

28 August 2019

# AUSTRALIAN POTASH LTD ANNOUNCES DEFINITIVE FEASIBILITY STUDY OUTSTANDING OUTCOMES OVER 30 YEAR MINE LIFE

## Lake Wells Sulphate of Potash Project

### Highlights

- **Compelling economics:**
  - Pre-tax NPV<sub>8</sub> of A\$665M
  - Annual pre-tax free cash flows of A\$100M and Life of Mine (LOM) pre-tax free cash flows of A\$3.1Billion
  - Pre-tax Internal Rate of Return (IRR) of 25% on robust operational and capital efficiencies
  - 150,000 tonnes per annum (tpa) Sulphate of Potash (SOP) production rate
- **Long life Project with lowest quartile production costs:**
  - 30 year mine life with LOM production of 4.5Mt of premium high-grade SOP
  - LOM cash cost of US\$262/t places the Lake Wells Sulphate of Potash Project (LSOP) in the first quartile of the SOP cost curve
- **Sector leading CAPEX:**
  - Development CAPEX of A\$208M
  - Capital intensity of A\$1,387/t SOP compared to peer average A\$2,400/t
- **Resources and Reserves:**
  - LOM production is met using maiden 3.6Mt Probable Reserve and draws on the Measured Resource Estimate of 18.1Mt drainable SOP
- **Clear pathway to production:**
  - Defined Project delivery schedule of 24 months post Final Investment Decision (FID)
  - Financing and off-take discussions rapidly advancing
  - FEED program commencing immediately

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Australian Potash Limited (ASX: APC) (**APC** or the **Company**) is pleased to provide shareholders with a summary of the findings of the Definitive Feasibility Study (**DFS**) on the development of its 100% owned Lake Wells Sulphate of Potash Project (LSOP).

**Managing Director and CEO, Matt Shackleton, commented:** “The APC team are understandably proud to deliver the findings of the DFS on developing the LSOP as one of the state’s premier mining/agricultural operations.

“Our premium high-grade Sulphate of Potash Project will be a hallmark operation in commencing a new export industry for the Eastern Goldfields region of Western Australia. We also plan to reserve a significant portion of output for the Australian market.

“The Project will use a bore-field to abstract brine, mitigating the geotechnical challenges and decline in grade and production over time, evident in trenching systems.

“The Project has an extremely competitive capital intensity, forecast first quartile operating costs and exceptional returns.

“The completion of the DFS enhances APC’s ability to finalise binding off-take agreements, optimise and secure the finance debt package, finalise the approvals process and commence FEED activities.

“We look forward to continuing to update shareholders as the Board considers the next important steps in the development of the Project.”

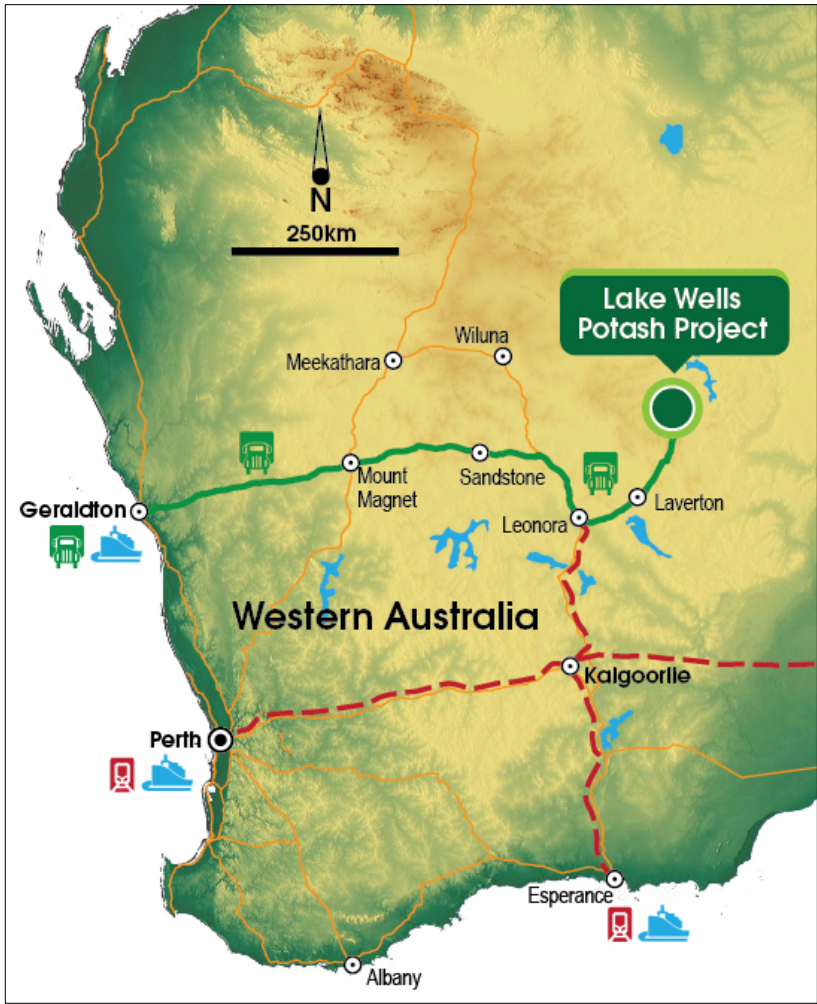


Figure 1: The LSOP’s location provides multiple options for export and domestic distribution



## 1. EXECUTIVE SUMMARY

The Lake Wells Sulphate of Potash Project (LSOP) is located approximately 160 kilometres north-east of the Eastern Goldfields town of Laverton in Western Australia. Australian Potash Limited (APC or Company) has completed an AACE Class 3 Definitive Feasibility Study (DFS) (+15%/-5%) on developing the LSOP into a 150,000 tonne per annum Sulphate of Potash operation. The results of this DFS are summarised below.

### Consultant Team

The DFS was prepared by Lycopodium Limited, with input from the Company and its team of industry consultants: Novopro Projects Inc. (Novopro), AQ2, Knight Piesold, Argus Media Group (Argus) and MBS Environmental. The Company's team provided project management, exploration and site management services and oversaw the financial analysis conducted by Origin Capital Group.

### 150,000 tonnes per annum (tpa), 30 year mine life SOP solar-salt development

The DFS has defined a development producing 150,000tpa of SOP, which provides optimal returns to capital investment. 95% of LOM output is based on exploiting the Reserve of 3.6Mt of SOP, with 5% of LOM output coming from the Measured Resource, for a total 30 years of mine life.

SOP produced from Reserves and Resources is increased by 50% through the addition and conversion of Muriate of Potash (MOP) to SOP: 100ktpa of SOP will be produced from brine and 50ktpa will be produced from MOP conversion.

Mine life can potentially increase past 30 years. The robust JORC2012 compliant measured Mineral Resource Estimate of 18.1Mt of drainable SOP presents strong upside potential to the Project.

### Bore-field Network

The LSOP will be developed using a bore-field network to abstract the brine contained within a section of the estimated 125km palaeochannel (refer Figure 3). The brine contains the potassium and sulphate bearing minerals from which SOP is refined. It is considered that a bore-field network mitigates the reduction in grade intrinsic in trench abstraction systems, given the latter's exposure to freshwater rainfall and subsequent grade dilution. In addition, the geotechnical challenges associated with trench networks are avoided when a bore-field network is used.



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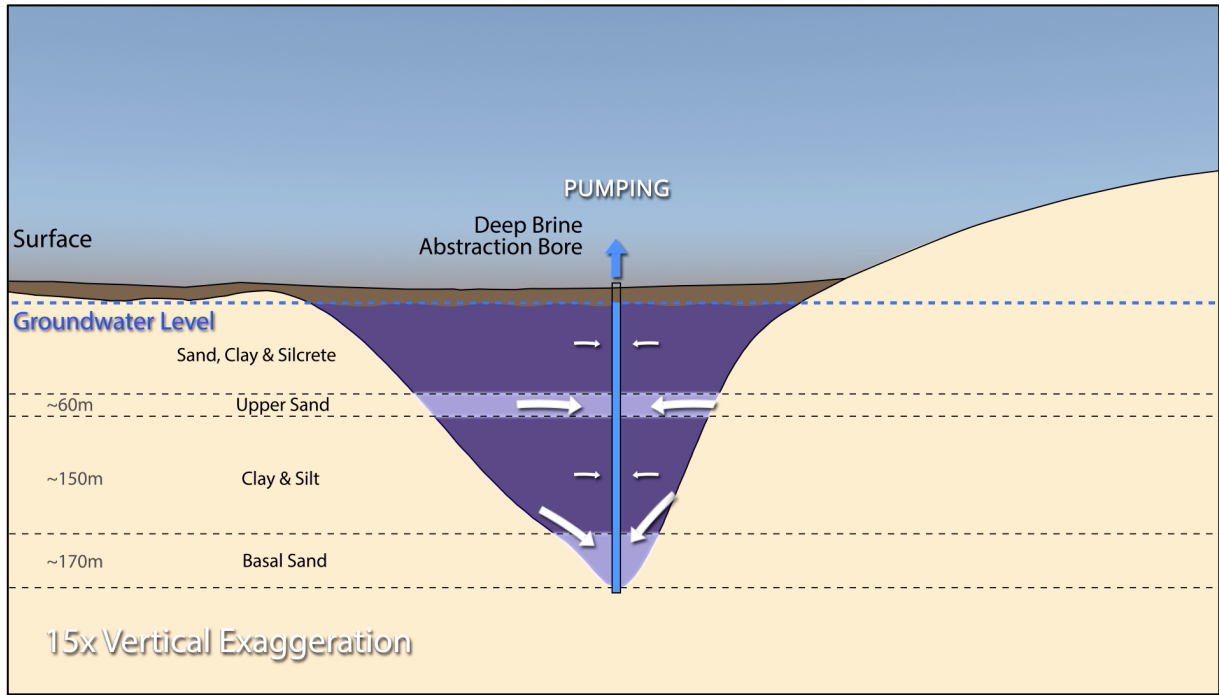


Figure 3: Stylised cross-section of palaeovalley with typical bore developed into the upper and lower aquifer units



Figure 4: The LSOP bore-field network will comprise 78 bores on 800m spacings

### Evaporation Ponds

The LSOP evaporation pond development comprises on-playa unlined pre-concentration ponds and off-playa, HDPE lined harvest ponds. The on-playa concentrators span an area of 10.03km<sup>2</sup>, with geotechnical investigations and test-work supporting the pond modelled and designed by Novopro. The on-playa ponds will be bunded by the naturally occurring dunes augmented as necessary by bentonite cut-off walls keyed into the sub-surface clay.

The 2.67km<sup>2</sup> off-playa harvest pond network will be HDPE lined to control seepage losses. As the enriched brine carries significant value, it is more important to control seepage losses at this end of the evaporation pond network.

### **Processing Plant**

Process flow sheets were developed by Novopro. Extensive testwork was completed across the main unit operations including evaporation rates and pond design, salt species conversion, and flotation and crystallisation. METSIM and PHREEQC modelling was calibrated with field data generated by the Company through the pilot evaporation pond program<sup>ii</sup>.

### **Markets**

The Company has spent time understanding the supply and demand metrics for SOP in the local domestic and overseas markets, and is basing pricing in the financial analysis on forward price curve models provided by Argus.

### **Logistics**

The LSOP is ideally located to exploit several options for the delivery of its SOP output to the local and overseas markets, with multiple rail, road and port combinations available. The DFS has been modelled on the assumption of a 100% road freight solution to Geraldton Port. For local market access, end-users are serviced by direct distribution.

### **Board and Management**

Australian Potash Limited is listed on the Australian Securities Exchange with its securities trading under the ticker APC. The Company is chaired by Mr Jim Walker, with Messrs. Rhett Brans and Brett Lambert serving as non-executive directors. Mr Matt Shackleton is the Managing Director and CEO, with Mr Scott Nicholas serving as Chief Financial Officer.

