

31 January 2019

## **QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 31 DECEMBER 2018**

### **Highlights:**

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

- 11 tonnes of potassium-rich salts harvested from Harvest Pond 1
- 13 tonnes of potassium-rich salts crystallised in Harvest Pond 2
- 3 tonnes of potassium-rich feeder salts delivered to Canning Vale pilot processing plant
- 8 hole/1,086m air-core drilling program completed
- Commitment to sealing an additional 100 kilometres of Great Central Road by Shire of Laverton
- Agreement between APC and Shire of Laverton to scope the sealing of the remaining 80 kilometres of the Lake Wells SOP project's logistics solution
- Post quarter end, high grade 98% SOP was produced

#### **Lake Wells Gold Project (LWGP) – 100% Owned, Western Australia**

- Australian Potash Limited and St Barbara Limited (ASX: SBM) entered into a A\$7M Earn In & Joint Venture Agreement covering tenure at the Lake Wells Gold Project
- \$1.25M cash payment received from SBM

### **Corporate**

- Appointment of Automic as APC's shareholder registry services provider
- Annual General Meeting held with all resolutions passed

Australian Potash Limited (ASX: APC) (**APC** or the **Company**) is pleased to provide shareholders with its Quarterly Activities Report for the period ended 31 December 2018.

**Managing Director and CEO, Matt Shackleton, commented:** "Another exciting and progressive quarter for APC and the Lake Wells SOP project.

"While solar salt production is generally lowest-quartile on the cost curve, the cost of logistics can quickly erode that advantage. A sound, viable and cheap logistics solution is of paramount focus for APC. It was of material importance therefore to have the support of the local shire in not only committing to sealing an additional 100 kilometres of the 280 kilometre road haul to Leonora' rail terminal but to also agree to work with us on scoping out the sealing of the remaining 80 kilometres of access road.

"The pilot evaporation pond program on site concluded, with more than 20 tonnes of harvest salts produced. We sent the first 3 tonnes of these potassium rich salts to the pilot processing facility, where post-quarter end, our specialist salt chemist on secondment from Novopro produced a very high grade 53% SOP. A significant milestone for the Company and the Australian SOP sector.

“We finalised an agreement with St Barbara Limited to facilitate the exploration of the Lake Wells Gold project, which saw us not only receive A\$1.25m but introduced one of Australia’s most respected mid-tier gold producers and active explorers as a partner. APC’s commitment and focus on the SOP can continue in the confidence that the gold exploration is being managed to the highest professional and technical levels.

“We very much look forward to 2019 and finalising the DFS into the development of the high-grade, low cost Lake Wells Potash project.”

## Lake Wells Potash Project

### Brine Transfers and First Salts Harvested

Following the first successful transfer of brine from the pre-concentration pond into the first harvest pond during the September quarter, the Company completed its second successful transfer of approximately 70 tonnes of potassium-saturated brine from the first harvest pond (H1) into the second harvest pond (H2) at its pilot evaporation pond network. This second transfer allowed for the desiccation and collection of potassium (K) and sulphate (SO<sub>4</sub>) bearing salts precipitated in H1.

Following the second transfer of brine, the Company completed the final transfer of +40 tonnes of concentrated brine into the third harvest pond (H3).

During the brine transfer program, 11 tonnes of potassium-rich salts were harvested from H1 (*Figure 1*), the first collected from the Lake Wells Sulphate of Potash project, and 13-14 tonnes of potassium-rich salts crystallised in H2.



*Figure 1: 11 tonnes of Potassium rich salts from the Lake Wells SOP project’s Harvest Pond 1 ready for processing into Lake Wells Sulphate of Potash*

## Delivery of Salts to Processing Plant

The highlight of the December quarter was the delivery of three tonnes of potassium-rich feeder salts to the Company's pilot processing plant in Canning Vale, Western Australia, positioning the Company to become a high-grade Australian producer of Sulphate of Potash from field evaporated salts.

## Infill Drilling Campaign

An 8-hole/1,086m air-core drilling campaign across the project resource area was completed during the quarter (Figure 2).

