

31 May 2021

# Multi Hole Diamond Drilling Program to Commence Targeting Massive Nickel Sulphide Mineralisation

- Diamond drill hole program targeting massive nickel sulphide mineralisation set to commence this week at Laverton Downs Project
- Priority targets determined by modelling of VTEM geophysical data
- Geochemistry identifies fertile ultramafic rock adjacent to targets

Australian Potash Limited (ASX: APC or the Company) is pleased to advise that mobilisation has commenced for the diamond drilling program targeting massive nickel sulphide mineralisation at the Company's 100% owned Laverton Downs Project (LDP), 5 kilometres north of Laverton.

Australian Potash Managing Director and CEO, Matt Shackleton said, "The VTEM survey identified 6 high-priority massive sulphide targets across the LDP area, which sit adjacent to previously mapped outcropping ultramafics. These targets, or conductor plates, sit along a previously unidentified, sub-surface magnetic horizon. In addition to this, the legacy drill hole sample analysis we conducted over LDP last year confirmed the presence of nickel fertile ultramafic rocks.

"The LDP has been the target of nickel exploration previously, however these newly identified massive sulphide targets sit on a buried horizon that no previous exploration penetrated. The deepest hole yet drilled at LDP achieved a vertical depth of only 90 metres, and it was targeting gold several kilometres away.

"The primary targets of this drill program are VTEM anomalies consistent with massive sulphide mineralisation in a geological setting replete with ultramafic rocks."

### **Technical Discussion**

As previously announced a limited program of Versatile Time Domain Electromagnetic (VTEM<sup>TM</sup>) surveying has returned several high priority target areas that are supported by detailed geochemistry at the Laverton Downs Project (Figure 1).

Electromagnetic geophysics are an excellent discovery tool for massive sulphide metal deposits, including copper and nickel, and are routinely used in WA with success. Alongside the VTEM<sup>TM</sup> survey the Company has located and resampled 450 shallow, legacy drill holes.

Nickel sulphide fertile komatiite rocks were interpreted from geochemistry as part of the CSA Global project evaluation. Additional sampling of legacy drilling bottom of hole spoils has expanded the geochemistry footprint and added to the existing interpretation. Recent results from the GSWA 'Barcoding' project have further refined the interpretation of Archean komatiite rocks and provided an explanation for the high chrome values seen in some of these rocks.

The Barcoding project has provided evidence for magma fractionation through the growth of chromite, and this can be seen in the known ultramafic rocks on site (Figure 1, Chromite UM). Fractionation of primary







magmas may contribute to enhancing the metal content of a magma and assist in the formation of economic mineralisation.

The VTEM<sup>TM</sup> survey reported identified six modelled conductive plates forming three separate high priority target areas (Figure 1). If drilling intersects massive sulphide mineralisation, then additional EM surveying and data processing will be warranted.

The Program is approved for up to 15 holes to depths of 450 metres into the highly conductive sulphide targets previously announced in April. Stage 1 of the program comprises 3 - 4 holes with planned depths of 300 metres.

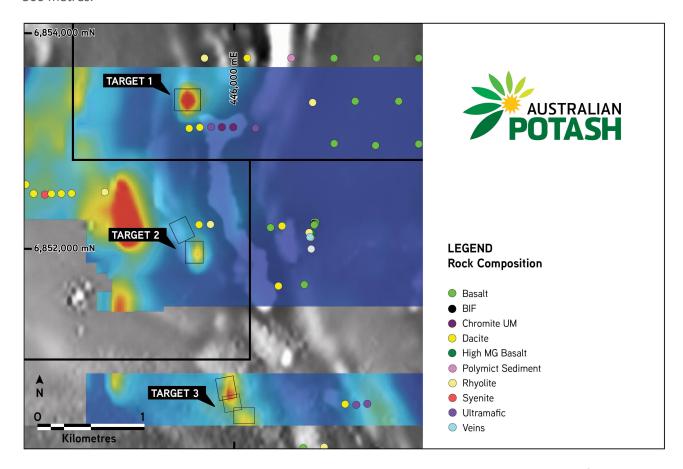


Figure 1: Laverton Downs Project diamond drill target modelled conductor plates, with geochemically defined rock compositions. Background image is a combination of the black and white first vertical derivative magnetic data overlain with the VTEM dZ45 HDV processed image.