### **Implementation Strategy**

The implementation strategy adopted in the DFS is to develop the LSOP under an Engineering, Procurement and Construction Management (EPCM) contract, with oversight from the Company's team (Owner's Team).

Working with its external consultants, the Company is executing its recruitment strategy to augment the technical skill base of the Owner's Team heading into the next phase of development.



## Timeline to Production

The LSOP will be developed over twenty-four months from FID, which time excludes any early works programs. First production of SOP is expected to commence six months prior to the processing plant output achieving name-plate capacity. A program of Front End Engineering Design (FEED) will commence immediately.

## 2. PROJECT SUMMARY

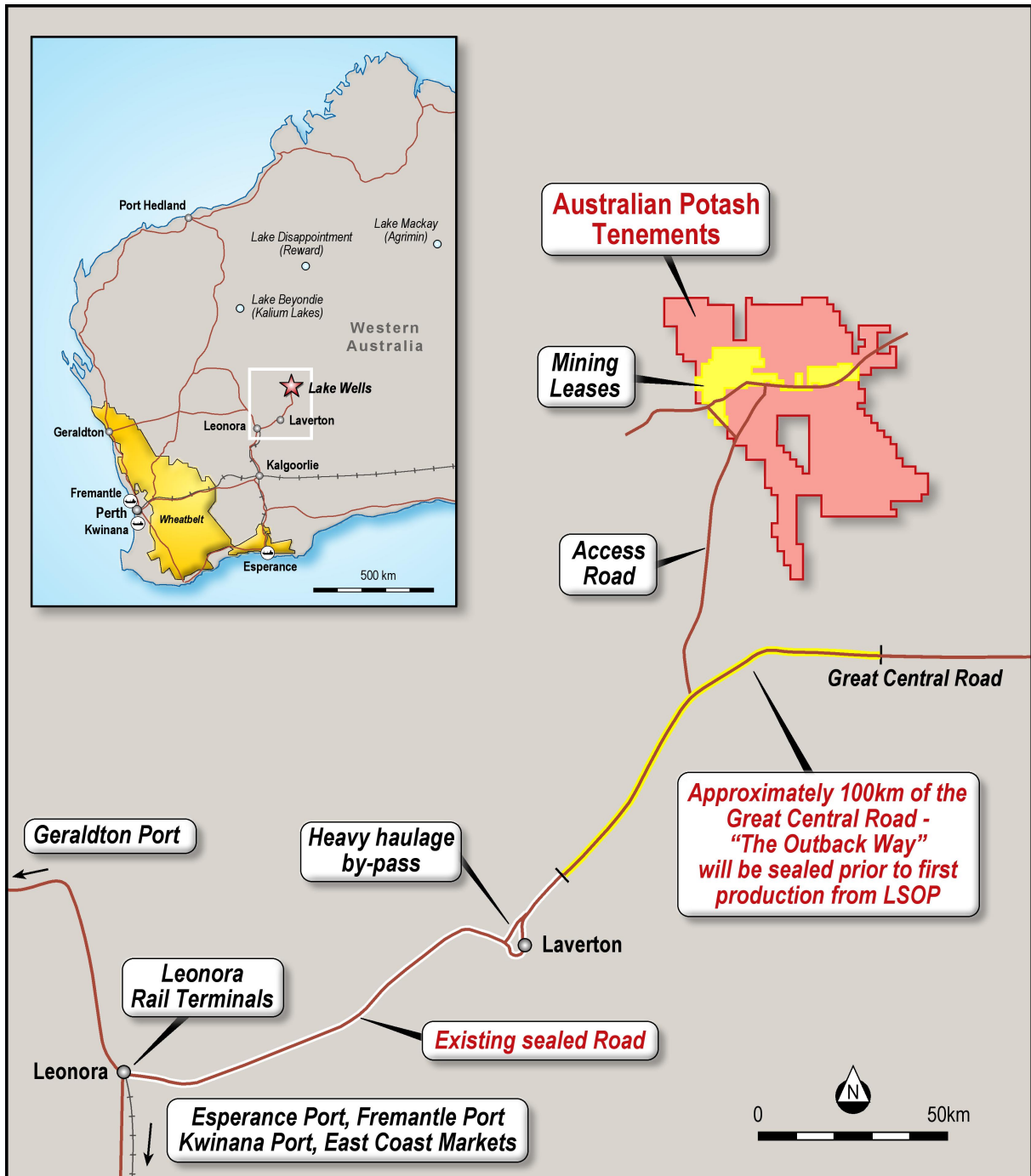


Figure 5: The Lake Wells Sulphate of Potash Project (LSOP) is ideally located with existing infrastructure in place

The LSOP covers an area of 2,100km<sup>2</sup> and comprises three granted Mining Leases (ML) and seventeen exploration licenses (EL), on the edge of the Great Victorian Desert.

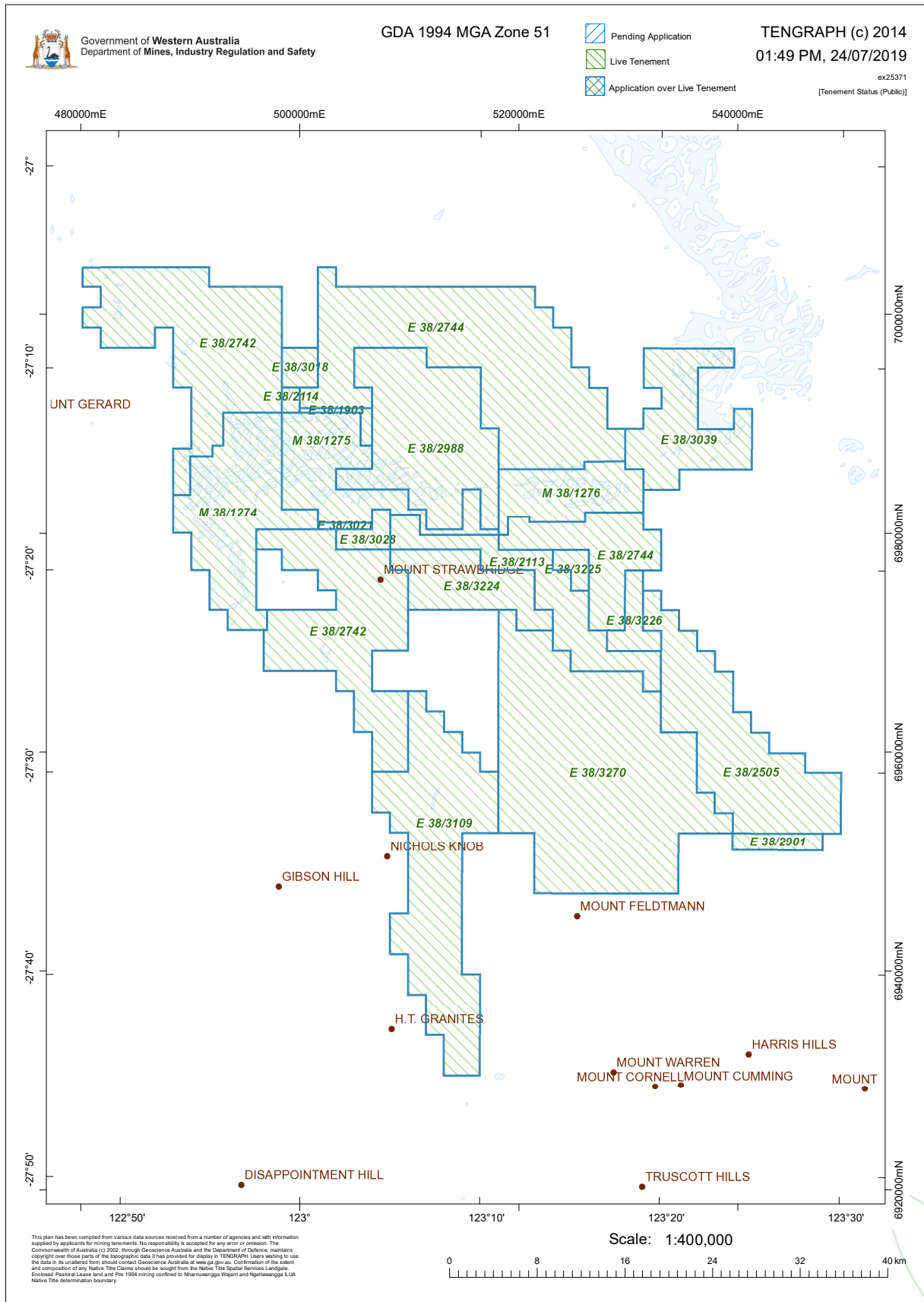


Figure 6: The LSOP tenure

All tenure comprising the LSOP is 100% owned by the Company with the exception of two of the ELs which are subject to a Sale and Split Commodity Agreement with Lake Wells Exploration Pty Ltd and Mark Gareth Creasy, the Company's largest shareholder. This agreement allows the Company to explore for and as it sees fit to exploit potash minerals contained within those two ELs.

Three Mining Leases (MLs) have been granted across the Project development area, with the Company ceding, on two of the granted MLs, non-potash prospecting rights to Mark Gareth Creasy and mineral rights other than potash minerals to Lake Wells Exploration Pty Ltd.

The Project is accessed via the 80 kilometre Lake Wells Road which heads north of the Great Central Road 80 kilometres east of Laverton. The Lake Wells Road is unsealed with minor upgrades and alignments required through development. Plans to bitumen-seal the Great Central Road from the edge of Laverton to past the Lake Wells Road turn-off are being finalised with the cost of that program being met with committed Federal and State Government funding. This program will be finished by the time the LSOP is in operation.

The Project tenements sit partly within the boundaries of the Lake Wells pastoral leases, with the majority of the tenure sitting on vacant crown land.

On 11 January 2017 the Department of Mines, Industry Regulation and Safety issued the required notification under the Native Title Act 1993 (Cth) of the intention to grant the Company's Mining Leases (MLs). As at 11 April 2017, being the prescribed period of time for persons to file a Native Title Claim, there had been no claim recorded with the Federal Court of Australia affecting the MLs. A Native Title claim was subsequently registered with the National Native Title Tribunal on 17 August 2018.

### **3. RESOURCES AND RESERVES**

#### **Brine Exploration**

APC have completed 305 km of Tromino passive seismic surveys and drilled eighty brine exploration drill holes (excluding shallow auger holes) across the LSOP area. The bores comprise sixty air-core or reverse-circulation holes, four mud-rotary holes, six dual-rotary holes, three diamond core holes and seven test production bores. Hydraulic properties have been determined from downhole bore magnetic resonance (BMR) logging, test pumping and particle size distribution (PSD) analyses.

#### **Hydrogeology and Brine Evaluation**

A conceptual hydrogeological model has been developed from the field investigations and data analyses. A deep palaeovalley (ranging between 150 and 170m in depth) extends along the length of the LSOP area, infilled with predominantly lacustrine clays and sand interbeds of Tertiary age. Seven hydrostratigraphic units (refer Figure 7) have been identified comprising:

- An extensive surficial unit of mixed alluvial/lacustrine sediments comprising:
  - Approximately 15m of sandy loam, including local laterite and evaporite deposits, overlying the entire lake area. Adopted permeability of 0.3 metres per day (m/d); adopted specific yield of 10%;



- An upper, low permeability, clay-rich unit with minor sand horizons extending across the entire lake area. Adopted permeability ranging between 0.03 and 0.15 m/d; adopted specific yield of 7%; and
- Local areas of permeable calcrete and / or silcrete. Adopted permeability of 1 m/d; adopted specific yield of 5%.
- An upper sand aquifer unit at the base of the surficial unit, occurring at depths ranging between 35 and 70m, with thicknesses varying between 1 and 12m and anticipated to be continuous both along the length and across the width of the palaeochannel. Adopted permeability ranging between 0.5 and 3 m/d; adopted specific yield of 17%. This unit will contribute to the ability to pump from the surficial aquifer unit.
- A lower clay aquitard comprising puggy lacustrine clay with minor sandy interbeds. Adopted permeability ranging between 0.07 and 0.8 m/d; adopted specific yield of 8%. The clay unit will act as a confining layer for the underlying basal sand and provide a source of downward leakage during the pumping of the basal sand aquifer.
- A mixed aquifer unit comprising interbedded sand and clay. Adopted permeability ranging between 0.4 and 0.8 m/d; adopted specific yield of 17%. Pumping from this moderately permeable aquifer and underlying basal sand aquifer will lower the hydrostatic pressure within these units, facilitating drainage of brine from the overlying clay aquitard.
- A basal sand aquifer located along the length of the paleochannel and encountered in 25 drill holes. Although predominantly of Tertiary age, in places, there are thin remnants of Permian glacial deposits (conglomerates and diamictites) overlying the Archean basement, which have also been included in this hydrogeological unit. Adopted permeability ranging between 2 and 3 m/d; adopted specific yield of 23%.

