

ASX Release 25 October 2018

MACKAY SOP PROJECT FIELDWORK UPDATE

Highlights

- Excavation of 21 pilot trenches across the project area completed
- 16 long-term pumping tests completed, with steady-state pumping rates in-line with expectations
- Targeted work programs for DFS mine planning and Ore Reserve estimation are in progress

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report an update of results from long-term pumping tests undertaken at the Mackay Sulphate of Potash ("SOP") Project in Western Australia.

Figure 1. Pilot Trench During Construction





In August 2017, the Company announced the commencement of trenching and long-term pump testing to acquire data to support key assumptions underpinning the hydrogeological model and brine recovery rates for the Definitive Feasibility Study ("**DFS**").

The Company has now excavated 21 pilot trenches and installed 111 associated monitoring bores across the project area (**Figure 1**). This marks the completion of trench excavation for this phase of work. The geographical spread of trench locations provides data that is representative of the hydrogeological conditions existing across the project area (**Figure 2**). Long-term pumping tests have been completed at 16 trenches, with the remaining five trenches planned to be tested in the coming months.

The final pumping rate at the conclusion of each pumping test has ranged from 0.2 to 6.9m³ per day per metre of trench ("m³/day/m"). Each test was concluded when the final pumping rate was believed to have reached a steady-state condition. Brine samples were taken throughout the duration of each test and assays returned median values of 3,633mg/L Potassium, 2,855mg/L Magnesium and 23,146mg/L Sulphate.

The pump testing results are in-line with the Company's expectations based on the hydrogeological characteristics across the shallow brine aquifer. The data collected will be used in the DFS level hydrogeological modelling and Ore Reserve estimation.

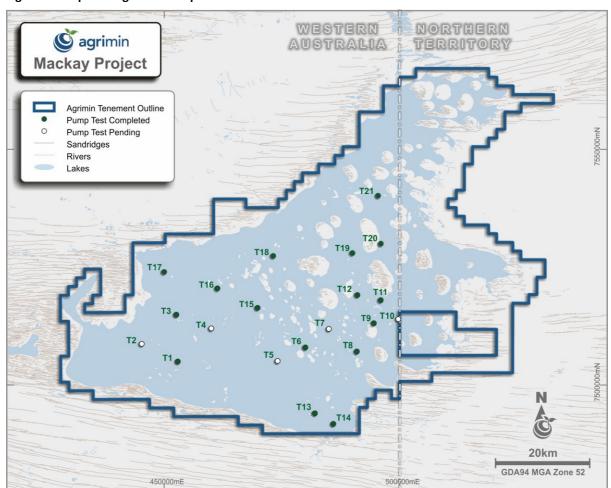


Figure 2. Map of Long-Term Pump Tests



The long-term pump testing results are presented in **Table 1**. Trench locations and brine chemistry are presented in **Table 3** and **Table 4**, respectively.

Table 1. Results of Long-Term Pumping Tests as at 21 October 2018

	Start of	Drawdown	Duration of Testing	Total Volume	Indicative Steady- State Pumping
Trench ID	Pumping Test	in Trench ¹	Period	Pumped ²	Rate
T1	4/8/2017	0.6m	60 days	7,904m³	1.4m³/day/m
T2	Pending	-	-	-	-
T3	10/8/2017	2.0m	125 days	4,166m³	0.5m³/day/m
T4	Pending	-	-	-	-
T5	Pending	-	-	-	-
Т6	13/10/2017	1.2m	25 days	890m³	0.3m³/day/m
T7	Pending	-	-	-	-
T8 ³	14/1/2018	2.5m	14 days	1,537m³	0.9m³/day/m
Т9	12/10/2017	0.6m	62 days	6,305m ³	1.2m³/day/m
T10	Pending	-	-	-	-
T11	12/1/2018	2.5m	45 days	6,933m³	1.6m³/day/m
T12	13/1/2018	1.1m	45 days	19,098m³	4.3m³/day/m
T13	11/3/2018	0.7m	37 days	8,861m ³	3.4m³/day/m
T14	17/5/2018	1.8m	49 days	3,800m³	0.7m³/day/m
T15	6/7/2018	3.1m	9 days	357m ³	0.6m³/day/m
T16	21/7/2018	1.5m	31 days	1,771m³	0.6m³/day/m
T17	5/8/2018	2.4m	20 days	820m³	0.2m³/day/m
T18 ³	29/9/2018	n/a	n/a	n/a	n/a
T19	20/8/2018	1.6m	30 days	19,841m³	6.9m³/day/m
T20	3/9/2018	1.9m	33 days	3,449m³	0.9m³/day/m
T21	6/9/2018	0.5m	16 days	1,663m³	0.9m³/day/m