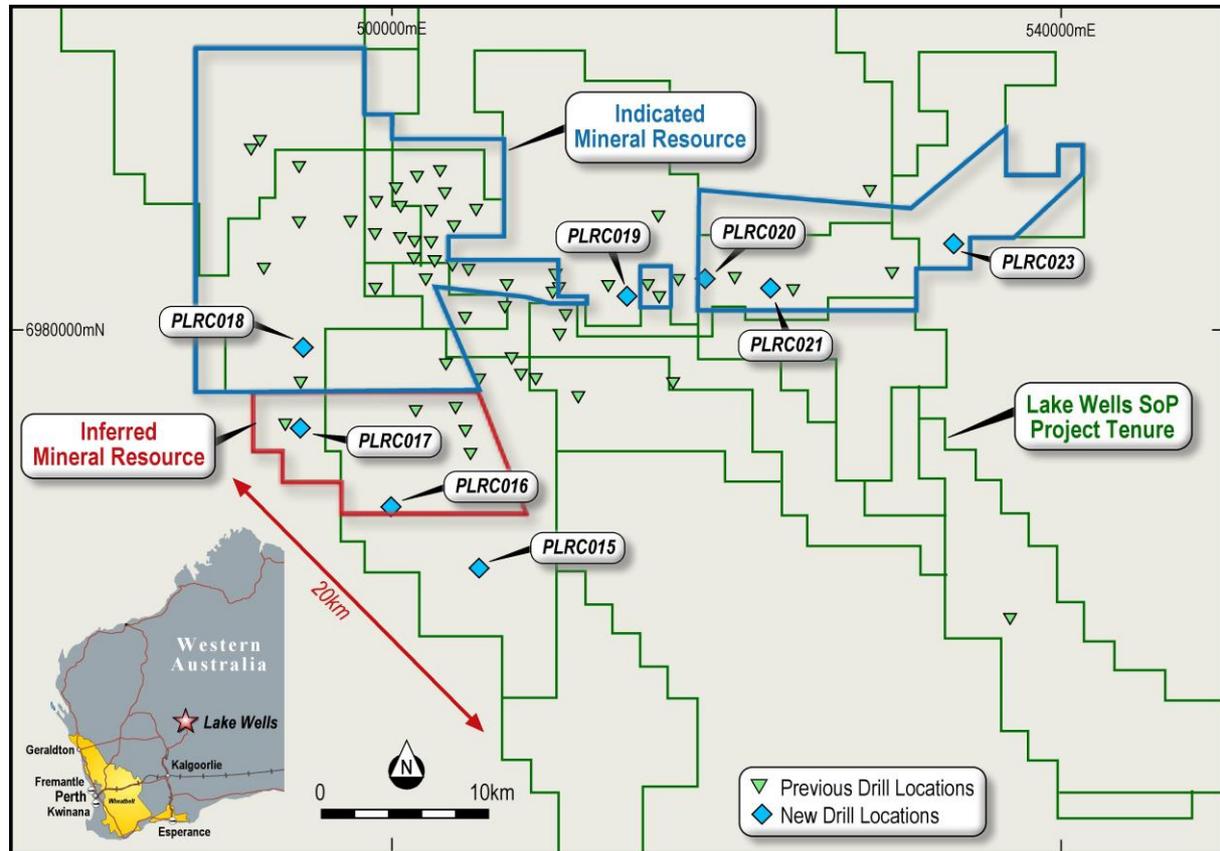


Figure 2: Location of December quarter drilling relative to past brine exploration bores, and the Mineral Resource outlines demonstrating the potential for this drilling to augment the existing Mineral Resource Estimate

To increase the confidence in the Lake Wells Potash project brine resource, additional information was collected and accounted for in the hydrogeological model. Over two weeks during the December quarter, eight exploration bores were completed for a total of 1,086m, all planned to answer questions on resource quality and quantity. All bores encountered the surficial aquifer, with six of the eight holes drilled to the basal aquifer.

