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POTASH RESOURCE UPGRADED BY 470%

Highlights

ASX Release

20 January 2020

- Drainable Mineral Resource upgraded to 123 million tonnes of sulphate of potash ("SOP") (based on drainable porosity)
- In-situ Mineral Resource exceeds >1 billion tonnes of SOP (based on total porosity) and confirms Lake Mackay as Australia's largest SOP deposit
- Mackay Potash Project is de-risked by an industry leading hydrogeological dataset, including over two years of trench pumping tests
- Ore Reserve scheduled for completion in Q1-2020

Agrimin Limited (**ASX: AMN**) ("**Agrimin**" or "**the Company**") is pleased to report the updated Mineral Resource estimate for the Mackay Potash Project in Western Australia.

Mark Savich, CEO of Agrimin said: "We are delighted to announce a very significant upgrade to the Mineral Resource for the Mackay Potash Project. This is the culmination of several years of data collection and extensive hydrogeological modelling, which we believe to represent an industry leading level of rigour in de-risking the project. Importantly, the outcomes exceed the parameters used in the 2018 Pre-Feasibility Study."

"Lake Mackay is a world-class SOP project and we look forward to providing regular updates as we finalise the Definitive Feasibilty Study over the coming months."

Resource	Aquifer Volume	Total P	orosity	Drainable Porosity		
Classification	(Mm³)	K (mg/l)	K (mg/l) SOP (Mt)		SOP (Mt)	
Measured	4,621	3,473	16.5	3,473	3.9	
Indicated	43,784	3,501	144.6	3,527	19.5	
Measured + Indicated	48,405	3,498	161.1	3,509	23.5	
Inferred	304,641	3,323	934.6	3,232	99.9	
Total	353,046	3,349	1,095.7	3,285	123.4	

Table 1. Mineral Resource Estimate

Note: Refer to the Technical Overview and Table 2 and Table 3 in this ASX Release for full Mineral Resource details.



Mackay Potash Project – Western Australia (100% owned)

The Mackay Potash Project is situated on Lake Mackay in Western Australia, as shown in Figure 1. Agrimin is currently completing a Definitive Feasibility Study ("**DFS**") for the project, which is scheduled for Q2-2020.

Lake Mackay's hydrogeological setting and favourable brine chemistry provide important attributes that support the development of a globally significant SOP operation. Lake Mackay is the largest known potash-bearing salt lake in Australia covering an area of approximately 3,500km². 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 Pre-Feasibility Study ("**PFS**") for the Mackay Potash Project was completed in May 2018. The project is based on the extraction of shallow brine-hosted potash from infiltration trenches across Lake Mackay. The brine will be transferred through a series of solar evaporation ponds with the precipitated potash-rich salts being wet harvested and pumped to the Lake Mackay Processing Plant. The PFS is designed for a production capacity of 426,000tpa of SOP. All production is planned to be shipped through the Company's Wyndham Port Facility to world markets. Details of the PFS results were provided in the Company's ASX Release on 7 May 2018.



Figure 1. Project Location Map



Overview

Following the completion of the PFS and previous Mineral Resource estimate in May 2018, the Company appointed USA based Stantec Consulting Services Inc ("**Stantec**") to update the Mineral Resource, as well as complete the Ore Reserve and DFS mine planning. Stantec has significant experience in relation to brine-hosted potash deposits around the world.

The Mackay Potash Project is a brine-hosted potash deposit in a closed basin, salt lake setting. Brine deposits are fundamentally different from hard rock deposits. Brine (i.e. hypersaline groundwater) is contained within the void space of salt lake sediments and is a fluid that is subject to movement. The groundwater within the deposit may be recharged (from rainfall and runoff) over time which is different from hard rock deposits which are progressively mined out.

The updated Mineral Resource estimate has been completed in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code), 2012 Edition. The estimation methodology is based on procedures that have been established by hydrogeologists and regulators that are applicable to Australian potash brine deposits, building on experience exploring for and reporting on lithium and potash brine deposits elsewhere in the world (refer to Houston et. Al., 2011¹ and the AMEC Brine Guidelines²).

The updated Mineral Resource is based on comprehensive datasets which include, but are not limited to, the following:

- 22 vibracore drill holes with a maximum depth of 1.8m (2011);
- 11 aircore drill holes for a total of 160m with a maximum depth of 27m (2014);
- Surficial mapping of salt lake (2015-2019);
- 2 weather stations gathering climatic data (2015-ongoing);
- 27 aircore bore holes for a total of 667m with a maximum depth of 30m (2015);
- 39 power auger drill holes with an average depth of 1.5m (2015);
- Various short-term aquifer tests on bores and trenches (2015-2019);
- Long-term monitoring of water level and brine chemistry from monitoring bores (2015-2019);
- Isotope sampling (2015-2019);
- 11 push tube samples (2016);
- 57 hollow-stem auger (core) bore holes for a total of 577m, with a maximum depth of 15m (2016);
- 319 passive seismic stations (2017-2018);
- 22 trenches excavated for a total of 2,060m with a typical length of 100m and depth of 6m (2017-2018);
- 122 trench monitoring bore holes installed with an average depth of 5m (2017-2018);
- 18 long-term trench pumping tests with test durations of 9 to 207 days (2017-2019);
- Extensive chemical analyses on brine samples collected during trench pumping tests (2017-2019);
- Extensive physical properties testing on core and bulk sediment samples from drilling, trenching and sampling programs (2017-2019);

¹ Houston, J; Butcher, A; Ehren, E, Evans, K and Godfrey, L. The Evaluation of Brine Prospects and the Requirement for Modifications to Filing Standards. Economic Geology. V 106 pp 1225-1239.

² AMEC Brine Guidelines. Guidelines for Resource and Reserve Estimation for Brines. Association of Mining and Exploration Companies, April, 2019.



- 1,265 line km of airborne electromagnetic survey (2018);
- 1,906 ground gravity stations (2018);
- 2,800km² of airborne LiDAR topography survey with ±10cm vertical accuracy (2018);
- 4 deep diamond bore holes for a total of 516m with a maximum depth of 215m (2018-2019);
- 128 infiltrometer tests (2016-2019);
- 106 shelby tube samples with length of 0.5m (2019);
- 26 sonic drill holes for a total of 147m with a maximum depth of 12.7m (2019);
- 1 artificial recharge testing site (2019);
- 3 separate buried closed lysimeter tests over the unsaturated zone (2019);
- Downhole nuclear magnetic resonance readings (VC Dart and Javelin units) (2019);
- Laboratory nuclear magnetic resonance readings (VC Corona unit) (2019);
- 36 soil column leach tests (2019);
- 18 soil water release tests (2019);
- 21 multi-step outflow tests (2019); and
- 25 synthetic precipitation leach tests (2019).

These datasets have been used as the basis for constructing robust geological and hydrogeological models to simulate the lake setting, groundwater flow and solute transport. These models have supported the updated Mineral Resource and will form the basis of the DFS mine plan and Ore Reserve. The major work program locations are shown in Figure 5.

Mineral Resource Estimate

The drainable porosity (or specific yield) Mineral Resource contains 123 million tonnes ("**Mt**") of SOP to a maximum depth of 211m, as shown in Table 2. This drainable porosity Mineral Resource represents the static free-draining portion of the total porosity Mineral Resource prior to extraction. It does not take into account any groundwater recharge which could increase the amount of extractable brine over the life of an operation. The project area has an average annual rainfall of 320mm and the brine resource commences only 50mm below the lakebed surface.

The total porosity Mineral Resource contains 1,096Mt of SOP to a maximum depth of 211m, as shown in Table 3. A portion of the total porosity Mineral Resource, in addition to the drainable porosity Mineral Resource, may be extractable depending on the transient groundwater flow and transport conditions affecting the brine resource during extraction and the active recharge regime within the lake system. This recharge is particularly relevant to the upper zone of the Mineral Resource. A substantial portion of the lower zone total porosity Mineral Resource during extracted.

Groundwater recharge by rainfall and runoff, and associated flow and transport processes, are being assessed as a component of the dynamic hydrogeological modelling being undertaken by Stantec. These models will be used to determine the Ore Reserve and DFS mine plan.

The Mineral Resource is based on the dimensions of the salt lake sediments, the variations in porosity (void space) and the potassium grade within the groundwater. An understanding of the physical properties of the lakebed sediments and the overall aquifer hydraulics is important when assessing extractability of the Mineral Resource.



The lakebed sediments within Lake Mackay contain five layered potassium-enriched brine resource zones (horizons) that overly a solid basement as shown in Figure 2. The Mineral Resource within each of these zones are presented in Table 2 and Table 3. The Upper Zone Top ("**UZT**") represents the top 3m below surface and is the targeted horizon for proposed brine extraction from trenches. Accordingly, the UZT will be the zone that is most relevant to the determination of the Ore Reserve and DFS mine plan.





The Mineral Resource area is limited to the extent of the Company's tenements, Lake Mackay's boundary and the basement topography that underlies the lakebed sediments. The classification and grade distribution for the UZT of the Mineral Resource are shown in Figure 3 and Figure 4.











			Measured plus Indicated					Infe	erred	Total Resource	
Resource Zone	Aquifer Volume (Mm³)	Mea	sured	Indi	cated	Тс	Total		otal	Total Resource	
	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	
UZT	10,568	3,473	3.9	3,719	3.3	3,558	7.3	2,969	3.7	3,360	11.0
UZB	28,636	-	-	3,405	6.5	3,405	6.5	3,084	3.6	3,292	10.1
LZ1	48,127	-	-	3,542	9.7	3,542	9.7	3,428	9.0	3,487	18.7
LZ2	248,711	-	-	-	-	-	-	3,382	75.0	3,382	75.0
LZ3	17,003	-	-	-	-	-	-	1,910	8.7	1,910	8.7
Total	353,046	3,473	3.9	3,527	19.5	3,509	23.5	3,232	99.9	3,285	123.4

 Table 2. Drainable Porosity Mineral Resource Estimate (otherwise known as Specific Yield)

Note: Million metric tonnes differences in totals are due to rounding and considered non-material.

Table 3. Total Porosity Mineral Resource Estimate

			Measured plus Indicated					Inferred		Total Deservice		
Resource Zone	Resource Aquifer Volume Zone (Mm ³)		Measured		Indicated		Total		Total		Total Resource	
20110	(,	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	K (mg/l)	SOP (Mt)	
UZT	10,568	3,473	16.5	3,719	8.6	3,558	25.1	2,952	10.9	3,375	36.0	
UZB	28,636	-	-	3,405	54.6	3,405	54.6	3,084	29.8	3,292	84.4	
LZ1	48,127	-	-	3,542	81.4	3,542	81.4	3,428	75.7	3,487	157.0	
LZ2	248,711	-	-	-	-	-	-	3,382	787.8	3,382	787.8	
LZ3	17,003	-	-	-	-	-	-	1,910	30.4	1,910	30.4	
Total	353,046	3,473	16.5	3,501	144.6	3,498	161.1	3,323	934.6	3,349	1,095.7	

Note: Million metric tonnes differences in totals are due to rounding and considered non-material.