Notes:

ENDS

^{1.} The depth of brine drawdown from the standing water table for each trench is shown in the table.

^{2.} Mechanical issues with pumps from time to time have caused pumping to stop for periods during testing which has resulted in the volume pumped being lower than what is achievable. The indicative steady-state pumping rate has taken this into account.

^{3.} Pump testing at T8 was cut short due to salt precipitation issues in the pumping equipment. Due to the shorter duration of this test there is a lower level of confidence that a steady-state pumping rate at T8 was achieved. Pump testing at T18 was terminated due to salt precipitation issues in the pumping equipment.



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About Agrimin

Based in Perth, Agrimin Limited is a leading fertilizer development company focused on the development of its 100% owned Mackay SOP Project. The Project is situated on Lake Mackay in Western Australia, the largest undeveloped SOP-bearing salt lake in the world. Agrimin is aiming to be a global supplier of high quality SOP fertilizer 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 statement that relates to Exploration Results for the Mackay SOP Project is based on 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 statement in the form and context in which it appears.



Table 2. Location and Dimensions of Pilot Trenches $^{\rm 1}$

Trench ID	Easting	Northing	Excavated Depth	Trench Length
T1	452880	7504972	4.0m	100m
T2	445231	7508720	5.0m	100m
T3	452574	7514916	4.0m	100m
T4	460008	7512003	4.5m	100m
T5	474098	7504090	5.0m	100m
T6	479984	7507964	5.5m	100m
T7	484981	7511898	6.0m	30m
Т8	490922	7507101	4.5m	100m
Т9	495997	7513449	6.0m	100m
T10	499725	7513971	6.0m	100m
T11	495998	7518001	6.0m	100m
T12	491031	7519093	6.0m	100m
T13	482030	7494097	6.0m	100m
T14	485923	7491845	6.0m	100m
T15	470863	7516331	4.5m	30m
T16	461294	7520500	6.0m	100m
T17	449993	7523988	4.5m	100m
T18	473150	7527384	4.5m	100m
T19	489988	7527994	5.5m	100m
T20	496019	7529993	4.5m	100m
T21	495100	7539535	5.5m	100m

Notes:

Table 3. Brine Chemistry of Pilot Trenches During Pumping Tests

Trench ID	Sample Date	K (mg/L)	Mg (mg/L)	SO ₄ (mg/L)
	4/8/2017	3,342	2,892	22,046
	16/8/2017	3,763	2,578	22,268
T1	2/9/2017	3,793	2,618	22,906
	5/9/2017	3,631	2,848	ТВА
	30/9/2017	3,624	2,883	TBA
	10/8/2017	3,410	3,874	22,109
	16/8/2017	3,809	3,358	21,624
Т3	2/9/2017	3,815	3,408	22,004
	30/9/2017	3,646	3,688	21,967
	7/10/2017	3,635	3,678	20,688

^{1.} Locations are in GDA94 Zone 52.



