on the Eyre Peninsula which comprises four tenements and is located approximately 635 kms west by road from Adelaide and 130 kms south-east from Ceduna (Figure 2). The Project is a joint venture between Andromeda Metals and Minotaur Exploration Limited (ASX: MEP) in which ADN holds a 75% equity interest.

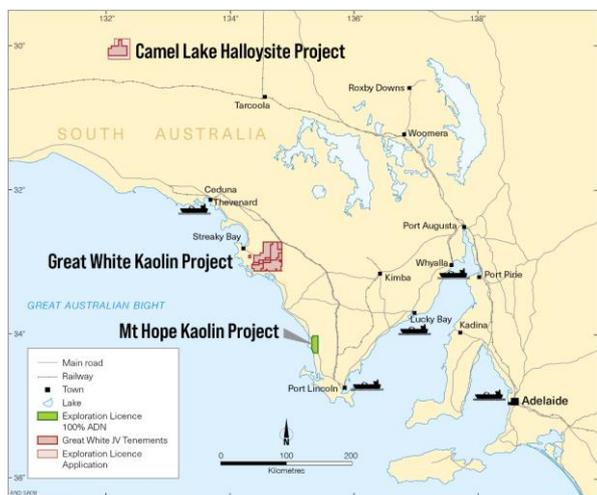


Figure 1 - Project Location Plan

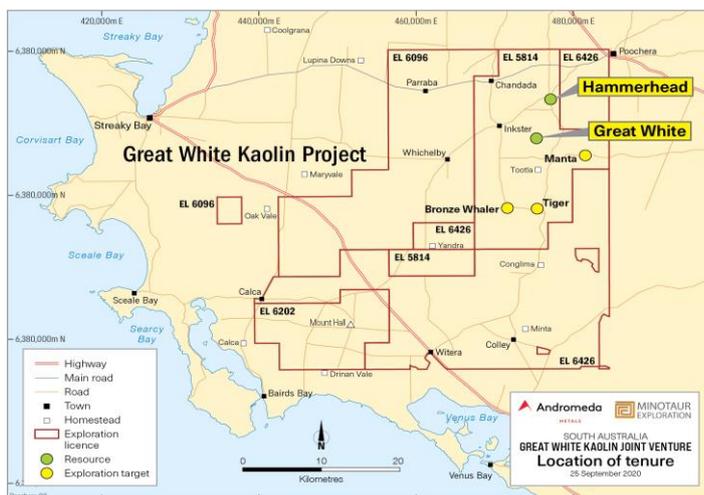


Figure 2 - Great White Joint Venture tenements

High quality halloysite-kaolin occurrences exist extensively across the Great White Project area making this a region of global significance for the mineral and capable of supporting a considerable long-life mining operation, should final feasibility studies determine the project to be commercially positive.

Andromeda also holds a 100% interest in the Mount Hope Kaolin Project which is located approximately 160 kms southeast of the Great White Kaolin Project.

Mining Lease Application

On 25 February 2021, the Company lodged applications on behalf of the joint venture partners for a Mining Lease and two Miscellaneous Purposes Licences with the South Australian Department for Energy and Mining (DEM) for the proposed development of the Great White Kaolin Project. The lodgement of the applications represents a significant milestone in the Project's development which remains focussed on the commencement of operations in February 2022.

The Application outlines the proposed development of a shallow open pit mine, wet-processing plant and supporting infrastructure at the Great White Deposit, which is in line with the Project Pre-Feasibility Study (*refer ADN ASX announcement dated 1 June 2020 titled "Pre-Feasibility Study Further Improves Poochera Halloysite-Kaolin Project Economics"*). A Mining Proposal and Management Plan supports the application which incorporates supporting environment impact assessments undertaken by independent experts.

The Application is supported by extensive stakeholder engagement and comprehensive Scoping and Pre-Feasibility Studies involving independent experts that have been prepared by Andromeda over the past 18 months with a commitment by the Company to continue to actively engage with stakeholders during the Government's public consultation process and throughout all stages of the proposed development.