Figure 5. Location of Major Work Programs





Technical Overview

Mineral Resource Estimation – Data Sources and Limitations

The updated Mineral Resource estimate of January 2020 ("**Mineral Resource**") supersedes any previous Mineral Resource estimates for the Mackay Potash Project. The Mineral Resource is based on the following:

- The Mineral Resource area is defined by the limit of the Company's tenements, with the Mineral Resource not extending off the lake surface where tenements cover more than the lake area. The Mineral Resource area includes the Company's tenement applications in the Northern Territory, however the Mineral Resource within these areas have been classified as Inferred. The Mineral Resource is further constrained by basement topography that unconformably underlies the lakebed sediments.
- A light detection and ranging survey ("LiDAR") survey and digital elevation model was used to apply elevations to drill holes, which have only been located with hand-held GPS. The LiDAR survey data covered the extents of the Company's tenements in Western Australia.
- The Mineral Resource thickness is based on data generated from four drilling programs and various geophysical surveys.
 - Four rotary diamond core holes were drilled to a maximum depth of 215m by the Company during the 2018 to 2019 period. In 2019, the Company also completed 11 sonic infill holes surrounding Trench 20 (to maximum depth 12.7m) and a further 11 sonic infill holes surrounding Trench 22 (to maximum depth of 6.5m). A further 18 column test holes ("CTH") were driven by mechanical hammer from surface using shelby tubes to a depth of 1m.
 - In 2016, the Company completed 57 auger core holes (to a maximum depth of 11.25m). In 2015 the Company completed 27 aircore holes (to a maximum depth of 30m), together with 35 power auger holes. In 2014, 11 aircore holes (to a maximum depth of 27m) were drilled by Verdant Resources Ltd. In 2011, 22 vibracore holes drilled by Toro Energy Ltd. These drill holes were all completed on ground that is now included within the Company's tenement package.
 - Between 2017 to 2019, the Company completed airborne electromagnetic, ground gravity and 2D passive seismic survey transects across Lake Mackay and in the immediate surrounding area. The information gathered from these surveys has assisted in understanding the geological setting and defining the basement topography of the lake and its surrounds.
 - The Mineral Resource that is estimated to a depth of 11m is based on information from all the above drilling programs.
 - The Mineral Resource that is estimated below a depth of 11m is based only on information from the Company's aircore and rotary diamond core drilling. The Mineral Resource below



11m is further limited to the depth of the basement surface identified from both drill holes and geophysics.

- Aircore sampling provided disturbed samples, whereas rotary diamond core, auger core, vibracore and sonic sampling provided undisturbed (sealed core) samples.
- The grades of potassium and other elements are based on analyses of brine samples collected from all drilling programs and from total mass of surface salt measurements taken from 13 surface column test sites completed in 2019 by the Company.
 - Samples utilised from the Company's sampling programs include bailed samples from core and power auger holes and airlifting, pumping, and bailing of aircore holes.
 - The Company also carried out analyses on brine extracted from the drill cores across the lake, providing a detailed data set through the top 11m of the lakebed sediments.
 - A total of 230 primary samples were used to define brine chemistry for the top 11m. At depths below 11m, 39 brine samples were used.
- Prior to 2018 (previous Mineral Resource estimate), extensive porosity data was collected from the 57 auger core holes across the lake obtained from 2016 drilling. A total of 302 samples were analysed at the Intertek soil laboratory in Perth, with an additional 64 samples analysed at Core Laboratories in Perth and at the British Geological Survey laboratory in the UK. An extensive suite of analyses including specific yield, total porosity, moisture content, particle size distribution, sample density and permeability were measured on cores to provide information on other key physical parameters.
- From 2018 onwards, additional porosity data used for this Mineral Resource were obtained from the following sources:
 - Trench pump tests conducted at 18 locations by the Company.
 - Laboratory measurements conducted by Daniel B. Stephens & Associates Inc. from 16 shelby tube samples at column test site locations and 36 core samples from sonic drill holes.
 - Indirect measurements from downhole Nuclear Magnetic Resonance ("**NMR**") logs from 24 drill holes completed during 2018 and 2019 by the Company.

Mineral Resource Estimation – Geological Model and Methodology

The Resource model is a 2D grid model compiled using MineSight[™] software (v15.60-1), formally known as Hexagon Mining MinePlan[™] software, and developed using metric Universal Transverse Mercator Zone 52 coordinates and elevations reported above mean sea level ("**AMSL**"). The model layers are grouped into two main zones, the Upper Zone ("**UZ**") and a Lower Zone ("**LZ**") as illustrated in the schematic section in Figure 2. Procedures followed in the construction of the grid model and estimation approch are summarised as follows:



- The model is setup to cover the entire footprint of Lake Mackay covering a rectangular space of 104.8km² (East) by 83.6km² (West). A grid node spacing of 200m by 200m was selected to capture the necessary topographic and grade resolution, plus other physical parameters, that would support mine planning studies for SOP production for the DFS.
- Outputs from the model are 2D grid estimates of model parameters and include topographic surfaces, brine aquifer physical properties, and brine grade ("**mg/I**") for each Mineral Resource zone. The extents of the Company's tenements for Western Australia and application areas in the Northern Territory, as well as development area, islands and lake extents have been coded into the grid nodes using binary codes (1=IN, 0=OUT). Islands less than 1 hectare in area are too small to be coded in the model. These small islands (i.e. <1 hectare) are included in the Resource and are considered non-material given the scale of the Mineral Resource area.
- The Mineral Resource is hosted in a UZ and LZ. The zones are separated into five subhorizons as shown in Figure 2. The topmost subhorizon labelled UZT in Figure 2, encompasses a surface layer (top 0.5m) that is subject to seasonal fluctuations in the water table and a brine saturated layer underneath to a total depth of 3.0m below ground surface. A network of trenches are expected to extract the Potassium contained in brines within the UZ, of which most of the brine will be extracted from the UZT subhorizon. Potassium contained in brines within the LZ is expected to be only accessible from production bores.
- The surface topography and Mineral Resource horizon boundaries shown in the schematic section in Figure 2 exist in the Mineral Resource model as elevation grid estimates. The topography grid is sourced from the LiDAR survey data within the Western Australian tenements and from public domain digital elevation data outside the Western Australian tenements. Basement topography grid estimates were based on penetration of basement in the drill hole record and observation of the geophysical datasets. The intervening upper and lower zone horizon boundaries were determined from observations of the drill hole log data and reflect the quantity of exploration data at successive depth intervals.
- LiDAR topography survey data was merged with the public domain digital elevations models and reduced to a 200m by 200m grid resolution using a triangulation algorithm. A separate lakebed-only topographic grid was developed that projected the lakebed surface horizontally beneath islands as illustrated in Figure 2. This lakebed surface grid was used as a reference surface to project the UZ and LZ horizon boundaries from surface to solid basement below using software macros. The lakebed surface elevation is flat, varying between 360m and 362m AMSL. Elevations of the overlying islands vary from approximately 362m to 370m AMSL.
- The lateral boundary limits of the Mineral Resource are defined by the Company's tenements and the shoreline of Lake Mackay. The shoreline boundary and island boundaries were identified from topographic and aerial photo interpretations using the Company's LiDAR survey data covering the Western Australian tenements and public domain data for the remaining areas. The final lakebed and island boundaries used in the grid model were a close match to prior boundaries obtained from public domain maps of the area. The boundaries were then used to code model grid nodes as within or outside the boundary for eventual reporting of Mineral Resource volumes and average grades.



- The Mineral Resource zones overlie a consolidated basement surface. The basement surface grid was
 developed from penetration of basement lithologies from seven drill holes, as well as using geophysical
 interpretations of ground gravity and passive seismic survey data. This basement surface has been
 incised by palaeochannels that have accumulated sand and gravel at depth. The lowermost LZ3 horizon
 occupies this relatively coarse unit as shown in Figure 2. The maximum depth of the LZ3 horizon, and
 overall Mineral Resource zone, is defined by the Company's deepest exploration bore LMD001 that
 penetrated the basement at 211m below surface. Exploration drilling and geophysical data shows the
 basement surface is deepest in the centre and shallowest in the east. The various Mineral Resource
 zone boundaries were truncated by the basement surface in areas as shown in Figure 2.
- Physical parameters used for Mineral Resource volume estimates are specific yield and total porosity. These are modelled as fixed parameters across four recharge zones and three lithologic zones for the unsaturated and saturated units of the UZT, respectively. Physical parameters for unsaturated UZT were determined from Tempe cell measurements of precipitated salt mass, total porosity and specific yield at the column test sites. Physical parameters for the saturated UZT were determined from trench pump test results and were modelled as fixed parameters for the entire zone. Physical parameters for Mineral Resource horizons below the UZT were determined from measurement of the core sample tests and NMR log data, and were also modelled as fixed parameters for the entire zone. The assigned parameters per zone were determined using averages of the data sets and applications of appropriate top and bottom cuts.
- The concentration of major ions including potassium and brine specific gravity, were estimated from the sample sites using an inverse distance squared algorithm whose search ranges covered the extent of the model. A minimum cut-off grade of 1,500mg/l was used for estimating brine grades within lakebed sediments. Under islands the upper zone brine grades were further diluted to less than 1,500mg/l in some areas using an island area-weighting formula developed from sample records. The formula was developed from brine grade distribution trends from lakebed to islands derived from the Company's island characteristation activities. For the unsaturated UZT zone, the ratio of potassium to total salts in the saturated zone below was used to calculate the estimated potassium that would go into solution from the precipitated salt mass near surface. These brine equivalent potassium grades for the unsaturated zone were found to be a close match with the saturated zone below.
- The unsaturated UZT potassium concentration is determined from total salt mass measurements taken from surface cores at the column test sites. The dry salt mass was averaged across four surface recharge zones interpreted from the column test data within each zone. The concentration of unsaturated UZT potassium (in mg/l equivalent) was subsequently calculated based on the relative proportion of potassium to total salts (in mg/l equivalent) in the underlying saturated UZT brine at each grid node. This residual salt mass in the unsaturated zone has accumulated from evaporation of brine over time, and it is understood that these precipitated salts go into solution following rainfall (inundation) events. The salt solution is expected to reprecipitate salts within this zone as brine levels subside during intervening dry periods.
- A minimum concentration of 1,500mg/l has been used for Mineral Resource estimation of potassium and as such this represents the cut-off grade applied to potassium in brine for lakebed sediments. Beneath islands the potassium concentrations are in some cases diluted to less than 1,500mg/l in places



and no cut-off has been applied for these areas of the Mineral Resource. Potassium under the islands may have potential for eventual extraction from nearby trenches situated on the lakebed over long periods of time. The UZ Resource below islands is materially insignificant and is classified as Inferred.

- Brine sample test results demonstrate that the production of SOP is only constrained by potassium. The atomic ratio of potassium (K) to sulphate (SO₄) in K₂SO₄ is 1.23. The K:SO₄ ratio in the brine sample data all exceed 1.23 with an average of five.
- The UZT Mineral Resource grade distribution in potassium units is shown in Figure 4.

Mineral Resource estimate classification:

- Semi-variograms generated from potassium concentration test results indicate that there is a statistical relationship between sample pairs at distance of up to 10,000m. Using these observations as a guide, the Measured Mineral Resource was considered for ranges of up to approximately 2,500m from the nearest sample site and the Indicated Mineral Resource up to approximately 5,000m. The quantity, quality and distribution of physical parameters plus overall geological complexity were also used to guide Mineral Resource confidence, and to develop Mineral Resource grade and volume averages.
- The potassium Mineral Resource exploration at Lake Mackay has focused on the UZ located in Western Australia and this area contains the Measured plus Indicated Mineral Resource.
- The Mineral Resource zone directly below islands are classified as Inferred based on quantity of data associated with these areas.
- The UZT is the target Mineral Resource horizon for proposed brine extraction via surface trenches and has been the primary focus of the Company's exploration at Lake Mackay. The exploration data supports a Measured plus Indicated Mineral Resource for the saturated portions of the UZT and an Indicated Mineral Resource for the overlying unsaturated portion of the UZT. The distribution of the classified Mineral Resource from the UZT is shown in Figure 2.