Trench ID	Sample Date	K (mg/L)	Mg (mg/L)	SO ₄ (mg/L)
	31/10/2017	3,634	3,456	23,575
	6/11/2017	3,782	3,609	23,146
	23/11/2017	3,626	3,468	22,878
	25/11/2017	3,557	3,465	TBA
	2/12/2017	3,701	3,580	23,409
	9/12/2017	3,766	3,643	30,514
TC	31/10/2017	3,922	3,570	23,441
T6 -	6/11/2017	3,805	3,469	23,772
TO	15/1/2018	5,863	5,336	42,276
T8 —	21/1/2018	4,701	4,108	32,971
	31/10/2017	2,970	1,932	18,237
	6/11/2017	3,103	2,008	18,750
T 0	23/11/2017	2,907	1,884	18,564
Т9 —	30/11/2017	2,952	1,942	18,616
	2/12/2017	3,040	2,013	19,038
	9/12/2017	3,009	1,974	19,325
	13/1/2018	4,768	2,551	28,645
	21/1/2018	3,713	1,996	22,213
T44	28/1/2018	3,456	1,865	20,976
T11 -	31/1/2018	3,485	1,867	21,102
	4/2/2018	3,379	1,875	21,312
	10/2/2018	3,545	1,966	22,270
	14/1/2018	3,365	2,140	21,009
	21/1/2018	2,982	1,887	18,372
T42	28/1/2018	2,957	1,842	18,012
T12 —	31/1/2018	2,889	1,802	17,550
	4/2/2018	2,798	1,801	17,823
	10/2/2018	2,808	1,803	17,820
	11/3/2018	4,921	3,142	31,403
	19/3/2018	4,823	3,145	29,397
	21/3/2018	4,257	2,812	25,068
T42	23/3/2018	4,129	2,746	24,531
T13 —	25/3/2018	4,213	2,792	24,935
	27/3/2018	4,165	2,773	24,745
	29/3/2018	4,175	2,748	24,505
	31/3/2018	4,249	2,811	24,995



Trench ID	Sample Date	K (mg/L)	Mg (mg/L)	SO₄ (mg/L)
	02/4/2018	4,311	2,849	25,427
	07/4/2018	4,659	2,999	TBA
	15/4/2018	4,296	2,844	TBA
	20/4/2018	4,569	2,971	TBA
	11/3/2018	4,751	3,851	35,488
	19/3/2018	3,704	3,022	26,538
	21/3/2018	3,655	2,987	26,843
	23/3/2018	3,571	2,918	26,454
	25/3/2018	3,489	2,849	25,912
	27/3/2018	3,484	2,828	25,844
	29/3/2018	3,525	2,891	26,398
	31/3/2018	3,587	2,900	26,422
	02/4/2018	3,546	2,887	26,216
T14	07/4/2018	3,752	2,974	TBA
	15/4/2018	3,564	2,813	TBA
	20/4/2018	3,685	2,890	TBA
	21/5/2018	3,835	3,033	TBA
	27/5/2018	3,851	3,070	TBA
	03/6/2018	3,592	2,852	27,106
	10/6/2018	3,646	2,919	TBA
	17/6/2018	3,575	2,838	26,898
	01/7/2018	3,612	2,718	28,097
	24/7/2018	3,629	2,923	28,265
	02/7/2018	3,892	2,718	25,181
T15	07/7/2018	4,057	2,789	25,589
	15/7/2018	3,432	2,477	23,088
	28/7/2018	3,531	3,453	21,753
	30/7/2018	3,521	3,458	21,279
T16	12/8/2018	3,516	3,445	21,228
	19/8/2018	3,479	3,438	21,258
	21/8/2018	3,508	3,471	TBA
	06/8/2018	4,037	3,947	24,276
T17	12/8/2018	4,159	4,039	TBA
T17	19/8/2018	4,100	3,942	TBA
	21/8/2018	4,083	3,927	ТВА
T19	21/8/2018	3,064	1,622	19,471



Trench ID	Sample Date	K (mg/L)	Mg (mg/L)	SO ₄ (mg/L)
	31/7/2018	2,852	1,516	17,071
T20	21/8/2018	3,100	2,102	TBA

Notes:

- 1. The first set of brine assays for each trench may have higher than natural concentrations due to the exposure of brine to evaporation and concentration during the period of time between trench excavation and pump testing commencing.
- 2. 'TBA' stands for 'to be advised'. These results are being confirmed with the laboratory.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	 Sediment samples are collected from the excavator bucket at regular intervals to assess the lithology of the trenches at different depths. Brine samples are collected into clean sample bottles from discharge hosing on the pump units at weekly intervals, representing a composite brine sample from the trench.
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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Excavation of the trenches is completed by a 25t amphibious excavator with an arm to excavate up to 12m deep.



