

5 August 2019

## MAJOR RESOURCE ESTIMATE UPGRADE

### Resource Increase to 18.1 MILLION TONNES of Drainable SOP in the Measured category

Lake Wells Sulphate of Potash (SOP) Project (LWPP) – 100% Owned, Western  
Australia

#### Highlights

- **Significant increase in the LWPP SOP resource to 18.1 million tonnes (Table 1);**
- **Resource upgrade based on extensive hydrogeological data and rigorous industry leading modelling;**
- **High confidence levels with 100% of the LWPP Resource in Measured category;**
- **Reserve estimate being finalised underpinning the Definitive Feasibility Study.**

Australian Potash Limited (ASX: APC) (**APC** or the **Company**) is pleased to advise shareholders of an upgrade to the JORC2012 Compliant Mineral Resource Estimate being incorporated into the Definitive Feasibility Study on the Lake Wells SOP Project.

**Managing Director and CEO, Matt Shackleton, commented:** “APC has always applied the most rigorous technical approach to the work we do at Lake Wells. This is reflected today in the quality of this upgraded mineral resource estimate.

“Based on data from more than 60,000 metres of drilling, 300,000 metres of seismic surveys and 1,329 exploration holes that has been completed by APC and others at Lake Wells, today’s resource estimate upgrade establishes an extremely solid base for the Reserve estimate underpinning the Definitive Feasibility Study’ economic analyses.

“APC utilises a specific yield, or drainable porosity, factor in its resource estimates. Specific yield gives an estimate of the proportion of contained brine that could potentially be recovered from an aquifer. The notion of an arithmetic estimate, or total porosity, based on area of aquifer is anathema to sound hydrogeology.

**“The release of this upgraded resource estimate today marks the commencement of the reporting for the Definitive Feasibility Study findings. I continue to look forward to providing shareholders with updates as they are finalised in the immediate future.”**

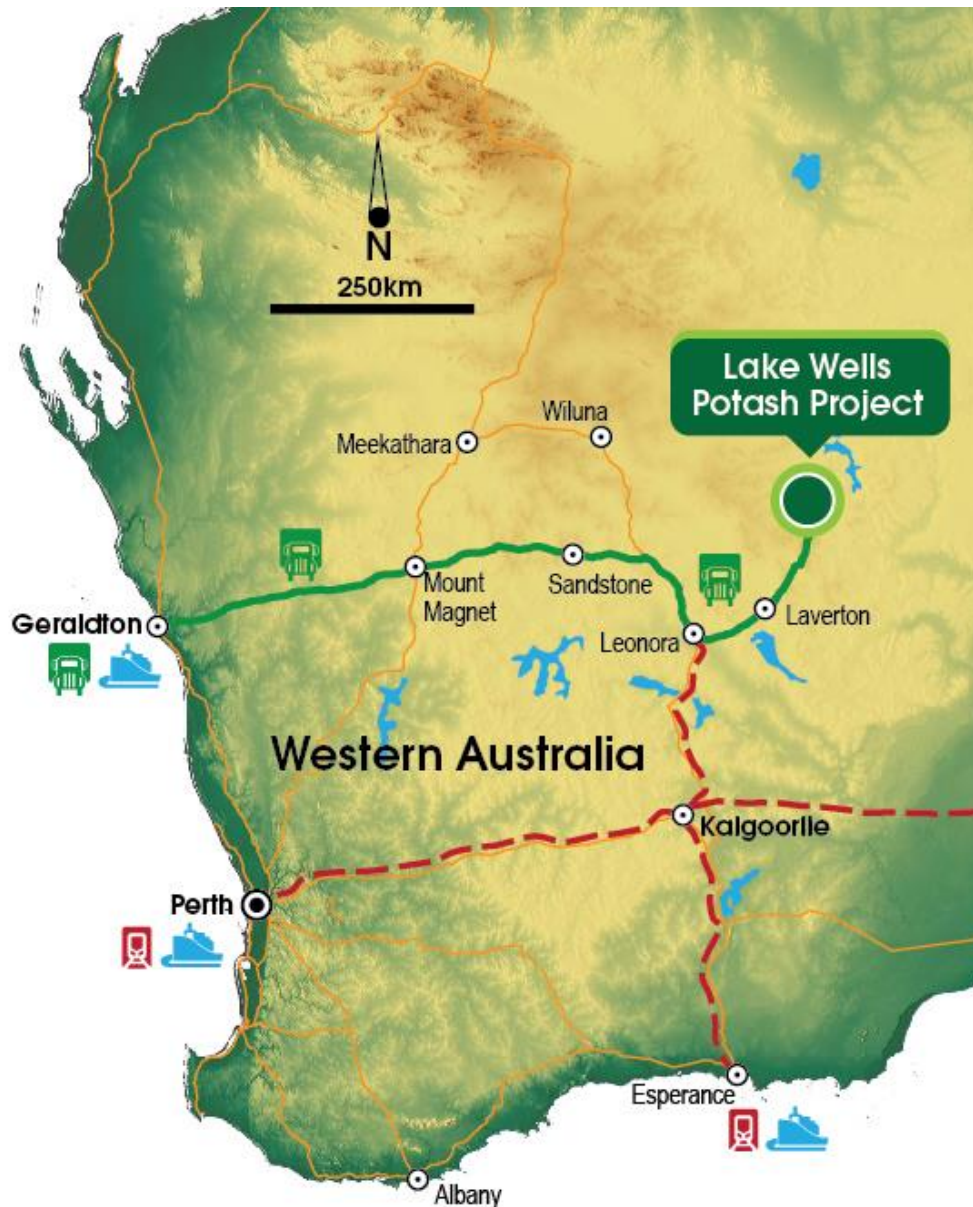


Figure 1: The Lake Wells Sulphate of Potash Project is located in the Eastern Goldfields region of Western Australia, a jurisdiction ranked 2<sup>nd</sup> internationally as a destination for developing minerals projects.

## Technical Discussion

### Mineral Resource Estimate Summary

A Mineral Resource Estimate (MRE) has been calculated on the LWPP's sulphate of potash (SOP) deposit under the guidelines of both *JORC 2012* and the recently adopted *Guidelines for Resource and Reserve Estimation for Brines 2019*. Under these internationally recognised guidelines the mineral resource is reported in terms of **gravity recoverable** SOP as measured by the Specific Yield (Sy) of the host unit lithology.

The Measured Resource is a static estimate; it represents the volume of potentially recoverable brine that is contained within the defined aquifer. It takes no account of modifying factors such as the design of a borefield (or other pumping scheme), which will affect both the proportion of the Resource that is ultimately recovered and changes in grade associated with mixing between each aquifer unit and the surrounding geology, which will occur once pumping starts.

Hydrogeological Unit	Volume of aquifer (MCM)	Specific Yield (mean)	Drainable Brine Volume (MCM)	K Concent <sup>n</sup> (mg/L, weighted mean value)	SOP Grade (mg/L, weighted mean value)	SOP Resource (MT)
Loam	5,180	10%	518	4,009	8,941	4.6
Upper aquitard	10,772	7%	754	3,020	6,735	5.1
Crete	479	5%	24	2,386	5,320	0.1
Upper sand	801	17%	136	3,435	7,660	1.0
Lower aquitard	9,502	8%	760	3,367	7,509	5.7
Mixed aquifer	440	17%	75	3,645	8,129	0.6
Basal sand	503	23%	116	3,415	7,616	0.9
<b>Total (MCM/MT)</b>	<b>27,678</b>		<b>2,383</b>	<b>3,343</b>	<b>7,455</b>	<b>18.1</b>

*Table 1: Measured JORC Mineral Resource Estimate for Lake Wells Sulphate of Potash Project based on modelled aquifer volume, specific yield and weighted mean K concentrations (derived from modelling)*

The Measured Resource also takes no account of recharge to the upper-most aquifer which is a modifying factor that may increase brine-recovery from this unit. The extent to which the Measured Resource will be converted to a Mineral Ore Reserve remains uncertain.

With combined resources of **18.1Mt SOP** APC has delineated a substantial resource upon which to base its planned 150,000 tpa SOP operation for a long, sustained period.

The MRE covers the four key parameters as outlined in the brine resource guidelines:

- Determination of the Specific Yield (Sy) of the brine-aquifer;
- Definition of the brine-aquifer geometry;
- Determination of the concentration of the elements of interest; and
- Determination of appropriate boundaries for the Mineral Resource Estimate.

The MRE has been modelled with three approaches:

- Continuous interpolant;
- Block-modelled Inverse distance; and
- Block-modelled Kriging.

Extensive modelling has been undertaken using all three approaches. The data and outcomes for these approaches were materially consistent providing a high level of confidence for the resource upgrade. The MRE has adopted the block-model with Inverse Distance as the preferred method for estimating with the resultant 18.1 MT of SOP from drainable brine.

A summary of the brine resource exploration drilling undertaken by APC is provided in Appendix 1. Other mineral exploration results contribute to geological control and add confidence to the hydrogeological interpolation and are summarised in Appendix 2. As a result of the extensive hydrogeological data and rigorous modelling undertaken by APC the LWPP resource is in the **Measured Category** providing a high level of confidence.

## Specific Yield

Fundamental to any resource project is the extraction of the mineral bearing ore. In the case of brine hosted deposits ore extraction is completed by pumps from an installed collection point. While collection point methodologies vary from deposit to deposit, the Sy will be an important influence on the abstraction method and rate (along with aquifer transmissivity). Calculation of the Sy for the Lake Wells SOP Project was done by collection of two data types:

physical sediment samples submitted for particle size distribution analysis (PSD), and geophysical borehole magnetic resonance (BMR).

Analysis of PSD was conducted on 105 lithological samples collected during drilling. Analyses were undertaken by Soil Water Group in Perth, WA (a recognised soil-science laboratory). The 105 samples represent each of the units in the hydrostratigraphic model covering surficial deposits, upper aquitard, upper sand aquifer, lower aquitard, mixed aquifer, and basal sand aquifer. PSD samples from “consolidated rock” (i.e. silcrete and basement) have not been considered. The PSDs have been used to estimate permeability, specific yield and porosity of the six identified hydraulic units by comparison to known standards as described by Saxton and Rawls (Soil Sci. Soc. Am. J. 2006, vol.70:1569 - 1578).

