

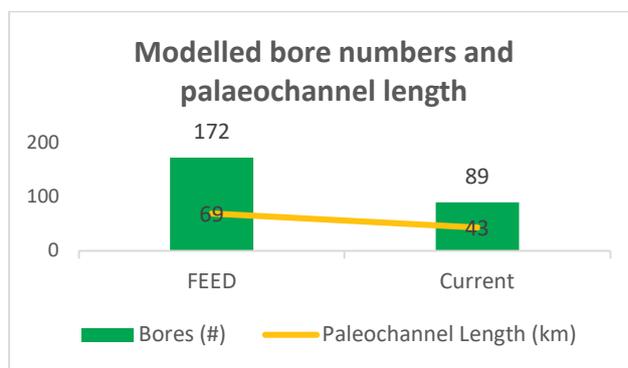
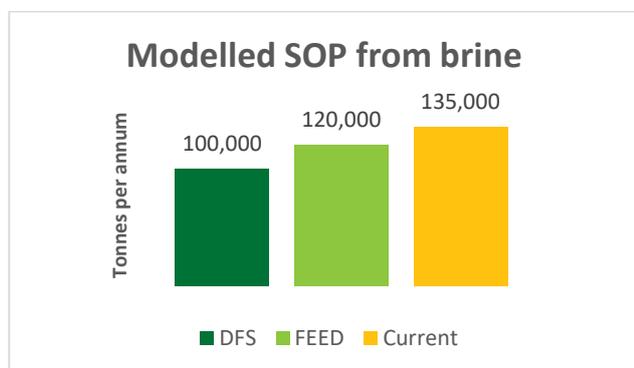
7 June 2022

Updated flow model increases SOP production potential

Australian Potash Limited (**ASX: APC** or the **Company**) is pleased to advise updated flow modelling outlines the potential for increased production from brine at the Lake Wells Sulphate of Potash Project (**LSOP**).

On 20 April 2021 the Company announced to ASX the results of its Front End Engineering Design (**FEED**) study. Further to that FEED study, analysis of results from recently completed brine supply bores on the LSOP demonstrates evidence of increased brine grade and sustainable pumping rates within the borefield the subject of the FEED study.

Updating the hydrogeological flow model with this data indicates the potential to increase the annual production of sulphate of potash (**SOP**) from the LSOP from 120,000 tonnes per annum (**tpa**) shown in the FEED study to 135,000tpa (an increase of 15,000tpa or 12.5%). Additional improvements realised in the recent modelling also indicate that 89 supply bores will be suitable for life-of-mine (**LOM**) operation, whereas the original FEED development model had 172 bores over the LOM, a 48% reduction in installed bores.



Managing Director and CEO, Matt Shackleton, commented: “We continue to apply a rigorous de-risking methodology to the development and operational strategies at the LSOP, including crucially in the fundamental brine abstraction (mining) process. The LSOP will be developed as a 100% borefield abstraction project with no reliance on surface trenching to collect brine.

“The early works program we undertook through 2021 and early 2022 has demonstrated improvements in the brine borefield, and data from constructed bores has allowed us to further optimise the flow model underpinning the LSOP development, providing us the opportunity to produce more SOP with less bores over the life of mine.

“The financial implications of these results are being worked through, but less bores means lower initial capital cost and lower sustaining capital costs which we reasonably anticipate will flow through to the LSOP’s financial outcomes. Updated financial modelling will be announced to ASX as soon as it is available.”

Higher Annual Production Rate

In the Company’s Definitive Feasibility Study (DFS) released in August 2019¹, SOP production from brine abstraction was projected to be 100,000tpa, resulting in a Probable Reserve of 3.6Mt[#] (utilising ~20% of the in-situ Measured Resource[#]). An additional 50,000tpa was forecast in that DFS to be produced through the addition and conversion of Muriate of Potash (MOP) to SOP.

The brine abstraction rate was optimised through the FEED study, leading to optimised SOP output of 120,000tpa.

Through the DFS, external consultants AQ2 prepared a hydrogeological model for the proposed development of the LSOP. This model has been updated regularly with actual data generated in the field. Short term pump testing allows the reconciliation of the modelled early-time flow rate at each bore to the actual early-time flow rate likely to be recorded in operations. The inclusion of the data from the test pumping of the bores completed to date² in the hydrogeological model, reconciles positively (see Figure 1 below) and indicates the potential to increase the annual SOP production from brine abstraction to 135,000tpa (+15,000tpa/12.5%).

