

ASX Release 27 July 2023

# QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 30 JUNE 2023

## Highlights

## **Mackay Potash Project**

- Front End Engineering Design ("FEED") works continued with additional process testwork underway in collaboration with leading equipment vendors
- . Environmental impact assessment is ongoing with Agrimin preparing responses to EPA comments

## **Corporate**

Cash balance of \$2.2 million as at 30 June 2023

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report its activities for the quarter ending 30 June 2023.

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

Agrimin's vision is to establish the Mackay Potash Project ("the Project") as the world's leading seaborne supplier of Sulphate of Potash ("SOP") fertiliser, to develop the Project with sustainability principles at its core and to empower local Indigenous communities throughout the Project's long life.

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.

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.

The Project 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 and four Exploration Licence applications covering over 1,200km² 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.



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's commitment to a sustainable and ESG-friendly development was embodied throughout the DFS and the Project will 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, supported by Turner & Townsend JukesTodd as project management consultant, 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.

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 will aim 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.

This additional process testwork has commenced in collaboration with a leading crystallisation vendor to test and confirm the optimal harvest salt preparation under a range of operating conditions for the conversion reactor. The conversion reactor is integral to the downstream processing stages and once testing is advanced it will facilitate further testwork to confirm the subsequent flotation process.

The current testwork program is anticipated to be completed during the second half of 2023. The results will be used to refine the process design and facilitate a subsequent phase of testing the flotation and crystallisation steps.



Planning is well advanced for testwork in relation to the flotation process design with technical risks identified, key vendor evaluations performed and a preferred vendor selected to collaboratively develop the test plan going forward. It is anticipated that vendor testwork will commence in the second half of 2023.

During the current FEED phase, the Company completed a civil construction trial to increase the understanding of 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.

The Company has also 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%.

## **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 received further comments from the EPA in relation to the Environmental Review Document and it continues to work closely with the EPA to ensure its information requirements are met in the most efficient way. Based on statutory guidelines the indicative timeline for EPA approval is for late-2023.

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;
- Department of Water and Environmental Regulation Works Approval and Licence; and
- Agreement with Tjurabalan Native Title Lands (Aboriginal Corporation) RNTBC for the grant of a Miscellaneous Licence over the proposed haul road.

## **Government and Community Engagement**

The Company continues its active engagement in local communities and across all levels of Federal, State and Local Government. The Mackay Potash Project enjoys strong support in local communities, particularly given the employment opportunities and economic infrastructure that the Project 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.

Newhaul Bulk Pty Ltd (the strategic haulage joint venture between Agrimin and Newhaul Pty Ltd) continues to progress plans to establish a Driver Training Academy to maximise the number of local employees and provide further opportunities for local employment and skills training presented by the Project's development. The Driver Training Academy will aim to provide inspiring pathways for young people in Central Desert, East Pilbara and Kimberley communities who are interested in pursuing a long-term career in logistics.



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

The Company continues its consultations with Western Desert Lands Aboriginal Corporation (Jamukurnu-Yapalikunu) 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**

No ordinary shares or other securities were issued during the quarter.

## **Business Development**

Various business development opportunities are constantly under consideration, with all opportunities being assessed in context of the Company's current strategic goals and risk profile.

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. An RC drilling program commenced in July 2023. Tali Resources Pty Ltd also holds a 15.9% shareholding in WA1 Resources Ltd (ASX: WA1).

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

The Company incurred expenditure of \$706,000 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 30 June 2023 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	82,500	82,500
Non-Executive Director Fees	57,625	57,625
Company Secretarial Fees	9,000	9,000
Total payments to related parties of the entity and their associates	149,125	149,125

# **Tenement Interests**

Table 2. Schedule of Tenement Interests as at 30 June 2023

Tenement Ref.	Project	Holder	State	Status	Interest		
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%		
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%		
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%		



Tenement Ref.	Project	Holder	State	Status	Interest
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 a leading fertiliser development company focused on the 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 is aiming to be a global supplier of specialty potash fertilisers to both traditional and emerging value-added markets. Agrimin's shares are traded on the Australian Securities Exchange (ASX: AMN).

#### **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.