Project Geology

Lake Mackay overlies the Palaeoproterozoic Arunta complex and Neoproterozoic Amadeus and Ngalia basins. The Proterozoic (Adelaidean) Bitter Springs Formation of the Amadeus Basin basal sequence outcrops to the immediate south-west of Lake Mackay and may occur at shallow depth elsewhere beneath dunes of the Great Sandy Desert. These sequences are underlain at variable depths by members of the Neoproterozoic Redcliff Pound Group which comprises quartz arenite, chert, conglomerate, limestone, dolomite and siltstone. Underlying this group is the Mount Webb Granite which overlies the Arunta Complex, an Archaean suite of schists.

The lake surface typically comprises a thin crust of evaporite mineral deposits (predominantly halite). This is underlain by a variable lakebed sequence which displays distinct characteristics east-west across the Project area. The sequence comprises:

• Reworked gypsiferous sand deposits comprising fine to coarse grained silty to clayey sands.



- Lacustrine deposits comprising soft to stiff, orange-brown, green clays to sandy clays, sandy silts and loose clayey sands with small variable decomposed organic material content in areas.
- Gypsum layers are present in both crystalline and granular form.
- Hard calcrete and silcrete layers are also present in bands.
- Palaeovalley deposits comprising sands, gravels, silts, minor clays, detrital/channel iron and lignites.

Both within and fringing the lakebed sequence, locally throughout the extent of Lake Mackay, is a series of discontinuous aeolian deposits comprising silty to clayey sands composed of loose to partially consolidated crystalline gypsum and quartz. These deposits intermittently extend above the surface as eroded dune islands throughout the extent of the salt lake.

Extensive tracts of calcrete comprising massive, nodular and cavernous sandy limestone of Tertiary age occur adjacent to Lake Mackay where they formed as palaeovalley infill deposits. Secondary silicification of these deposits locally results in incomplete replacement by a vuggy, opaline silica caprock. Quaternary aeolian deposits often overlie these calcrete deposits.

Hydrogeology

The lakebed sediment sequence of Lake Mackay is characterised into three broad flat lying lithological units. Firstly, an upper unit of gypsum sand, with an approximate thickness of 1m that varies laterally east-west across the lake. This unit progressively grades downward into clayey and silty sand approximately 3m below the surface. A second unit where the lithology is dominantly sandy and silty clay, containing discrete interbedded layers of evaporites (including granular/crystalline gypsum, halite and calcite), continues to as deep as 150m with denser clays increasing with depth. A third palaeochannel unit comprising sands and gravels, with minor silts and clays continues to as deep as 211m below surface. The upper part of this unit contains discrete detrital iron, lignites and evaporites horizons.

Lake Mackay hosts hypersaline brine within the lakebed sediments. Potassium and other elements dissolved in the brine are derived from weathering of rocks within the catchment area. Lake Mackay is the low point of a vast catchment that extends hundreds of kilometres east from the lake.

The complete surface area of Lake Mackay is 3,500km². The total catchment area is estimated at 87,000km², however, the majority of the aquifer recharge is considered to be derived from direct rainfall and surface runoff within a 7,000km² area covering the lake and its immediate surrounds. Intermittent inundation of the lake surface typically follows seasonal rainfall during the months of December to March. Based on Australian Bureau of Meteorology data, average rainfall for the region is 320mm per year, as shown in Figure 6. Elevation modelling indicates a slight topographic gradient across the lake surface, generally sloping towards the southeast.

An important feature of potash brine projects is the evaporation potential as the sun's energy is used to increase the potash concentration of the brine within large solar evaporation ponds. Based on Australian Bureau of Meteorology pan evaporation data, Lake Mackay is located in the highest solar radiation zone in the country with an evaporation rate of between 3,200mm to 3,400mm per year, as shown in Figure 7. As the lake is a closed system, evaporation and evapotranspiration are the only recognised forms of discharge.



The natural evapo-concentration of the lake brine is the most significant control on lake salinity. The water table varies seasonally and is generally encountered between surface and 0.5m depth at most points around the lake, with the brine saturated sediments continuing from this point to the base of drilling at a deepest confirmed point of 211m. Horizontal hydraulic gradients within these sediments are typically shallow.

Islands that rise several metres above the lake surface are present in the east of the lake, becoming progressively less common to the west across the lake, where they are absent in the western third of the lake. In 2016 and 2019, core holes were drilled on several of the islands and this confirms they are surficial features, with the sand forming the islands grading downward into the normal lakebed sequence. The islands themselves are composed of gypsum that is friable or cemented. The drilling has confirmed the islands have lower potassium grades to the base of drilling, due to the body of dilute brine that occupies the upper parts of the islands. However, the brine becomes progressively more concentrated in potassium with increasing depth below the islands.

Extensive geophysical surveys completed between 2017 to 2019 utilising the ground-based passive seismic and gravity techniques has identified the basement contact of the lake sequence over a significant area of the Western Australian side of the lake. This work has defined two large paleovalley features beneath Lake Mackay that are interpreted over a combined length of 90km with multiple possible channels feeding into them.



Figure 6. Average Annual Rainfall Map





Figure 7. Average Annual Evaporation Map

Deep drilling completed in 2019 confirmed the presence of a significant palaeovalley system to a depth of 211m, which included a 53m thick basal horizon of channel-hosted sand and gravel. The palaeovalley unit is confined and under artesian conditions, proving the existence of an upward pressure gradient from depth.

The observations to date form the basis for the conceptual model of the hydrogeological regime within the lake and the potential impact from groundwater extraction from the system. The conceptual hydrogeological model assumes that as the current groundwater storage in the lake is extracted, future rainfall and runoff will infiltrate the lake surface and recharge the system. This recharge water will infiltrate from surface, dissolving crystallised salts in the unsaturated zone and proceeding to mix with groundwater storage, thereby releasing additional potassium Mineral Resource over time.

The conceptual hydrogeological model is presented in Figure 8. The general recharge regime is as follows.

Rainfall and recharge:

- Direct infiltration through the lake surface during seasonal rainfall events.
- Runoff inundation of the lake from rainfall within the catchment, flowing into Lake Mackay as the low point in the drainage causing inundation in the east and south of the lake. Only likely with associated high rainfall events such as storms or cyclones.
- Interflow rainfall infiltrating into the upper soil profile and flowing to the lake, evaporating on the lake margins.



Groundwater inflows and recharge:

- Palaeovalleys interpreted to connect to Lake Mackay, bringing water from the Northern Territory and intersecting the lake in the east and along the southern boundary.
- Evaporation of surface water from rain and inundation of the lake surface.
- Evaporation/transpiration losses.
- Evaporation within the upper 1m of the lake sediments where capillary forces allow evaporation.
- Transpiration of water from plants that are accessing fresh to brackish water derived from incident rainfall as it percolates through the gypsiferous island sediments.
- Possible upward hydraulic connection to deep palaeovalley sequence beneath the lake bed sediments.



Figure 8. Conceptual Hydrogeological Model

Porosity Measurements

Porosity is one of the key variables in estimating brine resources for salt lakes. As discussed by Houston et., al. (2011) there is considerable misunderstanding of the terminology related to porosity. Total porosity (Pt) relates to the volume of brine contained within a volume of aquifer material. Except in well-sorted sands some of these pores are not connected to others, and only the interconnected pores may be drained. Interconnected porosity is referred to as the effective porosity (Pe). If the effective porosity is totally saturated with brine only some of this brine will be drained during pumping. This is because of considerations such as capillary forces in the pores. The porosity that freely drains by gravity is known as the specific yield (Sy) (or drainable porosity). Brine retained in the pores is referred to as specific retention (Sr).

In fine grained sediments, such as clays and silts much of the water is 'bound water' in small pores or held by clays or capillary forces, with specific retention exceeding specific yield, whereas in coarser grained sediments



specific yield exceeds specific retention. Salt lakes are often dominated by clays and fine grained sediments and the appropriate porosity metric for estimation of static brine resources that have a low level of influence from recharge is the specific yield. However, the determination of the specific yield is challenging, due to the unconsolidated nature of the sediments.

It is important to note that specific yield is a concept, not an analytical value, and therefore there is not a standard analytical method for its determination. Different laboratories use different methods and equipment.

There are four key methodologies used for determining the specific yield parameter, these include:

- 1. Pump testing for unconfined aquifers.
- 2. Geophysical analysis (Nuclear Magnetic Resonance).
- 3. Laboratory derived (either by low-pressure centrifuge, vacuum suction (i.e. RBRC method) or other membrane drainage methods).
- 4. Grain Size Analysis.

Agrimin has derived specific yield values from hydrogeological model calibration to observed drawdown in monitoring bores during long-term pumping tests from extraction trenches implemented down to 6m across Lake Mackay. This produced specific yield values ranging from 1% to 29%. Specific yield determinations from trench pump tests are viewed by the Company's resource consultants as the most representative of expected yields from surface trenching that will be drawing most brine up to depths of 3.0m below surface. This is due to the much larger volume of aquifer affected by drawdown during trench pumping versus the relatively small volume of a core sample from a lab measurement.

The Company has also used a low-pressure centrifuging method (equivalent to 5 psi or one-third of an atmosphere) for the determination of specific yield on over 300 core samples across three separate laboratories, including the British Geological Survey laboratory, which has processed samples from a number of brine projects globally. As different laboratories employ differences in analytical methods, Agrimin has had porosity samples analysed in the separate laboratories for specific yield determinations at centrifuge conditions equivalent to a low pressure (5 psi).

Prior to 2018, 302 porosity samples were submitted to the Intertek soil laboratory in Perth as the primary laboratory, with additional samples sent to Core Laboratories in Perth and the British Geological Survey sedimentology laboratory in the UK as check laboratories. In 2019, an additional 52 porosity samples were sent to Daniel B. Stephens & Associates Inc. laboratories located in Albuquerque, USA. Low-pressure centrifuging produced specific yield values ranging from 0.1% to 16.4%. Samples with higher proportions of sand and silt had higher specific yields.

Prior to 2019, 207 sediment samples were analysed for grain size distribution. These samples were processed using wet sieving and laser particle size distribution equipment. The resulting sand-silt-clay percentages were compared to a ternary grain size diagram to estimate the specific yield. The results from the Grain Size Analyses were compared to curves published by sedimentologists relating grain size to specific yield. This analysis produced specific yield values ranging from 3% to 25% and a regression result that is 1.8 times higher than the specific yield produced on duplicate samples by the low-pressure centrifuging method, the preferential method used for the updated Mineral Resource below the UZT. In 2019, 29 grain size distribution samples were collected



and used for soil classification in support of identifying four surface recharge zones and providing additional checks on prior (pre-2019) grain size distribution data.

In 2019, column leach test tests were conducted from shelby tube samples collected at 16 sites distributed across the lakebed. The purpose of the column leach test sites was to obtain natural surface recharge parameters to be used in the calibration of the hydrologic model and included measurement of total porosity, specific yield and total salt mass of unsaturated sediments to an average depth of 0.5m from surface.

