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ASX Release 29 July 2019

QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 30 JUNE 2019

Highlights

Mackay Potash Project

- Definitive Feasibility Study continued to advance
- Fieldwork included evaporation pond trial, trench pump testing and other targeted hydrogeological investigations
- Product development and marketing activities expand Agrimin's range of specialty potash fertilisers with a Sulphate of Potash Magnesia ("SOPM") product
- Completion of process modelling and flowsheets for both Sulphate of Potash ("SOP") and SOPM products
- Completion of a two year trench pump testing program to generate long-term data to support Mineral Resource estimation, Ore Reserve and mine planning
- Western Australian Government Budget allocates \$43 million of funding to the Tanami Road, in addition to Australian Federal Budget allocation of \$75 million
- Memorandum of Understanding signed with the Ngururrpa native title holders in relation to project infrastructure

Corporate

- Appointment of Mr Richard Seville as an Independent Non-Executive Director and Chairperson with effect from 5 August 2019
- Cash balance of \$5.7 million at 30 June 2019

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report its activities for the quarter ending 30 June 2019.



Mackay Potash Project – Western Australia (100% owned)

The Mackay Potash Project is located on Lake Mackay in Western Australia and is 100% owned by Agrimin. The project tenements cover an area of 4,335km² and are located 785km south of the Wyndham Port (**Figure 1**).

Lake Mackay's hydrogeological setting and significant size provide important attributes that support the development of a globally significant chloride-free potash operation. Lake Mackay is the largest known potashbearing salt lake in Australia and is the low point of an enormous groundwater and surface water catchment area. Lake Mackay covers an area of approximately 3,500km² and measures approximately 80km east-west and north-south. The salt lake is comparable in size to the two major sources of primary SOP production, being the 4,400km² Great Salt Lake in the USA and the 5,500km² Lop Nur (Luobupo operation) in China.

The closest community to the Mackay Potash Project is Kiwirrkurra which is located approximately 60km southwest. The Company has a Native Title Agreement in place that provides the necessary consents for the project's development and operations.



Figure 1. Project Location Map

The Pre-Feasibility Study ("**PFS**") for the Mackay Potash Project was completed in May 2018. The PFS is based on the extraction of brine-hosted potash from a single aquifer unit which commences approximately 40cm below ground surface. Brine is planned to be extracted solely from shallow trenches and fed into a series of



solar evaporation ponds. Potassium-bearing salts will precipitate in the ponds and will be wet harvested and pumped to the process plant.

The process plant has been designed for a capacity of 426,000tpa of SOP as dry granular product, with the PFS assuming a product mix of 50% granular and 50% standard product. The PFS assumed all production is shipped through Wyndham Port to world markets.

Details of the PFS results were provided in the Company's ASX Release on 7 May 2018.

Definitive Feasibility Study

The Company continues to advance the Definitive Feasibility Study ("**DFS**") for the project. During the quarter, DFS fieldwork included the evaporation pond trial, trench pump testing and other targeted hydrogeological investigations.

The Company has successfully finalised a two year program of long-term pumping tests across Lake Mackay. The long-term data acquired from this program will underpin the hydrogeological model, estimated brine grades and extraction rates for the DFS.

In addition, a range of other targeted hydrogeological investigations are nearing completion. This data will be used as the basis for constructing robust and reliable hydrogeological models to simulate lake-wide groundwater flow and mass transport. Agrimin's hydrogeological consultants have commenced work on an updated Mineral Resource Estimate, maiden Ore Reserve and DFS mine planning.

The Company recently completed a heritage clearance survey over an alternate process water borefield target located 70km north-west of the proposed process plant. Geophysical investigations undertaken last quarter identified an aquifer target within the Canning Basin which has potential to host extensive quantities of fresh water. Planning and approvals are expected to be completed in the current quarter to allow an investigatory bore drilling and pump testing program to be conducted.

The pilot evaporation trial continued to operate throughout the quarter, with salt harvesting activities commencing. The Company designed and fabricated a wet harvester to remove waste salts from the pilot evaporation ponds in order to allow the trial to operate uninterrupted over the long-term.

The trial has operated with continuous flows since October 2018 with brines being transferred through the ponds under a daily transfer regime. The Company's on-site process engineering team are closely monitoring the brine chemistry and salt formation in each pond in order to support the DFS pond model. The evaporation ponds are planned to operate throughout 2019 to capture a full annual cycle of operating data and seasonal variation. In addition, potash salts are being progressively harvested for product marketing purposes.

