

ASX Release  
24 April 2024

## QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 31 MARCH 2024

### Highlights

#### Mackay Potash Project

- Results from ongoing process test work were reported, demonstrating that temperature control successfully achieved conversion to Schoenite
- Environmental Impact Assessment response compilation continued in conjunction with significant engagement with the Western Australian Environmental Protection Authority and the Department of Climate Change, Energy, Environment and Water

#### Exploration

- Ongoing review of available data and exploration potential across Agrimin's tenure in the highly prospective West Arunta region
- Continued engagement with native title holders in WA and NT in relation to exploration agreements

#### Corporate

- Research and Development tax refund of \$1.0 million received in January 2024 in relation to the FY23 year
- Share Purchase Plan ("SPP") completed in March, raising \$2.9 million
- SPP shortfall of \$1.1 million (before costs) completed subsequent to the quarter end
- Cash balance of \$4.5 million as at 31 March 2024 (excluding SPP shortfall of \$1.1 million)
- Current market value of Agrimin's 40% share of Tali Resources Pty Ltd's investments was \$62 million as at 23 April 2024 on a gross see through basis

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report its activities for the quarter ending 31 March 2024.

## Mackay Potash Project – Western Australia (100% owned)

Agrimin's vision is sustainable food security for future generations by establishing the Mackay Potash Project (**"the Project"**) as the world's leading seaborne supplier of Sulphate of Potash (**"SOP"**) fertiliser, to provide the nutrition the world needs. The Project is situated on Lake Mackay in Western Australia, the largest undeveloped potash-bearing salt lake in the world. Lake Mackay hosts significant volumes of brine (hypersaline groundwater) containing dissolved potassium and sulphur which can produce high-grade, water-soluble SOP fertiliser.

Agrimin's production of SOP from Lake Mackay has strong environmental credentials, and is expected to displace SOP currently produced from the highly polluting Mannheim process. The Mannheim process involves mixing Muriate of Potash (**"MOP"**) with sulphuric acid and heating to over 600 degrees Celcius to produce SOP. The process consumes significantly more energy as a result of the heating required, and produces a hydrochloric acid waste by-product.

The Food and Agriculture Organization of the United Nations predicts global food demand will increase by 50% by 2050<sup>1</sup>. SOP has a critical role to play in global food security by providing high quality fertiliser essential for generating crops in less and more arid conditions. Domestic SOP production also has a significant role to play for Australian farmers as Australia currently imports 100% of its potash requirements. SOP has a low salt index and is virtually chloride-free, making it ideal for use on high value crops such as fruits and vegetables. Agrimin's SOP is certified as an allowable input for use in organic production systems and will be produced with lowest quartile emissions.

Lake Mackay is located 940km by road south of the Wyndham Port in Western Australia (**Figure 1**). It comprises nine granted Exploration Licences covering over 3,000km<sup>2</sup> in Western Australia and four Exploration Licence applications covering over 1,200km<sup>2</sup> in the Northern Territory. The closest community to the Project is Kiwirrkurra which is located approximately 60km south-west. A Native Title Agreement is in place and provides the necessary consents for the Project's development and operation within the Kiwirrkurra determination area, additionally all Native Title Agreements required for the proposed haul road from Lake Mackay to Wyndham are in place.

**Figure 1. Project Location Map**



The Project’s development plan is based on the sustainable extraction of brine from Lake Mackay using a network of shallow trenches. Brine will be transferred along trenches into a series of solar evaporation ponds located on the salt lake’s surface. Raw potash salts will crystallise on the floor of the ponds and be collected by wet harvesters and pumped as a slurry to the processing plant located off the edge of the salt lake. The plant will refine harvested salts into high quality finished SOP fertiliser ready for direct use by customers. SOP will be hauled by a dedicated fleet of road trains to a purpose-built storage facility at Wyndham Port. At the port, SOP will be loaded via an integrated barge loading facility for shipment to customers.