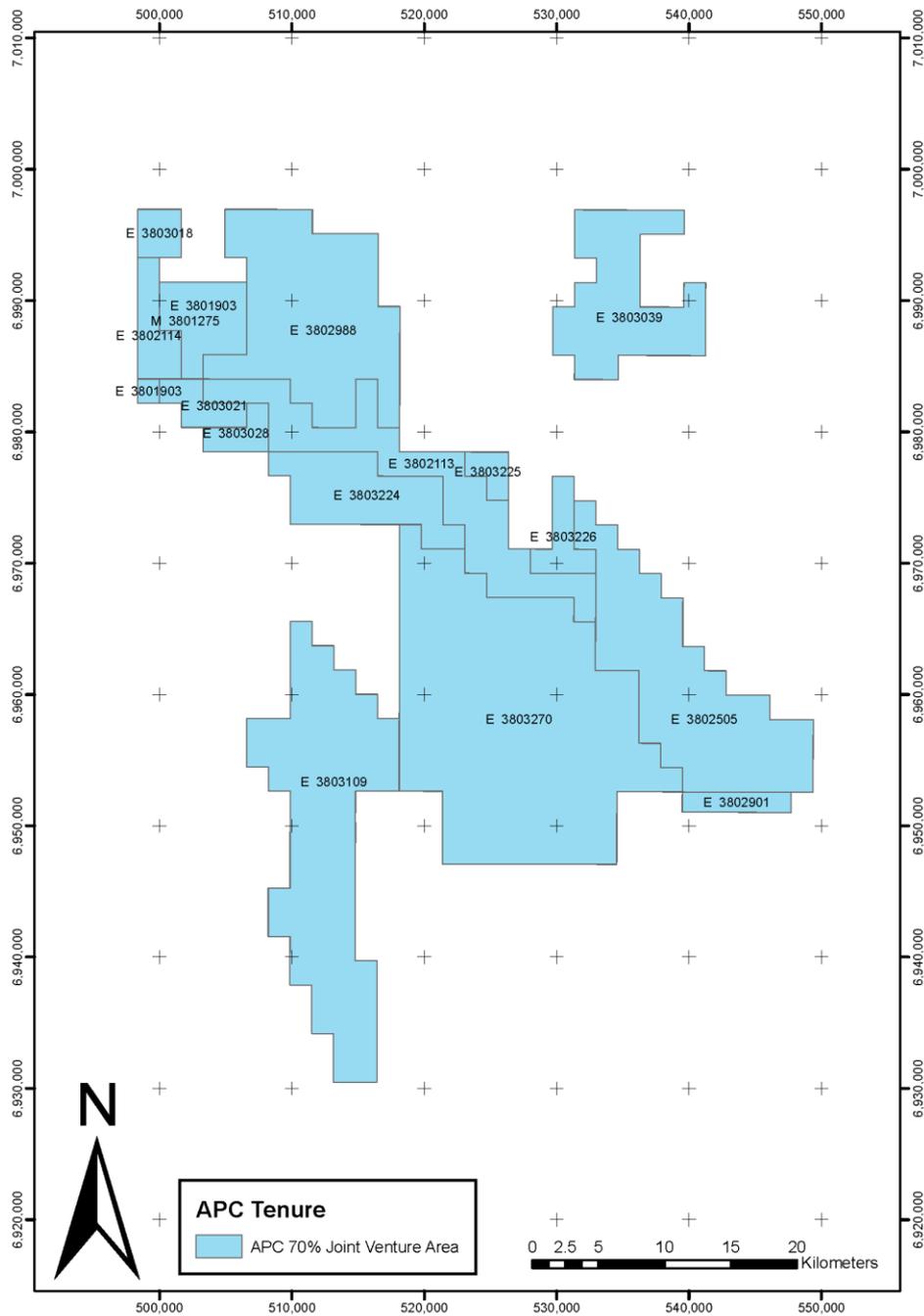
As demonstrated in Figure 1 above, there is potential for an increase in the Mineral Resource at the Lake Wells Potash project, with the additional data from this infill drilling program. Two areas are likely to add to the current Resource: the central area that was acquired from AngloGold Ashanti Limited (JSE: ANG) in 2017, and the southern region where no previous drilling had been carried out.

Any increase in the Mineral Resource Estimate could add longevity to the current project plan, and or increase the output from the staged development scenario that has been proposed.

## Lake Wells Gold Project

### Earn In & Joint Venture Agreement with St Barbara Limited

As previously announced on 8 October 2018, APC and St Barbara Limited (**SBM**) entered into an Earn in & Joint Venture Agreement during the quarter, covering tenure at the Lake Wells Gold Project over the tenements identified below (*Figure 3*).



*Figure 3: APC/SBM Earn-In and Joint Venture Agreement tenure*

Under the terms agreed and previously announced, SBM paid APC \$1.25M in cash consideration during the December quarter for entering into the Agreement and has agreed to pay a minimum exploration expenditure of \$1.75M in the first year.