The Great White approval process is ongoing with the Mining Lease application now being assessed by the Regulators. The public submission period closed on 30 March 2021. While there are some concerns raised about the integration of a new industry into the established commercial landscape, the community is generally supportive and excited about the opportunities the Project presents. Typical issues around dust management, traffic integration, safety of road users and water supply have been brought up by some community members. Consultation is continuing

to communicate the engineering controls to be implemented to ensure that the community and environment is not adversely affected.

A decision on the Application from the Minister for Energy and Mining is anticipated to be received later in the year.

Marketing

During the quarter, the first legally binding offtake agreement for 5,000tpa of Great White CRM for the Great White Project was secured with highly respected Japanese porcelain manufacturer Plantan Yamada (Yamada), which has factories located in both Japan and China. The customer has agreed to pay A\$700 per tonne for the high-quality halloysite-kaolin product, which is equivalent to the price used in the Pre-Feasibility Study (PFS) (*refer ADN ASX announcement dated 1 June 2020 titled "Pre-Feasibility Study Further Improves Poochera Halloysite-Kaolin Project Economics"*).

Yamada analysed and tested a broad series of samples at laboratory and pilot scale over two years prior to running approximately 40 tonnes of material through its processing plant. This was used to manufacture a large batch of high-quality porcelain items to give it a sufficiently high level of confidence to sign a legally binding agreement. Gaining customer approvals and offtake agreements for industrial minerals products such as halloysite-kaolin is an extremely intensive and lengthy process. It also involves a significant investment of resources by the target customers, so they must be fully convinced of a project's viability and ability to supply very consistent product over a long period before they are willing to run sufficient tests for a binding agreement.

The Project's marketing and logistics consultants, Conrad Partners (Conrad), are now actively engaging with high end ceramic end users and potential toll refining companies in China. A senior Conrad executive has been in China since late last year and is meeting with potential customers and distributors who have shown interest in acquiring Great White product for their ceramic manufacturing factories, including those customers who have previously signed Letters of Intent (LOI's). Conrad's objective is to assist Andromeda to put in place binding offtake agreements specifying refined product annual tonnages, prices and product specifications.

Freight restrictions due to COVID slowed the delivery of processed Great White CRM product to other Asian and European ceramic end users who expressed interest in testing the Great White material. However, this is now resolved with quality control testing on a 6 tonne batch of Great White CRM produced in China now complete allowing product samples to be sent to additional customers targeted throughout Asia and in the Middle East where there is significant sales potential. Testing of product material sent to Germany has also delivered the same high-quality results.

First Test Minerals in the UK were again engaged to update the Kaolin Market report that was prepared in June 2020 exclusively for the PFS to include all known existing production and sales information. Their initial report focussed on the high-end ceramic market and also the high value paint and coatings market, which are both target markets for the Great White Kaolin Project. The updated report will provide a reference for the independent marketing consultant's high-end ceramic market review and analysis.

Definitive Feasibility Study

Work on the Definitive Feasibility Study (DFS) is continuing with variations in the application and scope set out in the Pre-Feasibility Study (PFS) being evaluated. The Company remains on track to announce the results of the DFS by the end of June 2021.

The updated geological model has been run through mine optimisation and a detailed plant feed grade scheduled to confirm and support the production of Great White CRM for the life of mine (25 years). Optimisation analysis of each of the project components is being undertaken to reduce operating costs and improve product quality. All product options (CRM, HRM, HPA, Paints and Coatings) are able to be produced by the project to satisfy multiple markets. The focus for the DFS is on the ceramics market with Great White CRM being refined and packaged on site. This change to the PFS brings forward capital requirements but provides significant benefits in reducing transport costs, control over quality and adds additional value on site.

It is likely that a smaller 250,000tpa capacity plant will be established earlier in the project than that proposed in the PFS. This plant is designed to satisfy the CRM sales volumes as part of the commissioning and establishment of the

operation in the early years. The plant is designed to integrate upgrades for production and product variations to meet the full production capacity of 500,000tpa. Primero have completed the first phase of the design work for the wet processing and refining plant based on metallurgical work conducted in the UK, Germany, China and Australia. In parallel the recommissioning of the Streaky Bay pilot plant has confirmed the product quality from samples collected from the area to be mined in the early years of the Project.

Funding options are being considered under the DFS and for the following Bankable Feasibility Study (BFS) with significant assistance being provided by highly experienced corporate advisors Origin Capital.