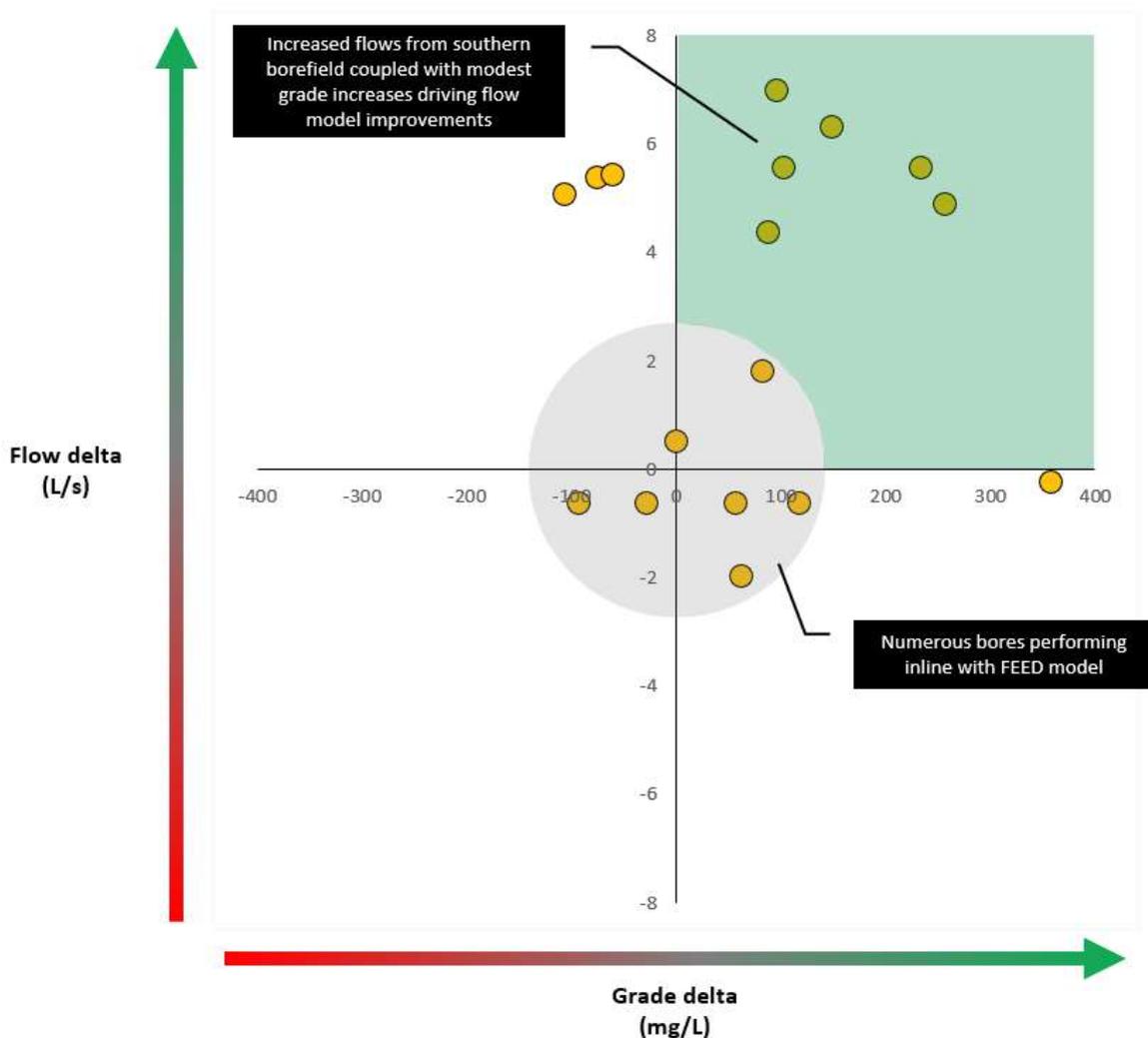


Figure 1 – Comparison of the FEED modelled results to updated flow model results for the early works’ bores. The yellow circle represents an individual bore’s performance for grade and flow, relative to the previous model.

¹ Refer ASX Announcement 28 August 2019

² Refer ASX Announcement 31 January 2022

Reduction in Capital Expenditure

A further improvement derived from the updated flow model is seen in the reduction in the number of bores required to produce the necessary brine flow. Where the FEED model indicated a required 79 bores at startup, expanding to 172 bores over the life of the LSOP, the current model revises the required bores down to only 89 bores over the life of mine. The potential cost savings over the life of the mine from the reduction in bores required may be substantial.

Higher Grade

Along with the reduction in bore number, the updated flow model predicts higher grade and a longer production profile. The implications to the pond network, harvest ponds, and processing plant are being thoroughly considered in light of the improved flow model.

Background

Prior to mobilisation of equipment for the first phase production bore drilling program in 2021, APC had developed seven test production bores at Lake Wells, six deep bores into the basal aquifer, and a shallow bore into the upper aquifer only. All six deep bores were pump tested and four were considered suitable as production bores. Two bores installed during the trial phase have proven to be poorly constructed and unsuitable for the project development.

Inclusion in the hydrogeological flow model of the 'early works' bores completed during 2021 has increased the data density in the model. This has resulted in a higher modelled overall flow rate and brine grade as noted above. Pumping tests were carried out upon completion of the majority of the bores to assess the efficiency and determine the sustainable flow rate and other important hydrogeological parameters.

On a linear basis currently constructed bores account for the development of approximately 20% of the LSOP's borefield: but on a volume basis the bores developed to date account for approximately 35% of required brine flow for full scale production.

There has been no material change to the previously estimated Resource for the project previously announced to ASX³.

This release was authorised by the Board of Directors.

