

ASX Release 29 January 2025

# QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 31 DECEMBER 2024

## Highlights

## **Mackay Potash Project**

- Western Australian state environmental approval for the development of the Mackay Potash Project received on 20 January 2025.
- Mackay Potash Project completed stage 4 of assessment with the Western Australian Environmental Protection Authority ("EPA") with publication of assessment report.
- Wyndham Port granted First Point of Entry Status by the Western Australian and Commonwealth Governments.
- Mining Lease loan of \$6.4 million approved by the Western Australian Cabinet for Lake Mackay.
- Tenement rents payable in 2025 totalling \$0.6 million have been deferred to 2026 by the Western Australian Mininster for Mines and Petroleum, the Hon. David Michael MLA.

#### Corporate

- Cash balance of \$1.7 million as at 31 December 2024 excluding R&D Tax refund of \$0.7 million received subsequent to the quarter end.
- Completed the milestones associated with the Supply Chain Resiliance Initiative grant and received a final payment of \$0.4 million during the quarter.
- Carrying value of Agrimin's 40% interest in Tali Resources Pty Ltd of \$46 million as at 30 June 2024, as reported in the Company's 2024 Annual Report (announced to the ASX on 30 September 2024).
- Mr Lee Bowers was appointed as non-executive chair following Mr Alec Pismiris' retirement at the Annual General Meeting on 29 November 2024.

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report its activities for the quarter ending 31 December 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 which will 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 planned production of SOP from Lake Mackay has strong environmental credentials, and is targeted 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 Celsius 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 greenhouse gas 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 3,000km² in Western Australia. 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 transport corridor from Lake Mackay to Wyndham are in place.

SOP prices remained strong during the quarter at approximately US\$625 per tonne<sup>2</sup>, supported by limited market supply and firm demand.



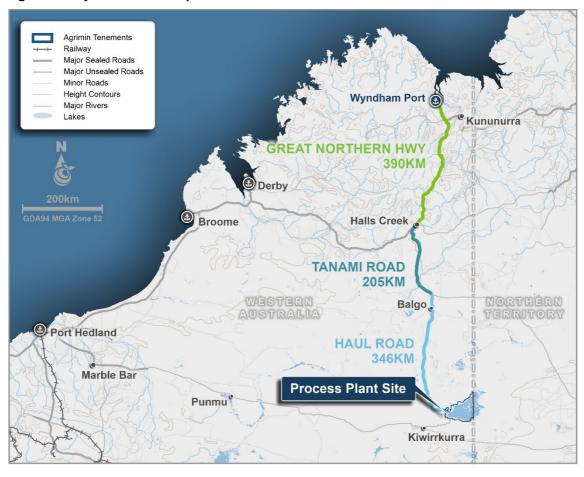


Figure 1. Project Location Map

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 has the potential to 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 Worley Consulting 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 well credentialed ESG development of the Project to deliver on a number of metrics, including:

- Strong engagement with Indigenous people and Traditional Owners with support for land management and community programs;
- Significant commitment to education, training and employment opportunities for Indigenous people, including in relation to the haul road maintenance and 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 support global food security, especially with respect to increasing demand for high value crops such as fruits, vegetables, tree nuts and grape-vines.

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

- Permitting Commonwealth primary environmental approval and granting of mining tenure;
- Engineering advanced process testwork and maturing preparation for contractor involvement;
- Execution Planning critical path schedule analysis and protection of earliest possible construction and operation with a key focus on required environmental surveys and baseline monitoring; and
- Funding evaluation of potential strategic partnerships and funding pathways.

## **Product Marketing and Project Funding**

The Company has 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, and announced to the ASX on 17 May 2021, 25 January 2022 and 4 April 2022 respectively.

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 are targeted to 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 completed site-based testwork for the salt harvesters in 2020, and geotechnical sampling and testwork for the sealed haul road in 2022. 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 +80%. 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 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.

An extensive technical review of the process flowsheet and associated testwork database, together with the reported learnings from globally successful operations and the early mover SOP projects in Western Australia, led to the requirement for additional process testwork to be completed. This additional testwork's objective was 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.

Having discovered Leonite, which does not float, instead of Schoenite in the flotation feed, testwork focussed on the conversion stage and has repeatably demonstrated that the Schoenite can be produced instead of Leonite through temperature control and sufficient residence time in a cooling crystalliser (as announced to the ASX on 1 March 2024). 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 approximately 15 degrees Celsius, which is lower than the 28 degrees Celsius assumed during the DFS.

This conversion testwork was conducted in collaboration with Veolia Water Technologies Inc. (USA) ("Veolia"), a leading crystallisation vendor. The conversion testwork was successful in understanding the process conditions for converting startup harvest salts (containing Leonite) into Schoenite for further refinement into SOP, via flotation, leaching and SOP crystallisation.