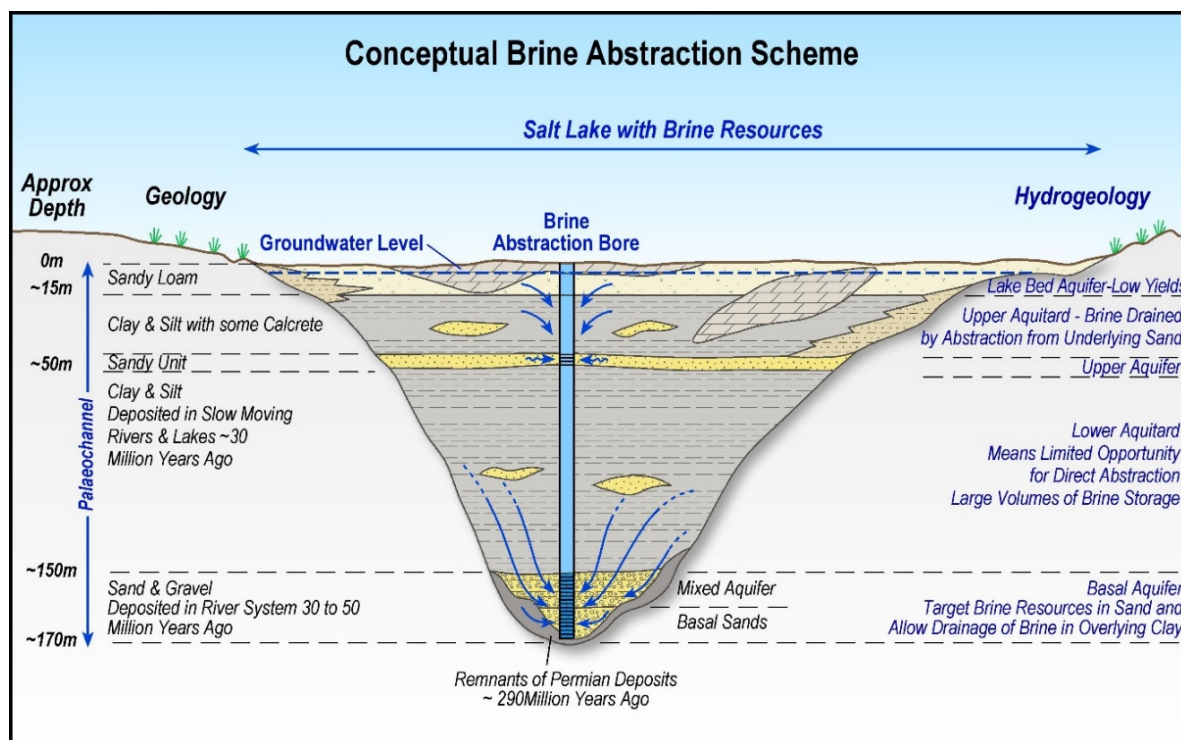


Figure 7: LSOP Conceptual Brine Abstraction Scheme

The brine contained in this aquifer sequence is enriched in potassium; the aquifer sequence has a weighted mean average potassium concentration of 3,345 mg/L and a maximum recorded concentration of 7,380 mg/L. Groundwater levels are essentially at ground surface.

Test pumping has been conducted at the seven production bores. Long-term constant rate tests (i.e. ~30 days duration) were conducted at five of the bores with yields ranging between 5 and 15 L/s. Pumping tests allowed determination of aquifer transmissivity and associated potential for brine-abstraction from both the upper and basal sand aquifers. The produced potassium concentration was consistent over the course of each pumping test, showing no evidence of blending with low grade groundwater.

### Mineral Resource Estimate

The LSOP Measured Resource Estimate has been determined based on the conceptual hydrogeological model described above and modelled using ARANZ (now Seequent) Leapfrog Geo software. A block model was developed using 100 m blocks and volumes were interpolated using inverse distance interpolation method.

The table below summarises the LSOP Measured Resource Estimate.

Measured Resource for APC Lake Wells Potash Project (JORC compliant)						
Hydrogeological Unit	Volume of Aquifer	Specific Yield	Drainable Brine Volume	K Concentration (mg/L)	SOP Grade (mg/L)	SOP Resource
	MCM	Mean	MCM	Weighted Mean Value	Weighted Mean Value	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>
<i>Measured Resource based on modelled aquifer volume, mean specific yield and weighted mean K concentrations (derived from modelling)</i>						

Table 1: LSOP Measured Resource Estimate

The Measured Resource is a static estimate of the volume of potentially recoverable brine that is contained within the defined aquifer. A groundwater flow model has been developed to simulate brine abstraction scenarios. These can be used to support feasibility studies and allow estimation of an Ore Reserve.

### Brine Abstraction and Mineral Reserve Estimation

Groundwater modelling has been conducted using the industry-standard, numerical groundwater flow model package Modflow Surfact (Version 4.0, Hydrogeologic Inc. 1996). The model has been set up using hydrostratigraphic geometry, aquifer parameter zoning and brine concentrations exported from the Leapfrog (Resource) block model and has been calibrated to both steady state water levels and transient water level responses from the test pumping.

The calibrated model has then been used to simulate the rate and concentration of potassium that can be abstracted to meet the targeted production rate of 100,000 tpa

of SOP for mine life scenarios of up to 30 years. Brine abstraction has been simulated from both the upper and basal sand aquifer units, applying borefield design parameters.

The model set-up, calibration and prediction scenarios are consistent with the Australian Groundwater Modelling Guidelines (Barnett et al, 2012) and are documented in detail a standalone technical report; salient points are as follows:

- Although direct lake recharge was applied to the steady state calibration, the majority of this was “lost” from the groundwater system by evaporation. Based on this and the fact that it is unlikely that rainfall recharge will reach the upper and basal sand units, the prediction scenarios (including the Ore Reserve estimate) do not include any direct recharge to the lake system, only limited recharge to the surrounding environment. This represents a conservative assumption with respect to the potential for brine level replenishment over the life of the project.
- Concentrations of 500 mg/L potassium were applied to areas outside of the aquifer and within the paleochannel sediments that extend outside of Measured Resource boundary (i.e. at the northern and southern extents). This represents a conservative boundary condition with respect to the risks of dilution over time.
- Annual production rates have been simulated, taking no account for seasonal variation in brine demand. It has been assumed that the buffer pond negates the need for any seasonal changes in brine abstraction.
- A total process recovery factor of 81.5% has been applied to the annual brine abstraction to derive SOP production rates. The recovery factor allows for losses in both the evaporation ponds and process plant.
- It is assumed all of the brine being abstracted has a similar density such that density-dependence is not included in the model predictions.
- The overall grade produced from the entire borefield remains above 3,000 mg/L (K) for the life of mine and no cut-off grade has been applied.

The model predictions indicate that for the first 20 years of abstraction the target SOP production of 100,000 tpa can be achieved from a borefield comprising 78 bores, located along the thalweg of the paleochannel at approximately 800 m spacing. Modelled bore yields, drawing from both the upper and basal sand aquifers, range between 4 L/s to 17 L/s per bore, based on the variable aquifer parameters and sand intervals. Target production can be sustained for a further 10 years (i.e. 30 years in total) with the progressive addition of 30 additional bores pumping only from the upper sand aquifer. The potassium concentrations are predicted to range between 3,570 mg/L to 3,255 mg/L over the 30 year life of mine.

There is inherent uncertainty in the modelling of groundwater systems for long periods into the future. This uncertainty limits the Reserve categorisation to Probable and is addressed with sensitivity and risk analysis, using a plausible range of more conservative aquifer parameters. Over 30 years, the base case SOP abstraction is 3.8 Mt (which represents 21% of the in-situ Measured Mineral Resource). For all sensitivity scenarios, brine production remains within 5% of the base-case estimate. The Reserve has been conservatively limited to the lower end of the sensitivity analysis which provides 3.6 Mt SOP for a 30 year mine life.

SOP production for 20 years is supported completely by Probable Ore Reserves. For 30 years 95% of SOP production is supported by Probable Ore Reserves and 5% will be recovered from the Measured Resource. The base case modelling shows the additional 5% can be recovered from the Measured Mineral Resource for the proposed borefield design. Moreover, the overall abstraction is a relatively small proportion of the Measured Mineral Resource (21% of the Resource will be abstracted over the life of the Project) which provides the potential for further risk-mitigation by the installation of infill bores if required. Given the residual Mineral Resource after 30 years, continued abstraction may be feasible. This has not been assessed as part of this Reserve modelling.

A summary of SOP recovery from the aquifers and Probable Ore Reserve for the LSOP are presented in the tables below.

Brine Volume Recovered (Mm <sup>3</sup> )	Mining Period	Average Pumping Rate (L/s)	K Concentration (mg/L)			Mass Potassium Recovered (MT)	Mass SOP Recovered (MT)	Proportion of Measured Resource
			Start	End	Average			
170	0-10 yrs	540	3,570	3,390	3,450	0.6	1.3	7%
511	0-30 yrs	540	3,570	3,250	3,350	1.7	3.8	21%

Table 2: Recovered Brine and Mass for First 10 Yrs and Life of Mine

Brine Volume Recovered (Mm <sup>3</sup> )	Average Produced K Concentration (mg/L)	K Mass (MT)	SOP Mass (MT)	Proportion of Measured Resource	Proportion of LOM Production
490	3,325	1.6	3.6	20%	96%

Table 3: Probable Ore Reserve

### Material Assumptions and Outcomes

The volume of recoverable Resource has been determined from numerical groundwater modelling using the industry-standard, numerical groundwater flow model package Modflow Surfact (Version 4.0, Hydrogeologic Inc. 1996, with set-up based on outputs from the Leapfrog Resource model derived from geophysical survey and drilling data. The model has been calibrated manually using an iterative process.

Bore abstraction has been simulated from both the upper and basal sand aquifers for the life of mine, and potassium concentrations have been exported from the Leapfrog block model and uploaded into the numerical groundwater model.

Sensitivity and risk analyses have been conducted by using a plausible range of more conservative aquifer parameters. For all sensitivity scenarios, brine production remains within 5% of the base-case estimate over 30 years.

The model set-up, calibration and prediction scenarios are consistent with the Australian Groundwater Modelling Guidelines (Barnett et al, 2012).

Hydraulic models have been developed to design the borefield pumping system to convey the brine to the evaporation ponds. The borefield design for the initial 20 year mine life comprises the installation of 78 production bores (excluding contingency) and associated headworks, pumps, power supply, telemetry and monitoring.

For 100 ktpa SOP production from brine, the SLOP must abstract 540L/sec from the Lake Wells Paleochannel through 70 production bores (and an additional 8 bores are standby). Brine is discharged into an on-playa buffer pond from which flow is controlled into the network of on-playa preconcentration ponds to adjust for seasonal fluctuations in evaporation.