The Definitive Feasibility Study (“**DFS**”) for the Mackay Potash Project was completed in July 2020. The DFS demonstrated the Project’s globally significant scale and that once in operation it could be the world’s lowest cost source of seaborne SOP. The Project also offers excellent potential to expand over time to meet the expected growth in demand for SOP.

The Independent Technical Review (“**ITR**”) of the DFS and Project was completed in April 2021 by Advisian Pty Ltd, a subsidiary of the Worley Limited group of companies. The ITR report concluded that, based upon the data described in the report, the identified project risks are not expected to impact the technical and financial viability of the Project, particularly when considering the FEED work programs and mitigations that are planned to occur prior to the Company making a Final Investment Decision (“**FID**”).

Agrimin is committed to a sustainable and ESG-friendly development of the Project to deliver on a number of metrics, including:

- Strong engagement with Indigenous people and Traditional Owners, as well as support for important land management and community programs;
- Significant commitment to training and employment opportunities for Indigenous people, particularly in relation to the road haulage operation;
- High renewable energy penetration to deliver very low greenhouse gas emissions along with one of the lowest carbon footprints associated with any macro-nutrient fertiliser product; and
- Creation of critical new seaborne SOP supply to help developing countries achieve their food security goals, especially with respect to increasing demand for high value crops such as fruits, vegetables, tree nuts and grape-vines.

The Mackay Potash Project is now advancing toward a FID. Current activities include:

- Project funding and strategic partnerships;
- FEED works, execution planning and contracting; and
- Mining tenure and environmental approvals.

### **Product Marketing and Project Funding**

The Company has signed three Binding Offtake Agreements with Sinochem Fertilizer Macao Limited, Nitron Group and MacroSource (formerly Gavilon Fertilizer) for the supply of 150,000tpa, 115,000tpa and 50,000tpa of SOP, respectively. The Company has committed its target of 70% of planned SOP production capacity under long-term binding offtake agreements and discussions with potential project partners and financiers continue.

### **Front End Engineering Design**

Since completion of the DFS, the Company's integrated owner's team has been progressing several FEED work streams. The outcomes of the FEED phase will provide a greater degree of accuracy for operating and capital costs, as well as minimise the risk of material changes during the execution phase of the Project.

The Company has already completed site-based testwork for the salt harvesters and geotechnical sampling and testwork for the sealed haul road. Additionally, the Company has worked with its proposed power contractor to refine the Project's site power station design which has resulted in a hybrid diesel, solar, wind and battery solution with a modelled renewable energy penetration of 84%. In 2023 the Company completed a civil construction trial to increase the understanding of the on-lake construction and operation of the Project's brine extraction trenches and solar evaporation ponds. The trial results will also be used to build on the Company's geotechnical data for the lake, confirm key equipment selections and validate remaining assumptions of the construction methodology.

During the current FEED phase, an extensive technical review of the process flowsheet and associated testwork database, together with the reported experiences of other SOP projects in Western Australia, has led to the requirement for additional process testwork to be completed. This additional testwork aims to de-risk the Project's start-up stage by demonstrating the targeted potash-bearing salt mineral can be consistently produced from the expected harvest salt feed during Project's start-up stage.

Harvest salts collected during the field evaporation trial at Lake Mackay have been prepared for conversion testwork and sent to vendors. The testwork program will focus on better understanding the range of process

conditions for the front end of the process flowsheet with a focus on variable grade harvest salts that may be present during the start-up stage of the Project before steady-state conditions are reached. By testing a range of possible conditions, the Company aims to improve the robustness of its process design for conversion and for downstream processing.

Test work results for the conversion stage have repeatably demonstrated that the occurrence of Leonite (expected during the start-up stage of the project) can be managed through temperature control and sufficient residence time in a cooling crystalliser. A cooling crystalliser was incorporated into the DFS design and remains the preferred equipment as it provides uniform temperature control throughout the vessel ensuring conversion to Schoenite. The optimal temperature required in the conversion stage to resolve Leonite is ~15 degrees Celsius, which is lower than the 28 degrees Celsius assumed during the DFS, prior to understanding the occurrence of Leonite in the startup feed salts.