During the quarter, the Class-A evaporation pans measured evaporation rates for the autumn and early winter months. The rates measured were higher compared to the rates applied to the PFS pond modelling for the same period. Higher than expected evaporation rates were also measured last quarter during the summer months. This is expected to have a positive impact on the DFS.

Agrimin's process consultants have completed the process modelling and flowsheets for the DFS. The Company subsequently awarded the design package for the process plant. This engineering design work is underway.



During the course of the Company's marketing activities, it has received strong interest from fertiliser customers who would benefit from a completely water soluble potassium fertiliser that also contains magnesium and sulphur. Accordingly, over the past year the Company has completed extensive DFS level processing studies and has successfully developed a process to produce a high-quality SOPM product.

Agrimin's SOPM product is a low-chloride potash fertiliser with a high content of potassium, sulphur and magnesium. Like SOP, SOPM has a low salt index and is essentially chloride-free. It is fully soluble and pH neutral and is therefore highly suitable for soil application. The SOPM product contains¹ 25% K₂O, 11% MgO, 17% S and less than 2% Cl. These indicative product specifications are based on process testwork and laboratory production of SOPM at the Saskatchewan Research Council using brine from Lake Mackay.

During the quarter, the Company finalised a range of processing studies to confirm the potential to produce a SOPM product to meet customer requirements. The SOPM production process uses the same proven technologies that were applied in the Company's PFS and majority of the unit operations for SOPM are the same as for SOP production.

The PFS was based on a production target of 426,000tpa of SOP containing 52% K_2O and 18% S. The PFS production target thus contained 218,000tpa of K_2O and this is not planned to change during the DFS. The DFS product mix of SOP and SOPM will be based on projected customer demand and this will determine the project's overall production tonnages. The capital cost and operating margins as reported in the PFS are not expected to materially change with the inclusion of SOPM into the product mix.

During the quarter, significant progress was achieved towards the establishment of a new transport corridor between the Mackay Potash Project and Wyndham Port. Datasets from the geotechnical test pitting program and LiDAR topography survey were received. The Company subsequently awarded the design packages for road works and this engineering design work is expected to be completed in the current quarter.

The DFS has investigated the option of trucking LNG to the project as an alternative to the natural gas pipeline which was assumed in the PFS. Outcomes of this investigation indicate that LNG fuel supply could potentially remove the large up-front capital cost associated with the gas pipeline, while maintaining operating costs at a similar level as estimated in the PFS. During the quarter, the Company progressed negotiations with LNG suppliers.

The DFS development plan will locate the back-end of project's process plant at Wyndham. The Company advanced a range of options relating to the use of existing port infrastructure at Wyndham and/or the development of new infrastructure to support the shipment of potash. During the quarter, the Company continued to engage with several potential customers and off-takers to ensure the DFS will incorporate the most cost effective port and shiploading operations based on the variety of cargo types and sizes that have been requested.

Project Permitting

During the quarter, the Company continued preparing documentation for the project's environmental assessment which is underway with the Environmental Protection Authority and Commonwealth Department of the Environment and Energy.

 $^{^{1}}$ K₂O stands for potassium oxide, MgO stands for magnesium oxide, S stands for sulphur and Cl stands for chloride.



The Company undertook a range of field programs which have included the assessment of abiotic components pertinent to and resulting from ground disturbance as a result of brine extraction from the shallow salt lake aquifer. These assessments have also been undertaken on the peripheral wetlands and on-lake islands.

Native title consultations with respect to obtaining land access agreements for the proposed haul road corridor progressed during the quarter. The corridor passes through three native title determination areas, which includes Tjamu Tjamu (Aboriginal Corporation) RNTBC, Parna Ngururrpa (Aboriginal Corporation) RNTBC and Tjurabalan Native Title Land Aboriginal Corporation RNTBC.

The Company has a Native Title Agreement in place with Tjamu Tjamu (Aboriginal Corporation) RNTBC that addresses the project's development and operations, including project infrastructure.

During the quarter, the Company signed a Memorandum of Understanding ("**MOU**") with Parna Ngururrpa (Aboriginal Corporation) RNTBC, the registered native title body corporate representing the Ngururrpa native title holders. The MOU addresses the following proposed activities within the Ngururrpa native title determination area in Western Australia:

- Construction of a haul road for the purposes of transporting the Company's potash production from Lake Mackay to Wyndham Port;
- Construction of a borefield to enable the abstraction of process water to supply the Company's process plant at Lake Mackay; and
- Expansion of the Company's potash operations (brine extraction infrastructure) into the northern extent of Lake Mackay, outside of the current project development envelope.