Indirect measurement of total porosity and specific yield were obtained from downhole geophysical NMR logs taken from the Company's diamond and sonic drilling programs. Vertical porosity profiles were obtained at 0.25m increments from the logs and validated against core sample results. Though comparison between the NMR logs and core samples were similar, the NMR log data was identified as best suited to understanding of vertical trends in the porosity. As such, NMR log data reflected observations of the lakebed lithology in drill cores and supported the separation of the Mineral Resource model into separate resource zones.

Taking a conservative approach, the Company's consultants have used direct total porosity and specific yield test results for the Mineral Resource estimation. Direct porosity measurements for the unsaturated zone were obtained from the column test results, and for the saturated zone below both laboratory and trench pump test results were used. Indirect measurements of porosity namely, geophysical analysis and grain size analyses were used for comparison with direct measurement and to identify spatial trends in porosity. This data together with observations of lithologic logs from trench profiles and drill cores were ultimately used to identify specific yield trends in the data. The porosity values applied within the Mineral Resource model are summarised in Table 4.

Resource	Donth (m)	Total Porosity (%)				Specific Yield (%)			
Zone	Depth (m)	West	Central	Central	East	West	Central	Central	East
1177	0m to 0.5m	55	50	54	59	28	22	31	34
UZT	0.5m to 3m		46			6	11 14		14
UZB	3m to 11m		4	2			Ľ.	5	
LZ1	11m to 25m		42				Į.	5	
LZ2	25m to 150m	42				2	1		
LZ3	150m to 211m		4	2			1	2	

Table 4. Mineral Resource Porosity Estimates

Note: The maximum depths of 25m, 150m and 211m for the LZ1, LZ2 and LZ3, respectively, represent the depth to basement for each zone.

Brine Assays and QA/QC Measures

Most brine samples have been submitted to the primary laboratory (Intertek) accompanied by blind QA/QC samples comprising standards, field duplicates and blanks. Bureau Veritas was used as the check laboratory, with QA/QC samples submitted for comparison analyses. For the 2018 and 2019 campaigns, Bureau Veritas was used as the primary laboratory and check assays submitted to Intertek. Both Intertek and Bureau Veritas are independent, NATA accredited, minerals laboratories located in Perth. Comparison of results from these laboratories confirmed the Intertek and Bureau Veritas analyses are suitable for the Mineral Resource. Additional check samples have also been sent to Hazen Laboratories in the USA and the University of Antofagasta



laboratory in Chile from selected programs, both of these laboratories have extensive experience in analysing brine samples from potash and lithium projects across the world.

Results of standards and duplicates showed a high level of repeatability and low variance for the field brine samples analysed in both primary and check laboratories. Brine extraction samples (brine extracted from the core as a check on open hole brine samples) showed a higher sample variance, and generally higher grades, which is likely to reflect the small volume brine samples obtained from the core samples. Details of the QA/QC program are provided in the following sections, along with brine assays.

The samples from the different drilling types also show similar average and median values for potassium and other elements. Spatial distribution of grades across the lake is generally consistent with both high and low grade regions evident. The closely spaced 2019 sonic sampling programs results (500m to 1,500m) confirmed regional grade trends observed in prior sampling campaigns and were able do demonstrate low overall variability in grades over short distances. The 2019 sonic program results also provided additional grade data to estimate potassium grades below islands that may be available for extraction via surface trenches.

A summary of the results are presented in Table 5 to Table 14.

Recharge Characterisation

The amount of the brine that can be extracted via trenches depends on a number of factors, including the hydraulic parameters of the lakebed sediments and the recharge dynamics of the shallow aquifer. The specific yield Mineral Resource represents the static free-draining portion of the deposit prior to any extraction. It does not take into account any recharge dynamics which could increase the amount of extractable brine over the life of an operation, particularly in the shallow upper zone of the Mineral Resource.

The specific yield Mineral Resource is a subset of the total porosity Mineral Resource. A portion of this total porosity Mineral Resource, in addition to the specific yield Mineral Resource, may be extractable depending on the transient conditions affecting the aquifer during extraction and the active recharge regime within the lake system. Recharge of the lakebed sediments by rainfall and runoff, and associated processes, including infiltration, mixing and dissolution of precipitated salts, are being assessed as a component of the dynamic hydrogeological modelling.

A key aspect to understanding the overall lake system and how it will respond to long-term brine extraction depends on the ability to characterise the aquifer recharge parameters in the salt lake's natural state and during brine extraction. To that extent, the Company has undertaken several targeted hydrogeological investigations to understand the physical, hydraulic, and solute mobility parameters of the shallow unsaturated and saturated zones of the salt lake.

During 2018 and 2019, a variety of targeted hydrogeological investigations have been undertaken to characterise the aquifer's recharge. This includes, but is not limited to, the below activities:

- Infiltrometer testing (measuring rate of surface water infiltration);
- Artificial recharge testing (rainfall replication by irrigation);
- Buried closed lysimeter testing (measuring evaporation from sediment columns);
- Soil column testing;



- Soil column leaching tests;
- Soil water release testing;
- Multi-step outflow Tempe cell testing; and
- Synthetic precipitation leach testing.

In addition to the above targeted work programs, long-term groundwater monitoring data which has been gathered between 2015 to 2019 is being used for the groundwater modelling studies, as well as the Ore Reserve and mine planning work that is currently ongoing.

ENDS

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This ASX Release is authorised for market release by Agrimin's CEO and Executive Director, Mark Savich.

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 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 ASX Release in the form and context in which it appears.

The information in this ASX Release that relates to the Mineral Resource estimate of January 2020 for the Mackay Potash Project is based on and fairly represents information and supporting documentation compiled or reviewed by Mr Derek Loveday who is a full-time employee of Stantec Consulting Services Inc. Mr Loveday is a geologist and is an independent consultant to Agrimin Limited. Mr Loveday is a Member of the Society for Mining, Metallurgy & Exploration, a Professional Engineer of the Association of Professional Engineers and Geoscientists of Alberta, and a Professional Engineer of the South African Council for Natural Scientific Professions. Mr Loveday 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 Loveday consents to the inclusion of such information in this ASX Release in the form and context in which it appears.

Other Tables with Exploration Results

Trench ID	Easting	Northing	Excavated Depth	Trench Length
T1	452880	7504972	4.0m	100m
T2	445231	7508720	5.0m	100m
Т3	452574	7514916	4.0m	100m
T4	460008	7512003	4.5m	100m
T5	474098	7504090	5.0m	100m
Т6	479984	7507964	5.5m	100m
Τ7	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

 Table 5. Location and Dimensions of Pilot Trenches



Trench ID	Easting	Northing	Excavated Depth	Trench Length
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
T22	463860	7499419	6.0m	100m

Note: Locations are in GDA94 Zone 52.

Trench ID	Sample Date	K (mg/l)	Mg (mg/l)	SO₄ (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	14,399
	30/9/2017	3,624	2,883	17,742
	10/8/2017	3,410	3,874	22,109
	16/8/2017	3,809	3,358	21,624
	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
Т3	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	17,481
	2/12/2017	3,701	3,580	23,409
	9/12/2017	3,766	3,643	30,514
	4/09/2017	3,998	3,408	22,804
Т6	31/10/2017	3,922	3,570	23,441
	6/11/2017	3,805	3,469	23,772
то	15/1/2018	5,863	5,336	42,276
Т8 —	21/1/2018	4,701	4,108	32,971
	31/10/2017	2,970	1,932	18,237
F	6/11/2017	3,103	2,008	18,750
Т9	23/11/2017	2,907	1,884	18,564
	30/11/2017	2,952	1,942	18,616
	2/12/2017	3,040	2,013	19,038



Trench ID	Sample Date	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
	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
	28/1/2018	3,456	1,865	20,976
	31/1/2018	3,485	1,867	21,102
T11 -	4/2/2018	3,379	1,875	21,312
	10/2/2018	3,545	1,966	22,270
	18/02/2018	3,564	1,844	21,128
	24/02/2018	3,511	1,815	21,451
	14/1/2018	3,365	2,140	21,009
	21/1/2018	2,982	1,887	18,372
	28/1/2018	2,957	1,842	18,012
	31/1/2018	2,889	1,802	17,550
T12	4/2/2018	2,798	1,801	17,823
	10/2/2018	2,808	1,803	17,820
	18/02/2018	3,028	1,816	18,151
	24/02/2018	3,016	1,809	17,997
	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
	23/3/2018	4,129	2,746	24,531
	25/3/2018	4,213	2,792	24,935
	27/3/2018	4,165	2,773	24,745
T13 -	29/3/2018	4,175	2,748	24,505
	31/3/2018	4,249	2,811	24,995
_	02/4/2018	4,311	2,849	25,427
_	07/4/2018	4,659	2,999	n/a
	15/4/2018	4,296	2,844	n/a
F	20/4/2018	4,569	2,971	n/a
	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
T14 -	23/3/2018	3,571	2,918	26,454
F	25/3/2018	3,489	2,849	25,912
F	27/3/2018	3,484	2,828	25,844



Trench ID	Sample Date	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
	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
	07/4/2018	3,752	2,974	n/a
	15/4/2018	3,564	2,813	n/a
	20/4/2018	3,685	2,890	n/a
	21/5/2018	3,835	3,033	n/a
	27/5/2018	3,851	3,070	n/a
	03/6/2018	3,592	2,852	27,106
	10/6/2018	3,646	2,919	n/a
	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	n/a
	06/8/2018	4,037	3,947	24,276
T 47	12/8/2018	4,159	4,039	n/a
T17 —	19/8/2018	4,100	3,942	n/a
	21/8/2018	4,083	3,927	n/a
740	21/8/2018	3,064	1,622	19,471
T19 —	31/7/2018	2,852	1,516	17,071
	21/8/2018	3,100	2,102	n/a
	16/9/2018	3,070	2,020	18,500
	19/9/2018	3,090	2,070	18,900
T20	22/9/2018	3,110	2,060	18,850
Т20 —	24/9/2018	3,080	2,060	18,500
F	30/9/2018	3,070	2,050	18,500
F	1/12/2018	4,010	2,800	24,200
	15/12/2018	2,860	2,020	17,800



Trench ID	Sample Date	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
	11/1/2019	2,810	1,960	17,500
	16/1/2019	3,020	2,000	18,200
	22/1/2019	3,130	2,100	19,300
	27/1/2019	3,025	2,065	17,900
	2/2/2019	2,990	2,050	18,300
	5/2/2019	2,930	2,020	17,900
	9/2/2019	3,250	2,170	19,500
	12/2/2019	3,160	2,100	19,100
	16/2/2019	3,030	2,010	18,800
	20/2/2019	3,170	2,090	19,100
	28/2/2019	3,100	2,140	19,600
	6/3/2019	3,050	2,080	19,100
	8/3/2019	3,050	2,110	18,500
	11/3/2019	3,100	2,140	18,700
	14/3/2019	3,030	2,100	17,900
	19/3/2019	3,080	2,150	18,500
	23/3/2019	3,180	2,120	19,100
	28/3/2019	3,090	2,030	18,600
	3/4/2019	3,060	2,000	18,500
	6/4/2019	3,050	2,100	19,200
	9/4/2019	3,070	2,120	18,800
	14/4/2019	3,080	2,130	19,300
	20/4/2019	3,035	2,055	17,950
	30/4/2019	3,020	2,060	18,300
	4/5/2019	3,170	2,065	19,050
	7/5/2019	3,230	2,100	18,800
	12/5/2019	3,140	2,060	18,400
	16/5/2019	3,210	2,070	18,800
	22/5/2019	3,170	2,180	19,200
	28/5/2019	3,080	2,100	18,700
	5/6/2019	3,030	2,120	19,400
[[9/6/2019	2,980	2,090	19,100
	25/6/2019	3,350	2,360	20,100
T22 -	2/12/2018	3,130	3,695	22,150
122	15/12/2018	2,810	3,210	19,300