Borehole magnetic resonance (BMR) logging has been conducted on eighteen exploration drill holes across the LWPP to provide in-situ estimates of permeability, specific yield and porosity. Specific yield values derived from BMR logging and PSD analysis for corresponding intervals correlate well. There are, however, some anomalies evident at intervals of the BMR logging, indicative of drilling disturbance or washouts. The BMR data has been filtered by level of confidence (reliability), such that the data against the washout zones can be filtered out from the data set. The washout zones occur predominantly in sandier, less consolidated units and, as such, the BMR data for these units have been found to be unreliable due to the large amount of filtered data.

The specific yield estimates, from both PSD analyses and reliable BMR logging, approximate a log-normal distribution (as is common for granular aquifers) and the mean of the log-normal distribution is presented in Table 1.

Recent test pumping from production bores screened in either the upper and/or basal sand units have given further confidence to the adopted parameters for these hydrostratigraphic units.

Hydrogeological Unit	Specific Yield (%)	Comment
Loam	10	BMR and PSD combined
Upper Aquitard	7	BMR and PSD combined
Crete	5	Adopted
Upper Sand	17	PSD data only
Lower Aquitard	8	BMR and PSD combined
Mixed Aquifer	17	PSD data only
Basal Sand	23	PSD data only

*Table 2: Specific Yield table highlighting unit and method of determination*

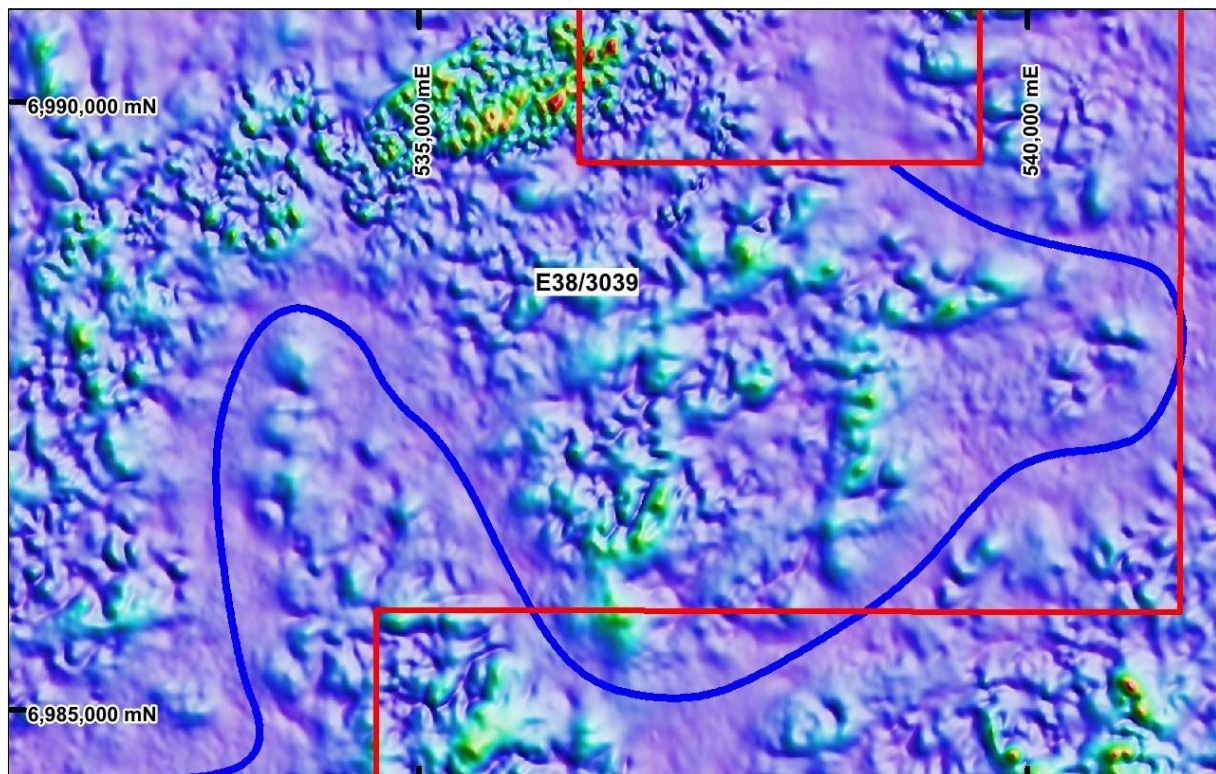
## Brine-Aquifer Geometry

Geometry for the brine hosting aquifers has been determined from an extensive dataset of geophysical and drilling data that includes:

- In excess of 60,000 metres of drilling from 1,329 exploration holes that confirm depth and lithology encompassing;
  - Production Bores Brine – 7 for 1,052m
  - Production Bores Fresh – 13 for 962m
  - Monitoring Bores B+F – 32 for 2,714m
  - Historical Mineral Exploration Holes – 1,273 for 49,786m
  - APC Brine Exploration Bores – 53 for 5,612m;
- 305,000 metres of passive seismic surveys defining the shape of the LWPP's palaeovalley;
- BMR logging of 18 holes; and
- Magnetic data interpretation confirming basal sand continuity.



Definition of the basement profile has been aided using the HVSr passive seismic geophysical technique. Sample spacing for data collection is generally 100m, though 50m spacings were used in some areas where additional detail was needed to resolve some complexity. Data output was calibrated against drilling data to provide a robust and predictable model, that was then further tested with additional drilling. Calibrated passive seismic data has proven to be an extremely effective method for defining the depth and shape of the bedrock surface and locating the deepest and coarsest channel sediments. While the passive seismic data have proven valuable in generating cross sections through the LWPP geology, magnetic data has proven effective in connecting cross sections together laterally. Airborne magnetic data when flown at close line spacings and high resolution can detect magnetic minerals that are concentrated in sediments by physical gravity sorting during transport. In the case of river systems this means concentrating sand sized grains of magnetite and pyrrhotite, and/or gravel of magnetic rocks such as dolerite or BIF (magnetic rich shale), usually along the highest energy parts of the system such as the river channel thalweg. Magnetic data at a line spacing of 100m covers the project area, where processed images give a clear view of the palaeochannel thalweg, with a small section shown below in Figure 2. Combining the interpreted thalweg of the palaeochannel with the section views generated by the passive seismic data a clear 3D view of the palaeochannel and the surrounding palaeovalley can be generated and further refined with drilling.



*Figure 2: Magnetic image of a section of the MRE highlighting interpreted thalweg (blue line) or deepest basal sands within the palaeovalley.*

For modelling purposes, the LWPP's sediments have been divided into hydro-stratigraphic units as determined by hydrogeological characteristics. Eight units in total were used to model the deposit:

- Recent surficial deposits (Loam) – includes dune sand, lake clays and halite deposits, between the current natural surface, and maximum of approximately 30m depth below ground level;
- Cemented deposits (Crete) – silcrete and calcrete deposits present specific hydrologic properties, and these have been accounted for in a modelled unit;
- Upper Aquitard (UA) – lacustrine clay and fine sediment deposits (with minor sand). Large brine resource that has demonstrated ability to leak vertically into underlying aquifers;

- Upper Sand (US) – 5 to 15m thick layer of fine sand that extends across the width of the deposit. Constitutes a brine resource that is likely to be recharged by the overlying clays during pumping and depressurisation;
- Lower Aquitard (LA) – thick sequence of clay and silty sediments (with minor sand) that retains a very large portion of brine that has a demonstrated ability to leak vertically into the underlying aquifer;
- Mixed Aquifer (MA) – interfingering coarse sand and clay units rich in lignite and organic matter. Has a large brine content that is recharged from overlying clay units;
- Basal Sand (BS) – coarse sand and gravel deposit sitting on basement. Highly porous and permeable with excellent Sy. Pumping and depressurisation of this horizon allows the leaking of all overlying units and is therefore recharged with brine from above; and
- Basement Rock (BR) – basement rocks of either Archean rocks, or older Tertiary sediments.

Historical mineral exploration drilling data has been extracted from the open source WAMEX database and includes 1,273 drill holes for 49,786m. This data has contributed geological control and added confidence to the hydrogeological interpolation.

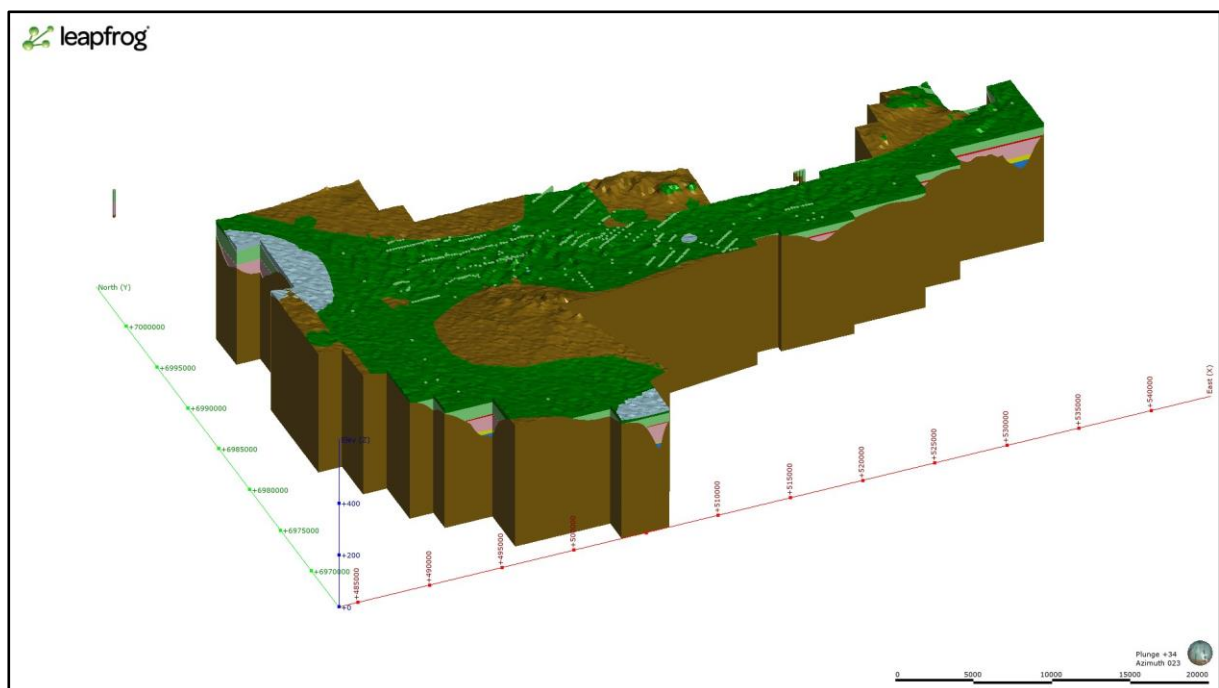


Figure 3: Lake Wells geology model with the seven modeled units. (20X vertical exaggeration).