Potassium supersaturated brine is decanted from the final preconcentration pond into the HDPE-lined, off-playa, harvest ponds. Potassium and sulphate bearing salts, along with other salts (halite and epsomite) are crystallised in the harvest ponds and collected for processing.

Harvested salts are processed through crushing, conversion, flotation, leaching and crystallisation to produce a pure SOP product, whereupon the SOP is dried and prepared for bulk transport.

### **Criteria used for Classification**

A Probable Reserve has been estimated. The Probable categorisation has been adopted based on the inherent uncertainty in the modelling of groundwater systems, which has been addressed with sensitivity and risk analyses.

For all sensitivity scenarios, brine production remains within 5% of the base-case estimate. The Reserve has been conservatively limited to the lower end of the sensitivity analysis which provides 3.6 MT SOP for a 30 year mine life.

SOP production for 20 years is supported completely by Probable Ore Reserves. For 30 years, 95% of SOP production is supported by Probable Ore Reserves and 5% will be recovered from the Measured Resource. The Probable Reserve is 20% of the Measured Mineral Resource Estimate. Continued abstraction of the residual Mineral Resource after 30 years has not been assessed as part of this Reserve modelling.

### **Mining Method**

The 'mining method' used in the Reserve estimate is a brine bore-field abstraction model. The LSOP is a brine, solar salt project, and as such there is not a 'mining' process in the traditional sense of the word. The ore is the brine that is abstracted from the aquifers as described above and elsewhere in this announcement.

For 100 ktpa SOP production from brine, the LSOP must abstract 540L/sec from the Lake Wells Paleochannel through 70 production bores (with an additional 8 bores on standby). This volume of brine is based on the first 10 years brine composition. Additional brine volume will be required once the concentration drops below 3390 mg/L to maintain production after 10 years. Brine is discharged into an on-playa buffer pond from which flow is controlled into the network of on-playa preconcentration ponds to adjust for seasonal fluctuations in evaporation.

There is similarly no 'dilution' factor applicable to the ore as there would be on a hard rock Reserve estimate. There is a recovery ratio that is applicable to the processing of SOP from the evaporites that result from the evaporative process, which as disclosed

above is 81.5%. This reflects that amount of brine left entrained in the halite base of the evaporation pond network and losses through seepage, as well as plant and logistical losses.

### **Processing Method**

The process follows a brine evaporation, salt crystallisation, and salt conversion flowsheet to produce a high purity sulphate of potash (SOP) product. In addition, the process utilises excess sulphate in the plant recirculated brine to convert potassium chloride (KCl or MOP) to SOP. Similar flowsheets are utilised in other evaporative brine SOP projects internationally (i.e. Compass Minerals in Ogden, Utah, USA).

Bench scale laboratory testwork on chemically representative brine samples were completed to demonstrate the crystallisation of SOP through synthetic evaporation and salt precipitation process, followed by conversion, flotation, leach and crystallisation test work. Furthermore, field-based pilot evaporation and salt crystallisation trials were completed to produce desired potassium and sulphate bearing salts. These salts were collected and processed through a lab-scale pilot plant to produce a pure SOP product, thus demonstrating process efficacy.

### **Quality Parameters Applied**

Average potassium grade of the brine and climate were used to determine evaporation pond size. A solute transport model was developed to predict potassium grade from each bore.

### **Estimation Methodology**

A Definitive Feasibility Study was completed and cost estimates are to within a +15 / - 5 % level of accuracy (Class 3). The Brine Abstraction Model was developed to include all the Reserves and 5 % of the Measured Resource.

### **Material Modifying Factors**

#### *Environmental*

The Project was referred to the Western Australian Environmental Protection Authority (EPA) under Section 38 of the *Environmental Protection Act 1986* on 21 December 2017. On 5 February 2018, the level of assessment was set at Environmental Review - no public review. An Environmental Scoping Document (ESD) was prepared by APC to define the form, content, timing and procedure of the Environmental Review Document (ERD). The EPA approved the ESD on 21 September 2018. The ESD outlines the preliminary key environmental factors, potential impacts and risks and required studies for the completion of the ERD. The ERD is scheduled for submission to the EPA in Q3 2019.

No waste rock will be generated as part of the Project. Tailings production is limited to halite (NaCl) and some epsomite (MgSO<sub>4</sub>) salts deposition on the surface of the salt lake. Magnesium chloride bitterns, a by-product of the brine evaporation is returned to the salt lake at a designated area northwest of the harvest ponds.

#### *Infrastructure*

Infrastructure at the Process Plant Area includes plant buildings (admin/operations building, crib room, change room, ablution block, stores and workshops), a power plant

and fuel storage. Fuel for the power plant will be LNG trucked to the operation and stored in Vendor's storage facility.

An Operations Village is located some 2 km east of the Process Plant Area on a hillside, elevated above flood levels; the village is designed to accommodate up to 100 people and includes a dining area, a wet mess and recreational facilities.

Raw water bores are in place to the southeast of the Process Plant Area and will be used to supply process and potable water at a rate of approximately 0.8 GL/year; the raw water bores will be connected through a HDPE pipeline that discharges into a tank at the Process Plant Area. Each bore will be powered by a dedicated diesel generator and will be monitored and controlled through telemetry linked to the Process Plant Control Room. A water treatment plant will be located within the Process Plant Area; potable water will be pumped to the village and stored in a potable water tank.

A wastewater treatment plant will be located between the village and the Process Plant.

The Process Plant and Village will be accessed by a purpose-built road that extends from the existing Lake Wells Road. The Lake Wells Road will be upgraded to accommodate quad road trains that transport the bulk SOP.

The Communications system will employ a series of microwave towers to connect the operations to the fibre-optic link in Laverton; the communications system will allow for Wi-Fi connectivity in the Process Plant Area and Operations Village.

#### *Costs*

The capital cost estimate was based on general arrangement drawings, 3D models and quantities from study engineering and estimate pricing was derived from a combination of sources including market pricing, independent engineering in-house data, estimations and factored pricing (minimal).

An EPCM delivery model was assumed including the associated costs in addition to costs for an oversight owners team to manage the EPCM and project delivery.

Sustaining capital costs have been included for the evaporation ponds and bore-fields over the life of mine based on quantities required (ponds) and expected life of asset (bores). An escalation factor of 2%pa has been used. Contingency was risk assessed across the work breakdown structure.

The capital cost estimate was completed to an accuracy level of +15% / -5% and the operating costs for the Project have been built up from first principles basis to an accuracy level of +15% / -5%. The operating costs includes abstraction, evaporation, salt harvesting, processing, transport to port, and port and shipping costs to produce and transport SOP to end customers. Operating costs are in 2019 Australian dollars and have been escalated at 2%pa. Operating costs denominated in US\$ have been converted to A\$ based on the Bloomberg forward curve.

Operations are assumed to be owner operated with the exception of the power station, accommodation messing, and haulage.

Power costs are based on confirmed load lists and budget pricing from an independent power provider under a build own operate (BOO) arrangement. The BOO power station will be supplied by trucked LNG that has been budget priced by local suppliers.

Reagents have been based on designed consumption rates and either budget pricing or commodity price forecasts provided by independent parties.

Logistics costs are based on budget pricing received for super-quad trucks hauling from site to Geraldton port. Port costs have been provided by Geraldton Port.

Labour costs have been based on industry benchmarks and manning levels from comparable operations. Labour on-costs have been based on budget pricing for flights and messing

Maintenance costs have been based on industry standard benchmarks. A corporate tax rate of 30% has been applied and a WA State royalty rate of \$0.73/t SOP applied.

#### *Revenue*

Product quantities are based on engineering design and testwork performed and product specification has been based on the design factors and the testwork performed with the trial evaporation pond and subsequent laboratory tests. The independent market report from Argus has formed the basis for the SOP price forecasts and demand/supply fundamentals. The average LOM realised SOP price is US\$614/t. An exchange rate based on the Bloomberg forward curve has been used and averages A\$0.67:US\$1 over the LOM.

#### *Market Assessment*

An independent market report from Argus provided the global demand and supply fundamentals for SOP, and the global price forecasts and detailed customer and competitor analysis. This has formed the basis of the target markets for the Project's SOP.

DFS testwork confirms that the SOP produced will meet or exceed market accepted specifications, and memoranda of understanding (non-binding) have been entered into with SOP customers for the majority of the planned Project's production.

#### *Economic*

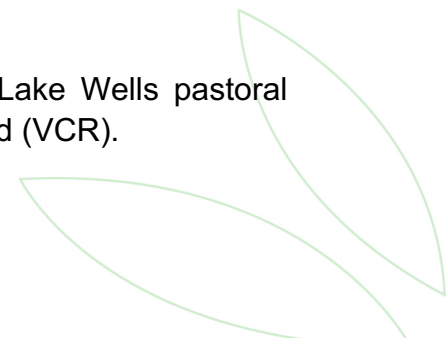
Key project financial metrics include NPV, IRR, and payback periods, and these metrics have been calculated from a financial model using discounted cash flows. An 8% post-tax nominal discount rate has been used for the NPV calculations. Inflation was included in the discounted cashflows at 2%pa.

SOP pricing was based on the independent market report and converted into A\$ using the Bloomberg forward curve. Capital costs have been based on the +15% / -5% estimate provided in the DFS. Operating costs have been based on the +15% / -5% provided in the DFS

Depreciation is based on a combination of straight line and diminishing value, and key sensitivities on NPV and IRR include SOP pricing, SOP production rate, and foreign exchange.

#### *Social*

The Project tenements sit partly within the boundaries of the Lake Wells pastoral leases, with the majority of the tenure sitting on vacant crown land (VCR).





On 11 January 2017 the Department of Mines, Industry Regulation and Safety issued the required notification under the Native Title Act 1993 (Cth) of the intention to grant the Company's Mining Leases (MLs). As at 11 April 2017, being the prescribed period of time for persons to file a Native Title Claim, there had been no claim recorded with the Federal Court of Australia affecting the MLs. The Mining Leases were granted on 8 August 2017. A Native Title claim was registered with the National Native Title Tribunal subsequently, on 17 August 2018, which covers the proposed development area contained within the Mining Leases.

#### **4. OPERATIONS**

The Project will be developed as a solar salt operation, comprising brine abstraction, brine evaporation and salt processing.

##### **Brine abstraction**

The bore-field network will be developed into the palaeovalley hosted deposit containing the potassium rich brines. The bore-field network has been designed to meet the required production flow rate. Bores will be developed into the upper and lower (or basal) aquifer units, with leakage of overlying units recharging the abstracted brine.

The bore-field design is based upon an abstraction rate across the network of 540 litres per second (l/s) of brine for the life of mine, producing 100,000 tpa of SOP. Total annual brine abstraction volume into the evaporation pond network is 17 gigalitres per year.

DFS bore-field design includes 78 bores on a nominal spacing of 800 metres. A contingency of 8 bores has been included that will be held on stand-by to cover scheduled maintenance.

##### **Brine evaporation**

The solar evaporation ponds are the first stage of processing the brine to produce SOP. Water is evaporated from the brine, precipitating potassium (K) bearing salts.

There are three types of ponds in the evaporation sequence: the buffer pond, where brine is stored and released to manage seasonal fluctuations in evaporation; the pre-concentration ponds, where the playa brine is concentrated and sodium chloride (halite) deposits as a waste material; and, the harvest ponds, where the potassium-bearing salts are crystallised and harvested.

The pre-concentration ponds will be constructed on the lake and will be configured to take advantage of the natural clay layer and topography, minimising construction costs. Berm walls will consist of an impermeable core section keyed into the underlying playa clay. The harvest ponds will be developed off-playa to limit hauling distances to the plant and will feature high-density polyethylene (HDPE) geomembrane lined construction to mitigate leakage.

The natural playa embankments are of sufficient height to accommodate the estimated brine height for the duration of the life of the mine. Where the natural topography does not allow for a downward slope parallel to that of the brine flow direction, internal berms with pump stations or weirs are required. The pre-concentration ponds will require

periodic lifting of the berm heights and brine transfer stations, as the pond floor rises due to halite deposition.