Trench ID	Sample Date	K (mg/l)	Mg (mg/l)	SO₄ (mg/I)
	9/1/2019	2,860	3,250	19,400
	14/1/2019	2,860	3,240	19,400
	20/1/2019	3,170	3,430	20,800
	25/1/2019	3,020	3,300	18,300
	29/1/2019	3,000	3,290	19,700
	29/1/2019	2,950	3,290	20,000
	5/2/2019	3,000	3,340	20,000
	9/2/2019	3,240	3,480	21,100
	13/2/2019	3,250	3,500	21,600
	15/2/2019	3,300	3,530	21,600
Γ	28/2/2019	3,120	3,480	21,600
	5/3/2019	3,090	3,470	21,200
	12/3/2019	3,130	3,580	20,600
	17/3/2019	2,910	3,140	18,400
	19/3/2019	2,980	3,350	19,800
	23/3/2019	3,120	3,410	20,900
	27/3/2019	3,120	3,430	21,100
	2/4/2019	3,175	3,500	21,550
	5/4/2019	3,100	3,480	21,100
	14/4/2019	3,150	3,560	21,100
	24/4/2019	3,050	3,430	20,400
	1/5/2019	3,020	3,410	20,600
	3/5/2019	3,210	3,480	21,500
	7/5/2019	3,210	3,450	21,300
	12/5/2019	3,230	3,500	21,300
	14/5/2019	3,180	3,420	21,000
	16/5/2019	3,110	3,410	20,400
	22/5/2019	3,100	3,500	21,300
	29/5/2019	3,090	3,520	21,300
	2/6/2019	3,060	3,510	21,600
	5/6/2019	3,060	3,485	21,650
	9/6/2019	3,100	3,490	21,500
	17/6/2019	3,060	3,600	20,800
	26/6/2019	3,060	3,560	20,900

Note: 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.



Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
T02AH-001	463865	7499406	6.5	0.5 – 3.0	2,700	3,200	19,100
T02AH-003	464365	7499406	6.5	0.5 – 5.0	2,740	3,190	19,300
T02AH-004	465865	7499406	6.5	0.5 - 4.0	1,990	1,680	9,810
T02AH-005	464572	7498699	6.6	0.5 – 5.0	2,520	2,500	15,000
T02AH-006	463865	7497406	6.5	0.5 – 5.0	2,800	2,610	22,400
T02AH-007	463158	7498699	6.5	0.5 – 5.0	2,130	1,670	17,200
T02AH-009	463365	7499406	6.5	0.5 – 5.0	2,350	1,840	19,400
T02AH-010	461865	7499406	6.5	0.5 – 5.0	3,160	2,680	25,700
T02AH-011	463158	7500113	6.6	0.5 – 5.0	3,250	3,550	23,700
T02AH-012	463865	7501406	6.0	0.5 – 5.0	2,990	3,370	19,400
T02AH-013	464572	7500113	6.5	0.5 – 5.0	1,490	635	3,870
T13H-001	496002	7530043	6.2	0.5 – 4.6	3,870	3,065	20,350
T13H-003	496502	7530043	6.5	0.5 – 6.0	3,350	2,660	22,400
T13H-004	498002	7530043	6.3	0.5 – 6.0	3,330	1,710	17,300
T13H-005	496709	7529336	6.5	0.5 – 5.0	3,370	2,420	20,900
T13H-006	496002	7528043	5.5	0.5 – 5.0	2,870	1,730	18,500
T13H-007	495295	7529336	5.5	0.5 – 6.5	2,270	1,610	15,300
T13H-009	495502	7530043	6.5	0.5 - 6.0	1,940	1,450	13,400
T13H-010	494002	7530043	12.7	0.5 – 3.5	30	5	1,620
T13H-011	495295	7530750	3.25	0.5 – 2.0	750	675	7,740
T13H-012	496002	7532043	6.5	0.5 – 5.5	2,990	1,700	19,500
T13H-013	496709	7530750	6.5	0.5 - 6.0	3,050	1,850	19,400

Table 7. Location and Assay Results of Sonic Drill Holes in 2019

Note: Locations are in GDA94 Zone 52 and all drill holes were vertical.

Table 8. Location and Assay Results of Shelby Tube Samples in 2019

Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
CTH-001	490896	7507311	1.0	0.5 – 1.0	3,520	3,070	25,700
CTH-002	491000	7519171	1.0	0.5 – 1.0	2,870	1,860	17,700
CTH-003	477550	7497550	1.0	0.5 – 1.0	3,260	2,740	20,200
CTH-004	470830	7516290	1.0	0.5 – 1.0	3,630	2,580	24,300
CTH-005	452630	7505152	1.0	0.5 – 1.0	3,405	2,490	22,300
CTH-006	441545	7506970	1.0	0.5 – 1.0	2,880	3,370	27,500
CTH-007	461250	7520540	1.0	0.5 – 1.0	3,380	3,250	19,600
CTH-008	495063	7539576	1.0	0.5 – 1.0	n/a	n/a	n/a



Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
CTH-009	474995	7530020	1.0	0.5 - 1.0	n/a	n/a	n/a
CTH-010	452510	7514900	1.0	0.5 - 1.0	n/a	n/a	n/a
CTH-011	459966	7512010	1.0	0.5 – 1.0	3,460	3,640	23,800
CTH-012	480010	7504990	1.0	0.5 – 1.0	n/a	n/a	n/a
CTH-013	478960	7518860	1.0	0.5 – 1.0	3,260	2,780	20,300
CTH-014	479990	7535018	1.0	0.5 – 1.0	n/a	n/a	n/a
CTH-015	487634	7529050	1.0	0.5 – 1.0	n/a	n/a	n/a
CTH-016	499475	7519988	1.0	0.5 – 1.0	n/a	n/a	n/a
CTH-017	474025	7505015	1.0	0.5 – 1.0	4,190	3,050	23,600
CTH-018	464950	7524968	1.0	0.5 - 1.0	3,210	2,825	19,400

Note: Locations are in GDA94 Zone 52 and all drill holes were vertical.

Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
LMD001	478872	7503410	215	164 – 200	1,990	290	9,600
LMD002	485011	7510000	35	n/a	n/a	n/a	n/a
LMD003	463844	7499602	109	n/a	n/a	n/a	n/a
LMD004	451199	7505010	157	157	2,050	440	10,400

Note: Locations are in GDA94 Zone 52 and all drill holes were vertical. Assay results are not available for LMD002 and LMD003 due to constraints around specialised piezometer construction and sampling.

Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MC01	464954	7510017	10.40	C01_11	3,158	3,273	23,317
MC02	470016	7510019	9.75	C02_10	5,062	2,664	21,906
MC02	470016	7510019	9.75	C02_2	5,250	2,700	22,112
MC03	493409	7509502	9.75	C03_10	2,835	3,220	19,187
MC03	493409	7509502	9.75	C03_2	2,799	3,189	18,706
MC04	493786	7510003	9.75	C04_1	2,008	1,798	14,482
MC04	493786	7510003	9.75	C04_10	2,627	2,200	17,680
MC05	494088	7510168	9.75	C05_10	927	933	9,283
MC05	494088	7510168	9.75	C05_5	923	925	9,409
MC06	499845	7510004	11.25	C06_11	3,154	3,426	19,120
MC06	499845	7510004	11.25	C06_2	3,167	3,423	18,927
MC07	495020	7515084	11.25	C07_3	3,316	3,016	21,039



Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MC08	491436	7519245	11.25	C08_11	2,829	1,803	17,106
MC08	491436	7519245	11.25	C08_2	2,817	1,809	17,154
MC09	492704	7524188	11.25	C09_11	2,979	2,256	19,720
MC09	492704	7524188	11.25	C09_2	2,932	2,233	19,217
MC10	490123	7529868	11.25	C10_11	3,013	1,712	18,546
MC10	490123	7529868	11.25	C10_2	3,083	1,750	19,012
MC11	490717	7529886	7.50	C11_2	2,614	1,457	16,083
MC11	490717	7529886	7.50	C11_8	3,200	1,748	19,593
MC12	496021	7529993	11.25	C12_11	4,023	2,910	22,716
MC12	496021	7529993	11.25	C12_2	3,125	2,127	17,742
MC13	494917	7530028	11.25	C13_11	328	282	4,571
MC13	494917	7530028	11.25	C13_5	339	272	4,437
MC14	496221	7529995	6.75	C14_1	3,321	2,281	18,458
MC14	496221	7529995	6.75	C14_8	3,602	2,536	20,644
MC15	496620	7529958	7.50	C15_1	3,281	1,910	19,624
MC15	496620	7529958	7.50	C15_8	3,554	2,356	22,224
MC16	497412	7529995	7.50	C16_1	3,156	1,904	20,515
MC16	497412	7529995	7.50	C16_8	3,189	1,980	20,350
MC17	499006	7529977	11.25	C17_1	3,223	1,810	21,572
MC17	499006	7529977	11.25	C17_11	3,378	1,930	22,208
MC18	495004	7535000	7.50	C18_1	2,829	1,888	17,791
MC19	495002	7539595	11.25	C19_1	2,864	1,638	18,501
MC20	499950	7539535	11.25	C20_1	3,186	2,151	21,382
MC21	498098	7535005	11.25	C21_1	3,023	2,200	21,791
MC21	498098	7535005	11.25	C21_11	3,055	2,202	21,459
MC22	495295	7537123	3.75	C22_1	2,845	2,098	17,420
MC23	484818	7535109	11.25	C23_1	3,069	2,961	23,221
MC23	484818	7535109	11.25	C23_11	3,279	3,244	22,782
MC24	479943	7529996	11.25	C24_1	3,230	2,916	21,542
MC25	485777	7524188	11.25	C25_1	3,324	2,258	21,044
MC26	485261	7521087	7.50	C26_1	3,859	3,652	24,159
MC27	477282	7523399	7.50	C27_1	3,590	2,203	21,362
MC28	480002	7519998	11.25	C28_1	4,555	3,176	23,404
MC28	480002	7519998	11.25	C28_1	4,555	3,176	23,404
MC29	484971	7515062	11.25	C29_1	3,133	3,179	22,068



Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MC29	484971	7515062	11.25	C29_11	3,095	3,122	22,225
MC30	484684	7505003	11.25	C30_1	3,827	3,351	23,577
MC30	484684	7505003	11.25	C30_11	3,829	3,362	24,341
MC31	475276	7514859	11.25	C31_1	3,280	3,374	22,496
MC31	475276	7514859	11.25	C31_11	3,113	3,214	21,758
MC32	470014	7520051	11.25	C32_1	3,163	2,844	21,235
MC32	470014	7520051	11.25	C32_11	3,233	2,904	21,520
MC33	475013	7524996	11.25	C33_1	3,795	3,045	23,665
MC33	475013	7524996	11.25	C33_11	3,419	2,737	21,037
MC34	470370	7527745	11.25	C34_1	3,309	3,325	19,692
MC35	464974	7524997	11.25	C35_1	3,215	2,915	18,721
MC35	464974	7524997	11.25	C35_11	3,276	2,892	19,063
MC36	459997	7519996	11.25	C36_1	3,495	3,283	19,537
MC36	459997	7519996	11.25	C36_11	3,314	3,111	18,803
MC37	455015	7524980	11.25	C37_1	3,870	3,795	21,382
MC37	455015	7524980	11.25	C37_11	3,861	3,773	21,348
MC38	449994	7519984	11.25	C38_1	3,849	3,883	21,396
MC38	449994	7519984	11.25	C38_11	3,880	3,864	21,716
MC39	455027	7514983	11.25	C39_1	3,734	3,457	21,579
MC39	455027	7514983	11.25	C39_11	3,455	3,184	20,469
MC40	464570	7514535	11.25	C40_1	3,575	3,061	20,309
MC40	464570	7514535	11.25	C40_11	3,604	3,083	20,796
MC41	450016	7510007	11.25	C41_1	3,503	3,474	21,916
MC41	450016	7510007	11.25	C41_11	3,479	3,547	22,161
MC42	439990	7510029	11.25	C42_1	3,625	4,099	24,470
MC42	439990	7510029	11.25	C42_11	3,527	4,009	23,921
MC43	435003	7509993	11.25	C43_1	3,578	4,013	25,492
MC43	435003	7509993	11.25	C43_11	3,455	3,896	24,777
MC44	441561	7506993	11.25	C44_11	2,844	3,426	27,707
MC45	441561	7506993	2.25	C45_2	2,826	3,432	28,001
MC47	445769	7506084	2.25	C47_1	2,817	3,760	28,918
MC48	441424	7502388	11.25	C48_11	2,651	3,477	32,007
MC49	444860	7501803	11.25	C49_1	2,860	3,696	30,010
MC49	444860	7501803	11.25	C49_11	2,787	3,841	30,109
MC50	455013	7509984	11.25	C50_1	3,399	3,602	23,909



Hole ID	Easting	Northing	Depth (m)	Sample Interval (m)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MC50	455013	7509984	11.25	C50_11	3,012	3,185	22,999
MC51	457166	7498787	11.25	C51_1	2,966	5,215	31,328
MC51	457166	7498787	11.25	C51_11	2,914	5,115	31,032
MC52	474090	7504660	6.0	C52_1	3,776	3,360	22,530
MC53	479978	7510044	11.25	C53_1	3,096	3,181	25,331
MC54	480019	7505009	11.25	C54_1	3,759	3,193	24,415
MC55	489983	7505010	11.25	C55_1	3,675	3,895	26,708
MC56	482373	7495002	11.25	C56_1	3,997	2,832	26,699
MC56	482373	7495002	11.25	C56_11	3,938	2,800	26,819
MC57	485876	7491918	11.25	C57_1	3,060	2,614	25,456
MC57	485876	7491918	11.25	C57_11	3,084	2,744	25,520
	Av	verage of Sam	3,383	2,997	22,451		

Note: Locations are in GDA94 Zone 52 and all auger core holes were vertical. Auger core holes drilled to a maximum depth of 11.25m. Samples taken from islands have been excluded from the average presented as they have been sterilised from the Mineral Resource.

Hole ID	Easting	Northing	Depth (mbgs)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MA01	440018	7505016	24.0	3,315	3,151	30,185
MA02	450003	7504992	16.7	3,308	3,584	25,825
MA03	449969	7514950	19.0	4,548	4,020	24,506
MA04	450003	7524996	24.0	4,111	3,653	24,467
MA05	460003	7514992	18.7	3,495	2,751	21,927
MA06	470022	7515008	22.5	3,649	2,867	22,653
MA07	479996	7514981	27.0	3,872	2,573	21,265
MA08	490050	7515074	30.0	3,305	3,476	22,727
MA09	499801	7515003	30.0	3,223	3,362	23,968
MA10	495031	7519985	29.0	2,691	1,953	15,425
MA11	499807	7524974	30.0	3,140	2,915	19,869
MA12	495001	7539605	27.0	3,177	1,883	21,220
MA13	490003	7535004	26.0	3,364	2,824	22,482
MA14	485014	7539617	20.0	3,560	3,697	24,166
MA15	480001	7534993	25.0	3,373	3,039	22,373
MA16	475005	7529997	27.0	3,370	3,193	20,483
MA17	485007	7528035	30.0	4,031	2,876	23,386
MA18	489998	7525007	26.8	3,164	2,514	21,092

Table 11. Location and Assay Results of Aircore Drill Holes in 2015



Hole ID	Easting	Northing	Depth (mbgs)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
MA19	494995	7509521	27.0	3,381	2,094	23,060
MA20	484997	7510000	21.5	3,590	2,621	25,303
MA21	474508	7509959	22.0	4,175	3,480	22,070
MA22	474993	7519995	28.0	3,570	2,744	24,337
MA23	464982	7520024	24.0	3,807	2,972	21,006
MA24	460000	7524999	18.0	3,830	3,704	22,336
MA25	454987	7520000	26.5	3,897	3,181	22,771
MA26	444989	7510006	22.5	3,930	4,180	24,480
MA27	482395	7494998	25.0	4,395	2,658	29,008
Av	erage of Drill Ho	les	24.7	3,603	3,036	23,051

Note: Locations are in GDA94 Zone 52 and all aircore drill holes were vertical. Assays are averaged for each aircore drill hole from the available samples.

Table 12.	Location and Assay	Results of Auger Holes in 2015	
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Hole ID	Easting	Northing	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
HA01	432353	7508719	4,109	2,906	31,395
HA03	435206	7500041	5,239	6,319	34,481
HA04	499822	7515003	2,927	1,987	23,901
HA05	489999	7530002	2,276	1,333	18,719
HA06	485860	7491930	3,462	2,650	26,417
PA01	499228	7571653	3,468	2,496	30,694
PA02	499042	7515874	3,941	3,162	22,716
PA03	498770	7516208	3,481	2,607	22,185
PA04	498390	7516601	3,228	1,753	21,930
PA05	497996	7516981	3,142	1,942	22,377
PA06	497600	7517377	3,094	2,643	20,354
PA07	497230	7817742	4,523	3,971	27,048
PA08	496814	7518095	3,500	2,744	19,766
PA09	496509	7518372	3,336	2,127	20,805
PA10	496199	7518660	3,351	1,988	21,298
PA11	495927	7519113	3,405	2,280	21,107
PA12	495540	7519432	3,146	2,072	18,583
PA13	495307	7519609	1,953	1,440	13,142
PA14	495155	7519829	2,474	1,635	14,564
PA15	495004	7527573	2,936	1,589	17,715
PA16	494996	7535003	2,954	1,780	18,413



Hole ID	Easting	Northing	K (mg/l)	Mg (mg/l)	SO₄ (mg/I)
PA18	480008	7529895	3,637	3,056	23,708
PA19	474988	7534981	3,844	2,949	24,112
PA21	485011	7522434	4,446	3,418	23,021
PA22	480008	7520004	5,019	3,387	27,841
PA23	475000	7515002	3,464	3,413	23,890
PA24	470000	7510001	3,987	2,414	24,729
PA25	465000	7509997	3,533	3,314	23,687
PA26	455001	7509999	3,463	3,243	24,593
PA27	470000	7510001	3,903	4,030	31,629
PA28	480000	7505000	4,199	3,272	26,193
PA29	490000	7505000	4,118	3,793	27,584
PA30	470234	7526253	3,924	3,075	22,096
PA31	465000	7524999	3,559	3,011	20,645
PA32	465000	7530001	3,728	3,516	21,160
PA33	454999	7530001	6,520	7,857	44,747
PA34	454999	7525001	4,168	3,870	23,611
PA35	450001	7520001	4,212	3,988	23,814
PA36	445005	7515004	4,226	3,068	25,341
A	verage of Drill Hole	es	3,690	2,977	23,846

Note: Locations are in GDA94 Zone 52 and all auger holes were vertical. Assays are based on a single sample for each auger hole. All auger holes drilled to a maximum depth of 1.5m.

Hole ID	Easting	Northing	Depth (mbgs)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
LMAC001	474073	7492043	27.0	2,992	3,655	19,519
LMAC002	469990	7493275	18.0	3,694	5,026	32,695
LMAC003	469942	7502583	19.0	3,079	3,217	20,663
LMAC004	464988	7502499	18.0	3,053	3,334	21,880
LMAC005	459999	7502486	9.0	3,183	2,977	26,913
LMAC006	462481	7507525	9.0	3,639	3,631	24,442
LMAC007	480761	7502357	12.0	3,388	3,064	23,310
LMAC008	487111	7498661	12.0	3,587	2,851	24,939
LMAC009	477542	7497552	12.0	3,264	2,658	19,624
LMAC010	472472	7497554	12.0	2,874	2,818	19,456
LMAC011	462476	7497539	12.0	2,929	2,409	24,770
Av	erage of Drill Ho	oles	14.5	3,244	3,240	23,474

 Table 13. Location and Assay Results of Aircore Holes in 2014



Note: Locations are in GDA94 Zone 52 and all aircore holes were vertical. Assays are based on a single sample for each aircore hole.

Hole ID	Easting	Northing	Depth (mbgs)	K (mg/l)	Mg (mg/l)	SO₄ (mg/l)
LV01	465013	7495164	0.71	-	-	-
LV02	467357	7507487	1.22	3,950	3,320	24,000
LV03	475955	7499855	1.82	-	-	-
LV04	489989	7502393	1.45	4,210	3,240	18,300
LV05	484247	7502448	1.66	4,200	3,450	20,000
LV06	484973	7493598	0.89	4,900	3,200	18,600
LV07	487453	7497655	1.47	4,800	3,510	18,000
LV08	482461	7497519	1.14	5,160	2,450	17,800
LV09	477481	7497528	1.18	4,110	2,810	25,000
LV10	472421	7497555	0.67	3,640	3,470	29,000
LV11	467410	7497489	1.18	3,560	3,610	18,600
LV12	462501	7497513	1.53	3,230	2,260	19,900
LV13	455076	7497546	1.17	3,290	3,240	16,600
LV14	449981	7497662	0.98	3,560	3,560	18,900
LV15	459948	7502471	0.38	3,860	3,950	22,800
LV16	464912	7502474	1.01	3,700	3,640	25,400
LV17	469895	7502595	1.08	3,460	3,230	18,100
LV18	474967	7502555	0.70	-	-	-
LV19	479954	7502404	0.79	4,600	3,240	18,800
LV20	474958	7491136	1.42	4,010	3,310	31,700
LV21	462491	7507523	1.14	4,020	3,410	28,600
LV22	470023	7493234	0.67	5,430	7,480	22,400
Av	erage of Drill Ho	bles	1.10	4,089	3,494	21,711

Table 14. Location and Assay Results of Vibracore Holes in 2011

Note: Locations are in GDA94 Zone 52 and all vibracore holes were vertical. Assays are based on a single sample for each vibracore hole.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data (Trench and Pump Testing Program)

(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	 Brine samples were collected over the various field programs by airlifting with the drilling rig or by pumping or bailer samples from the drill holes. The results