This additional conversion process testwork was conducted in collaboration with Veolia Water Technologies Inc. (USA), a leading crystallisation-vendor, to test the conversion stage of the process. The conversion testwork was successful in understanding the process conditions for converting startup harvest (containing Leonite) into Schoenite for further refinement into SOP, via flotation, leaching and SOP crystallization. Testwork for the leaching and SOP crystallisation stages are currently being scoped in collaboration with Veolia.

A flotation test program commenced at a separate flotation vendor late in the quarter and will continue through to the middle of the year. The program aims to confirm key flotation unit parameters to efficiently separate Schoenite from halite gangue. The results of both testwork programs will be used to refine the process design of the flotation stage.

### **Project Approvals**

The Mackay Potash Project is currently being assessed by the Western Australian Environmental Protection Authority (“EPA”). The EPA’s assessment is an accredited process under a bilateral agreement with the Commonwealth Government, and therefore the Project will not require a separate assessment by the Commonwealth Department of Climate Change, Energy, the Environment and Water.

During the quarter, the Company continued to respond to comments from the EPA and moreover, expand significantly on the Environmental Management and Monitoring Plans submitted with the Environmental Review Document. Several positive engagements were held with the EPA and the Department of Climate Change, Energy and Water (“DCCEEW”) to ensure the submission meets the requirements from the EPA in order for the project proposal to be put forward for assessment. Based on statutory guidelines the indicative timeline for EPA approval remains 2H 2024.

The Company is also progressing other outstanding approvals, licences and agreements, which include:

- Department of Mines, Industry Regulation and Safety – Miscellaneous Licences, Mining Lease, Mining Proposal and Mine Closure Plan approvals; and
- Department of Water and Environmental Regulation – Works Approval and Licence.

## Government and Community Engagement

The Company continues its active engagement in local communities and across all levels of Federal, State and Local Government. Aligned with project progress several engagement meetings were held with Federal Government Ministers and Commonwealth Departments in March.

The Project enjoys strong support in local communities, particularly given the employment opportunities and economic infrastructure that it will create. The Project is expected to create approximately 200 direct full-time jobs and support over 600 jobs through the regional supply chain over its 40 year life, generating valuable long-term opportunities for Indigenous people living in Central Desert communities, as well as people living throughout the broader Kimberley region. Contemporary letters of support from multiple Native Title Holder representative bodies have been received to support re-submission to EPA WA in the June quarter.

A focus of the community engagement efforts during the quarter has been the design of an Indigenous Participation Readiness Assessment, the next step of which involves direct engagement with the Tjamu Tjamu (Aboriginal Corporation) RNTBC and the broader Kiwirrkurra community, including the local school and IPA Ranger program, to deepen understanding of local skills, aspirations, and business capabilities.