During 2024, further testwork was carried out to finalise the conversion and flotation steps of the flowsheet. The flotation testwork was again performed at Veolia's facility in Plainfield, USA and utilised FLSmidth Inc.'s ("FLSmidth") flotation metallurgist and test equipment. The testwork aimed to evaluate collector preparation and mixing intensity, process temperature range, thickening and filtration and a bulk flotation effort to produce sufficient Schoenite concentrate to enable downstream leach and SOP crystallisation validation (as announced to the ASX on 24 September 2024).

Further FEED related activities undertaken during the quarter included:

- Updated 19 redline Process Flow Diagrams (PFD's) incorporating process test work results and flowsheet maturation. The PFD's detail equipment selection and key process parameters relating to the operation of the pond system and mineral processing plant.
- Engaged an SOP design, procurement, construction and commissioning experienced consultant to complete an initial design review and optimisation study. Scope for global peer review and continued optimisation activities developed.



- Remaining process test work scoped and budgeted in collaboration with leading equipment vendors relating to the crushing and downstream Schoenite leach and SOP crystallisation stages of the flowsheet.
- Engagement with experienced design, procurement, construction and commissioning potential contracting partners including deep civil expertise commencing co-design of the FEED scope of work, schedule and budget.
- Continued engagement and collaboration with potential wet harvester vendor to optimise equipment selection and improve pond reliability and operational flexibility.

#### **Project Approvals**

The Mackay Potash Project was assessed by the EPA under Part IV of the *Environmental Protection Act 1986 (WA)*. The EPA's assessment was an accredited process under a bilateral agreement with the Commonwealth Government, and therefore the Project did not require a separate assessment by the Commonwealth Department of Climate Change, Energy, the Environment and Water ("**DCCEEW**").

The EPA recommended to the Western Australian Minister for Environment that the development could proceed, subject to compliance with the assigned conditions. EPA Assessment Report 1777 for the Mackay Potash Project was published on 10 December 2024 and during the required public appeal period no appeals were submitted to the Western Australian Minister for Environment.

The EPA assessment report included a number of commendations for Agrimin including the extensive survey effort undertaken by the Company; the measures incorporated into project design to mitigate impacts; the nature and extent of consultation with Traditional Owners and ranger groups and the cobenefits of the proposed offsets to Traditional Owners, ranger groups and communities in building on their existing efforts within their Indigenous Protected Areas.

Subsequent to the quarter end on 20 January 2025 the Western Australian Minister for Environment published Ministerial Statement 1244 providing State approval for the project to proceed. Ministerial Statement 1244 and EPA Assessment Report 1777 are publicly available on the EPA website: Mackay Sulphate of Potash Project | EPA Western Australia.

Agrimin note the level of involvement that the DCCEEW committed during the State accredited assessment process. The Company will now expeditiously work to secure Commonwealth environmental approval, targeted in the first half of 2025.

During the quarter, Agrimin provided a detailed application to both State and Federal Governments for Wyndham Port to be granted First Point of Entry ("FPOE") Status. Subsequent to the quarter end, the Western Australian and Commonwealth Governments announced Wyndham Port's designation as a FPOE. Designation of Wyndham Port as a First Point of Entry is expected to bolster export optionality with higher container loads. Critically, it provides Agrimin with the opportunity to import construction and operations equipment, materials, fuel and consumables via Wyndham – a dynamic that offers significant de-risking and reliability enhancement over Project life. Coupled with the



planned fully sealed transport corridor, it is designed to minimise reliance on unsealed roads and significantly longer transport options.

The Company is also progressing other secondary approvals, licences and agreements, including:

- Department of Energy, 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.

#### **Mining Lease Loan**

Following significant advocacy and engagement with the Department of Jobs, Tourism, Science and Innovation ("JTSI"), Agrimin was notified during the quarter that the Western Australian Cabinet had approved a Mining Lease Loan for Agrimin of \$6.4 million. The loan remains undrawn.

The concessional mining lease rate for minerals dissolved in brine requires the full mining lease rate (\$28.60/ha) be paid on application for a mining lease with the difference between the full mining lease rate and the minerals dissolved in brine mining lease rate (\$3.30/ha) being rebated on grant of a mining lease. The \$6.4 million loan is intended to approximately cover the rebate amount so that Agrimin would not be out of pocket for the period taken for any mining lease to be granted.

This unique arrangement approved by the Western Australian Cabinet demonstrates strong support from the State Government for advancement of the Mackay Potash Project.

#### **Tenement Rent Deferral**

During the quarter the Company successfully applied to the Western Australian Mininster for Mines and Petroleum, the Hon. David Michael MLA, for tenement rents payable in 2025 totalling \$0.6 million to be deferred to 2026.

The time extension was granted under the provisions of the *Mining Act 1978* for extenuating circumstances is in recognition of the long regulatory approval timelines and demonstrates the State Governments' ongoing support for Agrimin and the SOP industry.

## **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 the Project's progress, significant advocacy was undertaken during the quarter with State Government Ministers and Departments, and Federal Government Ministers and Commonwealth Departments.

The Project enjoys strong support in local communities, particularly given the employment opportunities and economic infrastructure that it can create. If positive FID is achieved, the Project is expected to create approximately 200 direct full-time operational jobs, 100 full-time roles related to the haulage and the transport corridor and support over 600 jobs through the regional supply chain



over its multi-decade mine life, generating valuable long-term opportunities for Indigenous people living in Central Desert communities, as well as people living throughout the broader Kimberley region.