## **Nickel Prospectivity**

Regional geology, including known nickel deposits, highlight the potential for nickel sulphide mineralisation within the LDP (Figure 2).

A project evaluation by CSA Global utilised all available data including regional datasets, detailed magnetic data, and high precision geochemical assay results derived from bottom of hole drill samples. Targeting criteria for Kambalda-style nickel deposits is based on identifying nickel bearing ultramafic rocks in contact with sulphur rich sediments. The geochemical results confirm that the high MgO ultramafic komatiite rock type is present within the LDP, and also indicates the presence of magmatic nickel sulphides through the relationship of Fe vs S.





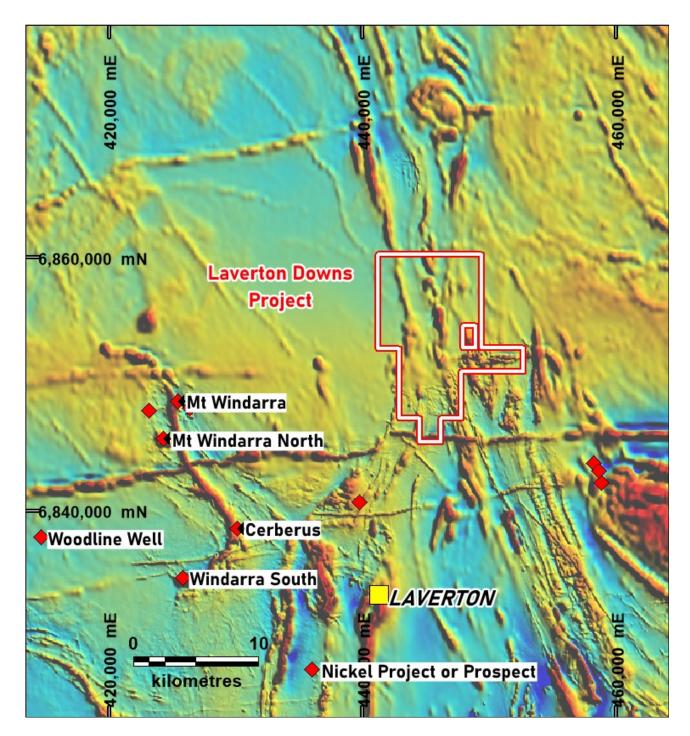


Figure 2: Regional location of the Laverton Downs Project showing known nickel sulphide deposits. Regional RTP magnetic image as background.

This release was authorised by the Board of the Company.

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#### **About Australian Potash Limited**

APC holds a 100% interest in the Lake Wells Sulphate of Potash (LSOP), located approximately 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields. The Company is finalising predevelopment plans for commencement of construction. First production from the LSOP is scheduled mid-2023.

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.<sup>ii</sup>

APC holds a 30% free-carried interest in the **Lake Wells Gold Project**, located 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields.<sup>iii</sup>

Please visit <u>www.australianpotash.com.au</u> 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 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 Person Statements**

The information in this announcement that relates to Geophysical Exploration Results complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Dr Jayson Meyers, a consultant to Australian Potash Limited and a Director of Resource Potentials Pty Ltd. Dr Meyers is a Fellow of the Australasian Institute of Geoscientists. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a





Competent Person as defined in the 2012 Edition of the JORC Code. Dr Meyers consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. Dr Meyers does not hold securities in the Company.

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.

Refer to ASX Announcement 20 April 2021 'FEED positions K-Brite at the Premium End of SOP Market'. 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 20 April 2021 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 20 April 2021 announcement continue to apply and have not materially changed.

<sup>&</sup>lt;sup>II</sup> Refer to ASX Announcement 9 April 2021 'Massive Nickel Sulphide Targets Identified at Laverton Downs'. 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 9 April 2021 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 9 April 2021 announcement continue to apply and have not materially changed.

Refer to ASX Announcement 8 April 2021 'SBM Acquires 70% Interest in Lake Wells Gold Project'. 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 8 April 2021 announcement, and 2. State that the material assumptions and technical parameters underpinning the estimates in the 8 April 2021 announcement continue to apply and have not materially changed.