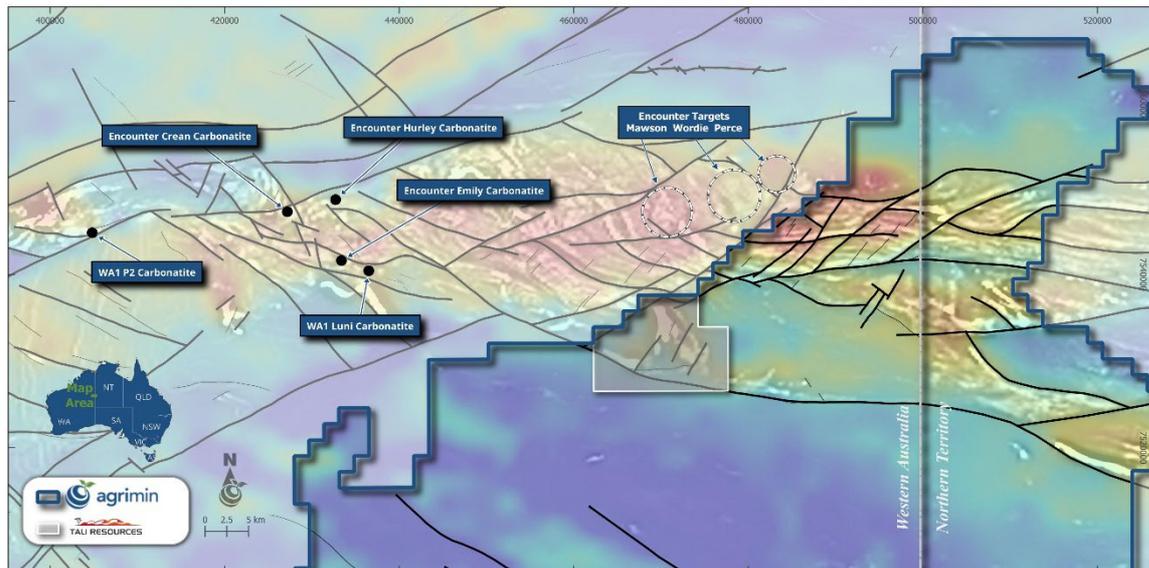
## Exploration

During the quarter, the Company provided an update on its activities in relation to exploration of its prospective tenure in the West Arunta. Agrimin's Mackay West Arunta Project covers over 30km of untested strike extent in the West Arunta Region, along trend from both WA1 Resources Ltd's Luni and P2 carbonatites and from Encounter Resources Ltd's Emily, Crean and Hurley carbonatites, where significant niobium and rare earth element mineralisation has been found.

Agrimin's Project has to date had no systematic exploration for iron oxide copper-gold ("IOCG") or carbonatite style deposits, with all prior exploration solely focussed on potash at Lake Mackay. The Project consists of semi-coincident gravity high anomalies, some with coincident magnetic anomalies, which have been identified from broad-spaced, regional geophysical datasets. These anomalies are considered highly prospective for both IOCG and carbonatite mineralisation. Whilst regional data coupled with adjacent exploration success highlight the prospectivity of the West Arunta, Agrimin will undertake infill gravity surveys to define potential targets for drill testing.

Engagement and negotiation of exploration agreements continued with Tjamu Tjamu (Aboriginal Corporation) RNTBC and Parna Ngururrpa (Aboriginal Corporation) RNTBC with regard to tenure in Western Australia, and the Central Land Council with regard to tenure in the Northern Territory. Agrimin continues to target exploration activities in the West Arunta as soon as practicable.

**Figure 2. Agrimin’s Exploration Tenure with Filtered Gravity over Filtered Magnetics**



## Lake Auld Potash Project – Western Australia (100% owned)

The Company continues its consultations with Jamukurnu-Yapalikurnu Aboriginal Corporation (Western Desert Lands) RNTBC, the Native Title representative body for the Martu people.

The Lake Auld Potash Project is located approximately 640km south-east of Port Hedland, Western Australia (**Figure 1**). The Lake Auld Potash Project consists of a granted Exploration Licence covering a lakebed area of 108km<sup>2</sup> across Lake Auld. Lake Auld’s exceptionally high grades, favourable climatic conditions for solar evaporation and proximity to a major operating port support the potential for strong economics.

The Lake Auld Potash Project is neighboured either side by the Company’s existing Exploration Licence applications which cover the Canning Palaeovalley, including the remainder of Lake Auld and Percival Lakes. The Company’s tenements cover the most prospective portion of the 450km long lake system where historic sampling of brine has returned the highest known in-situ SOP grades from an Australian salt lake.

## Corporate Activities

### Share Issues

During the quarter the Company completed a SPP that raised \$2.9 million. The SPP was conducted at an issue price of \$0.15 per ordinary share in the Company, with a free attaching unlisted option exercisable at \$0.20 each within 3 years of issue, resulting in approximately 19.6 million Shares and 19.6 million Options issued. The SPP details were announced on 15 February 2024.