## Brine Grade

Throughout exploration drilling and test pumping operations brine samples have been collected and analysed for multiple relevant elements, including anion and cation content, pH and density. A total of 672 samples have been collected during exploration drilling sampling over 2,800m of lithology. Additionally, 57 samples have been collected during test pumping of the seven completed production bores. This comprehensive dataset provides confidence in the grade distribution throughout the deposit.

Modelling of the deposit indicates that the LWPP is essentially a closed system, and that there will be limited recharge from periodic rainfall events (particularly to the deeper hydrostratigraphic units). The closed nature of the deposit suggests that the grade of brine during proposed operations is likely to remain consistent.

A summary of brine-assays and grade is provided in Table 3.

Hydrogeological Unit	No of Assays Used in Brine Modelling <sup>1</sup>	Potassium (mg/L)			Sulphate (mg/L)			SOP (mg/L)
		Median	Average <sup>2</sup>	Std Deviation	Median	Average <sup>2</sup>	Std Deviation	Weighted Mean Average <sup>3</sup> (Measured Resource)
Loam	125	4,330	4,168	1,248	20,750	20,131	5,437	8,941
Upper Aquitard	190	4,150	3,937	1,273	22,500	22,452	6,787	6,735
Crete	40	3,925	3,515	1,483	22,100	20,469	8,565	5,320
Upper Sand	24	3,990	3,811	1,036	25,300	24,404	7,357	7,660
Lower Aquitard	319	3,700	3,582	1,306	21,400	22,131	7,597	7,509
Mixed Aquifer	26	3,585	3,333	1,061	21,200	20,943	7,924	8,129
Basal Sand	25	3,720	3,250	1,029	22,100	21,852	6,654	7,616
<b>Total</b>	<b>749</b>							<b>7,455</b>

Notes:

- 1 Excludes QA/QC assays and assays from transient conditions (i.e. test pumping of production bores).
- 2 Average values are simply arithmetic means of all samples provided to summarise numerous assay results; they do not represent a weighted mean average.
- 3 Weighted Mean Averages for the Measured Resource area are derived from the brine modelling.

*Table 3: Brine assays for the Lake Wells Potash Project*

### Deposit Boundaries

The most significant boundary to the deposit is the sediment to basement rock interface where brine is assigned to the sedimentary hosts. It must be noted that brine is known to be present in underlying basement rocks, and in part this may contribute to the overall brine volumes, though it has been excluded from the resource calculation at this time.

Tenement boundaries are the final limiting factor in defining the deposit boundaries. The resource upgrade sits entirely within tenements either owned 100% by APC, or which APC has secured exclusive rights to the contained potash within. Boundaries are summarised in Figure 4. Figures 5 – 7 show geological cross sections and nature of the boundary between the brine-aquifer and basement.



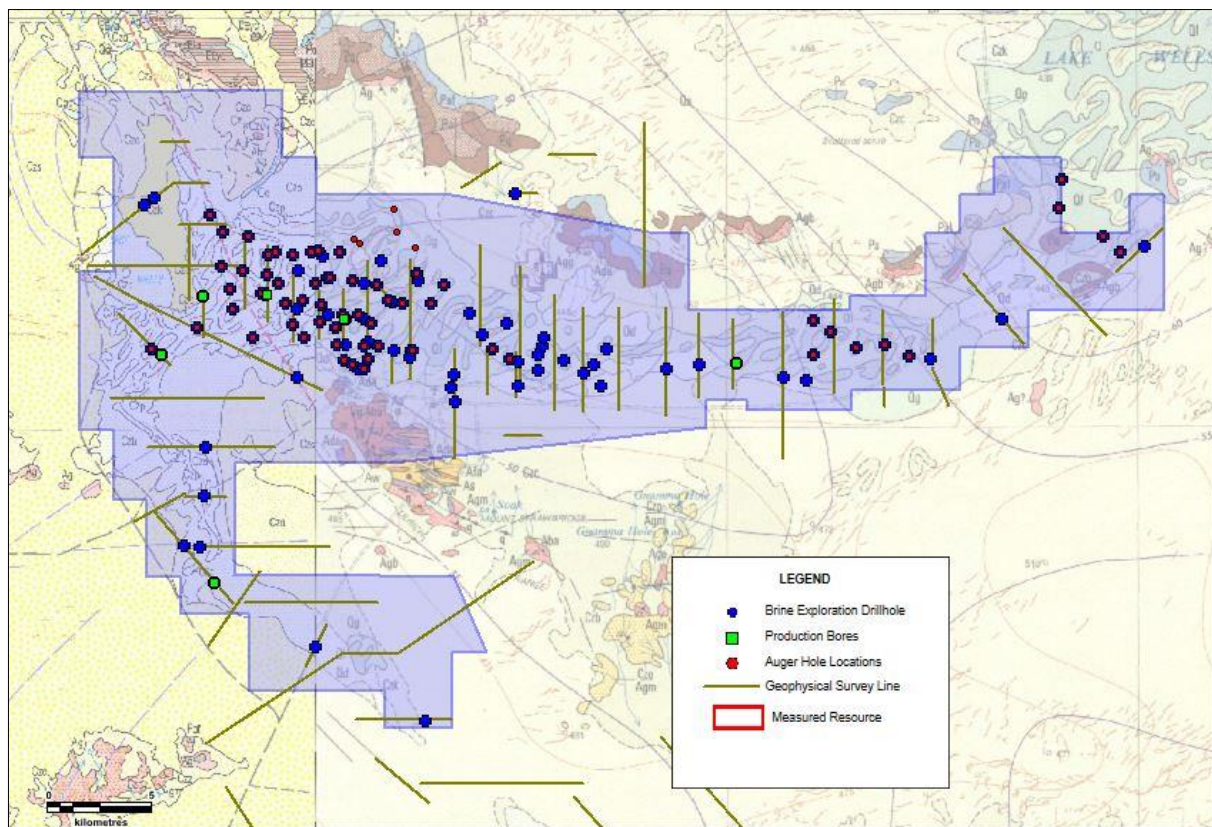


Figure 4: Brine exploration drill hole, production bore and auger hole locations.

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## **Competent Person's Statement**

The information in the announcement that relates to Mineral Resources is based on information that was compiled by Mr Duncan Gareth Storey. Mr Storey is a Director and Consulting Hydrogeologist with AQ2, a firm that provides consulting services to the Company. Neither Mr Storey nor AQ2 own either directly or indirectly any securities in the issued capital of the Company. Mr Storey has 30 years of international experience. He is a Chartered Geologist with, and Fellow of, the Geological Society of London (a Recognised Professional Organisation under the JORC Code 2012). Mr Storey has experience in the assessment and development of paleochannel aquifers, including the development of hypersaline brines in Western Australia. His experience and expertise are such that he qualifies as a Competent Person as defined in the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves". Mr Storey consents to the inclusion in this report of the matters based on this information in the form and context as it appears.

The information in this report that relates to Exploration Results is based on information compiled by Christopher Shaw who is a member of the Australian Institute of Geoscientists (AIG). Mr Shaw is an employee of Australian Potash Ltd. Mr Shaw has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Shaw consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## **Forward Looking Statements Disclaimer**

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.



# JORC (2012) Table 1

## Section 1: Sampling Techniques and Data

(Criteria in the section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples collected during exploration drilling were collected in the following manner; brine collected through the cyclone in a clean bucket (9l or 20l) at the start of drilling each 6m drill rod. Sampling at the start of each rod allowed the drilling to proceed continuously through the interval, and let brine accumulate from the drilled interval during the rod change to provide a representative sample of the preceding 6m interval. Brine samples in the buckets tended to be muddy, and these were left for up to half an hour to settle and provide a clear sample. Subsamples were collected in 125ml or 250ml labelled bottles, and density and temperature data collected. Subsamples were then sealed and submitted for chemical analysis.</li> <li>Auger hole brine samples collected via bailer or by hand with 250ml or 500ml bottles.</li> <li>Brine samples during test pumping were collected by opening a valve on the headworks and collecting the brine in a clean, labelled, sample bottle. Measurements of temperature and density are collected, then the bottle sealed and submitted for chemical analysis.</li> <li>Sampling from pumped bores provides a composite brine sample drawing predominantly from the more permeable, screened units.</li> <li>Bore holes have been drilled via the following techniques; Mud Rotary (MR), Air core (AC), Reverse Circulation (RC), and Diamond Drilling (DD). Auger holes completed using handheld (unpowered) auger.</li> <li>Drill spoil samples from AC/RC drilling were collected from the cyclone and laid out in rows of 10 or 20 for geological logging and (where applicable) material sampling. Particle size distribution (PSD) samples were collected by subsampling 1- 2kg of material from selected spoil piles by scoop in a radial pattern.</li> <li>Drill cuttings from MR drilling were collected from the outside return with a shovel and laid out in rows of 1m or 3m sample piles.</li> <li>All PSD testing was undertaken according to AS 1289.3.6.1 Soil Classification tests - Determination of the particle size distribution of a soil - Standard method of analysis by sieving.</li> <li>PSD samples have been used to estimate permeability, specific yield and porosity.</li> </ul>