During the quarter, the Company advanced discussions with the Tjurabalan native title holders in respect to the construction of a haul road for the purposes of transporting the Company's potash production from Lake Mackay to Wyndham Port.

Project Financing

The Company continues discussions with a number of potential strategic partners and traditional financiers. The Company also continues to assess a number of options in relation to off-take agreements which are aligned with the project execution strategy for the Mackay Potash Project.

During the quarter, the State Government announced it will allocate \$43 million to the Tanami Road in Western Australian. In addition, the Federal Government announced it will allocate \$75 million to the Western Australian section of the Alice Springs to Halls Creek Corridor (i.e. the Tanami Road). This Federal Government funding is anticipated to occur under the Australian Government's Roads of Strategic Importance initiative.

The proposed funding announced in the State and Federal Budgets is separate to the Company's discussions with the Northern Australia Infrastructure Facility ("**NAIF**"). The NAIF Board has previously expressed its interest in investigating the potential for NAIF support for the project with particular reference to Agrimin's proposed infrastructure. The NAIF could potentially provide concessional longer term debt finance for the project's proposed infrastructure.



Percival SOP Project – Western Australia (100% owned)

In December 2018, the Company lodged five Exploration Licence applications located approximately 450km south-east of Broome, Western Australia. The applications cover an area of 2,792km² over the majority of an extensive 450km long lake system (**Figure 1**). Historic sampling of brine within the application area has returned the highest known in-situ potassium grades from an Australian salt lake to date.

During the quarter, the Company progressed consultations with Western Desert Lands Aboriginal Corporation (Jamukurnu-Yapalikunu) RNTBC, the Native Title representative body for the Martu people, with a view to having the Exploration Licences granted in 2019.

Corporate Activities

Share Issues

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

Appointment of Chairperson

On 26 June 2019, the Company announced the appointment of Mr Richard Seville to the Board of Directors of Agrimin with effect from 5 August 2019. Mr Seville joins the Board as an Independent Non-Executive Director and Chairperson, replacing the current Chairperson Mr Brad Sampson. Mr Sampson will continue to serve on the Board as a Non-Executive Director.

Mr Seville has over 35 years experience in the resources sector including positions as Managing Director, Operations Director, Non-Executive Director and Chair. Mr Seville recently retired from his position as CEO and Managing Director of Orocobre Limited (ASX: ORE), a lithium and boron chemicals producer with operations in Argentina. He led Orocobre Limited for 12 years where he took the flagship Olaroz brine project through exploration, feasibility, financing with project debt and partnering with Toyota Tsusho Corporation and into production. Mr Seville holds a BSc in Mining Geology from Imperial College, London and a Masters in Engineering Science from James Cook University. Mr Seville continues to serve Orocobre Limited as a Non-Executive Director.

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.

During the quarter, the Company signed Mineral Exploration and Land Access Deed of Agreements in relation to tenements E80/5173 and E80/5175 with Tjamu Tjamu (Aboriginal Corporation) RNTBC and with the Parna Ngururrpa (Aboriginal Corporation) RNTBC.



Tenement Interests

Table 1. Schedule of Tenement Interests as at 30 June 2019

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%
EL30651	Mackay Potash	Agrimin Limited	N.T.	Application	100%
EL31780	Mackay Potash	Agrimin Limited	N.T.	Application	100%
EL31781	Mackay Potash	Agrimin Limited	N.T.	Application	100%
E80/5173	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Granted	100%
E80/5175	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Granted	100%
E80/5333	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5334	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E45/5417	Percival Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5418	Percival Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5419	Percival Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5420	Percival Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5421	Percival Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
Miscellaneous 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%
L80/95	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Application	100%
L80/96	Mackay Potash	Agrimin Potash Pty Ltd	W.A.	Granted	100%

ENDS



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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 Limited's shares are traded on the Australian Stock 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.

Competent Person's Statements

The information in this ASX Release that relates to Exploration Results, Mineral Resource Estimates and Pre-Feasibility Study results are extracted from the relevant ASX Releases and are available on www.asx.com.au and Company's website on www.agrimin.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous ASX Releases and, in the case of the Mineral Resource, that all material assumptions and technical parameters underpinning the estimates in the ASX Release on 7 May 2018 continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the previous ASX Releases.