Matt Shackleton

Managing Director & CEO

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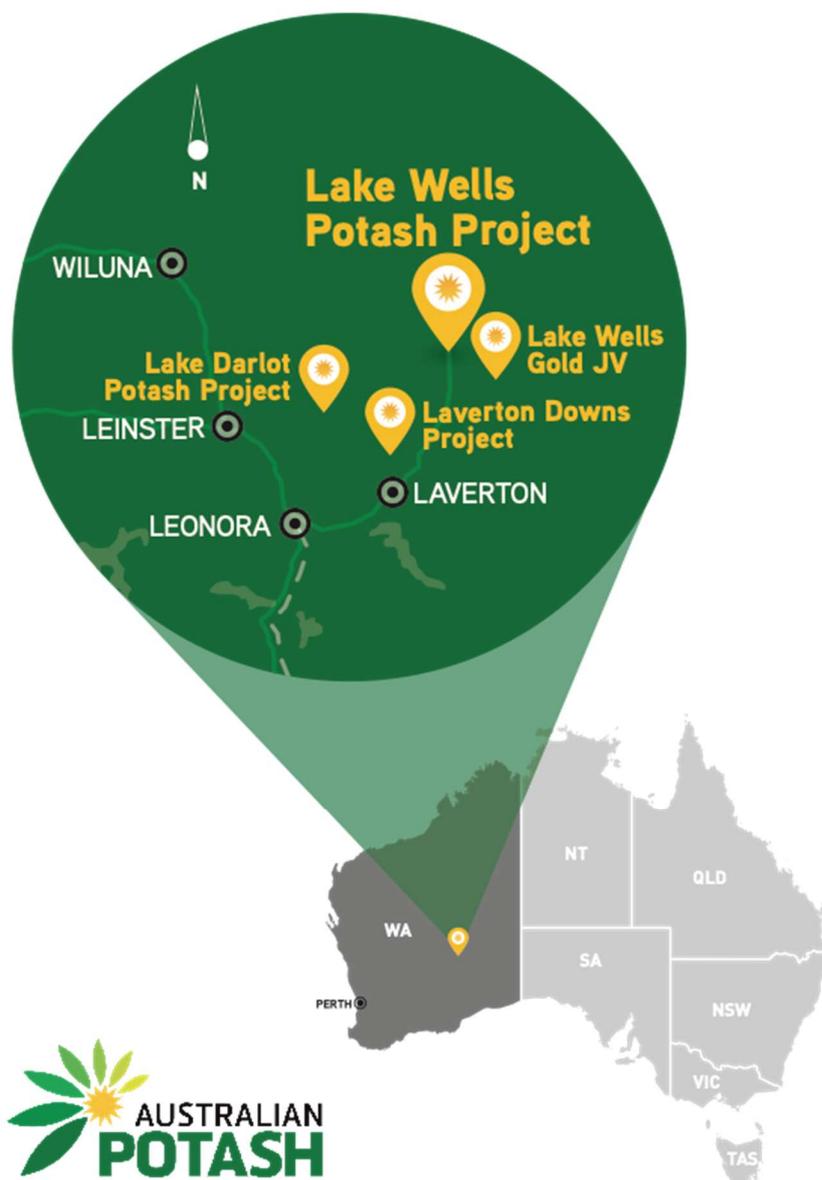
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³ Refer ASX Announcement 8 August 2019



APC holds a 100% interest in the **Lake Wells Sulphate of Potash (LSOP)**, located approximately 500km northeast of Kalgoorlie, in Western Australia's Eastern Goldfields. The Company is finalising pre-development plans for commencement of construction. First production from the LSOP is scheduled for 24 to 27 months from a Final Investment Decision.

K-Brite™ is a registered trademark brand of Australian Potash Limited and the brand under which the suite of high quality, premium SOP products from the LSOP will be marketed.

APC holds a 100% interest in the **Laverton Downs Project**, located 5kms north of Laverton, in Western Australia's Eastern Goldfields.⁴

APC holds a 30% free-carried interest in the **Lake Wells Gold Project**, located 500km northeast of Kalgoorlie, in Western Australia's Eastern Goldfields.⁵

Please visit www.australianpotash.com.au for more information.

Forward Looking Statements

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 forward-looking 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 or any other referenced announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

⁴ Refer to ASX Announcement 9 April 2021

⁵ Refer to ASX Announcement 8 April 2021

Competent Person Statement

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

#Mineral Resource Estimate

The information in this report that relates to the Mineral Resource is based on information announced to the ASX on 8 August 2019. APC confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the Estimate in the relevant market announcement continue to apply.

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

Table 2: Measured JORC Mineral Resource Estimate for Lake Wells Sulphate of Potash Project based on modelled aquifer volume, specific yield and weighted mean K concentrations (derived from modelling)

#Ore Reserve Estimate

The information in this report that relates to the Ore Reserve is based on information announced to the ASX on 28 August 2019. APC confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement, and that all material assumptions and technical parameters underpinning the Estimate in the relevant market announcement continue to apply.

Brine Volume Recovered (Mm ³)	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%