The first pond (P-1) will be used as a brine storage area to buffer the brine demand downstream due to varying flow demand as a result of fluctuations in seasonal evaporation rates. The bore-field will discharge at a constant rate throughout the year into the buffer pond. During summer as evaporation rates increase, a higher flow from the buffer pond into the pre-concentration pond network occurs to maintain constant pond levels.

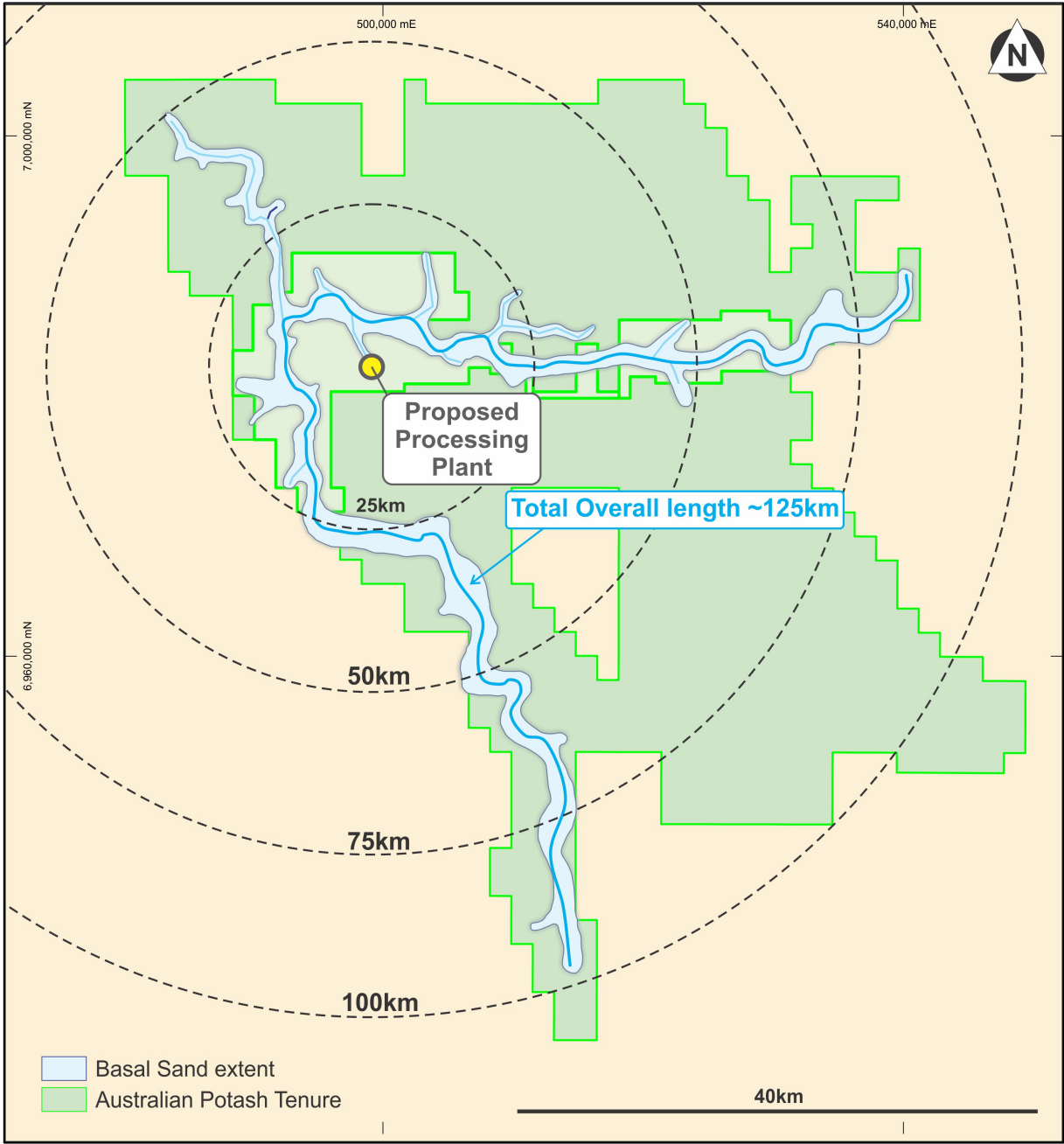
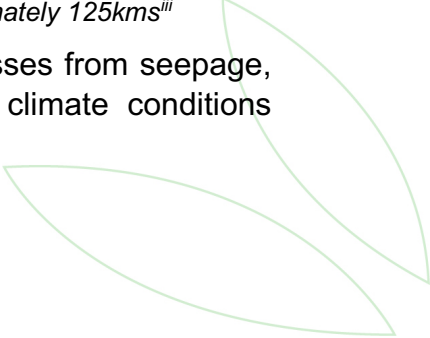


Figure 8: The Company has delineated a palaeochannel over approximately 125kms<sup>iii</sup>

The brine flow and pond area required are a function of brine losses from seepage, brine entrainment in waste materials, processing losses, and climate conditions (including precipitation, relative humidity, temperature and wind).

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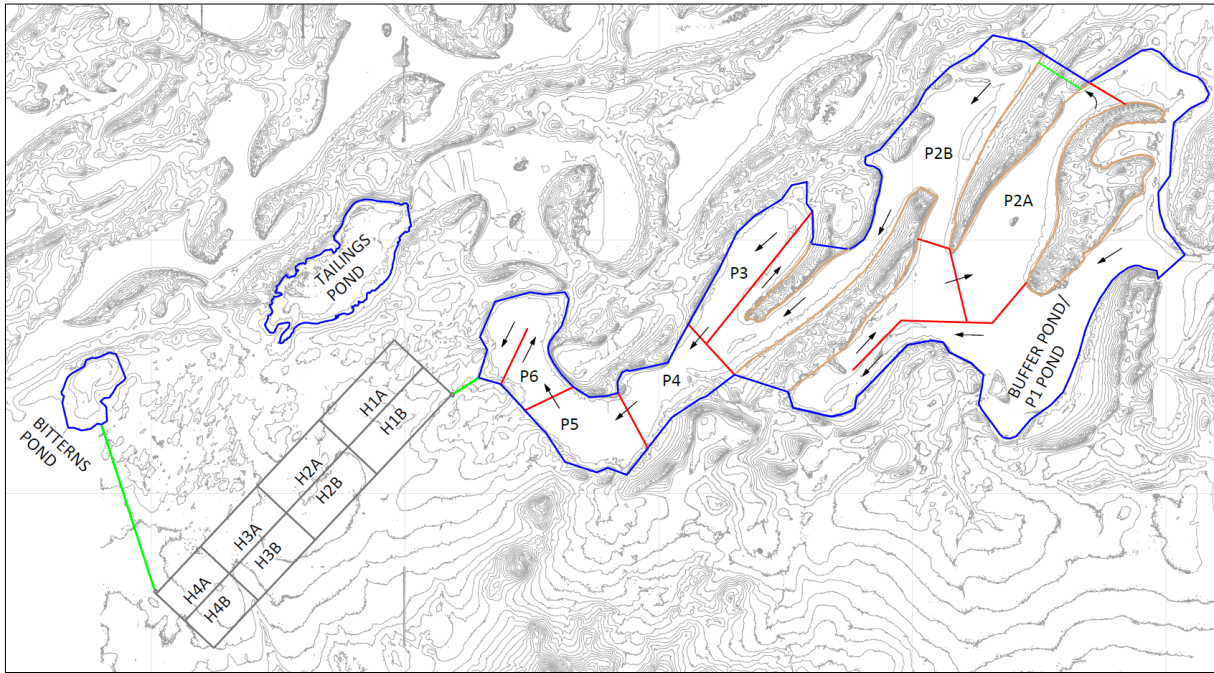


Figure 9: Evaporation pond layout at LSOP showing the on-playa, unlined pre-concentration ponds (P1 – P6) and the off-playa, HDPE lined harvest ponds (H1 – H4)

### Processing

The processing facility is designed to produce 150,000 tpa of SOP. The process plant operates by reacting mixed salts recovered from the harvest ponds, with recirculated brine. MOP is added to the circuit where it reacts with excess sulphate to increase SOP output. During operations, a significant portion of potassium fed to the plant is recirculated within the plant and recycled through the harvest ponds.

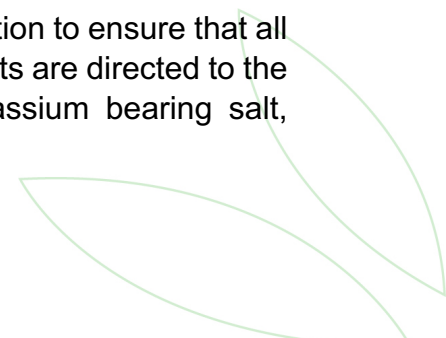
The process design criteria are presented in Table 4.

Parameter	Value
Playa Brine Feed	19.4 Mtpa
Harvest Salts to Plant	117.2 dry tph
MOP Addition	5.6 tph
Annual Plant Availability	7800 hours
SOP Production	150,000 tpa
Overall Process Potassium Recovery	81.5%

Table 4: Process Design Criteria

Based on the process development work, an optimised process route has been developed.

The harvested salts are directed to a crushing area for size reduction to ensure that all potassium bearing salts are sufficiently liberated. The crushed salts are directed to the conversion reactor where they are converted to a single potassium bearing salt, schoenite.



The schoenite slurry is recovered and directed to flotation where the schoenite is separated from the gangue material, with the flotation tailings leached to recover un-floated potassium bearing salts.

The flotation concentrate is also leached to ensure a high purity schoenite is produced.

In a separate unit operation, MOP is added to the wet plant process being mixed with the high purity schoenite generated in conversion and directed to the SOP crystalliser to create pure SOP crystals.

A simplified block diagram of the process is presented below in Figure 10.