Subsequent to the quarter end, the Company announced it had received firm commitments from clients of Euroz Hartleys Limited in relation to the shortfall from the Company’s recently completed SPP, via the placement of

7.1 million fully paid ordinary shares and 7.1 million unlisted options to raise gross proceeds of approximately \$1.1 million (before costs).

Funds raised from the SPP and shortfall will be applied towards:

- regulatory approvals, heritage surveys and environmental monitoring;
- Mackay Potash Project delivery;
- West Arunta access agreements and exploration; and
- general working capital and corporate cost requirements.

### **Tali Resources Pty Ltd**

Agrimin holds a 40% interest in Tali Resources Pty Ltd, a private company which has Exploration Licences in Western Australia that are subject to a Farm-in and Joint Venture Agreement with Rio Tinto Exploration Pty Ltd. Tali Resources Pty Ltd also holds 8,525,000 shares in WA1 Resources Ltd (ASX: WA1), which had a share price of \$18.12 per share as at 23 April 2024. The current market value of Agrimin's 40% share of Tali Resources's WA1 shares was \$62 million as at 23 April 2024, on a gross see through basis.

### **Summary of Expenditure Incurred on Activities**

The Company incurred expenditure of \$1,023,000 which for accounting purposes has been allocated to exploration and evaluation activities during the quarter. No expenditure was allocated to development or production activities during the quarter. Exploration and evaluation expenditure during the quarter primarily related to FEED works, environmental approvals and project financing.

### **Payments to Related Parties of the Entity**

A description of and explanation for payments to related parties and their associates per Section 6.1 of the Appendix 5B for the quarter ending 31 March 2024 is set out below (**Table 1**).

**Table 1. Payments to Related Parties of the Entity and their Associates**

<b>Item</b>	<b>Current Quarter (A\$)</b>	<b>Previous Quarter (A\$)</b>
<b>Directors' Remuneration</b>		
CEO Salary and Superannuation	111,000	111,000
Executive Director Fee and Superannuation	-	184,677
Non-Executive Director Fees	72,750	62,750
Company Secretarial Fees	-	1,500
<b>Total payments to related parties of the entity and their associates</b>	<b>183,750</b>	<b>359,927</b>

## Tenement Interests

**Table 2. Schedule of Tenement Interests as at 31 March 2024**

Tenement Ref.	Project	Holder	State	Status	Interest
<b>Exploration Licences</b>					
E80/4887	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4888	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4889	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4890	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4893	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4995	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5055	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5124	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5172	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
EL24861	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%
EL30651	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%
EL31780	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%
EL31781	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%
E45/4925	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E45/5417	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5419	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5420	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5579	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
<b>Other Licences</b>					
L80/87	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
L80/88	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%
L80/98	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
L80/99	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Application	100%
L80/100	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Granted	100%
L80/101	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Application	100%
L80/102	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Application	100%
L80/103	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Application	100%
L80/104	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Application	100%
L80/105	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%

ENDS

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This ASX Release is authorised for market release by Agrimin's Board.

**About Agrimin**

Based in Perth, Agrimin Limited is the leading fertiliser company on the ASX (**ASX: AMN**) focused on development of its 100% owned Mackay Potash Project. The Project is situated on Lake Mackay in Western Australia, the largest undeveloped potash-bearing salt lake in the world. Agrimin's vision is sustainable food security for future generations by providing nutrition the world needs. The demand for SOP is underpinned by population growth, which the Food and Agriculture Organization of the United Nations predicts will drive an increase in global food demand by 50% by 2050<sup>1</sup>.

**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. Forward-looking information includes exchange rates; the proposed production plan; projected brine concentrations and recovery rates; uncertainties and risks regarding the estimated capital and operating costs; uncertainties and risks regarding the development timeline, including the need to obtain the necessary approvals. For a more detailed discussion of such risks and other factors, see the Company's 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.

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<sup>1</sup> Food and Agriculture Organization of the United Nations, The future of food and agriculture trends and challenges, accessed 24 October 2023, page 136: <https://www.fao.org/3/i6583e/i6583e.pdf>