<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</i></li> <li>• Mud Rotary-Diamond Drilling (MR-DDH) was used to complete five bores. Selective PQ Triple tube Core (diameter 85mm, no orientation) used to penetrate hard regolith zones and basement was collected with core recovery generally over 90%.</li> <li>• Diamond Drilling was used to collect core samples for the entirety of two holes. Core recovery was via PQ triple tube through the sediment zone, with some HQ core recovery once basement was encountered. Recovery was above 95% through most of the holes, though there was significant core loss in the free running sand zones. Both holes were vertical and not orientated.</li> <li>• Air core (AC) drilling using a Schramm 685 drill rig, with 125mm face sampling bit, was used on several exploration programs. Recovery of both sediment and brine samples was highly variable due to ground conditions.</li> <li>• Reverse circulation (RC) drilling using a Schramm 685 drill rig, with hammer and 125mm face sampling bit, was used on several exploration programs. Recovery of both sediment and brine samples was highly variable due to ground conditions.</li> <li>• Mud Rotary Drilling (MR) was used to construct production bores and selected monitoring bores. Drill diameter varied depending on the purpose of the hole, though generally a 4" or 6.5" hole was drilled, then reamed out to the required size for completion, that being 10" 12", or 14". Sediment sampling from MR bores is indicative only as it is an open hole drilling technique and there is no certainty of where the samples have come from. Casing installed into the MR hole is designed to be screened against interpreted brine producing horizons, then gravel packed. Once the bore is completed with gravel pack it can then be test pumped either by air lifting, or submersible pump to collect brine samples for analysis.</li> </ul>
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<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>• Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples taken from intervals downhole are considered indicative due to groundwater seepage below the static water table level (SWL) and it is difficult to estimate the degree of down-hole brine 'mixing' using the AC or RC drilling technique. Brine samples collected at end of rod (every 3 or 6m) where possible, are to some extent, naturally composited due to the nature of the sample medium and compressed air drill technique.</li> <li>• To compensate for the variable release of brine, and indicate production grades over time, as noted in <b>Sampling Techniques</b>, the most reliable and unequivocal assay results come from test pumping of bores, particularly the long-term test pumping.</li> <li>• Other than the grade of the brine, the recovery rate of brine is also a key parameter in a brine hosted resource. To ascertain the recovery rate of brine several methods have been used in parallel to confirm this variable parameter; PSD samples, BMR logging, and long-term test pumping. Each of the three techniques works of inform, and confirm, the other and provides high confidence to the calculated recovery rate and transmissivity of the host lithology.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• AC and RC Drilling – Initially qualitative lithological logging was completed by inspection of washed (sieved) drill cuttings at the time of drilling. Most recently logging has been completed in a pan so that fine material can be observed and noted in the drill logs. Drill logging format has also been altered to suit the sedimentary nature of the host lithologies.</li> <li>• DD Drilling – All core has been qualitatively logged and photographed for future reference. Recovery data for each drill run has been recorded.</li> <li>• To quantify observations of lithology porosity and permeability samples have been collected (as noted in <b>Drill sample recovery</b>) for PSD analysis.</li> <li>• Downhole logging has also been completed on selected holes by a Javelin Borehole Magnetic Resonance (BMR) tool. By detecting fluid hydrogen, the Javelin system allows direct measurement of groundwater. With a view into the pore space, a Javelin log yields precise quantification of water content and porosity, as well as estimates of key hydrogeological parameters including permeability, specific yield, and pore size distribution.</li> <li>• Quantification of aquifer response is most heavily influenced by logging water level drawdown during pump testing. Water levels are monitored for the production bores, and several monitoring bores that are constructed for the express purpose of indicating where the brine is being drawn from, and at what rate. Recording and modelling drawdown data from the bores allows for accurate prediction of aquifer performance over the long.</li> </ul>



<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul> <ul style="list-style-type: none"> <li>• AC and RC Drilling - Brine water samples were collected with a clean bucket from the rig cyclone. Settling time of up to half an hour after collection allowed mud to settle. Subsampling was conducted either by immersing the sample bottle into the bucket until the sample bottle was full or decanting clear brine into a smaller jug that was then poured into the sample bottle. Sterile plastic sample bottles of 125ml or 250ml were used to collect each subsample.</li> <li>• Mud Rotary Drilling – Brine samples either collected from small submersible pump in 50mm PVC cased holes after sufficient airlifting to remove traces of drilling fluids, or at the end of airlifting and development of the cased bore.</li> <li>• Production bores – brine collected at multiple stages; initially at the completion of drilling (when drilled with air), again at the end of airlifting and bore development, then finally samples are collected at regular intervals during pump testing. In all cases the sample is collected in a clean bucket or jug then poured into a clean sample bottle.</li> <li>• In drill sampling the original sample is considered a good representation of the interval sampled. The pump testing samples are considered an excellent representation of the host ore brine. In both cases the subsampling is conducted on a fluid that is homogenous and that the time taken for settling, or other procedures, will not affect the outcome of the assay i.e. the half hour settling time in a half full bucket will not allow sufficient evaporation to upgrade the sample, nor will settling of the elements of interest occur.</li> <li>• As the host material of the mineral/s of interest is a fluid, and that settling of the elements of interest is unlikely in the timeframe noted, it is considered that the subsampling technique is appropriate.</li> <li>• The brine samples collected are demonstrated to be homogenous through duplicate samples that report within the margin of error for the assay technique used.</li> </ul>
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<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• All analysis is considered total as elements of interest are dissolved in the host brine.</li> <li>• Major cations were analysed using either ICP-AES or ICP-MS techniques. Analysis of Cations in brine solution by Mohr Titration. Sulphate was determined by either: ICP-AES Determination or dissolved sulphate in a 0.45um filtered sample with sulphate ions converted to a barium sulphate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO<sub>4</sub> suspension measured by a photometer and the SO<sub>4</sub>-2 concentration is determined by comparison of the reading with a standard curve. Specific Gravity (SG) calculated using Pycnometric method. Total Dissolved Solids (TDS) calculated by Gravimetric method.</li> <li>• Reference brine solution provided by, or repeatedly tested by, independent laboratory used for QA/QC analysis with a sample ratio of approx. 1:10. Duplicate samples (approx. 1:20) were also collected for QA/QC analysis and despatched to laboratory for brine analysis. A small sample batch has been despatched to umpire lab for comparison purposes.</li> <li>• The samples were collected for major cation (Ca, K, Na, Mg) and anions (Cl, sulphate), alkalinity, Specific Gravity, Total Dissolved Solids (TDS) and selective multi-element (dissolved metals) via ICP-MS and ICP-OES analysis. Drill samples (2016 - 2019) were completed at Bureau Veritas Laboratory, Perth. These samples were analysed with Lab Codes GC006, GC026, GC033, GC004, and SO101 and SO102 methods. Reference brine solution samples dispatched to laboratory reported an average error of &lt;10%. Drill samples (2015) were assayed at ALS Laboratory (Perth) with Lab Codes ED093F, ED041G, ED045G, EA050, ED037-P, EG020A-F. Duplicate and reference brine samples were submitted to MPL Laboratory (Perth) and ALS Metallurgy Laboratory (Perth).</li> <li>• Potash brine results calculated with primary potassium (K) values and K<sub>2</sub>SO<sub>4</sub> equivalent. No upper and lower cuts applied. For multi-element suite - (Bureau Veritas Lab Code SO101 and SO102) elements included (but not limited to): Al, As, Cr, Co, Fe, Pb, Ni, U, Th, Zn, V). No anomalous or significant multi-element results recorded in brine samples.</li> <li>• Quality control process and internal laboratory checks demonstrate acceptable levels of accuracy.</li> <li>• Further Data QA/QC checks undertaken include: <ul style="list-style-type: none"> <li>◦ Database QA/QC reporting including box and whisker plots</li> <li>◦ Primary laboratory duplicate comparison and interlaboratory duplicate comparison</li> <li>◦ Charge balance check</li> <li>◦ Ionic ratio analysis</li> </ul> </li> <li>• These checks demonstrate acceptable levels of accuracy and consistency in the dataset.</li> <li>• Downhole Javelin BMR tool supplied by Vista Clara Corp, USA. Tool model = Javelin</li> </ul>
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		<p>JP175, with 200m cable and winch. Tool reads the following parameters at approximate half metre intervals;</p> <ul style="list-style-type: none"> <li>• Direct detection of groundwater</li> <li>• Quantification of water content and porosity</li> <li>• Determination of bound versus unbound water</li> <li>• Estimation of hydraulic conductivity, transmissivity, specific yield, and porosity.</li> <li>• Sensitivity beyond the drilling disturbed zone</li> </ul> <ul style="list-style-type: none"> <li>• Javelin BMR is a high precision tool that collects in-situ data. There is no calibration for the BMR tool and data collection, though the output can be scaled against known parameters gained from other analysis. Checks and scaling of the BMR output has been conducted against hydraulic conductivity, porosity and specific yield data gathered from PSD and pump test data. Specific yield values derived from BMR logging and PSD analysis for corresponding intervals correlate well. There are, however, some anomalies evident at intervals of the BMR logging, indicative of drilling disturbance or washouts. The BMR data has been filtered by level of confidence (reliability), such that the data against the washout zones can be filtered out from the data set. The washout zones tend to occur predominantly in sandier, less consolidated units and, as such, the BMR data for these units have been found to be unreliable due to the large amount of filtered data.</li> </ul>
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<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• QA/QC procedures included reference solution and duplicate samples collected and analysed at both the primary and independent umpire laboratory to evaluate analytical consistency. Internal laboratory standards and instrument calibration are completed as a matter of course.</li> <li>• Sample data was captured in the field and digital data entry completed both in the field and in the Company's Perth office. All drill and sample data is then loaded into a SQL Server database and validation checks completed to ensure data accuracy.</li> <li>• Potash assay results are received in csv format and loaded into a SQL Server database. Results and metadata are loaded as received. The following adjustments to assay data are made so results from different laboratories can be compared and plotted together. Refer Attachment plus Metadata Assay tables in supplied database export. <ul style="list-style-type: none"> <li>• Text results converted to numbers. Results less than the detection limit are converted to the detection limit * -1.</li> <li>• When different laboratories report results in different measurement units, they are converted to a consistent measurement unit for plotting.</li> <li>• When different laboratories report methods, analytes and measurement units differently they are converted to a more consistent method, analyte and measurement for plotting.</li> </ul> </li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill collars were surveyed by RTK GPS with accuracy of approximately <math>\pm 0.03\text{m}</math> horizontal and <math>\pm 0.07\text{m}</math> vertically.</li> <li>• GPS coordinates and height were recorded for the casing as well as the plinth/collar, otherwise only the top of casing and a natural surface height. With a couple of instances, the casing protruded beyond the collar.</li> <li>• Grid System – MGA94 Zone 51.</li> <li>• Topographic control via RTK GPS is of a very high level, and appropriate for the Mineral Resource Estimation.</li> </ul>