Any project debt funding will likely be sourced at a Project level, resulting in identical terms for both parties to the joint venture. Importantly, for Minotaur as minority participant, this arrangement obviates the need for Minotaur to seek separate financing avenues and streamlines the joint venture manager's negotiations with bankers.

Other Studies

Alongside the DFS, which is purely focused on the ceramics market, separate Pre-Feasibility Studies are being prepared for recently identified alternative market opportunities for Great White material, being the addition as a rheology modifier product for the concrete industry, and also separately as a product suited for the high-end paint and coatings industry. Both of these applications are likely to be sourced from different parts of the Great White Mineral Resource and would complement the Great White CRM market application.

Work on these two new market applications is not as advanced as for ceramics in both testing and product marketing, and so have been separated from the DFS due to the required level of detailed analysis needed to support the studies.

Camel Lake Halloysite Project

Following a positive meeting held with the Maralinga Tjarutja Council in late 2020, who are the traditional landowners on which the Camel Lake tenement is located, a helicopter supported site inspection was conducted in January 2021 in which 24 localities across the tenement were visited by Maralinga Tjarutja representatives and an anthropologist. A report has been prepared by the anthropologist outlining areas that can be accessed for surface sampling by Andromeda.

A heritage agreement is currently being drafted by the Maralinga Tjarutja lawyers to be provided to the Company for consideration during May 2021.



Figure 3 – Field team undertaking helicopter site inspection at Camel Lake

Mount Hope Kaolin Project

An aircore drilling program comprising 50 holes for 1,988 metres was undertaken during March 2021 at the Mount Hope Kaolin Project. The objective for the drilling program was to infill drill the southern half of the Mount Hope Resource to allow a reclassification from Inferred to Indicated category and to close off the deposit to the south and to the east which remained open from previous drilling.

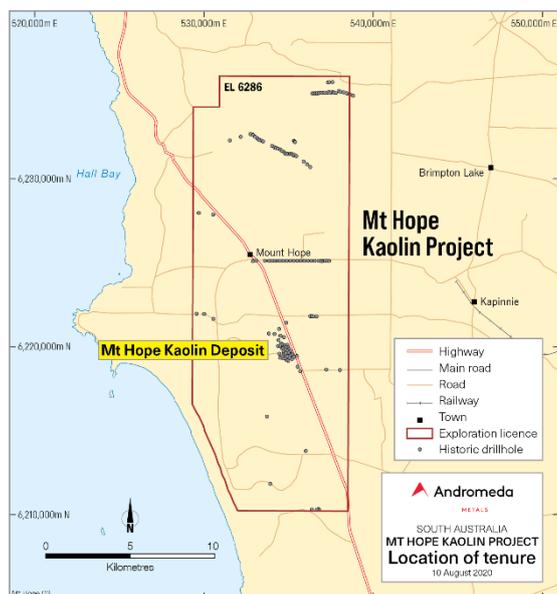


Figure 4 - Project Location Plan

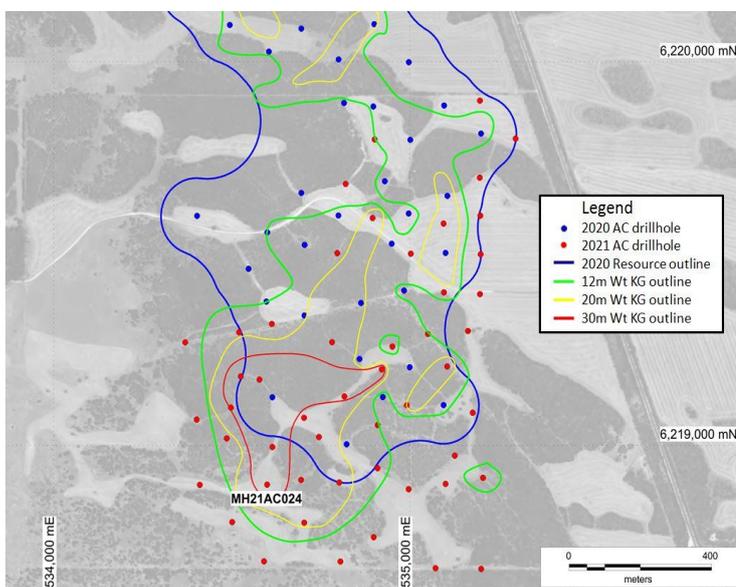


Figure 5 – March 2021 drill program showing MH21AC024

Average thickness of white clay intercepted from drilling was slightly over 20 metres. Significant thicknesses of white kaolin were encountered at the southern end of the deposit with holes intersecting kaolin of up to 40 metres (MH21AC024) immediately south of the 2020 Mount Hope Resource. The quality of the white clay is yet to be determined by analytical methods.