Criteria	JORC Code explanation	Commentary
	minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples	of the sample populations from each sampling technique have been compared statistically.
	 should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to 	 Brine samples from aircore drilling were taken from the cyclone during airlifting the hole, and from bailed (tube with a
	ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	non-return valve to prevent brine escape) or pumped samples when monitoring bores were installed in the
	• Aspects of the determination of mineralisation that are Material to the Public Report.	 holes. Brine samples taken by airlift, bailing and pumping are considered composite
	 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 	samples from the phreatic surface, as brine from all levels of the stratigraphic sequence contributes to the brine sample composition. These samples are considered representative of brine that will flow into trenches or bores during brine extraction from the resource.
	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.	 Samples of brine extracted from sediment core samples provide information on potassium, magnesium and sulphate concentrations in the sediments and were used as a check on brine grades from the other sampling methods.
		 A significant number of the drill holes completed across the project area had 50mm monitoring bores installed for future monitoring and brine sampling.
		• The core samples were retrieved in plastic tubes (in the place of triple tubes) or Shelby tubes and sealed to ensure the unconsolidated sediments and entrained brine were recovered.
		 During trench excavations, sediment samples were collected from the excavator bucket at regular intervals to assess the lithology of the trenches at different depths.
		 During pumping tests, brine samples were collected into clean sample bottles from discharge hosing on the pump units at regular intervals, representing a composite brine sample from the trench or bore.
		A number of 2015 and 2016 holes were



Criteria	JORC Code explanation	Commentary
		twinned and sampled. In addition, a transect of holes with a closer spacing than the 5km grid drilling, were drilled with a spacing from 200m to 800m and sampled to evaluate short range variability in brine concentration and lithology. Additional close spaced drilling around trenches was completed in the 2019 sonic drilling program.
		 Brine samples were generally taken in 1L bottles directly from the bailer, pump or cyclone, so no sub-sampling was carried out. These were filtered in the laboratory prior to analysis, with the measurement of physical parameters and analysis by industry standard techniques that are applicable to brine analysis.
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). 	• The project area has been subject to several drilling techniques over different field campaigns. Drilling campaigns required the use of small purpose-built auger core, aircore, diamond core and sonic core drilling rigs transported by helicopter sling loading or ATV between the drill sites.
		• Excavation of the trenches was completed by a 25t amphibious excavator with an arm to excavate up to 12m deep. Monitoring bores were drilled using an auger attachment to the excavator to depths up to 6m.
		 Auger core drilling was undertaken with a hollow stem auger in which the core was collected in plastic (triple) tubes in the centre of the augers, with the core barrel recovered with wireline and overshot.
		 Aircore drilling using an aircore blade bit to cut through the sediments, the compressed air supply transported sediment samples to the surface with minimal injection of water into the holes.
		 Most drill holes have been completed as 50mm monitoring bores or other variable diameter bores.


Criteria	JORC Code explanation	Commentary
		• Shelby tube and shallow auger samples were generally collected by hand or pneumatic hammer.
		The core was not orientated and all holes were drilled vertically.
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 	 The key sample material collected during and following drilling of holes is brine, in addition to the core samples. Lithological samples are important to provide an understanding of the sediment characteristics and to provide samples for physical properties measurements. There is not a relationship between the
	sample bias may have occurred due to preferential loss/gain of fine/coarse material.	sediment sample recovery and brine grade and sediment core recovery was sufficient that it is unlikely to be biased for reasons of variable sediment sample recovery during aircore (or core) drilling.
		• Auger core samples were recovered and measured for comparison to the length drilled (0.75m long core tubes). Core recovery was then calculated for each core tube. The plastic tubes act like triple tubes to maximise sample recovery, but allow the cores to be sealed immediately following recovery to prevent brine loss. Cores were cut to the length of recovered core if less than 0.75m.
		• Overall core recovery from the auger core drilling was 88%, mostly influenced by the presence of gypsum bands which caused cores to collar off in the tubes, with core below the gypsum bands lost by washing during drilling of the remaining part of the core run.
		• Core recovery was not applicable to aircore drilling. It is unknown whether core recovery was measured by Toro Energy Ltd as part of vibracore sampling conducted in the south of the lake.
		 Aircore brine samples were recovered via air pressure forcing water up the drill rods, through the cyclone or outside return, with samples collected in buckets and transferred into 1L



Criteria	JORC Code explanation	Commentary
		bottles.
		 Aircore brine samples were only obtained when water was free flowing after a rod change and composite samples were only obtained at the bottom of the hole in many cases.
		 Aircore sediment samples were collected from the cyclone and logged and placed in chip trays and sealed bags on 3m intervals, with increased detail in the upper 2m.
		• Due to the wet and sometimes sticky, plastic nature of the sediments it was not practical to weigh sample buckets for 3m intervals.
		 Diamond core recovered PQ3 and HQ drill core via wireline core barrel and contained within core trays. Core recovery was observed to be adequate for characterisation of lakebed sediments.
		 Sonic drilling samples were retrieved directly from the rod string. Only 3 of the 22 drill holes did not retrieve core. For holes that did retrieve core the recovery was good at greater than 80%, though some swelling of the clay after retrieval was observed.
		 Column test holes samples were retrieved from Shelby tubes. Core recovery was adequate for column tests.
		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.	 All trenches and drill holes were logged for hydrogeological characteristics, including descriptions of lithology, sediment grain size, colour, general observations and flow rates. A qualified hydrogeologist/geologist
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	 A qualified hydrogeologist/geologist logged all samples. All core trays were photographed for comparison purposes.
	• The total length and percentage of the relevant intersections logged.	 During aircore drilling snap top sample bags and chip trays were photographed as a permanent record of sample



Criteria	JORC Code explanation	Commentary
		 intervals. Because clays can cause some smearing in the core tubes during drilling a number of core holes were frozen in a Perth laboratory and split to allow more detailed logging and evaluation of small- scale structures in the core.
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. 	 Cores were collected for the purposes of lithological logging and physical properties testing. The cores were systematically sampled for a suite of properties including total porosity, specific yield, density, permeability and grain size data using systematic (nonselective) intervals of full core. Brine samples were collected by airlifting with the drilling rig or by pumping or bailer sampling. The brine was mixed during the sampling process. Due to the helicopter supported nature of much of the drilling campaigns it was necessary to sample bores during and immediately following drilling and bore installation. It was not always possible to purge 3 bore volumes of brine from the holes prior to sampling, with the exception of airlifting of a limited number of aircore holes. Representative brine samples are taken from the trenches by pumping, with a surface mounted pump. The brine sampling methods are considered appropriate for the circumstances. As a quality control procedure, the auger core samples have been validated by the collection of brine extracted from the cores. Field duplicates of brine samples were taken during pumping, bailing or
		 airlifting of samples. 10cm core sub-samples are considered appropriate for the laboratory test work, as are 1L brine samples for the brine analyses.
Quality of assay data and	• The nature, quality and appropriateness of the assaying and laboratory	The samples collected were analysed for elemental assay at the Intertek or



Criteria	JORC Code explanation	Commentary
laboratory tests	 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. 	 Bureau Veritas laboratories in Perth, both of which are reputable independent laboratories. The technique of analysis used is Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry for cations and sulphur, UV visible spectrometry for chloride, gravimetric 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. Check samples were analysed at another independent laboratory for the various field programs as an independent check on the results, acting as triplicate analyses. See the ASX Release for further details of laboratories used. Quality control data indicates the brine results are acceptable for resource estimation.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative 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. 	 Qualified hydrogeologists and geologists have carried out the field programs. Results have been verified by independent consulting hydrogeologists and geologists. There are 22 duplicate pairs in sampling across the lake where brine samples from different drilling techniques have been compared, with both Agrimin and Verdant Resources Ltd data. The Rum Verdant Resources Ltd twin holes show a higher level of variation, which is likely to be in part related to the aircore drilling following a period of heavy rain. Twinned hole transects of auger core holes and power auger holes were used to evaluate variability in brine concentration over shorter distances. In 2019, an additional 11 infill holes were completed surrounding Trench 20, and 11 holes surrounding Trench 22.



Criteria	JORC Code explanation	Commentary
		These infill holes varied in spacing from 0.5km to 1.5km to assess short range variability.
		 Brine analytical results are received from the laboratory in digital format to prevent transposition errors.
		 Analysis of brine from pump tests on select holes provides a check on the analyses of the composite sample taken during drilling and trenching.
		 Data is stored in Excel format with regular backups/copies created.
		• The concentrated nature of the brines requires the laboratory to dilute sub- samples to allow analysis. The results are then corrected for dilution factors by the laboratory before results are reported.
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	 Drilling, trenching and sampling locations were surveyed using a handheld GPS system, with accuracy of +/- 5m.
	estimation.Specification of the grid system used.	• The grid system used was GDA94 in MGA Zone 52.
	• Quality and adequacy of topographic control.	 The Company has acquired high resolution topographic data from the LiDAR survey that has vertical accuracy of +/-10cm. Sampling locations have been fixed to this surface as part of the resource modelling.
		• The salt lake surface is generally flat lying so topographic control is not considered a critical point.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and 	 Drilling has been completed on an approximate 5km spacing or closer across the salt lake.
	distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation	• Trenches are broadly spaced at differing distances apart, generally 10km to 15km to evaluate different geomorphological areas of the salt lake.
	 procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Prior to 2019, most drilling was completed on a 5km grid, with some holes moved to avoid drilling on islands. In 2019, an additional 11 infill holes were completed surrounding Trench 20,



Criteria	JORC Code explanation	Commentary
		and 11 holes surrounding Trench 22. These infill holes varied in spacing from 0.5km to 1.5km.
		 No drilling has been conducted north of 7,540,000m North or east of the Western Australian border.
		• The correlation of lithological and brine concentration data suggests drilling completed in the 5km grid and infill programs is sufficient to demonstrate the continuity of both lithology/geology and brine grades to estimate a resource for the project.
		• All brine samples, from both drilling and trenching, are considered a composite from the water table to the depth they are taken from i.e. a sample taken at the bottom of the hole is representative of the whole hole. The only exception is the brine extraction analyses from the auger core holes.
		• The results from incremental brine extraction analyses from auger core holes validated the representivity of the composite sampling described above.
Orientation of data in relation to geological	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• The distribution of drilling, trenching and sampling locations is considered representative of the broad lakebed sediment deposit and profile.
structure	• 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	• 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.
	material.	• Some anisotropy in hydraulic parameters of the sediments is noted from the installation of monitoring bores on different sides of the trenches.
		 No orientation or structural information was obtained, as the target is brine in the pores of unconsolidated lake sediments.
Sample security	• The measures taken to ensure sample security.	• All samples were clearly labelled and kept onsite prior to being transported to Perth or directly to laboratories located elsewhere, via secured freight or by



Criteria	JORC Code explanation	Commentary
		 company personnel, for analysis. Samples for assaying were submitted to an independent laboratory, with a shain
		an independent laboratory, with a chain of custody system maintained.
		 Photographs of samples were maintained as a control in addition to copies of the Chain of Custody forms.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No audits or reviews were conducted.

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 in Western Australia: E80/4887, E80/4888, E80/4889, E80/4890, E80/4893, E80/4995, E80/5055, E80/5124, E80/5172, L80/87, L80/88 and L80/96. The project tenements also include the following Exploration Licence applications in the Northern Territory: EL30651, EL31780 and EL31781. The project area lies within the Kiwirrkurra native title determination area. Tjamu Tjamu (Aboriginal Corporation) RNTBC is the native title registered body corporate for the Kiwirrkurra native title holders. Agrimin and Tjamu Tjamu have signed a Native Title Agreement which provides the necessary consents for the project's development and operation. The project area is also subject to the Use and Benefit Aboriginal Reserves 24923 and 40783. The Company has been granted Mining Entry Permits from the Department of Aboriginal Affairs in order to access the Reserves for the purpose of the project's development and operation.