<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Hole spacing on approximate 1-6 km drill pattern targeted upper and basal sand paleochannel zones with 6m sample intervals (where possible) across the targeted salt lake system and meets SEG and Benchmark standards for Inferred Brine Resource classification (Houston, Butcher, Ehren, Evans, Godfrey (2012) The Evaluation of Brine Prospects and the Requirement for Modification to Filing Standards. Economic Geology v106, pp1225-1239. The data spacing is considered sufficient to establish the degree of geological and grade continuity appropriate for mineral resource estimation procedures.</li> <li>• No sample compositing has been applied in the generation of the mineral resource.</li> <li>• Sample compositing has naturally occurred in the production bores during test pumping. Natural compositing occurs as the brine held in each aquifer drains under gravity into the production bore where it mixes with brine from vertically stacked aquifers to produce a single brine outflow. As this process is the same whether in test pumping a trial bore, or a production bore in an operating bore field, it is considered this is best indication of grade over the long term and life of the project in a closed aquifer system.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• The orientation of the target aquifer/s is effectively horizontal, therefore vertical holes are piercing the targets normal to the target.</li> <li>• No bias is anticipated from drilling vertical holes.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples collected in the field were kept under supervision of the senior company person on site until delivery to the transport provider.</li> <li>• Bottle lids were sealed with tape to prevent loosening and leakage, and to be tamper evident.</li> <li>• Transport from the field to a Perth laboratory was conducted with sealed eskies and airfreight, delivered by Company personnel to the laboratory direct, or by Australia Post Express Prepaid Post Bag.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• Data reviews are summarised under QA/QC of data above.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul> <p>Data validation procedures used.</p>	<ul style="list-style-type: none"> <li>• All geological and field data is entered into excel spreadsheets with lookup tables and fixed formatting (and protected from modification) thus only allowing data to be entered using approved geological code system and sample protocol. Data is then emailed to the database administrator for validation and importation into a SQL Server database.</li> </ul>
<b>Site Visits</b>	<ul style="list-style-type: none"> <li>• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul> <p>If no site visits have been undertaken indicate why this is the case.</p>	<ul style="list-style-type: none"> <li>• Competent Person for information regarding Exploration Results has maintained constant supervision and in-field management for all exploration programs.</li> <li>• Competent Person for the calculation of brine hosted mineral resources, and related</li> </ul>

		hydrogeological inputs, has visited site three times over the past six months for training and supervision of resource specific data gathering. As a result of these site visits the competent person is satisfied that all data presented here is an accurate reflection of the geological and hydrogeological conditions of the site of those investigations.
<b>Geological Interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> </ul> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<ul style="list-style-type: none"> <li>• Confidence in the geological interpretation is high because sediment filled palaeo-valleys are common in Western Australia and have been extensively studied over many years.</li> <li>• Applying knowledge of other palaeo-valley systems to the Lake Wells system has resulted in a robust model of the cycles and timing of sedimentary infill of the valley, and the brine hosting units.</li> <li>• The geological interpretation is supported by multiple lines of evidence including; detailed geological logging of drill chips; palynological analysis for age dating, BMR downhole logging, regional geological correlation, magnetic data interpretation, and detailed passive seismic survey sections.</li> <li>• The interpretation of geological data has a strong controlling influence in the scale of the resource estimate, primarily in limiting the extent of the host units. A key controlling factor in resource scale is development of a 3D model of the basement rocks to the unconsolidated sedimentary fill. The basement model is derived from passive seismic sections that provide depth control between the land surface and the sediment/basement interface. Lateral continuity of the palaeo-channel thalweg can be interpreted from magnetic data where the accumulation of magnetic minerals in basal sediments can be seen. Drilling data has been used to calibrate geophysical data, and interpretation of this has allowed a robust interpretation of the basement topography to be modelled.</li> <li>• Palaeo topography (basement surface) has a strong controlling influence on the resource scale as this provides a limit to the lateral resource extents. The basement model then provides the volume that the various brine hosting units fill and facilitates the calculation of a resource on a 'closed basin' basis i.e. no water is assumed to flow into the resource to recharge the resource volume over time.</li> <li>• No alternative geological interpretations have been generated.</li> <li>• Geological interpretation, supported by grain size analysis and brine flow rates, directly provide the dimensions of the Mineral Resource estimate. Geological interpretation in the field is the most immediate guide to designing the screening intervals in exploration and production bores.</li> <li>• Sedimentological processes affect form, thickness and extent of each stratigraphic unit.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Measured, Indicated and Inferred Resources have been calculated for most of the Lake Wells Paleochannel/palaeo-valley fill system within tenements owned or controlled by APC.</li> <li>• The resource covers greater than 70 kilometre</li> </ul>

		<p>length of paleochannel thalweg, and many additional kilometres of tributary river and streambeds. On the surface of the lake system this translates into two broad sections;</p> <ul style="list-style-type: none"> <li>• 1/ E-W section that measures 50km by 4km that tapers to approximately 200m at its base, and a vertical thickness of approximately 155m from surface.</li> <li>• 2/ N-S section that measures 15km by 4km that tapers to a base approximately 800m wide, and a maximum thickness of 175mbgl.</li> <li>• In section, the valley fill is consistent through the deposit and consists of 7 hydrostratigraphic units divided on hydrogeologic characteristics that for the specific 'hydro-stratigraphy' for this deposit. From top to bottom the hydro- stratigraphy is; <ul style="list-style-type: none"> <li>1 – Loam</li> <li>2 – Upper Aquitard</li> <li>3 - Crete</li> <li>4 – Upper Sand Aquifer</li> <li>5 – Lower Aquitard</li> <li>6 – Mixed Aquifer</li> <li>7 – Basal Sand Aquifer</li> </ul> </li> <li>• Variability along strike is consistent with the sedimentary river and lake system models and is accounted for in the modelling.</li> </ul>
<b>Estimation and Modelling Techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> </ul> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	<ul style="list-style-type: none"> <li>• Modelling has been undertaken with ARANZ Leapfrog Geo modelling software and Edge geostatistical software. The model provides an estimate of the potentially drainable brine within the LWPP. The model is a static model and takes no account of pumping / brine recovery (other than by the application of specific yield rather than porosity).</li> <li>• The model comprises 7 geological units – basement, basal sand, mixed aquifer, lower aquitard, upper sand, upper aquitard and surficial mixed aquifer (loam). All lithologies encountered during drilling were assigned to one of these 7 hydrogeological groups.</li> <li>• Geological surfaces were modelled with priority given to drill-hole data and secondary focus on seismic interpretation. Key surfaces, particularly the base of the palaeochannel thalweg were extended assuming constant gradients between control points (this is considered reasonable given the hydrological origin of the surface i.e. the base of a river generally has a constant gradient).</li> <li>• Surfaces were modelled with a spatial resolution of 75m. Interpolations were undertaken with Leapfrog's Linear Interpolation Function.</li> <li>• Brine volume estimation was undertaken by 3 separate modelling techniques.</li> <li>• A block model was overlain on the geological model with block sizes 100m by 100m by 2m thick. Brine volume and grade was estimated using both Inverse Distance and Ordinary Kriging for each hydrostratigraphic unit.</li> <li>• Brine volume and grade was also estimated by applying a continuous interpolation (RBF) to each of the units of the geological model.</li> <li>• During all interpolations, data was also considered from adjacent hydrostratigraphic units to reflect the continuous nature of the</li> </ul>

		<p>occurrence of groundwater through the aquifer system.</p> <ul style="list-style-type: none"> <li>• All estimates of brine volume and grade were within 10% of each other.</li> <li>• The volume of brine for each hydrostratigraphic unit was multiplied by the representative specific yield for that unit to generate the Measured Resource.</li> <li>• Representative specific yields of each hydrostratigraphic unit were determined from two methods of analysis – both methods using a combination of data from PSD analysis and BMR logging.</li> <li>• The range in specific yield estimates for each hydrostratigraphic unit was analysed and found to follow a log-normal distribution. The log-mean value was taken as one measure of the representative value.</li> <li>• All estimates of specific yield were also applied to the continuous interpolant and block models (Kriging and ID) in Leapfrog and a weighted mean average determined; this generated alternative estimates of the representative specific yield.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable to estimated tonnages for brine resources</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>• No cut-off grades applied. The resource boundary is defined by the physical extent of the aquifer system or tenement boundaries.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• 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 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 explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential mining process or brine abstraction process is envisaged to involve pumping brine via a series of water bores targeting the basal sand and surficial aquifer / upper sand.</li> <li>• Both field and laboratory test work studies have been completed to test the efficiency and viability of extraction method options.</li> <li>• Preliminary assessment based on the permeability values described in the attached report, indicate groundwater abstraction from throughout the aquifer sequence is feasible. In particular, the basal sand will be depressurised during pumping and induce leakage (under-draining) from the overlying clay. This has been the general operating experience in numerous palaeochannel bore fields in the region.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Substantial field trials have been completed in ponds constructed on site, with the resultant salts put through simulated production processing to produce commercial grade sulphate of potash.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>• 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</li> </ul>	<ul style="list-style-type: none"> <li>• Assumptions made regarding Environmental factors may include: Ground disturbance from the installation of bores, trenches, ponds and salt tailing facilities and extraction with possible reduction in hypersaline and fresh groundwater aquifers.</li> <li>• The brine evaporation process will result in a salt (sodium chloride residue).</li> </ul>