Figure 6 – Drill hole MH21AC024 showing white kaolinised gneiss from 8-48 metres

The 2020 Mount Hope Mineral Resource Estimate of 18.0Mt of kaolinised gneiss included two sub domains; an Ultra-Bright (R457 >84 in the minus 45 micron) high-purity (very low iron) kaolin sub domain and a halloysite-kaolin sub-domain (refer Table 1) (refer ADN ASX announcement dated 11 August 2020 titled “New Mineral Resource for the Mount Hope Kaolin Project”).

Table 1 - Mount Hope Kaolin Mineral Resource

Domain	Mt	PSD -45µm	Kaolinite %	Halloysite %
Main	12.8	40.95	33.6	0.9
Halloysite	1.6	39.13	25.6	6.7
Ultra-Bright	3.7	44.37	38.0	0.7
Total	18.0	41.49	33.8	1.4

Note that all figures are rounded to reflect appropriate levels of confidence

The Mount Hope Mineral Resource yields 7.5Mt of High Bright kaolin product (R457 >80) when applying the minus 45 micron recovery factor. The Ultra-Bright sub domain contains 1.6Mt of minus 45 micron material with an ISO brightness (R457) of 84.1 and the halloysite sub domain contains 0.6Mt of minus 45 micron material comprised of 17.2% halloysite (refer Table 2).

Table 2 - Mount Hope Kaolin Mineral Resource -45µm

Domain	Mt	R457	Kaolinite %	Halloysite %	Al ₂ O ₃ %	Fe ₂ O ₃ %	TiO ₂ %
Main	5.2	81.8	82.1	2.2	35.1	0.56	0.62
Halloysite	0.6	81.2	65.4	17.2	34.8	0.60	0.63
Ultra-Bright	1.6	84.1	85.7	1.5	36.0	0.32	0.63
Total	7.5	82.2	81.4	3.3	35.3	0.51	0.62

Note that all figures are rounded to reflect appropriate levels of confidence

The Ultra-Bright domain is comprised of extremely high purity, bright white kaolin with low halloysite levels. This makes it ideally suited to high-value markets in specialist coatings and polymers, thus providing market diversification and de-risking opportunities while presenting new and potentially significant markets for the Company to pursue.

Halloysite Research and Development

Natural Nanotech Pty Ltd (NNT) is a research and commercialisation venture, jointly owned (50:50) by Andromeda and Minotaur, established to investigate new technology applications for halloysite-kaolin nanoparticles. The company objective is to create new user markets for the halloysite nanotube material including the potential to produce a global alternative to inordinately expensive manufactured carbon nanotubes amongst other things. Potential applications include carbon capture, hydrogen storage and transport, remediation of water and wastewater, energy storage technologies, and antibacterial and agricultural applications.

The special properties of Great White halloysite-derived nanomaterials are their enormous surface area per unit weight, their porous nature and differential charge capabilities between inner and outer surfaces.

Natural Nanotech’s research, funded jointly by Andromeda and Minotaur, is being directed through the University of Newcastle’s Global Innovative Center for Advanced Nanomaterials (GICAN) team whose current effort is to optimise adsorption performance. Results already superior to commercially available products (such as activated carbon) have been documented with Great White refined halloysite demonstrating over 1600 m²/g surface area and 25.7 mmol/g of CO₂ adsorption when synthesised into engineered porous carbon nanomaterial (refer ADN ASX announcement dated 12 April 2021 titled “Carbon Capture Utilising Halloysite-Derived Adsorbent Nanomaterials”).