During the quarter, APC and SBM have continued to progress their joint venture by forming a management committee as provided for under the Earn in & Joint Venture Agreement.

Work completed includes preparation for access to allow a 500 hole, 23,500 metre Lake Wells aircore drilling program to commence in late Q3 March or early Q4 June FY19 (*Figure 4*) (notwithstanding the proposed drilling date as per the SBM-generated drilling program map).

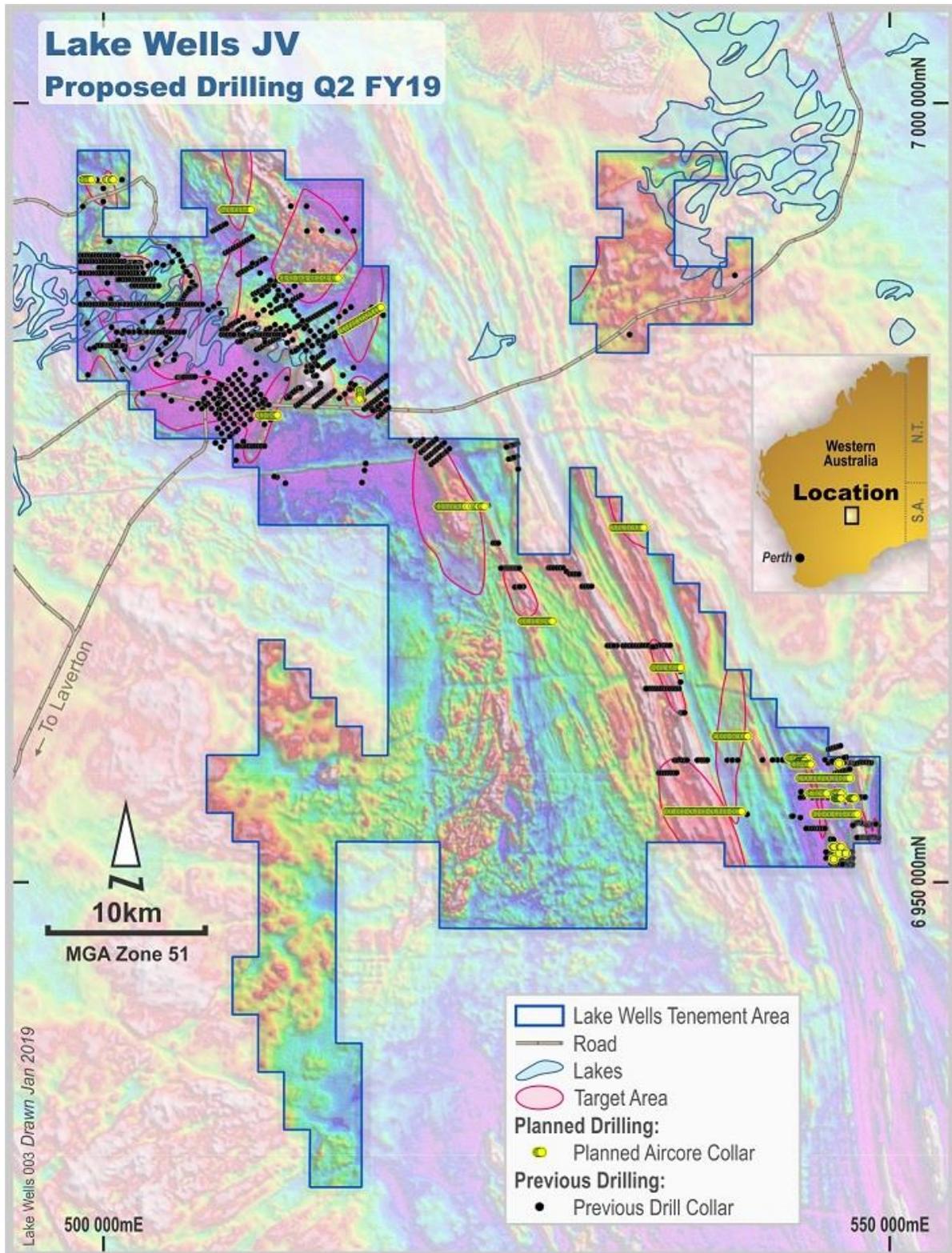


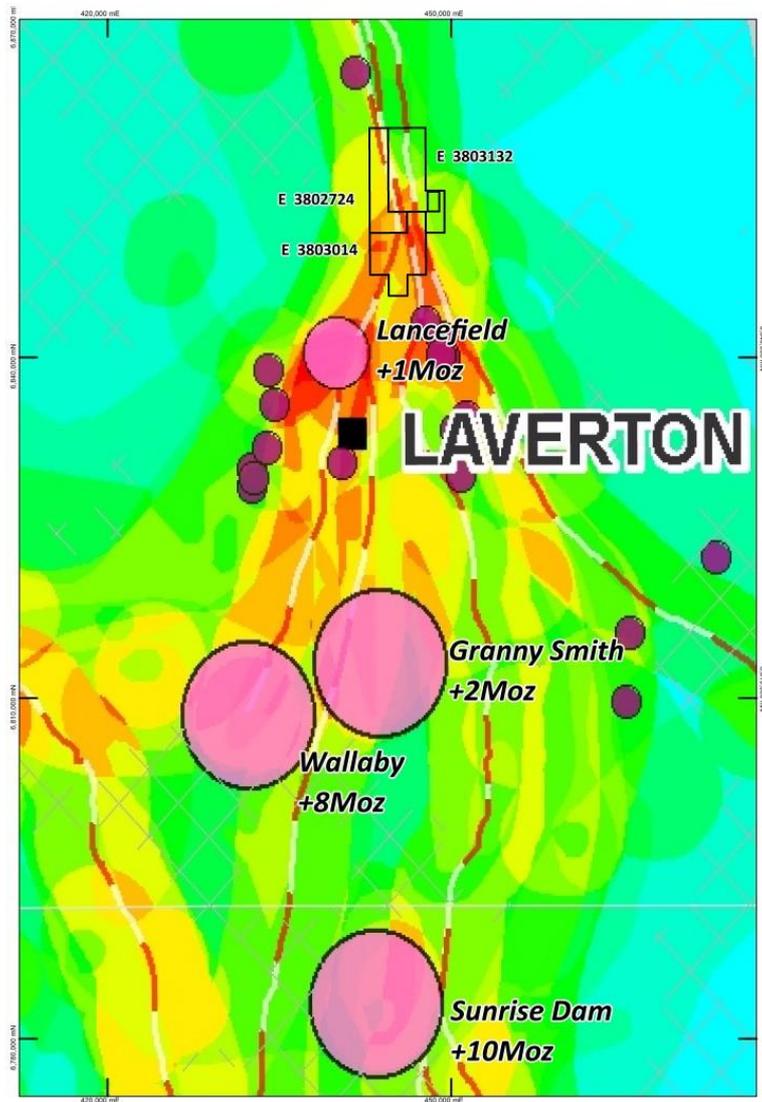
Figure 4: Lake Wells Planned Aircore Drilling Map (generated by SBM in its Q2 2018 report)

## Laverton Downs Project

The Laverton Downs project was assessed for prospectivity against regional craton scale prospectivity studies, primarily the Predictive Mineral Discovery Co-operative Research Centre's Y4 project.

To enhance the Laverton Downs Project exploration tenement E38/3132 has been acquired from Goldfields Ltd. *Figure 5* below shows the tenement outline over the final output of the Y4 Project where warm colours are prospective and cool colours are less so. Within the project we can see three crustal scale faults converge, each with significant mineralisation along them. Significant faults along with mapped rock types, alteration, metamorphic grade, and proximal mineralisation all combine to give this project a high score in the predictive mineralisation scale.

A similar work program to that carried out on the Lake Wells tenements to highlight the gold potential there is planned for this project to commence in the next half year, with a similar value proposition for APC being targeted.



*Figure 5: Tenement prospectivity study. Laverton Downs Project tenement outlines over the Y4 Project final output map highlighting the prospectivity of the project area*

## Corporate Activity

### Change of Share Registry

During the quarter, the Company appointed Automic as its provider for shareholder registry services, enabling shareholders to manage their holdings via Automic's secure and highly accessible online investor portal.

### Annual General Meeting

The Company's Annual General Meeting was held on 29 November 2018, at which the requisite majority passed all resolutions presented to shareholders.

### Issue of Unlisted Options

Following shareholder approval at the Company's Annual General Meeting, during the quarter the Company issued 1,277,500 unlisted options exercisable at \$0.225 each on or before 27 December 2021 to its Chairman, Mr Jim Walker.