	<p><i>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.</i></p>	
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bulk density determination is not relevant for brine resource calculations.</li> <li>• The volume of the sediments containing the brine and the specific yield of those sediments combine for brine resource volume calculation.</li> <li>• The Specific yield has been determined by a combination of PSD analysis and BMR logging.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. 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).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration data including brine analysis, geology logging, PSD analysis, test pumping data, BMR logging, geological setting, and geophysical surveys provide confidence in: <ul style="list-style-type: none"> <li>- hydrogeological continuity of the aquifer system and presence of lateral aquifer boundaries;</li> <li>- petro-physical properties of the aquifer system (particularly the specific yield and permeability)</li> <li>- continuity of mineralised brine and the grade changes of the brine through the aquifer system</li> </ul> </li> <li>• In combination, the extent of these data allows a Measured Resource to be classified.</li> <li>• Appropriate account for brine resource reporting has been taken of all relevant factors.</li> <li>• The Classification result appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The modelling and the Measured Resource estimates have been subject to internal peer-review only.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Measured, Indicated and Inferred Resources are based on average specific yield values for the major hydrogeological units and the interpolated distribution of potassium brine within those units. The average specific yields are derived from PSD and BMR logs and the results fall within the ranges of other published work from the region (Department of Water).</li> <li>• The aquifer conditions during the test pumping only allow for a confined storage to be derived. This is a different storage property to specific yield and the values cannot be compared.</li> <li>• It is not possible to provide a quantified level of confidence. This is because the Measured Resource is a static estimate; it represents the volume of potentially recoverable brine that is contained within the defined aquifer. It takes no account of modifying factors such as the design of any bore field (or other pumping scheme), which will affect both the proportion of the Measured Resource that is ultimately recovered, the period of recovery and changes in grade associated with mixing between each aquifer unit, which will occur</li> </ul>

		<p>once pumping starts. Such uncertainties are inherent in groundwater systems where factors vary in both space and time. Given these uncertainties inherent in the ultimate concentration of produced brine, the level of confidence in the modelling to date is considered satisfactory.</p>
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## Appendix 1: Brine exploration drill hole statistics

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
19LWEX004	AC	Exploration	GPS	MGA94z51	6957993.00	510384.00	452.40	-90	67	3/4/19		y	y
19LWEX005	MR	Exploration	GPS	MGA94z51	6972657.33	495012.33	452.06	-90	178.1	30/4/19	y		y
19LWEX006	DD	Exploration	GPS	MGA94z51	6981406.00	506697.00	451.75	-90	44.1	25/5/19			y
PLAC001	AC	Exploration	GPS	MGA94z51	6984310.00	502503.00	447.00	-90	89	23/7/15		y	y
PLAC002	AC	Exploration	RTK GPS	MGA94z51	6986261.92	503666.05	445.87	-90	125	24/7/15			y
PLAC003	AC	Exploration	RTK GPS	MGA94z51	6986866.05	504410.69	459.73	-90	27	24/7/15			y
PLAC004	AC	Exploration	RTK GPS	MGA94z51	6989580.10	502862.24	445.76	-90	69	24/7/15		y	y
PLAC005	AC	Exploration	GPS	MGA94z51	6988482.00	500271.00	449.00	-90	30	25/7/15			y
PLAC006	AC	Exploration	RTK GPS	MGA94z51	6989303.64	501478.99	447.91	-90	21	25/7/15			y
PLAC007	AC	Exploration	GPS	MGA94z51	6987185.00	502280.00	450.00	-90	105	25/7/15			y
PLAC008	AC	Exploration	GPS	MGA94z51	6988271.00	503135.00	448.00	-90	62	26/7/15			y
PLAC009	AC	Exploration	RTK GPS	MGA94z51	6985444.85	502288.94	447.08	-90	141	27/7/15		y	y
PLAC010	AC	Exploration	RTK GPS	MGA94z51	6984205.10	501396.48	445.77	-90	31	31/7/15			y
PLAC011	AC	Exploration	GPS	MGA94z51	6985628.00	500540.00	448.00	-90	138	1/8/15			y
PLAC012	AC	Exploration	GPS	MGA94z51	6987435.00	500480.00	446.00	-90	27	1/8/15		y	y
PLAC013	AC	Exploration	GPS	MGA94z51	6987782.00	499069.00	451.00	-90	18	2/8/15			y
PLAC014	AC	Exploration	GPS	MGA94z51	6985903.00	499000.00	446.00	-90	84	2/8/15			y
PLAC015	AC	Exploration	GPS	MGA94z51	6983905.00	503707.00	454.00	-90	141	3/8/15			y
PLAC016	AC	Exploration	GPS	MGA94z51	6983910.00	504600.00	448.00	-90	107	4/8/15			y
PLAC017	AC	Exploration	GPS	MGA94z51	6982990.00	501984.00	447.00	-90	12	4/8/15			y
PLAC018	AC	Exploration	RTK GPS	MGA94z51	6985429.53	501343.83	446.69	-90	156	30/4/16		y	y
PLAC019	AC	Exploration	RTK GPS	MGA94z51	6983278.38	520414.06	444.48	-90	149	2/5/16	y	y	y
PLAC020	AC	Exploration	RTK GPS	MGA94z51	6982465.91	523823.13	444.48	-90	137	4/5/16	y	y	y
PLAC021	AC	Exploration	RTK GPS	MGA94z51	6983430.92	529839.81	448.31	-90	101	6/5/16			y
PLAC022	AC	Exploration	RTK GPS	MGA94z51	6983325.17	509757.15	449.45	-90	29	7/5/16			y
PLAC023	AC	Exploration	GPS	MGA94z51	6983556.00	504517.00	452.00	-90	131	8/5/16	y		y
PLAC024	AC	Exploration	RTK GPS	MGA94z51	6989992.46	494458.48	447.98	-90	10	8/5/16			y
PLAC025	AC	Exploration	RTK GPS	MGA94z51	6986618.73	497500.35	448.24	-90	166	11/5/16			y
PLAC026	AC	Exploration	RTK GPS	MGA94z51	6983713.02	492427.95	448.77	-90	59	12/5/16			y
PLAC027	AC	Exploration	RTK GPS	MGA94z51	6976879.88	494503.28	450.27	-90	101.9	13/5/16	y		y
PLAC028	AC	Exploration	RTK GPS	MGA94z51	6982552.61	509898.86	449.81	-90	138	23/11/16	y		
PLAC029	AC	Exploration	RTK GPS	MGA94z51	6982655.65	515302.47	451.57	-90	69	24/11/16	y		
PLAC030	AC	Exploration	RTK GPS	MGA94z51	6982145.24	506499.64	449.06	-90	138	23/8/17		y	y

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
PLAC031	AC	Exploration	RTK GPS	MGA94z51	6982268.07	509717.44	449.50	-90	161	25/8/17			y
PLAC032	AC	Exploration	RTK GPS	MGA94z51	6982786.75	512971.62	456.33	-90	156	29/8/17			y
PLRC001	RC	Exploration	RTK GPS	MGA94z51	6982791.67	512982.56	457.20	-90	166	22/9/17			y
PLRC002	RC	Exploration	GPS	MGA94z51	6983025.00	515983.00	440.00	-90	152	25/9/17			y
PLRC004	RC	Exploration	RTK GPS	MGA94z51	6988903.80	540337.07	442.54	-90	140	30/9/17			y
PLRC005	RC	Exploration	RTK GPS	MGA94z51	6974415.04	493509.27	450.89	-90	84	13/11/17			y
PLRC008	RC	Exploration	RTK GPS	MGA94z51	6982584.61	499029.23	449.52	-90	101	28/9/17			y
PLRC009	RC	Exploration	RTK GPS	MGA94z51	6991314.97	492073.82	450.08	-90	161	5/11/17	y		y
PLRC010	RC	Exploration	RTK GPS	MGA94z51	6990950.58	491561.69	450.95	-90	134	9/11/17			y
PLRC011	RC	Exploration	RTK GPS	MGA94z51	6982702.52	506694.12	451.46	-90	149	27/9/17			y
PLRC012	RC	Exploration	RTK GPS	MGA94z51	6981395.48	506694.71	451.75	-90	116	14/11/17			y
PLRC013	RC	Exploration	GPS	MGA94z51	7001981.00	483688.00	459.00	-90	105	7/11/17			y
PLRC015	AC	Exploration	GPS	MGA94z51	6965970.00	505248.00	450.00	-90	126	30/10/18	y	y	y
PLRC016	RC	Exploration	RTK GPS	MGA94z51	6969555.23	499896.28	453.78	-90	138	27/10/18		y	y
PLRC017	AC	Exploration	RTK GPS	MGA94z51	6974391.11	494308.07	451.83	-90	158	31/10/18		y	y
PLRC018	RC	Exploration	RTK GPS	MGA94z51	6979183.98	494599.82	450.84	-90	164	24/10/18	y	y	y
PLRC019	AC	Exploration	RTK GPS	MGA94z51	6982188.25	513813.63	451.12	-90	91	2/11/18		y	y
PLRC020	AC	Exploration	RTK GPS	MGA94z51	6983240.20	518624.91	448.30	-90	149	4/11/18	y	y	y
PLRC021	AC	Exploration	RTK GPS	MGA94z51	6982573.44	522709.39	446.29	-90	152	6/11/18		y	y
PLRC023	AC	Exploration	RTK GPS	MGA94z51	6985399.01	533384.03	445.73	-90	108	7/11/18	y	y	y