During the quarter, a comprehensive planning workshop was held with the Kiwirrkurra Rangers related to the environmental monitoring surveys to commence in 2025. The workshop approach was successful in delivering the desired outcomes of collaboration, knowledge sharing and community engagement. Similar meetings are planned to be held with the Ngururrpa Rangers and Tjurabalan People in 2025. Commencement of environmental monitoring programs in 2025 is critical path to the construction schedule and part of compliance with pre-construction approval conditions included in the State environment approval.

#### **Northern Territory Tenure**

Following an on-country meeting with Traditional Owners and their representative body, the Central Land Council, and following feedback received, Agrimin respectfully withdrew its tenement applications over the Northern Territory portion of Lake Mackay during the quarter. These include: EL24861, EL30651, EL31780 and EL31781. There was no carrying value associated with these tenements as they were not granted.

## **Exploration**

Agrimin's Mackay West Arunta Project ("MWA Project") covers untested strike extent in the West Arunta region, along trend from both WA1 Resources Ltd's (ASX: WA1) Luni and P2 carbonatites and from Encounter Resources Ltd's (ASX: ENR) Emily, Crean and Hurley carbonatites, where significant niobium and rare earth element mineralisation has been found.

The MWA 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 MWA 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.

Agrimin plans to continue engagement with Traditional Owners towards exploration agreements to support exploration on the MWA Project.



## Lake Auld Potash Project – Western Australia

Following the Annual General Meeting of Jamukurnu-Yapalikurnu Aboriginal Corporation (Western Desert Lands) RNTBC ("JYAC"), the Native Title representative body for the Martu people, the Company received feedback that the Board of JYAC was not supportive of mining activity on the Lake Auld Lake System.

As a result, Agrimin respectfully withdrew tenement applications E45/5417, E45/5419, E45/5420 and E45/5579 during the quarter. As disclosed in the 2024 Annual Report, the Company also wrote off the carrying value capitalised with regards to the Lake Auld Potash Project as at 30 June 2024.

## **Corporate Activities**

#### **Supply Chain Resiliance Initiative Grant**

During the quarter, Agrimin successfully completed the milestones associated with the Supply Chain Resiliance Initiative ("SCRI") grant (announced to the ASX on 20 December 2024). The final payment of \$0.4 million of the \$2.0 million grant was received during the quarter. The SCRI provides grant funding to Australian businesses to address supply chain vulnerabilities for critical products or inputs identified in the Sovereign Manufacturing Capability Plan.

### **Tali Resources Pty Ltd**

Tali is a private company which is 40% owned by Agrimin and is focused on exploration in the West Arunta region of Western Australia. Tali holds one of the largest and most prospective tenement packages in the West Arunta. Tali also owns 13% of WA1 Resources Ltd (ASX: WA1). The carrying value of Agrimin's 40% interest in Tali Resources Pty Ltd was \$46 million as at 30 June 2024, as reported in 2024 Annual Report (announced to the ASX on 30 September 2024).

#### **Board Changes**

Mr Lee Bowers was appointed as a non-executive director on 14 October 2024.

Mr Alec Pismiris retired from the board following the Annual General Meeting ("**Meeting**") on 29 November 2024. Mr Bowers has assumed the role of non-executive chair following the Meeting.

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

The Company incurred expenditure of \$716,000 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 potential project financing evaluation.



## **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 December 2024 is set out below (**Table 1**).

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

Item	Current Quarter (A\$)	Previous Quarter (A\$)	
Directors' Remuneration			
CEO Salary and Superannuation	94,606	111,500	
Non-Executive Director Fees	35,778	70,833	
Fivemark Capital Pty Ltd <sup>1</sup>	6,522	-	
Total payments to related parties of the entity and their associates	136,906	182,333	

<sup>1.</sup> Fivemark Capital Pty Ltd provides investor relations and advisory services and is a related party of Mr Lee Bowers. The amount relates to costs incurred from the date of Mr Bowers' appointment as a director on 14 October 2024.



# **Tenement Interests**

Table 2. Schedule of Tenement Interests as at 31 December 2024

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Tenement	Project	Holder	State	Status	Interest	Nature of Change			
Exploration Licences									
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%	Withdrawn			
EL30651	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%	Withdrawn			
EL31780	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%	Withdrawn			
EL31781	Mackay Potash	Agrimin Potash Pty Ltd	N.T.	Application	100%	Withdrawn			
E45/5417	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%	Withdrawn			
E45/5419	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%	Withdrawn			
E45/5420	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%	Withdrawn			
E45/5579	Lake Auld Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%	Withdrawn			
Other Licences									
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.	Granted	100%				
L80/102	Mackay Potash	Northern Infrastructure Pty Ltd	W.A.	Granted	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.

<sup>&</sup>lt;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

<sup>&</sup>lt;sup>2</sup> Argus Media Group as at 17 October 2024