## Mining Tenements

Area	Tenement	Interest at 1 October 2018	Action	Interest at 31 December 2018
Lake Wells	E38/1903	100%	-	100%
	E38/2901	100%	-	100%
	E38/2505	100%	-	100%
	E38/3021	100%	-	100%
	E38/3039	100%	-	100%
	E38/2113	100%	-	100%
	E38/2114	100%	-	100%
	E38/2744 <sup>1</sup>	100%	-	100%
	E38/2742 <sup>2</sup>	100%	-	100%
	E38/2988	100%	-	100%
	E38/3018	100%	-	100%
	E38/3028	100%	-	100%
	E38/3109	100%	-	100%
	E38/3224	100%	-	100%
	E38/3225	100%	-	100%
	E38/3226	100%	-	100%
E38/3270	100%	-	100%	

<sup>1</sup> Australian Potash Limited holds the rights to explore for and extract all potash minerals contained within brine from the tenement. Lake Wells Exploration Pty Ltd remains the holder of the tenement.

<sup>2</sup> Australian Potash Limited holds the rights to explore for and extract all potash minerals contained within brine from the tenement. Lake Wells Exploration Pty Ltd remains the holder of the tenement.

	M38/1274 <sup>3</sup>	-	Granted	100%
	M38/1275	-	Granted	100%
	M38/1276 <sup>4</sup>	-	Granted	100%
Laverton Downs	E38/2724	100%	-	100%
	E38/3014	100%	-	100%
	E38/3132	-	Acquired	100%

### About Australian Potash Limited

Australian Potash Limited (ASX: APC) is an ASX-listed Sulphate of Potash (SOP) developer. The Company holds a 100% interest in the LWPP located approximately 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields.

The LWPP is a palaeochannel brine hosted sulphate of potash project. Palaeochannel bore fields supply large volumes of brine to many existing mining operations throughout Western Australia, and this technique is a well understood and proven method for extracting brine. APC will use this technically low-risk and commonly used brine extraction model to further develop a bore-field into the palaeochannel hosting the Lake Wells SOP resource.

A Scoping Study on the LWPP was completed and released on 23 March 2017<sup>5</sup>. The Scoping Study exceeded expectations and confirmed that the Project's economic and technical aspects are all exceptionally strong, and highlights APC's potential to become a significant long-life, low capital and high margin sulphate of potash (SOP) producer.

Key outcomes from the Scoping Study are as follows:

- Stage 1 production rate of **150,000tpa** of premium-priced sulphate of potash (years 1 – 5)
- Stage 2 production rate of **300,000tpa** of premium-priced sulphate of potash (years 6 – 20)
- Upgraded JORC 2012 Mineral Resource Estimate comprising 14.7m tonnes of SOP, including 12.7mt in the Indicated category<sup>6</sup>
- Operating expenditure of A\$368/US\$283 tonne SOP in the first 5 years and A\$343 tonne SOP over the life of mine
- At a SOP price of A\$795 per tonne SOP, the Project generates LOM annual operating pre-tax cashflow<sup>7</sup> of A\$118m/US\$81m
- Pre-production capital expenditure (Stage 1) of A\$175m/US\$135m and Stage 2 of A\$163m/US\$125m
- Life of Mine (LOM) is 20 years (inc. Stage 1 & Stage 2) –upside to LOM through continued exploration

### Forward looking statements disclaimer

<sup>3</sup> Australian Potash Limited holds the rights to explore for and extract all potash minerals contained within brine from the tenement. Lake Wells Exploration Pty Ltd remains the holder of the tenement.

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<sup>5</sup> Refer to ASX announcement 23 March 2017 'Scoping Study Confirms Exceptional Economics of APC's 100% Owned LWPP In WA'. 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 23 March 2017 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 23 March 2017 announcement continue to apply and have not materially changed.

<sup>6</sup> Refer to ASX announcement 23 March 2017 'Scoping Study Confirms Exceptional Economics of APC's 100% Owned LWPP In WA'. 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 23 March 2017 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 23 March 2017 announcement continue to apply and have not materially changed.

<sup>7</sup> Operating cashflows include all revenue and operating expenditure, but exclude capital expenditure.

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.

#### **Competent persons statement**

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

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