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
19LWMON01	MR	Monitoring	GPS	MGA94z51	6983285.47	520424.88	444.90	-90	95	2/5/19			y
19LWMON02	MR	Monitoring	GPS	MGA94z51	6983278.86	520387.23	445.15	-90	53	3/5/19			
19LWVWP01	DD	Monitoring	GPS	MGA94z51	6986621.52	497550.29	446.73	-90	182.1	27/4/19			
19LWVWP02	DD	Monitoring	GPS	MGA94z51	6972647.63	495007.74	451.16	-90	186.5	18/5/19		y	
PLWDD001	MRD	Monitoring	RTK GPS	MGA94z51	6985395.46	501331.39	446.01	-90	163.3	17/3/16			
PLWDD002	MR	Monitoring	RTK GPS	MGA94z51	6986505.78	494432.74	448.54	-90	170.3	19/3/16			y
PLWDD003	MR	Monitoring	RTK GPS	MGA94z51	6983712.86	492409.66	448.75	-90	174	22/3/16			y
PLWDD004	MR	Monitoring	RTK GPS	MGA94z51	6986593.19	497510.75	448.26	-90	59.1	3/4/16			
PLWDD005	MR	Monitoring	RTK GPS	MGA94z51	6986643.05	497511.24	447.73	-90	167.7	6/4/16			y
19LWEX001	RC	Monitoring	GPS	MGA94z51	6991499.00	509658.00	459.00	-90	33	20/3/19			
19LWEX002	RC	Monitoring	GPS	MGA94z51	6993359.00	511241.00	472.00	-90	32	21/3/19			



Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
19LWEX003	RC	Monitoring	GPS	MGA94z51	6993396.00	512571.00	480.00	-90	61	29/3/19			
PWRC001	RC	Monitoring	GPS	MGA94z51	6991509.00	509686.00	450.00	-90	78	8/11/18		y	y
PWRC002	RC	Monitoring	GPS	MGA94z51	6991496.00	510507.00	450.00	-90	42	8/11/18			
PWRC004	RC	Monitoring	GPS	MGA94z51	6993413.00	512598.00	450.00	-90	23	9/11/18			
LWFRM001	WB	Monitoring	GPS	MGA94z51	6978218.00	507161.00	440.00	-90	66	2/6/17			
LWFRM002	WB	Monitoring	GPS	MGA94z51	6977381.00	507722.00	440.00	-90	72	3/6/17			
LWFRM003	WB	Monitoring	GPS	MGA94z51	6977005.00	505219.00	440.00	-90	70	4/6/17			
LWFRM004	WB	Monitoring	GPS	MGA94z51	6976833.00	505027.00	440.00	-90	65	6/6/17			
LWFRM005	WB	Monitoring	GPS	MGA94z51	6977930.00	503233.00	440.00	-90	70	10/6/17			
LWFRM006	WB	Monitoring	GPS	MGA94z51	6972577.00	504806.00	440.00	-90	78	12/6/16			
LWFRM007	WB	Monitoring	GPS	MGA94z51	6974065.00	504379.00	440.00	-90	78	16/6/17			
LWFRM008	WB	Monitoring	GPS	MGA94z51	6975508.00	503762.00	440.00	-90	72	19/6/17			
LWFRM009	WB	Monitoring	GPS	MGA94z51	6975328.00	501373.00	440.00	-90	72	20/6/17			
LWFRM010	WB	Monitoring	GPS	MGA94z51	6977079.00	508461.00	440.00	-90	72	22/6/17			
LWFRM011	WB	Monitoring	RTK GPS	MGA94z51	6980875.13	510293.10	451.78	-90	50	29/6/17			
LWFRM012	WB	Monitoring	RTK GPS	MGA94z51	6979784.84	510005.82	455.90	-90	72	1/7/17			
LWFRM013	WB	Monitoring	GPS	MGA94z51	6976874.00	516733.00	440.00	-90	84	5/7/17			
LWFRM014R	WB	Monitoring	RTK GPS	MGA94z51	6982000.94	515836.33	451.63	-90	48	24/7/17			
LWFRM015	WB	Monitoring	RTK GPS	MGA94z51	6988466.42	528374.78	481.41	-90	78	12/7/17			
LWFRM016	WB	Monitoring	GPS	MGA94z51	6962808.00	536786.00	440.00	-90	78	14/7/17			
LWFRM017	WB	Monitoring	GPS	MGA94z51	6986948.00	515806.00	440.00	-90	69	15/7/17			
LWDRM001	DR	Monitoring	RTK GPS	MGA94z51	6983719.14	492407.768	449.102	-90	169.1	10/6/17	y		
LWDRM002	DR	Monitoring	RTK GPS	MGA94z51	6986613.02	497530.848	447.602	-90	164.5	14/6/17	y		
LWDRM003	DR	Monitoring	RTK GPS	MGA94z51	6986622	497529.962	447.603	-90	53	29/6/17			
LWDRM004	DR	Monitoring	RTK GPS	MGA94z51	6986515.05	494440.038	448.694	-90	175	9/8/17	y		
LWDRM005	DR	Monitoring	RTK GPS	MGA94z51	6986522.68	494396.892	448.631	-90	71.5	20/8/17			
LWDRM006	DR	Monitoring	RTK GPS	MGA94z51	6983721.61	492438.379	448.913	-90	124.5	24/9/17			

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
LWDRP001	DR	Prod'n Brine	RTK GPS	MGA94z51	6986641.54	497537.96	447.16	-90	162.8	2/8/17			y
LWDRP002	DR	Prod'n Brine	RTK GPS	MGA94z51	6986520.15	494411.29	448.39	-90	170	28/6/17			y
19LWPB01	MR	Prod'n Brine	GPS	MGA94z51	6983276.17	520404.90	444.28	-90	151	12/5/19			y
19LWPB02	MR	Prod'n Brine	GPS	MGA94z51	6972675.00	495012.00	451.50	-90	177.2	5/6/19			y

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
TPB001	MR	Prod'n Brine	RTK GPS	MGA94z51	6985418.08	501353.35	447.00	-90	60.5	10/9/16			y
TPB002	MR	Prod'n Brine	RTK GPS	MGA94z51	6985397.96	501342.98	446.84	-90	162	29/9/16			y
TPB003	MR	Prod'n Brine	GPS	MGA94z51	6983734.00	492418.00	453.00	-90	168	1/11/16			y

Hole ID	Hole Type	Hole Purpose	Survey Method	Grid ID	North	East	RL	Dip	Max Depth	Completed	BMR (y/n)	PSD (y/n)	Brine Assay (y/n)
LWFRP001	WB	Prod'n Process	GPS	MGA94z51	6978217.00	507171.00	440.00	-90	67	31/5/17			
LWFRP002	WB	Prod'n Process	GPS	MGA94z51	6977923.00	503227.00	440.00	-90	70	9/6/17			y
LWFRP003	WB	Prod'n Process	GPS	MGA94z51	6974056.00	504381.00	440.00	-90	78	14/6/17			y
LWFRP004	WB	Prod'n Process	GPS	MGA94z51	6975519.00	503759.00	440.00	-90	72	17/6/17			y
LWFRP005A	WB	Prod'n Process	GPS	MGA94z51	6976024.00	511073.00	440.00	-90	84	23/6/17			
LWFRP005B	WB	Prod'n Process	GPS	MGA94z51	6976017.00	511080.00	440.00	-90	84	26/6/17			y
LWFRP006	WB	Prod'n Process	RTK GPS	MGA94z51	6980854.62	510277.52	452.02	-90	66	28/6/17			y
LWFRP007	WB	Prod'n Process	GPS	MGA94z51	6976879.00	516760.00	440.00	-90	84	3/7/17			y
LWFRP008	WB	Prod'n Process	RTK GPS	MGA94z51	6982006.16	515818.45	451.35	-90	52	6/7/17			y
LWFRP009	WB	Prod'n Process	RTK GPS	MGA94z51	6988475.89	528365.51	481.30	-90	93	10/7/17			y
LWFRP010	WB	Prod'n Process	RTK GPS	MGA94z51	6980924.40	504359.92	456.44	-90	72	17/7/17			
LWFRP011	WB	Prod'n Process	RTK GPS	MGA94z51	6980910.15	504359.51	456.38	-90	74	20/7/17			y
LWFRP012	WB	Prod'n Process	GPS	MGA94z51	6977091.00	508469.00	440.00	-90	66	21/7/17			y



## Appendix 2: Non-brine and legacy drill hole statistics

Company	Year	Reference	Holes	Metres
Utah Development Corp.	1981	A011189	147	3134
Gold Partners NL	1994	A043184	69	1246
Kilkenny Gold NL	1995	A045537	142	3053
Western Mining Corporation Ltd	1997	A054285	109	4723
Gold Partners NL	1999	A059698	9	94
Gold Partners NL	1999	A062675	219	6746
Oroya Mining Limited	2012	A093029	2	676.3
AngloGold Ashanti Australia Limited	2016	A113831	14	420
AngloGold Ashanti Australia Limited	2016	A114503	7	340
Salt Lake Potash Pty Ltd	2018	A114705	28	2971
MB Exploration Pty Ltd	2018	A117708	19	1380
Goldphyre Resources Limited	2012	APC	184	9196
Lake Wells Exploration	2015	Agreement	88	3725
AngloGold Ashanti Australia Limited	2016	Purchase	236	12082
<b>Totals</b>			<b>1273</b>	<b>49786.3</b>