NNT owners and the GICAN unit has received an ARC Linkage Grant to the value of \$350,000 for an R&D project, under the direction of Professor Jiabao Yi of GICAN, investigating the use of halloysite-derived nanocomposite materials for the removal of microplastics from contaminated water systems. This new project aims to advance next-generation composite materials for water treatment exploiting the high surface area and catalytic nature of halloysite nanotubes.

Drummond Epithermal Gold Project

Following completion of the latest drilling program on the Drummond Gold Project in late 2020 in which no significant intercepts were encountered, Evolution Mining formally withdrew from the Joint Venture on 21 January 2021. As a result, the Project has reverted back to 100% ownership by Andromeda, with all data on the Project collected by Evolution as operator of the joint venture in the process of being handed across to ADN geologists.

The Company intends to undertake a full review of the data before determining how best to progress the Drummond Gold Project.

Eyre Peninsula Gold Joint Venture

As reported last quarter, joint venture partner Cobra Resources PLC (Cobra) has met the Stage 1 expenditure commitment and therefore earned a 50% equity interest in the Eyre Peninsula Gold Project tenements. Cobra have now subsequently advised of their intention to proceed with Stage 2 of the joint venture which requires them to spend a further \$1.65M over the next 2 years (equivalent to \$3.75M over 5 years in total from commencement of the joint venture) to move to a 65% interest in the Project.

During the quarter, Cobra has undertaken some further soil sampling at Barns and White Tank with 138 samples collected for analysis. Cobra are currently designing a more extensive geochemical program to be undertaken across a number of the prospects on the Eyre Peninsula Project in the next quarter. Cobra have also modelled the Clarke prospect following the highly encouraging result returned during last year's drill program of 31 metres at 3.06 g/t gold from 69 metres, including 15 metres at 5.35 g/t gold from 83 metres, and applying the new interpretation to reassessing the geology of the Baggy Green North and South deposits.

Moonta Copper ISR Joint Venture

During the quarter further progress on stakeholder engagement was undertaken by joint venture partner Environmental Metals Recovery (EMR) with a meeting held between EMR representatives and the State local Member and further meetings scheduled with both the Copper Coast Council and the Barunga West Council to occur in the next month to provide an update on the Project.

Initial lixiviant testing work has been completed by the CSIRO with a report due to be received shortly. Preparation for the hydrogeologic drilling program is underway with a PEPR being prepared and a drilling contractor secured. Additional ISR specialist geological staff have been engaged to assist with the Project, specifically to review Hylogger and hydrogeological data interpretation, while a modelling specialist from the University of Adelaide has been engaged to work on developing a coupled hydro flow model for the Alford West Project.

Pilbara Gold Project

With no offers received following a review of the Pilbara Gold Project by a number of third parties, the Pilbara tenements were relinquished during the quarter.

Finance and Corporate

Andromeda's cash position at the 31 March 2021 stood at \$6.702 million.

Cash Exploration and Evaluation expenditure of \$1,070,000 was incurred for the March 2021 Quarter, the majority of which was in progressing the DFS for the Great White Project along with an aircore drilling program conducted at the Mount Hope Kaolin Project. There was no substantive mining production and development activities during the quarter.

A total of \$229,000 was paid during the quarter to directors or their related parties in relation to Executive Director salaries and consulting fees and Non-Executive Director fees.

A total of 8,000,000 ordinary shares were issued during the quarter resulting from the exercise of 4,500,000 unlisted options with an exercise price of \$0.064, generating cash receipts of \$288,000, and the vesting of 3,500,000 performance rights.

As of the date of this report, Andromeda Metals currently has on issue 2,160,727,827 ordinary shares, 86,320,000 unlisted options and 19,750,000 performance rights.

Exploration Tenements

During the quarter, Andromeda lodged a tenement application under wholly owned subsidiary Mylo Gold Pty Ltd for E 63/2089 named Circle Valley in Western Australia.

Andromeda also relinquished four tenements comprising the Pilbara Gold Project in Western Australia.

The tenement schedule as at 31 March 2021 is attached to this Quarterly Activities Report.