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Holocene Pty Ltd, Verdant Resources Ltd and Toro Energy Ltd have previously conducted exploration activities in the project area. Verdant Resources Ltd and Toro Energy Ltd conducted drilling programs in the southern tenements now held by Agrimin. A total of 22 vibracore holes were drilled in 2011 and a further 11 aircore holes were drilled in 2014. These results have now been incorporated into the Mineral Resource.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Refer to the details in the ASX Release. 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 	 Refer to the various drilling, trenching and sampling tables in the ASX Release. Approximate RL of the lake is 360m. Refer to the ASX Release and tables.
Data aggregation methods	 why this is the case. 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. Where aggregate intercepts incorporate short lengths of high grade results and 	 Brine samples used in the Mineral Resource are all of hole composites obtained from sampling in open holes or installed bores, if a corresponding sample interval is not referred to. Brine samples from the trenches are the composite samples from inflow in the 100m long trenches.



Criteria	JORC Code explanation	Commentary
	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.	 Results are reported as K2SO4, which is the combination of the available potassium with the available sulphate. The conversion factor from potassium is x 2.23.
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Brine grades within lakebed lithologies outside of islands were applied a bottom cut of 1,500mg/l. Grades less that this 1,500mg/l were identified as anomalous, local and not representative of natural conditions. No top cut was applied.
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'). 	 Exploration drilling shows the brine aquifer to be continuous throughout the sediment profile to depth of 11m below the lakebed surface, defining the upper resource zone. Below 11m, the lower resource zone, targeted drilling and geophysics programs have identified a basement surface that truncates the sediment profile at depth. The lake sediment units are flat lying above the basement surface 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 	 Between 2017 to 2019 the Company completed airborne electromagnetic, ground gravity and 2D passive seismic survey transects across Lake Mackay and in the immediate surrounding area. These surveys have assisted in defining



Criteria	JORC Code explanation	Commentary
	treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 the basement topography of the lake and its surrounds. Indirect measurement of total porosity and specific yield were obtained from downhole geophysical NMR logs taken from Agrimin's diamond and sonic drilling programs. The NMR log data is best suited to understanding of vertical trends in porosity and reflected observations of the lakebed lithology in drill cores.
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 Ore Reserve determination and the DFS for the project is underway.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	 Data was transferred directly from laboratory spreadsheets to the database. Data was checked for transcription errors once in the database, to ensure coordinates, assay values and lithological codes were correct. Drop down tables were used for spreadsheet entry, to minimise potential for data entry errors. Data was plotted to check the spatial location and relationship to adjoining sample points. Brine assays and porosity data have been analysed and compared with other publicly available information for reasonableness. Comparisons of original and current
		datasets were made to ensure no lack



Criteria	JORC Code explanation	Commentary
		of integrity.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	• The Competent Person has not conducted a site inspection of the property, however other qualified geologists and hydrogeologists who are members of Stantec Consulting Services Inc have visited the site.
		• The Competent Person has personally inspected and logged drill core samples from the 2019 field programs.
		 A site visit was not deemed necessary by the Competent Person having observed drill cores from the 2019 program and experience on similar deposit types.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• There is a high level of confidence in the geological model for the project. The geology is simple, with brine-hosted in flat bring rolatively uniform lakehood
	 Nature of the data used and of any assumptions made. 	flat lying, relatively uniform, lakebed sediments.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	 Any alternative interpretations are restricted to smaller scale variations in sedimentology, principally in the upper unit.
	 The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Similar sediments are reported in previously adjoining properties (that have now been incorporated into this Mineral Resource estimate) and other Australian salt lakes.
		• Geology has been used to separate the deposit into different layers for the resource estimate. The upper sandy layer is more porous, beneath which there is a less porous unit overlying the lower clays that are again less porous, prior to reaching the coarser LZ3 sediments.
		• Within the upper zone (UZ) the lakebed sediments are further separated into top and bottom sub-horizons labelled as UZT and UZB respectively in the ASX release figures.
		• The lower zone (LZ) sediments are separated into three sub-horizons labelled as LZ1, LZ2 and LZ3 in the ASX release figures.



Criteria	JORC Code explanation	Commentary
		 These sub-horizon divisions were introduced on account of subtle changes in lithostratigraphy with increasing depth from surface.
		 Lake sediments are saturated in brine below 0.5m depth from surface which represents the average brine level during the dry season across the lakebed.
		• A basement surface has been identified from drilling and geophysics, limiting the vertical extent of the lake sediments above. Lakebed sediments extend to a drilling depth of 150m where a basal paleochannel unit has been identified.
		 The paleochannel is incised into the basement to a maximum depth of 211m. Beyond the extents of the paleochannel the basement surface rises gently towards the east to a depth of between 11m and 25m below surface.
		 Islands are situated on the lakebed surface. These low relief islands (elevation from 362m to 370m) are interpreted to be aeolian in origin and are not included as part of the Mineral Resource estimate.
		 Sedimentary processes affect the continuity of geology, whereas the concentration of potassium and other elements in the brine is related to water inflows, evaporation and brine evolution in the salt lake.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The lateral extent of the resource has been defined by the boundary of the Company's tenements, which have been trimmed to fit within the margins of the salt lake. Refer to the figures in the ASX Release.
		 The top of the resource is defined by the surface of the lakebed and extends below islands at the same elevation between 361m and 362m (AMSL). The base of the resource is defined by the basements surface that varies in depth from 211m maximum to between 11m



Criteria	JORC Code explanation	Commentary
		and 25m below lakebed surface. The resource remains open laterally outside of the Company's tenements off the lake (where it is covered by sand dunes) and at depth.
		 Agrimin's current granted Exploration Licences in Western Australia cover an area of:
		o 71.9km E-W.
		o 73.8km N-S.
		• Surface area of 3,120km ² in total.
		 Surface area of 2,701km² on-lake (including islands).
		 Agrimin's current Exploration Licences (all applications) in Northern Territory cover an area of:
		o 66.4km N-S
		o 32.6km E-W
		• Surface area of 1,236km ² in total.
		• Surface area of 646km ² on-lake.
		• There is currently an approximate 100m gap between the Western Australia and Northern Territory tenements (on the Northern Territory side of the border) which is an artificial feature with tenements extending to the borders.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 The estimates are generated from a layered grid model of the Lake Mackay lakebed sediments. The grid model was constructed using MineSight[™] software (v15.60-1).
		• The model covers the entire footprint of Lake Mackay. A grid node spacing of 200m by 200m was selected to capture the necessary topographic and grade resolution, plus other physical
	• The availability of check estimates, previous estimates and/or mine production records and whether the	parameters, that would support a DFS level brine extraction study for SOP production.
	Mineral Resource estimate takes appropriate account of such data.The assumptions made regarding	 A surface topography grid was generated from LiDAR topo survey data and digital elevation model data using a
	recovery of by-products.	triangulation algorithm.
	Estimation of deleterious elements or	A separate lakebed-only topographic



Criteria	JORC Code explanation	Commentary
Criteria	 JORC Code explanation other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 grid was developed that projected the lakebed surface horizontally beneath islands. This lakebed surface grid was used as a reference surface to project upper and lower zone horizon boundaries from surface to a solid basement below using software macros. The basement surface grid was developed from exploration data. The resource zone boundaries were truncated by the basement surface Modelled physical parameters include surface precipitated salts, total porosity and specific yield. These parameters within each horizontal resource horizon (zone). The assigned parameters per zone were determined using averages of the data sets and applications of appropriate top and bottom cuts. Within the saturated zones the
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of	zone were determined using averages of the data sets and applications of appropriate top and bottom cuts.
		 mass on surface. A number of additional elements or compounds were estimated, including Ca, Mg, Na, SO₄, Cl and brine specific gravity. No assumptions were made regarding recovery of by-products.



Criteria	JORC Code explanation	Commentary
		 selective mining units. No assumptions were made about correlation between variables.
		 The geological interpretation was used to define the thickness of the orebody and the lake outline was used to limit the reported resources, although mineralisation most likely extends beyond the lake boundary.
		• The new model was compared visually and statistically to the drill hole data and found to reasonably represent the underlying data. There has been no production from the project, so no reconciliation data is available.
		 The new model was also compared to the previous estimate and found to be compatible, taking into account the new data and differences in the geological interpretation and estimation methodology.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Moisture content of the cores was measured, but as brine will be extracted this is not relevant for the resource.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	 Brine grades within lakebed lithologies outside of islands were applied a bottom cut of 1,500mg/l. Grades less that this 1,500mg/l were identified as anomalous, local and not representative of natural conditions.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process 	 The resource has been quoted in terms of brine volume, grade and tonnage. No mining or recovery factors have been applied. The concentual mining method is
	of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	 The conceptual mining method is recovering brine from the salt lake via extraction trenches cut into the lakebed sediments. Mining recovery is expected to be significantly higher using trenches compared to bores. Detailed hydrogeological studies have



Criteria	JORC Code explanation	Commentary
	assumptions made.	been undertaken to define the extractable resources and extraction rates possible for the project.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Evaporation trials and process testwork have been undertaken using bulk samples of the project's brine with representative chemistry. The testwork results demonstrated that the Lake Mackay brine is suitable for the production of commercial grade SOP using conventional processing techniques. The testwork produced SOP samples ranging from 52% to 54% K₂O, exceeding the typical grades for SOP products sold in global markets.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 Agrimin's Environmental Impact Assessment has identified the Preliminary Environmental Factors relevant to the Project as Social Surroundings, Flora and Vegetation, Terrestrial Fauna, Subterranean Fauna and Inland Waters. Studies have been completed in relation to each of these factors with sufficient detail and certainty to support the submission of a Referral to the Western Australian EPA under Part IV of the <i>Environmental</i> <i>Protection Act 1986</i>. Environmental assessments to date suggest that the potential impacts to the relevant environmental factors can be managed to meet the EPA Objectives.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. 	 Density measurements were taken as part of the drill core assessment process described in section 1. This included wet core density, brine density and dry solids density. However, no bulk density was applied to the estimates because resources are defined by volume, rather than by tonnage.



Criteria	JORC Code explanation	Commentary
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Semi-variograms generated from potassium concentration test results indicate that there is a statistical relationship between sample pairs at distance of up 10km. Using these observations as a guide, Measured Mineral Resources were considered for ranges of up to approximately 2,500m from the nearest sample site and Indicated resources up to approximately 5,000km. The quantity, quality and distribution physical parameters plus overall geologic complexity were also used to guide resource confidence. The Mineral Resource directly below islands are classified as Inferred based quantity of data associated with these areas. The potassium Mineral Resource exploration at Lake Mackay has focused on the upper zone located in Western Australia and this area contains the Measured plus Indicated Mineral resources. The above scheme is considered to take appropriate account of all relevant factors, including the relative
		 estimates, confidence in the continuity of geology and brine concentrations values, and the quality, quantity and distribution of the data. The classification appropriately reflects
		the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The Mineral Resource was estimated by the Competent Person who is a full-time employee of Stantec Consulting Services Inc. The Mineral Resource has been reviewed by other consultants employed at Stantec Consulting Services Inc.



Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence dures where available. 	 The relative accuracy of the Mineral Resource is reflected in the reporting of the Mineral Resources as per the guidelines of the JORC Code (2012). The statement relates to global estimates of volume, tonnages and grades. No production data is available for this resource.