

ASX Release 6 March 2024

## **West Arunta Exploration Update**

## Highlights

- Agrimin holds over 30km of untested strike extent within the West Arunta Region, along trend from WA1 Resources' Luni and P2 carbonatites and from Encounter Resources' Emily, Crean and Hurley carbonatites
- Meaningful geophysical anomalies have been identified within Agrimin's West Arunta tenure
- Carbonatite and IOCG deposits often have a strong density and/or magnetic contrast to surrounding country rock and can be identified by gravity and magnetic geophysical surveys
- Agrimin's prospective Mackay West Arunta Project tenure is located in the eastern area of Lake
   Mackay and remains unexplored with no prior systematic exploration or drilling
- Exploration agreements are progressing with Native Title holders
- Heritage surveys and infill geophysics will be undertaken with finalised exploration agreements
- Drill targets will be prioritised using infill geophysics and completed as soon as practicable

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to provide an update on activities to facilitate the testing of geophysical targets identified within its Mackay West Arunta Project ("the Project") from existing regional datasets. The area is located within Agrimin's Lake Mackay tenure in the eastern region of Lake Mackay. Regional exploration successes for niobium and rare earth elements by WA1 Resources Ltd ("WA1") and Encounter Resources Limited ("Encounter") are located ~50km west of Agrimin's target area along the same major geological trends.

**Debbie Morrow, Managing Director and CEO of Agrimin said:** "We are excited to be pursuing exploration of our tenure in the West Arunta in light of the significant discoveries in 2022 by WA1 and additional exploration success in 2023 by Encounter. The prospectivity of the West Arunta has been highlighted in the last few years with a significant increase in activity in the region and recent exploration success adjacent to our tenure has validated the West Arunta as a mineralised province that is worthy of further exploration.

"Gravity and magnetic surveys are low-cost and powerful tools, which we intend to utilise to refine the area of interest and assist with drill targeting. Following a decade in the region Agrimin has strong relationships with stakeholders and holds vast operational expertise in the area, and we are excited to be progressing exploration activities alongside our Mackay Potash Project in 2024. We look forward to sharing our progress over the coming months."



### **Exploration Targeting**

Agrimin's Mackay West Arunta Project covers over 30km of untested strike extent in the West Arunta Region, along trend from both WA1's Luni and P2 carbonatites and from Encounter's<sup>1</sup> Emily, Crean and Hurley carbonatites, where significant niobium and rare earth element mineralisation has been found. Agrimin's Project has 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.

Agrimin is progressing exploration agreements to facilitate multi-commodity exploration in the region. Exploration will target the potential for IOCG or carbonatite-hosted mineralisation, and therefore the priority exploration work is a gravity survey to further refine targets across the northern extent of Lake Mackay.

There is significant activity expected in the region in 2024 with WA1<sup>2</sup> and Encounter<sup>1</sup> both recently announcing drilling campaigns, including the Encounter plans to drill test targets adjacent to Agrimin tenure in April 2024, including the Mawson, Wordie and Perce targets (refer to Figure 1).

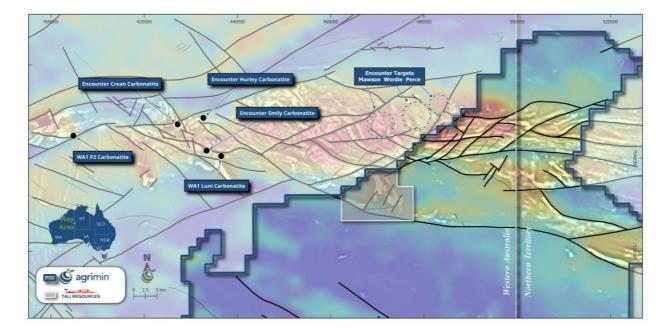


Figure 1. Agrimin's West Arunta Exploration Tenure with Filtered Gravity over Filetered Magentics

<sup>&</sup>lt;sup>1</sup> Refer to Encounter Resources Limited announcement dated 13 February 2024

 $<sup>^{2}</sup>$  Refer to WA1 Resources Ltd's announcement dated 21 February 2024



### **Next steps**

The Company is planning the following workstreams throughout 2024 to further its exploration activites:

- Complete exploration agreements and untertake heritage surveys;
- Complete infill geophysical surveys including gravity and magnetics over priority north-eastern anomalies;
- · Modelling and interpretation of gravity and magnetic datasets to define drill targets; and
- Plan appropriate drilling campaign.

Additional geophysical surveys will be considered on the eastern portion of Lake Mackay and on tenements in the Northern Territory as a second order priority.

## Mackay West Arunta Project (100% Agrimin)

Agrimin's prospective exploration tenure is located in the West Arunta region of Western Australia, coincident with its Mackay Potash Project tenure. The Project covers over 30km of untested strike extent in the West Arunta Region and is located ~50km to the east and along strike of WA1 Resources Ltd's (ASX: WA1) Luni and P2 carbonatites discovered in 2022 and abuts tenements held by Encounter Resources Limited (ASX: ENR) which include carbonatite mineralisation discovered in 2023 at Emily, Crean and Hurley.

## Tali Resources Pty Ltd (40% Agrimin)

Agimin holds a 40% interest in Tali Resources Pty Ltd ("**Tali**"), a private company which has significant Exploration Licences across tenure in the West Arunta, some of which are subject to a farm-in Agreement with Rio Tinto Exploration Pty Ltd.

Tali also holds 8,525,000 shares in WA1 Resources Ltd. On 5 March WA1 had a share price of \$12.47 per share and a market capitalisation of \$760 million. Agrimin's see through value of these shares is ~\$42 million.

#### **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 development 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>3</sup>.

#### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results for the Mackay Potash Project is based on and fairly represents information compiled or reviewed by Mr Michael Hartley, who is a member of AusIMM and the Australian Institute of Geoscience (AIG). Mr Hartley is a full-time employee of Agrimin Limited. Mr Hartley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2012 Edition). Mr Hartley consents to the inclusion of such information in this announcement in the form and context in which it appears.

#### **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>3</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



# JORC Code, 2012 Edition – Table 1

**Section 1 Sampling Techniques and Data** 

Criteria	ling Techniques and Data  JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	N/A. No sampling is being reported in this announcement.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Not applicable. No sampling is being reported in this announcement.
	Aspects of the determination of mineralisation that are Material to the public Report.	Not applicable. No sampling is being reported in this announcement.
	In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Not applicable. No sampling is being reported in this announcement.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Not applicable. No drilling is being reported in this announcement.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable. No drilling is being reported in this announcement.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable. No core or chip sampling is being reported in this announcement.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not applicable. No drilling is being reported in this announcement.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Not applicable. No drilling is being reported in this announcement.



Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not applicable. No drilling is being reported in this announcement.
	The total length and percentage of the relevant intersections logged.	Not applicable. No drilling is being reported in this announcement.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable. No sampling is being reported in this announcement.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable. No sampling is being reported in this announcement.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not applicable. No sampling is being reported in this announcement.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Not applicable. No sampling is being reported in this announcement.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Not applicable. No sampling is being reported in this announcement.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not applicable. No sampling is being reported in this announcement.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Not applicable. No assaying is being reported in this announcement.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable. No assaying is being reported in this announcement.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Not applicable. No assaying is being reported in this announcement.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable. No assaying is being reported in this announcement.
	The use of twinned holes.	Not applicable. No assaying is being reported in this announcement.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable. No assaying is being reported in this announcement.



Criteria	JORC Code explanation	Commentary
	Discuss any adjustment to assay data.	Not applicable. No assaying is being reported in this announcement.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Not applicable. No new survey data is being reported in this announcement.
	Specification of the grid system used.	The MGA94 UTM Zone 52 co-ordination system was used for representing locations and data.
	Quality and adequacy of topographic control.	Not applicable. No quality control data is being reported in this announcement.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Existing regional ground gravity data is based on 2.5km x 2.5km spacing and airborne magnetics data has survey line spacing of 400m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Not applicable. No Mineral Resource or Ore Reserve estimation is presented in this announcement.
	Whether sample compositing has been applied.	Not applicable. No sampling is being reported in this announcement.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Not applicable. No sampling is being reported in this announcement.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Not applicable. No drilling results are being reported in this announcement.
Sample security	The measures taken to ensure sample security.	Not applicable. No drilling results are being reported in this announcement.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The available data is reviewed on a regular basis by senior Agrimin personnel.
		Regional interpretation of publicly available gravity data has been quality controlled by external consultants.

### **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and	Type, reference name/number, location and ownership including agreements or material	The Mackay West Arunta Project is located within the tenements E80/5172, E80/4888,
	issues with third parties such as joint ventures, partnerships, overriding royalties, native title	E80/4887 and E80/4890 which are all held 100% by Agrimin Potash Pty Ltd, a wholly owned



Criteria	JORC Code explanation	Commentary
land tenure status	interests, historical sites, wilderness or national park and environmental settings.	subsidiary of Agrimin Limited.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	These tenements are contained completely within Aboriginal Reserve Land. Whilst Agrimin has existing Native Title Agreements with Parna Ngururrpa and Tjamu Tjamu Aboriginal Corporations relating to potash, Agrimin is negotiating exploration agreements with those Native Title Groups for the exploration of other minerals.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous on ground or airborne exploration has been conducted on the tenement other than government available public data.
Geology	Deposit type, geological setting and style of mineralisation.	The Mackay West Arunta Project is located within the West Arunta Orogen, representing the western-most part of the Arunta Orogen which straddles the Western Australia-Northern Territory border.
		Outcrop in the area is generally poor, with bedrock largely covered by Tertiary sand dunes and spinifex country of the Gibson Desert. As a result, geological studies in the area have been limited, and a broader understanding of the geological setting is interpreted from early mapping as presented on the MacDonald (Wells, 1968) and Webb (Blake, 1977 (First Edition) and Spaggiari et al., 2016 (Second Edition)) 1:250k scale geological map sheets.
		The West Arunta Orogen is considered to be the portion of the Arunta Orogen commencing at, and west of, the Western Australia-Northern Territory border. It is characterised by the dominant west-north-west trending Central Australian Suture, which defines the boundary between the Aileron Province to the north and the Warumpi Province to the south.
		The broader Arunta Orogen itself includes both basement and overlying basin sequences, with a complex stratigraphic, structural and metamorphic history extending from the Paleoproterozoic to the Paleozoic (Joly et al., 2013).
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Not applicable. No drilling results are being reported in this announcement.
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation</li> </ul>	



Criteria	JORC Code explanation	Commentary
	<ul> <li>above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Not applicable. No drilling results are being reported in this announcement.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Not applicable. No drilling results are being reported in this announcement.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable. No drilling results are being reported in this announcement.
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Not applicable. No drilling results are being reported in this announcement.
mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable. No drilling results are being reported in this announcement.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Not applicable. No drilling results are being reported in this announcement.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figure 1 provided in the above announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All meaningful information has been included in the body of the text.
Other substantive	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical	All material data and information has been included in the body of the announcement. Statewide publicly available GSWA and NTGS



Criteria	JORC Code explanation	Commentary
exploration data	survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	data including ground gravity data with 2.5km x 2.5km spacing and airborne magnetics data with survey line spacing of 400m.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Additional geophysical surveys are planned to be completed to aid interpretation and future work objectives.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to Figure 1 provided in the above announcement.