Competent Persons Statements

Information in this announcement has been compiled by Mr James Marsh a member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Marsh is an employee of Andromeda Metals Limited who holds shares and options in the company and has sufficient experience, which is relevant to the style of mineralisation, type of deposits and their ore recovery under consideration and to the activity being undertaking to qualify as Competent Persons under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). This includes Mr Marsh attaining over 30 years of experience in kaolin processing and applications. Mr Marsh consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Information in this announcement that relates to the Exploration Results for the Great White Kaolin Project and Mt Hope Halloysite-Kaolin Project is based on information evaluated 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 type of deposit under consideration and to 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 consents to inclusion in this document of the information in the form and context in which it appears.

SCHEDULE OF TENEMENTS AS AT 31 MARCH 2021

Project	Tenement	Tenement Name	Area km ²	Registered Holder or Applicant	Nature of Company's Interest %
South Australia					
<i>Wudinna Gold Joint Venture</i>	EL 6317	Pinkawillinie	156	Peninsula Resources Ltd ¹	100%
	EL 6131	Corrobinnie	1303	Peninsula Resources Ltd	100%
	EL 6489	Wudinna Hill	42	Peninsula Resources Ltd	100%
	EL 5953	Minnipa	184	Peninsula Resources Ltd	100%
	EL 6001	Waddikee Rocks	147	Peninsula Resources Ltd	100%
	EL 6262	Acraman	96	Peninsula Resources Ltd	100%
<i>Moonta Copper Gold Project²</i>	EL 5984	Moonta-Wallaroo	713	Peninsula Resources Ltd	100%
	EL 5984	Moonta Porphyry JV	106	Peninsula Resources Ltd	90% - option to acquire 100% from Minotaur Exploration Ltd
<i>Great White Kaolin Project</i>	EL 6588	Tootla	372	Great Southern Kaolin Pty Ltd ³	AIM 75% ⁴ GSK 25%
	EL 6096	Whichelby	447	Minotaur Operations Pty Ltd ⁵	AIM 75% MOP 25%
	EL 6202	Mt Hall	147	Minotaur Operations Pty Ltd	AIM 75% MOP 25%
	EL 6426	Mt Cooper	648	Minotaur Operations Pty Ltd	AIM 75% MOP 25%
<i>Camel Lake Halloysite Project</i>	EL 6128	Camel Lake	455	Minotaur Operations Pty Ltd	AIM 75% MOP 25%
	ELA 2019/73	Dromedary	481	Minotaur Operations Pty Ltd	AIM 75% MOP 25%
<i>Mt Hope Kaolin Project</i>	EL 6286	Mt Hope	227	Andromeda Industrial Minerals Pty Ltd	100%
Queensland					
<i>Drummond Gold Project</i>	EPM 18090	Glenroy	196	Adelaide Exploration Pty Ltd ⁶	100%
	EPM 25660	Gunthorpe	74	Adelaide Exploration Pty Ltd	100%
	EPM 26154	Sandalwood Creek	109	Adelaide Exploration Pty Ltd	100%
	EPM 26155	Mount Wyatt	144	Adelaide Exploration Pty Ltd	100%
	EPM 27501	Packhorse Creek	16	Adelaide Exploration Pty Ltd	100%
Western Australia					
<i>Dundas Project</i>	E 63/2089 (Application)	Circle Valley	29	Mylo Gold Pty Ltd ⁷	100%

1 Peninsula Resources Ltd (incorporated 18 May 2007) is a wholly owned subsidiary of Andromeda Metals Ltd.

2 Andromeda Metals Ltd has partnered with Environmental Metals Recovery Pty Ltd ("EMR") to form the Moonta ISR Joint Venture.

3 Great Southern Kaolin Pty Ltd ("GSK") is a wholly owned subsidiary of Minotaur Exploration Ltd.

4 Andromeda Industrial Minerals Pty Ltd ("AIM"; incorporated 9 August 2018) is a wholly owned subsidiary of Andromeda Metals Ltd.

5 Minotaur Operations Pty Ltd ("MOP") is a wholly owned subsidiary of Minotaur Exploration Ltd.

6 Adelaide Exploration Pty Ltd (incorporated 13 July 2001) is a wholly owned subsidiary of Andromeda Metals Ltd.

7 Mylo Gold Pty Ltd (acquired 21 December 2017) is a wholly owned subsidiary of Andromeda Metals Ltd.