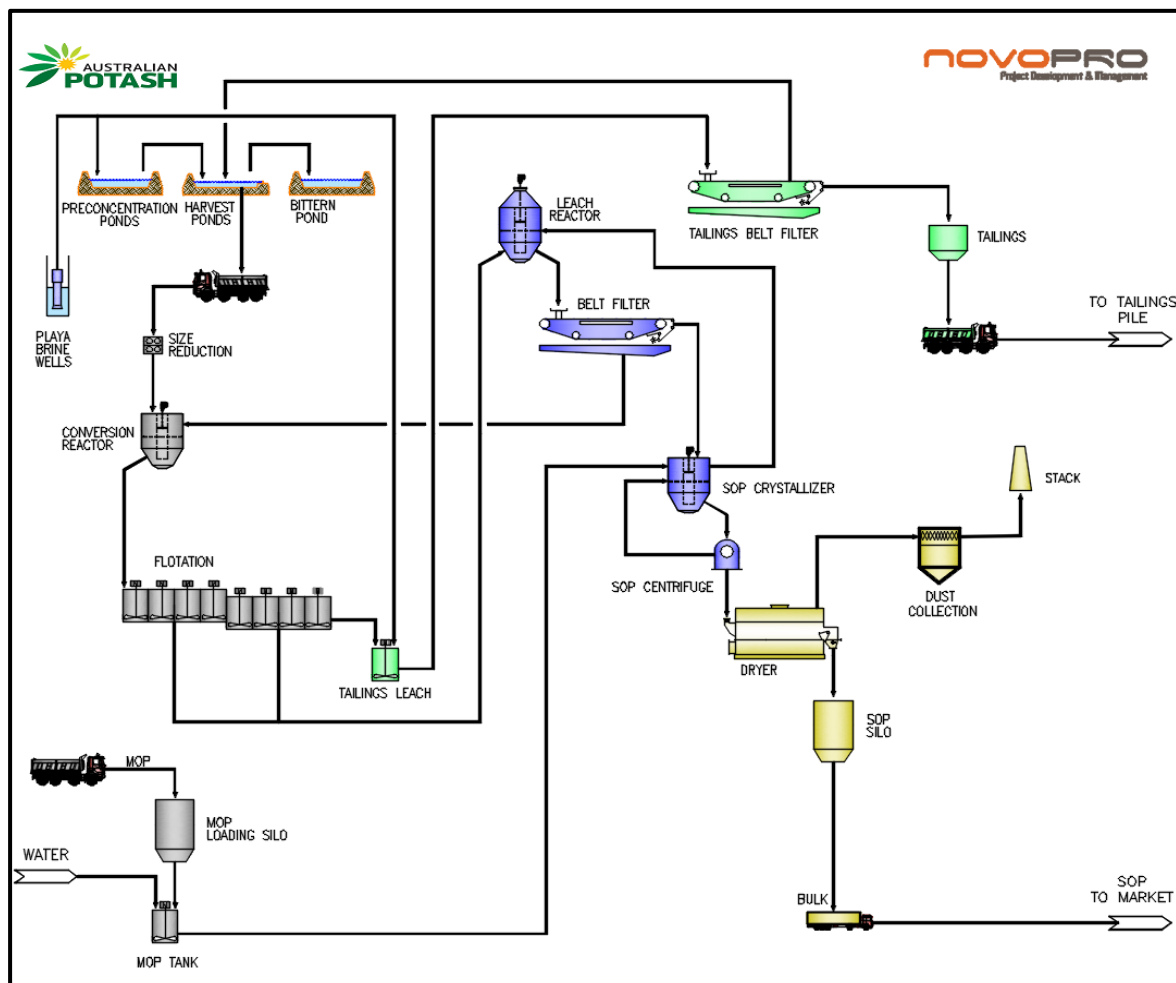


Figure 10: Simplified Block Diagram

## 5. MARKETING

The LSOP will produce a premium suite of products at  $>50\%K_2O$ . The pilot evaporation pond process at the LSOP produced harvest salts that were subsequently processed into high-quality SOP in a pilot processing facility in Perth, in January 2019.

SOP has historically traded at a premium over MOP as a potassium fertiliser. Other than market economics, this premium is due to the following factors:

- MOP cannot be used on chloride intolerant crops, which tend to be high-value crops.
- SOP contains sulphur, which is considered the fourth macronutrient and is an essential nutrient for most crops.

- SOP effectively has a NIL salinity index compared to other potassium fertilisers, making it preferable for saline environments and depleted soils.

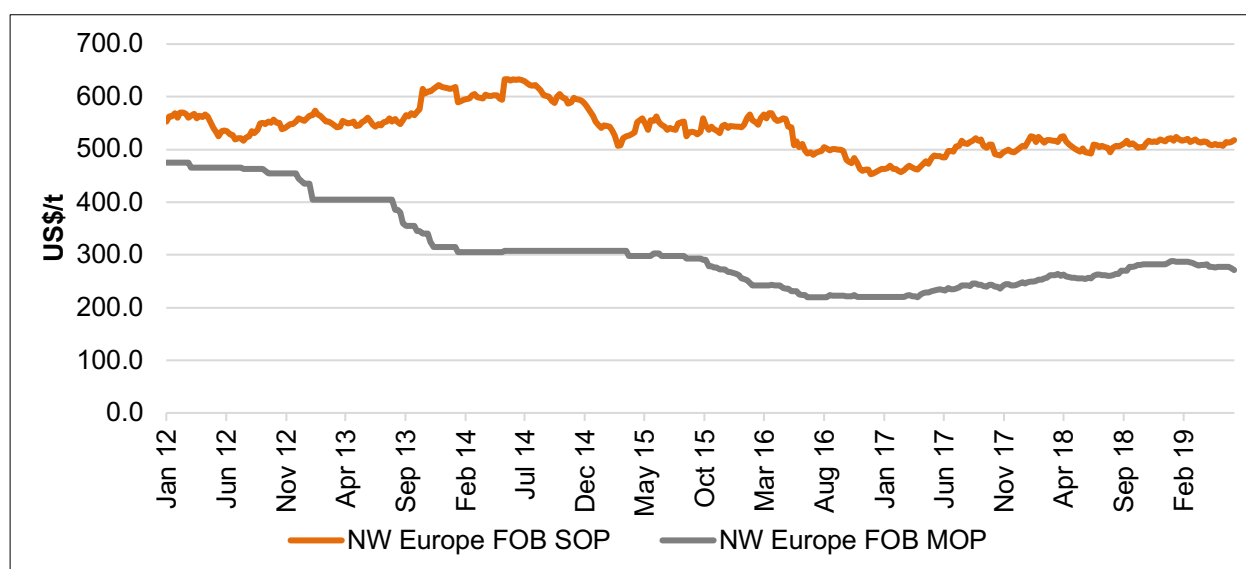


Figure 11: NW Europe SOP and MOP Historical Prices: the north-west European market is the most actively traded global SOP market (Source: Argus)

APC has engaged leading independent market consultant, Argus, to provide industry research reports and analyse the optimal marketing plans for LSOP products.

APC is pursuing both domestic and international market opportunities.

### Australian Domestic Market

Australia currently imports all of its potash requirements. It consumes approximately 360ktpa of MOP and 70 – 90ktpa of SOP. The opportunity to supply into the Australian market for SOP is, in the first instance, at the commodity level, and also to partly displace the Australian MOP demand with SOP.

To support domestic marketing opportunities, the Company has established a research program with the University of Western Australia (UWA) to explore and measure the benefits of SOP over MOP in specific WA soil types and on various broadacre crops which are of material economic importance to Australia's agricultural industry.

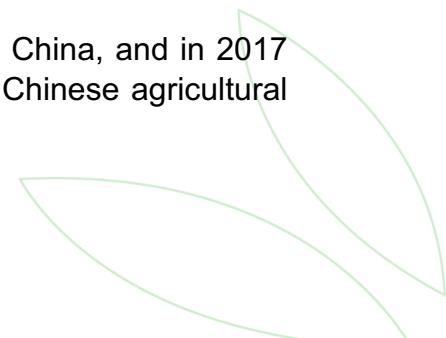
The study will compare commonly used MOP with SOP, and investigate the full effects of both potassium sources on crop yield, quality, safety and value.

Argus estimates that average cost and freight (CFR) Australian prices in the first year of production (CY2022) will be US\$472-487 per tonne (real dollars) for Standard SOP. Argus estimates that the CFR Australian price will rise to US\$574-644 per tonne (real dollars) in 2040.

### International

The Company has to date focused on the largest Asian market, China, and in 2017 announced two Memorandum of Understanding for offtake with Chinese agricultural entities.

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China represents a vast market by way of scale: approximately 50% of the world's SOP is consumed in China. Domestic Chinese producers currently supply 3-4mtpa of SOP, materially all of which is consumed in the Chinese domestic market. Growth in SOP demand in China as measured by cumulative average growth rate (CAGR) is expected to be 1.3% through to 2040, when the market demand is expected to be approximately 4.5mtpa.

APC is also targeting south east Asian countries, Japan and Korea. These markets are anticipated to grow faster than the Chinese market at 2.3% CAGR. SOP crop area in south east Asia has risen by 3-4% per year in the last decade. SOP demand in the target markets, not including China, is estimated to add 280ktpa of demand over the next two decades.

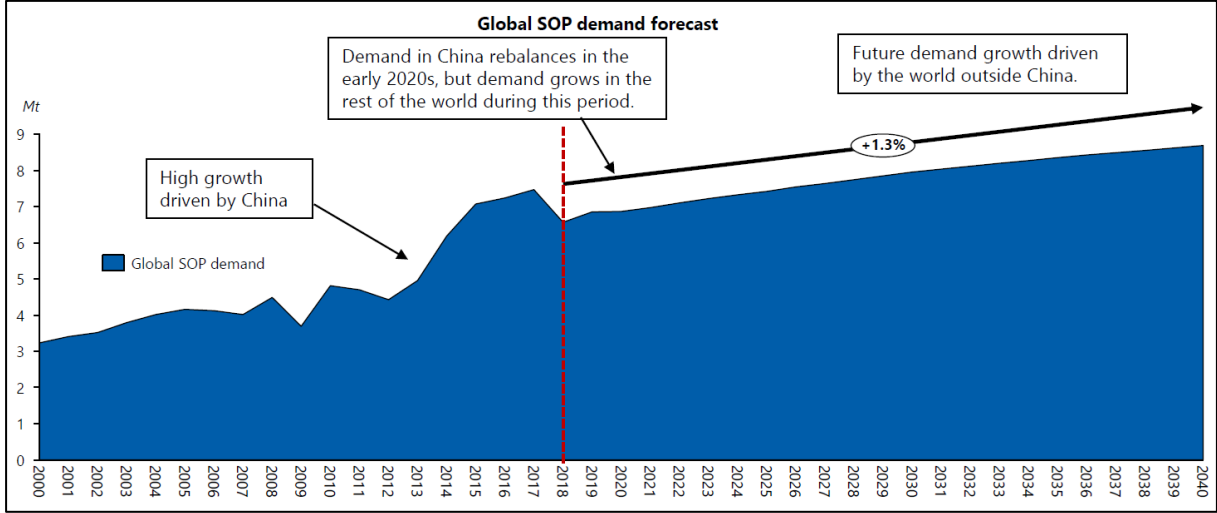


Figure 12: Global SOP Demand Forecast. (Source: Argus)

The region with the most significant freight advantage for the LSOP, besides its domestic market, is the Indian Ocean rim market, comprising Oceania, India and south east Asia, as well as parts of East Asia and south east Africa. On a delivered cost basis, the LSOP would be one of the lowest-cost suppliers to India, Japan, south east Asia, and New Zealand, if it were in production in 2018. The LSOP has a freight advantage over North-western European suppliers.

China and Taiwan have freight advantages in serving Japan and South Korea, but the LSOP's competitive cash cost position would mean it could still be the most competitive supplier on a delivered cost basis to these markets.

The LSOP can supply into the west coast USA, where the additional logistical cost is offset by the higher realised prices.

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## 6. FINANCIAL ANALYSIS

A financial model was prepared using discounted cash flows based on the technical and financial findings in the DFS. An 8% post-tax nominal discount rate has been used to return future cash flows to their current value. A 2% inflation factor has been applied to the discounted cash flows. All the analysis has been made on an unlevered basis.

### Project Returns and Cash Flows

A summary of the Project's financial metrics is presented below in Table 5.

Description	Unit	150 ktpa SOP
Average LOM realised sales price (real)	US\$/t SOP	614 <sup>iv</sup>
Average LOM exchange rate	AS:US\$	0.67
Project NPV <sub>8</sub> (pre-tax, nominal)	A\$m	665
Project NPV <sub>8</sub> (post-tax, nominal)	A\$m	441
IRR (pre-tax)	%	25%
IRR (post-tax)	%	21%
Operational payback period (pre-tax)	Years	4.00
Operational payback period (post-tax)	Years	4.75
Annual average free cash flow (pre-tax) <sup>v</sup>	A\$m/p.a.	100
Annual average free cash flow (post-tax) <sup>v</sup>	A\$m/p.a.	70
Annual average EBITDA <sup>v</sup>	A\$m/p.a.	114
EBITDA margin (average)	%	55%

Table 5: Project returns and cash flows

Sensitivity analysis using  $\pm 15\%$  on key project sensitivities including SOP price, production levels, capital expenditure, operating expenditure, and fixed overheads have been prepared and presented in Figure 13.