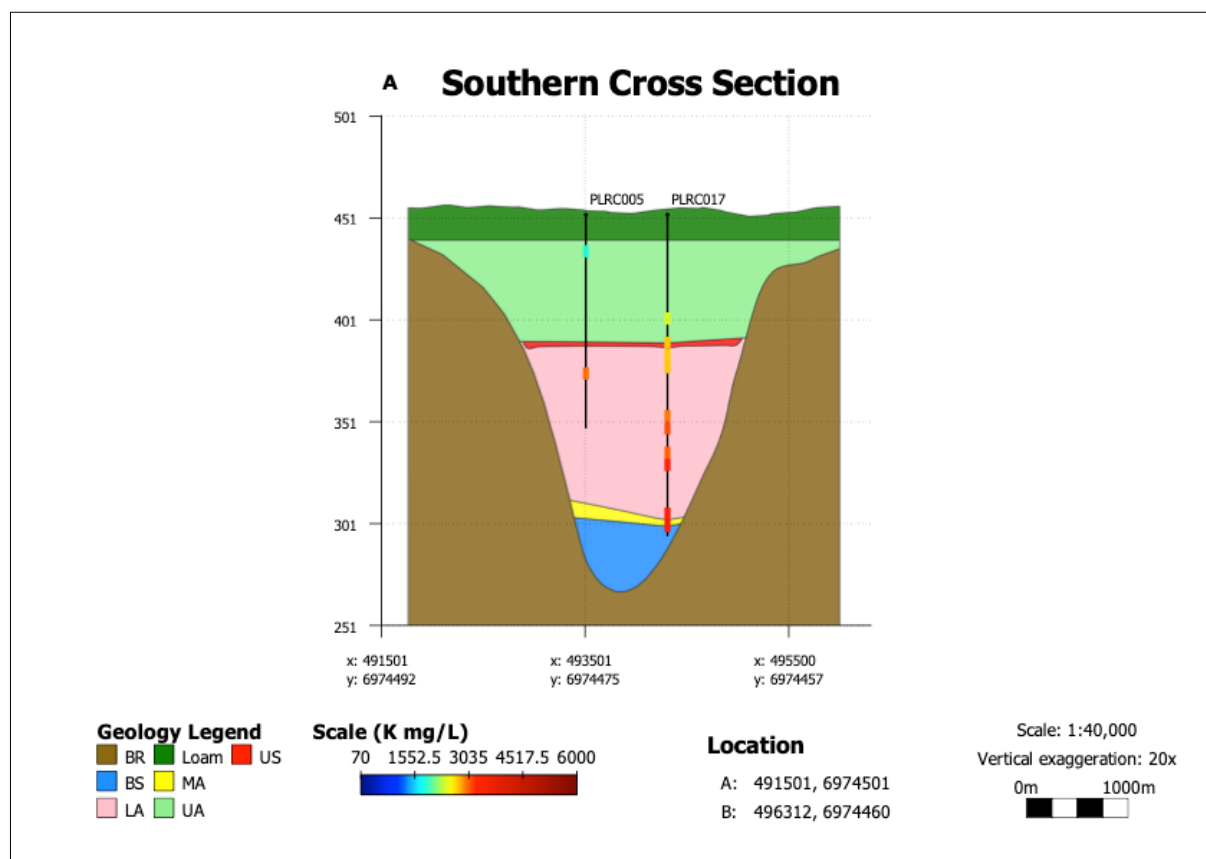


Figure 5: Southern Cross section

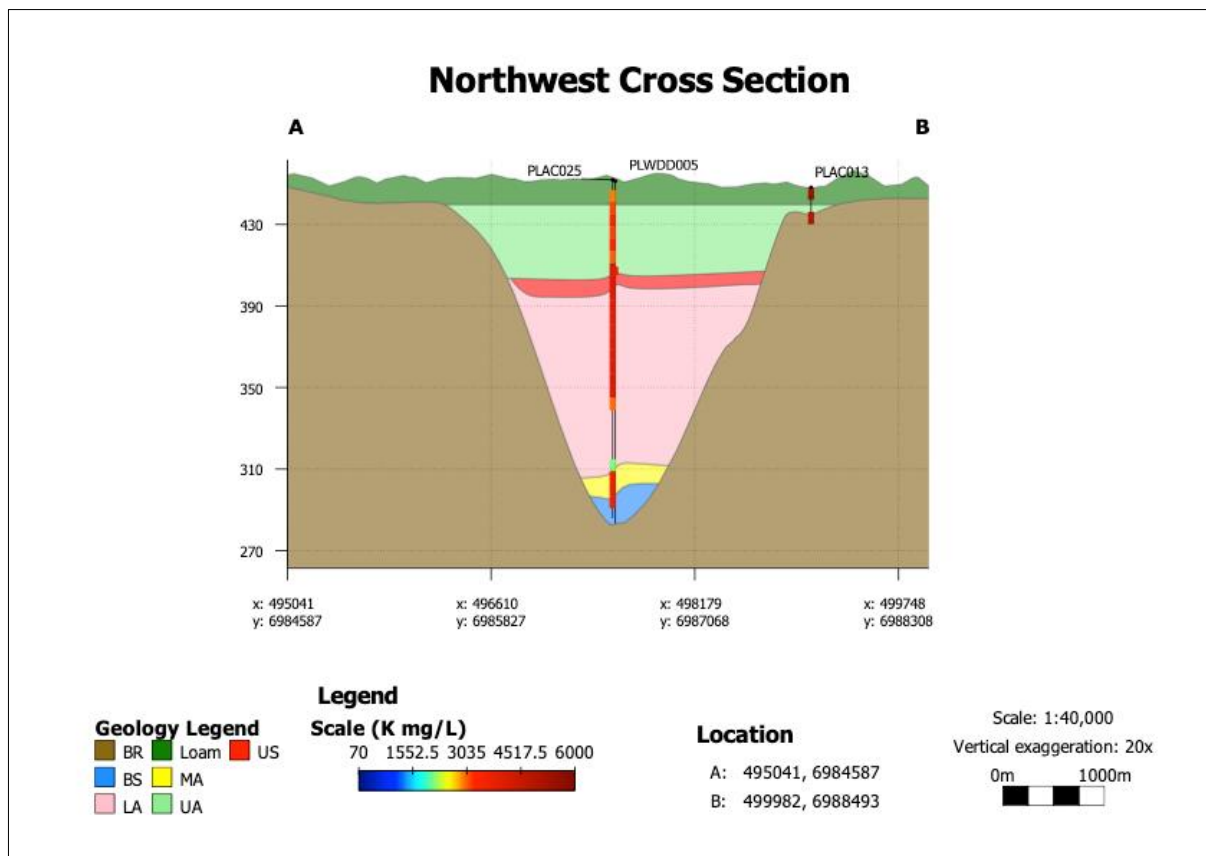


Figure 6: Northwest Cross section

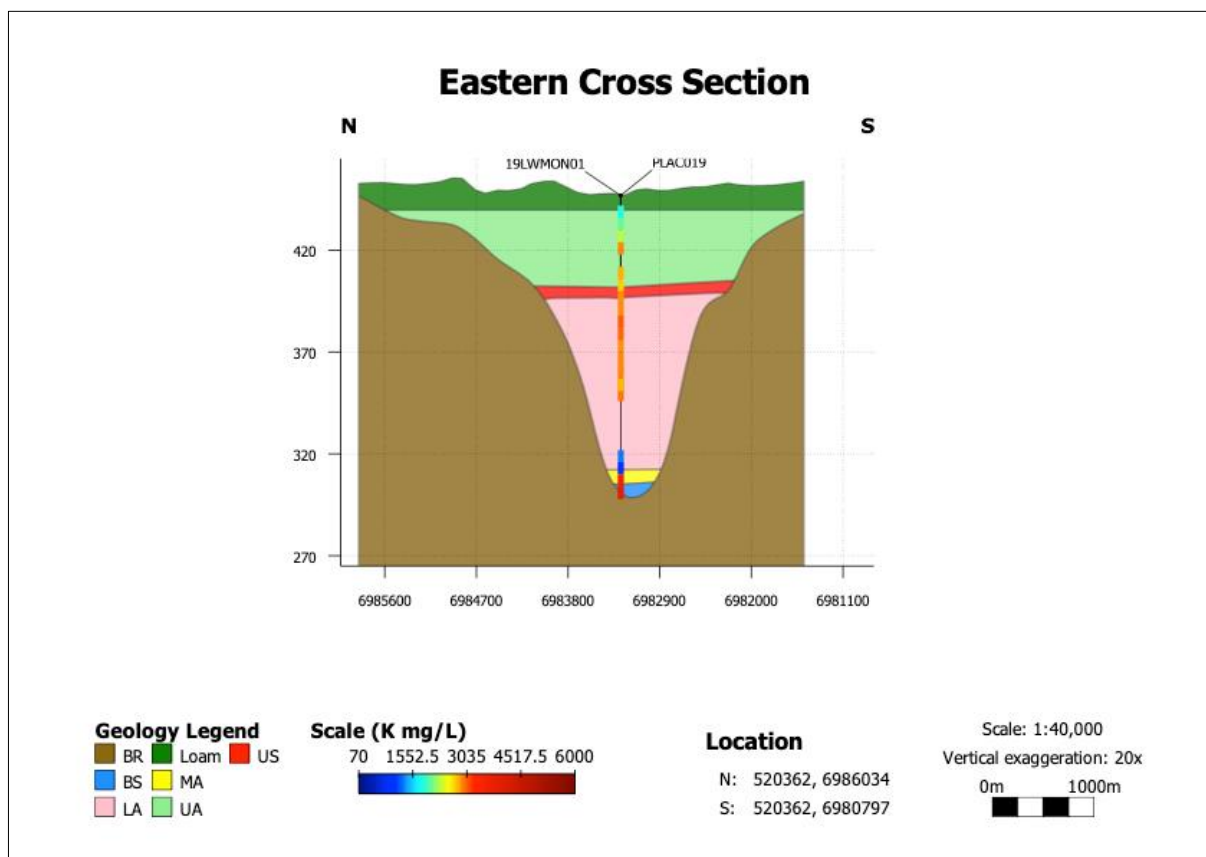


Figure 7: Eastern Cross section