Criteria	JORC Code explanation	Commentary		
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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 to trenching.		
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All trenches were logged for hydrogeological characteristics, including descriptions of lithology, sediment grain size, colour, general observations and flow rates. A qualified hydrogeologist/geologist logged all samples. 		
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Not applicable for trenching. Representative brine samples are taken from the trenches by pumping, with a surface mounted pump.		
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. 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. 	 The samples collected were analysed for elemental assay at Intertek laboratories in Perth, a reputable independent laboratory. Internal laboratory standards are in place to calibrate equipment and maintain analytical procedures. The technique of analysis used is Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry for cations and sulphur, UV visible spectrometry for chloride, gravimetric 		



Criteria	JORC Code explanation	Commentary
Verification of sampling and	The verification of significant intersections by either independent or alternative	 analysis for Total Dissolved Solids. Sulphate concentration was calculated from the sulphur analysis. Quality control procedures were in place throughout the analyses process, including the use of blanks, duplicates and laboratory certified standards. Qualified hydrogeologists carried out the sampling of brine from pumped trenches.
assaying	 company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	
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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Trenches were located using a handheld GPS system, with accuracy of +/- 5m. The grid system used was GDA94 in MGA Zone 52. The salt lake surface is generally flat lying so high precision topographic control is not an important consideration for trenching.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 Trenches are broadly spaced at differing distances apart, generally 10-15km to evaluate different geomorphological areas of the salt lake. All brine samples are considered a composite from the top of water table to the depth of the trench.
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. 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. 	 Trench locations are considered representative of the broad lakebed sediment deposit. The lake sediments are a horizontally lying sequence and the sampling is perpendicular to this. Any structures of importance in the sediments are considered to be sub-horizonal. Some anisotropy in hydraulic parameters of the sediments is noted from the installation of monitoring wells on different sides of the trenches.
Sample security	The measures taken to ensure sample security.	 All samples were clearly labelled and kept onsite prior to being transported to Perth, via secured freight, for analysis. Samples for assaying were submitted to an independent laboratory, with a chain



Criteria	JORC Code explanation	Commentary
		of custody system maintained.
Audits or	The results of any audits or reviews of	No audits or reviews were conducted.
reviews	sampling techniques and data.	

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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. 	 The Project is 100% owned by Agrimin Limited. The project tenure is held under granted Exploration Licences and Miscellaneous Licences - E80/4887, E80/4888, E80/4889, E80/4890, E80/4893, E80/4995, E80/5055, E80/5124, L80/87 and L80/88. The Project is situated in the Kiwirrkurra native title determination area and a Native Title Mining Agreement has been signed with the Kiwirrkurra People.
Exploration	Acknowledgment and appraisal of	 Previous exploration by Holocene Pty Ltd,
done by other parties	exploration by other parties.	Verdant Resources Ltd and Toro Energy Ltd has provided information on the geology and water quality in the area.
Geology	Deposit type, geological setting and style of mineralisation.	The deposit type is brine-hosted potash within flat lying salt lake sediments.
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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	 Refer to trench location table in the ASX Release. Approximate RL of the lake is 355m.
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. 	Brine samples from the trenches are the composite samples from inflow in the 100m long trenches.



	 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	The brine aquifer is considered to be continuous throughout the sediment profile of the lake, which has been confirmed by analyses of depth profiles in drilling conducted across the lake on a 5 km grid. The lake sediment units are flat lying and all holes have been drilled vertically so it is assumed that the true width of mineralisation has been intersected in each hole/trench.
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 figures within the ASX Release.
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.	Results considered relevant have been reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical 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.	 No other exploration has been carried out within the Project area. Toro Energy Ltd and Verdant Resources Ltd have historically conducted potash and uranium exploration on neighbouring tenure at Lake Mackay. Agrimin has previously reported the results of aircore and auger core drilling at Lake Mackay and the results of brine sampling from these programs.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Work associated with the Definitive Feasibility Study for the Project is underway.