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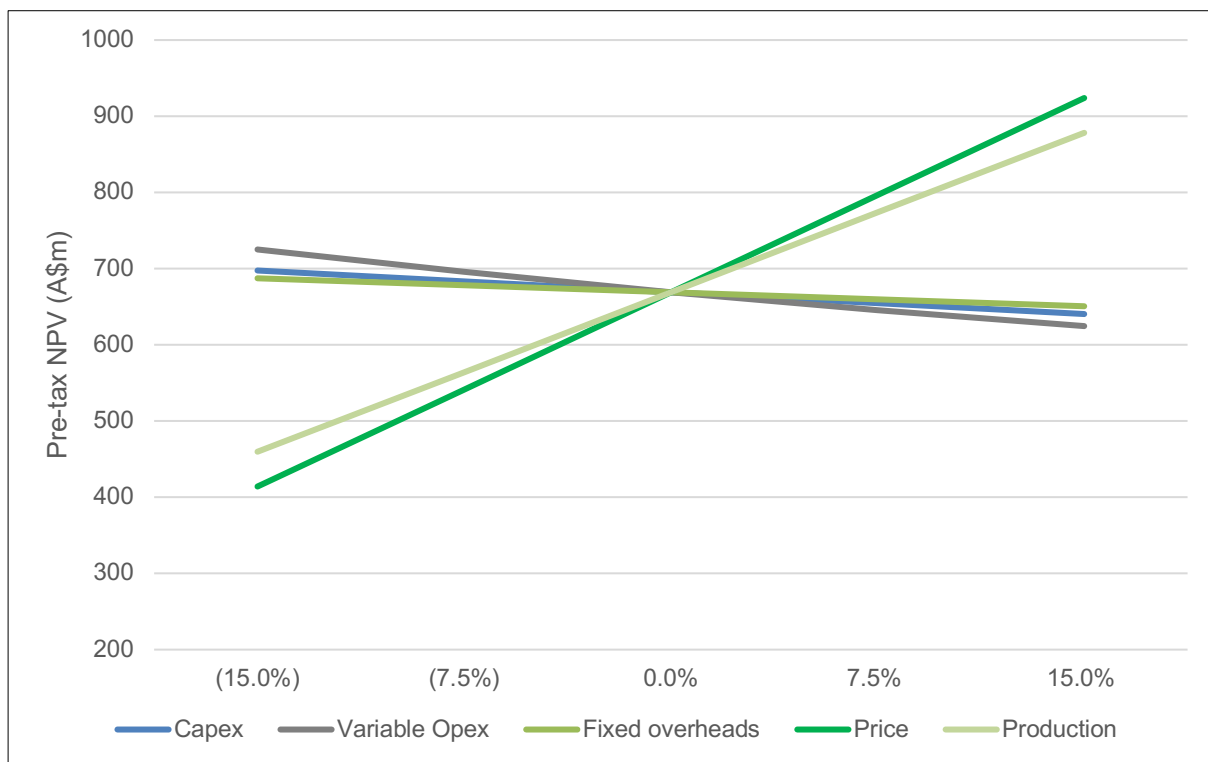


Figure 13: Pre-tax Project NPV sensitivities (A\$m)

### Operating Costs

The Project operating costs include all costs to allow brine abstraction, evaporation, processing, and transport costs to the export port. It excludes head office corporate costs, sustaining capital, royalties and taxes. The forecast cash cost positions the LSOP in the first quartile of the current SOP cost curve and delivers a strong operating margin.

LSOP Cash Cost (real)	US\$/t
Salt harvesting	16
Power supply	40
Reagents and consumables	116
Labour	30
Transport and logistics	36
Maintenance	4
Indirects	20
<b>Cash Cost</b>	<b>262</b>

Table 6: LSOP Cash Cost





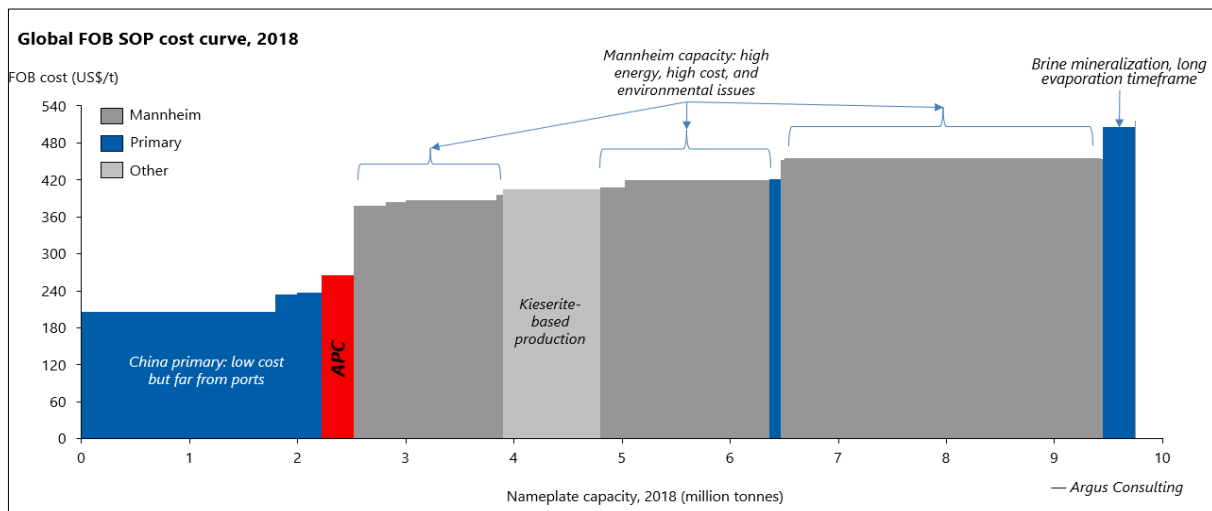


Figure 14: LSOP's forecast position on SOP cost curve. (Source: Argus)

## Capital Cost

The LSOP has been designed for 150,000 tonnes per annum of SOP operation. A summary of the capital cost estimate is in Table 7 and has a level of accuracy of +15% / -5%.

LSOP Capital Expenditure	A\$m
Project Indirects	37
Bore-field	48
Evaporation Ponds	26
Processing Plant	58
Non-Process Infrastructure	19
<b>Total Capex (exc-cont)</b>	<b>188</b>
Contingency	20
<b>Total Capex (inc-cont)</b>	<b>208</b>

Table 7: LSOP Capital cost estimate

## 7. NEXT STEPS

The Board of APC are considering options for managing the FEED program and expect to be in a position to make an announcement on this presently.

It is the strategic intent of the Company to conduct the FEED program using a combination of Owner's Team and external consultants over a period of 4 – 6 months.

## Competent Person's Statement

The information in the announcement that relates to Mineral Resources and Reserves 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 palaeochannel 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.

The information in this report that relates to mineral processing is based on information compiled by Mr Antoine Lefavre, P.Eng, a Competent Person who is a Member of the *Ordre des Ingénieurs du Québec* (Order of Engineers of Quebec). Neither Mr. Lefavre nor Novopro own either directly or indirectly any securities in the issued capital of the Company. Mr Lefavre is a Chemical Engineer employed by Novopro Projects Inc. and has 11 years of experience, with 8 years of potash processing that is relevant to the type of minerals recovered from deposits similar to the one under consideration and to the activity 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 Lefavre consents to the inclusion in the 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> </ul>	<ul style="list-style-type: none"> <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</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <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>
<p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></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>
<p><b>Logging</b></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></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</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <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><i>Drill sample recovery</i></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>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<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</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<p>evaporation to upgrade the sample, nor will settling of the elements of interest occur.</p> <ul style="list-style-type: none"> <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>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></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> </ul>

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Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <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 JP175, with 200m cable and winch. Tool reads the following parameters at approximate half metre intervals;               <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> </li> <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>



Criteria	JORC Code Explanation	Commentary
<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>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></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 Bench mark 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</li> </ul>



Criteria	JORC Code Explanation	Commentary
		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.
<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> <li>Data validation procedures used.</li> </ul>	<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>	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <ul style="list-style-type: none"> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<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 hydrogeological inputs, has visited site three times over the past six months for training and supervision of resource specific data collection. 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.</li> </ul>
<b>Geological Interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	<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</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>hosting units.</p> <ul style="list-style-type: none"> <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>
<p><b>Dimensions</b></p>	<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 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 a 70 kilometre 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:             <ol style="list-style-type: none"> <li>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; and</li> <li>N-S section that measures 15km by 4km that tapers to a base approximately 800m wide, and a maximum thickness of 175mbgl.</li> </ol> </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-</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<p>stratigraphy is;</p> <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> <ul style="list-style-type: none"><li>• Variability along strike is consistent with the sedimentary river and lake system models and is accounted for in the modelling.</li></ul>



Criteria	JORC Code Explanation	Commentary
<p><b>Estimation and Modelling Techniques</b></p>	<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> <li>• <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></li> </ul>	<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 LSOP. 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 occurrence of groundwater through the aquifer system.</li> <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>

Criteria	JORC Code Explanation	Commentary
<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, 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 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.</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>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</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>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data,</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</li> </ul> </li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>system and presence of lateral aquifer boundaries;</p> <ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <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 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.</li> </ul>

#### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>• <i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li>• <i>Clear statement as to whether the Mineral Resources are reported</i></li> </ul>	<ul style="list-style-type: none"> <li>• See Resources table above (JORC Table 1, Section 3 – Estimation and Reporting of Mineral Resource), the modelling process and Mineral Reserve estimate are also detailed</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>additional to, or inclusive of, the Ore Reserves.</i>	above. <ul style="list-style-type: none"> <li>Measured Resources are reported inclusive of Ore Reserves.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>Competent Person for the calculation of brine hosted mineral Reserves, and related 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.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves</i></li> <li><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<ul style="list-style-type: none"> <li>A Definitive Feasibility Study was completed</li> <li>Cost Estimates are to within a +15 / -5 % level of accuracy (Class 3)</li> <li>The Brine Abstraction Model was developed to include all the Reserves and 5 % of the Measured Resource.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Average potassium grade of the brine and climate were used to determine evaporation pond size</li> <li>Pond size includes a 20% design factor to accommodate climate and grade variability</li> <li>A solute transport model was developed to predict potassium grade from each bore.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li><i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li><i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</i></li> <li><i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li><i>The mining dilution factors used.</i></li> <li><i>The mining recovery factors used.</i></li> <li><i>Any minimum mining widths used.</i></li> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the</i></li> </ul>	<ul style="list-style-type: none"> <li>The volume of recoverable Resource has been determined from numerical groundwater modelling using the industry-standard, numerical groundwater flow model package Modflow Surfact (Version 4.0, Hydrogeologic Inc. 1996).</li> <li>The model has been set-up based on outputs from the Leapfrog Resource model derived from geophysical survey and drilling data.</li> <li>The model has been calibrated to both steady state and transient conditions (test pumping data from both short-term and long-term testing, including 5 tests of 30-day durations). Calibration has been conducted manually using an iterative process.</li> <li>Bore abstraction has been simulated from both the upper and basal sand aquifers for the life of mine.</li> <li>Potassium concentrations have been exported from the Leapfrog block model and uploaded into the numerical groundwater model.</li> <li>Sensitivity and risk analyses have been conducted by using a plausible</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>outcome to their inclusion.</i></p> <ul style="list-style-type: none"> <li>• <i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p>range of more conservative aquifer parameters.</p> <ul style="list-style-type: none"> <li>• For all sensitivity scenarios, brine production remains within 10% of the base-case estimate.</li> <li>• The model set-up, calibration and prediction scenarios are consistent with the Australian Groundwater Modelling Guidelines (Barnett et al, 2012).</li> <li>• Hydraulic models have been developed to design the borefield pumping system to convey the brine to the evaporation ponds.</li> <li>• The borefield design for the initial 20 year mine life comprises the installation of 78 production bores and associated headworks, pumps, power supply, telemetry and monitoring.</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>• The process follows a brine evaporation, salt crystallisation, and salt conversion flowsheet to produce a pure sulphate of potash (SOP) product</li> <li>• The process utilises excess sulphate in the plant recirculated brine to convert potassium chloride (KCl or MOP) to SOP</li> <li>• Similar flowsheets are utilised in other evaporative brine SOP project internationally (i.e. Compass Minerals in Ogden, Utah, USA)</li> <li>• Bench scale laboratory testwork on chemically representative brine samples were completed to demonstrate the crystallisation of SOP through synthetic evaporation and salt precipitation process, followed by conversion, flotation, leach and crystallisation test work. Furthermore, field-based pilot evaporation and salt crystallisation trials were completed to produce desired potassium and sulphate bearing salts. These salts were collected and processed through a lab-scale pilot plant to produce a pure SOP product, thus demonstrating process efficacy.</li> <li>• For 100 ktpa SOP production from brine, the LSOP must abstract 540L/sec from the Lake Wells Paleochannel through 78 production bores including 8 bores as standby.</li> <li>• Brine is discharged into an on-playa buffer pond from which flow is controlled into the network of on-playa preconcentration ponds to adjust for seasonal fluctuations in evaporation.</li> <li>• Potassium supersaturated brine is decanted from the final preconcentration pond into the HDPE-lined, off-playa, harvest ponds.</li> <li>• Potassium and sulphate bearing salts, along with other salts (halite and epsomite) are crystallised in the harvest ponds and collected for processing.</li> </ul>



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		<ul style="list-style-type: none"> <li>Harvested salts are processed through crushing, conversion, flotation, leaching and crystallisation to produce a pure SOP product.</li> <li>The SOP is dried and prepared for bulk transport.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li><i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Project was referred to the Western Australian Environmental Protection Authority (EPA) under Section 38 of the <i>Environmental Protection Act 1986</i> on 21 December 2017. On 5 February 2018, the level of assessment was set at Environmental Review - no public review.</li> <li>An Environmental Scoping Document (ESD) was prepared by APC to define the form, content, timing and procedure of the Environmental Review Document (ERD). The EPA approved the ESD on 21 September 2018. The ESD outlines the preliminary key environmental factors, potential impacts and risks and required studies for the completion of the ERD. The ERD is scheduled for submission to the EPA in Q3 2019.</li> <li>No waste rock will be generated as part of the Project</li> <li>Tailings production is limited to halite (NaCl) and some epsomite (MgSO<sub>4</sub>) salts deposition on the surface of the salt lake</li> <li>Magnesium chloride bitterns, a by-product of the brine evaporation is returned to the salt lake at a designated area northwest of the harvest ponds.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure at the Process Plant Area includes plant buildings (admin/operations building, crib room, change room, ablution block, stores and workshops), a power plant and fuel storage.</li> <li>Fuel for the power plant will be LNG trucked to the operation and stored in Vendor's storage facility</li> <li>An Operations Village is located some 2 km east of the Process Plant Area on a hillside, elevated above flood levels; the village is designed to accommodate up to 100 people and includes a dining area, a wet mess and recreational facilities.</li> <li>Raw water bores are in place to the southeast of the Process Plant Area and will be used to supply process and potable water at a rate of approximately 0.8 GL/year; the raw water bores will be connected through a HDPE pipeline that discharges into a tank at the Process Plant Area. Each bore will be powered by a dedicated diesel generator and will be monitored and controlled through telemetry linked to the Process Plant Control Room.</li> <li>A water treatment plant will be located</li> </ul>

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		<p>within the Process Plant Area; potable water will be pumped to the village and stored in a potable water tank.</p> <ul style="list-style-type: none"> <li>• A wastewater treatment plant will be located between the village and the Process Plant</li> <li>• The Process Plant and Village will be access by a purpose-built road that extends from the existing Lake Wells Road.</li> <li>• The Lake Wells Road will be upgraded to accommodate quad road trains that transport the bulk SOP</li> <li>• The Communications system will employ a series of microwave towers to connect the operations to the fibre-optic link in Laverton; the communications system will allow for Wi-Fi connectivity in the Process Plant Area and Operations Village.</li> </ul>
<p><b>Costs</b></p>	<ul style="list-style-type: none"> <li>• <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li>• <i>The methodology used to estimate operating costs.</i></li> <li>• <i>Allowances made for the content of deleterious elements.</i></li> <li>• <i>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</i></li> <li>• <i>The source of exchange rates used in the study.</i></li> <li>• <i>Derivation of transportation charges.</i></li> <li>• <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li>• <i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The capital cost estimate was based on general arrangement drawings, 3D models and quantities from study engineering <ul style="list-style-type: none"> <li>○ Estimate pricing was derived from a combination of sources including market pricing, independent engineering in-house data, estimations and factored pricing (minimal)</li> <li>○ An EPCM delivery model was assumed including the associated costs in addition to costs for an oversight owners team to manage the EPCM and project delivery</li> <li>○ Sustaining capital costs have been included for the evaporation ponds and bore fields over the life of mine based on quantities required (ponds) and expected life of asset (bores). An escalation factor of 2%pa has been used</li> <li>○ Contingency was risk assessed across the work breakdown structure</li> <li>○ The capital cost estimate was completed to an accuracy level of +15% / -5%</li> </ul> </li> <li>• The operating costs for the Project have been built up from first principles basis to an accuracy level of +15% / -5%</li> <li>• The operating costs includes abstraction, evaporation, salt harvesting, processing, transport to port, and port and shipping costs to produce and transport SOP to end customers <ul style="list-style-type: none"> <li>○ Operating costs are in 2019 Australian dollars and have been escalated at 2%pa. Operating costs denominated in US\$ have been converted to A\$ based on the Bloomberg forward curve</li> <li>○ Operations are assumed to be owner operated with the exception</li> </ul> </li> </ul>

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		<p>of the powerstation, accommodation messing, and haulage</p> <ul style="list-style-type: none"> <li>○ Power costs are based on confirmed load lists and budget pricing from an independent power provider under a build own operate (BOO) arrangement. The BOO power station will be supplied by trucked LNG that has been budget priced by local suppliers</li> <li>○ Reagents have been based on designed consumption rates and either budget pricing or commodity price forecasts provided by independent parties</li> <li>○ Logistics costs are based on budget pricing received for super-quad trucks hauling from site to Geraldton port. Port costs have been provided by Geraldton Port</li> <li>○ Labour costs have been based on industry benchmarks and manning levels from comparable operations. Labour on-costs have been based on budget pricing for flights and messing</li> <li>○ Maintenance costs have been based on industry standard benchmarks</li> <li>○ Corporate tax rate of 30%</li> <li>● WA State royalty rate of \$0.73/t SOP</li> </ul>
<p><b>Revenue factors</b></p>	<ul style="list-style-type: none"> <li>● <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li>● <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>● Product quantities based on engineering design and testwork performed</li> <li>● Product specification has been based on the design factors and the testwork performed with the trial evaporation pond and subsequent laboratory tests</li> <li>● Independent market report from Argus has formed the basis for the SOP price forecasts and demand/supply fundamentals. The average LOM realised SOP price is US\$614/t</li> <li>● Exchange rate has been based on the Bloomberg forward curve and averages A\$0.67:US\$1 over the LOM</li> </ul>
<p><b>Market assessment</b></p>	<ul style="list-style-type: none"> <li>● <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>● <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>● <i>Price and volume forecasts and the basis for these forecasts.</i></li> <li>● <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>● An independent market report from Argus provided the global demand and supply fundamentals for SOP</li> <li>● The independent market report provided global price forecasts and detailed customer and competitor analysis. This has formed the basis of the target markets for the Project's SOP</li> <li>● DFS testwork confirms that the SOP produced will meet or exceed market accepted specifications</li> <li>● Memorandum of understandings (non-binding) have been entered into with SOP customers for the majority of the planned Project's production</li> </ul>

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<b>Economic</b>	<ul style="list-style-type: none"> <li><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>Key project financial metrics include NPV, IRR, and payback periods</li> <li>These metrics have been calculated from a financial model using discounted cash flows</li> <li>A 8% post-tax nominal discount rate has been used for the NPV calculations</li> <li>Inflation was included in the discounted cashflows at 2%pa</li> <li>SOP pricing was based on the independent market report and converted into A\$ using the Bloomberg forward curve</li> <li>Capital costs have been based on the +15%/-5% estimate provided in the DFS</li> <li>Operating costs have been based on the +15%/-5% provided in the DFS</li> <li>Corporate tax rate of 30%</li> <li>WA State royalty of A\$0.73/t SOP</li> <li>Depreciation based on a combination of straight line and diminishing value</li> <li>Key sensitivities on NPV and IRR include SOP pricing, SOP production rate, and foreign exchange</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Project tenements sit partly within the boundaries of the Lake Wells pastoral leases, with the majority of the tenure sitting on vacant crown land (VCR).</li> <li>On 11 January 2017 the Department of Mines, Industry Regulation and Safety issued the required notification under the Native Title Act 1993 (Cth) of the intention to grant the Company's Mining Leases (MLs). As at 11 April 2017, being the prescribed period of time for persons to file a Native Title Claim, there had been no claim recorded with the Federal Court of Australia affecting the MLs. The Mining Leases were granted on 8 August 2017. A Native Title claim was registered with the National Native Title Tribunal subsequently, on 17 August 2018, which covers the proposed development area contained within the Mining Leases.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government</i></li> </ul>	

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	<p><i>approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></p>	
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li>• <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>• A Probable Reserve has been estimated.</li> <li>• The Probable categorisation has been adopted based on the inherent uncertainty in the modelling of groundwater systems, which has been addressed with sensitivity and risk analyses.</li> <li>• For all sensitivity scenarios, brine production remains within 10% of the base-case estimate. The Reserve has been conservatively limited to the lower end of the sensitivity analysis which provides 3.6 MT SOP for a 30 year mine life.</li> <li>• SOP production for 20 years is supported completely by Probable Ore Reserves. For 30 years, 95% of SOP production is supported by Probable Ore Reserves and 5% will be recovered from the Measured Resource.</li> <li>• The Probable Reserve is 20% of the Measured Mineral Resource Estimate.</li> <li>• Continued abstraction of the residual Mineral Resource after 30 years has not been assessed as part of this Reserve modelling.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Ore Reserve Estimate has been reviewed and audited by the Competent Person.</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 Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore</i></li> </ul>	<ul style="list-style-type: none"> <li>• There is inherent uncertainty in the modelling of groundwater systems for long periods into the future. This uncertainty limits the Reserve categorisation to Probable and is addressed with sensitivity and risk analysis, using a plausible range of more conservative aquifer parameters. Over 30 years, the base case SOP abstraction is 3.8 Mt (which represents 21% of the in-situ Measured Mineral Resource). For all sensitivity scenarios, brine production remains within 5% of the base-case estimate. The Reserve has been conservatively limited to the lower end of the sensitivity analysis which provides 3.6 Mt SOP for a 30 year mine life.</li> <li>• NPV sensitivities were determined against financial model drivers including SOP price, production rates, capital and operating costs and, fixed overheads.</li> <li>• Estimates of capital and operating costs were developed to a +15% / -5% level of confidence (Class 3) based on</li> </ul>

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	<p><i>Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></p> <ul style="list-style-type: none"> <li><i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>engineering designs, and contractor and vendor quotations typical for a Definitive Feasibility Study.</p>

i When compared to Class 3 AACE estimates or better, or completed Definitive Feasibility Study or better studies. Refer to Kalium Lakes Limited (ASX: KLL) ASX Release 4 March 2019 'Lower Operating Cost and Increased Production for BSOPP'

ii Refer to ASX announcement 5 August 2019 'Major JORC Resource Upgrade'. That announcement contains the relevant statements, data and consents referred to in this announcement. Apart from that which is disclosed in this document, Australian Potash Limited, its directors, officers and agents: 1. Are not aware of any new information that materially affects the information contained in the 5 August 2019 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 5 August 2019 announcement continue to apply and have not materially changed.

iii Not all of the palaeochannel that has been defined at the LSOP contains ore-grade brine, with investigations for process water aquifers ongoing

iv Average realised sales price excludes any product quality premiums

v Nominal

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