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ALLIANCE RESOURCES LTD

ASX: AGS

ABN: 38 063 293 336

Market Cap: \$31.2M @ \$0.15

Shares on issue: 208,017,134

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**Projects:**

**Wilcherry, SA (100%):** gold,  
iron, base metals, graphite

**Nepean, WA (100%):**

gold-nickel

**Kalgoorlie Sth, WA (100%):**

gold-nickel

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## ALLIANCE SECURES \$300,000 CO-FUNDING FROM SOUTH AUSTRALIAN GOVERNMENT FOR WEEDNANNA RESEARCH

Alliance Resources Ltd (Alliance) is pleased to announce that the Company has been granted \$300,000 in co-funding by the South Australian Government under Phase 2 of the Sth Australian Government Accelerated Discovery Initiative (ADI). The co-funding will pay for 50% of the cost of drilling diamond core holes at the Weednanna Au-Fe Deposit and for research activities undertaken by the CSIRO for the Company.

The ADI embraces innovation, collaboration and capacity building to advance exploration in South Australia. It aims to make a major contribution to South Australia's *Growth State* target through supporting the potential discovery of new mineral and groundwater resources, while delivering a number of other economic and social benefits including; Aboriginal employment opportunities, data to support development of rural communities, and development and application of innovative exploration technologies.

Alliance's proposal, titled "An exploration model for gold in the southern Gawler Craton" will build upon collaborative research currently being completed with the CSIRO.

The project will combine new diamond drill core with novel multi-scale analytical techniques developed by the CSIRO to study the chemistry, structures and mineralogy associated with the gold leading to a new genetic deposit model which has the potential to connect iron skarn with present-day iron oxide-copper-gold (IOCG) formation models.

Microscale chemical imaging will highlight the gold deportment in newly drilled core and how it relates to different host rocks, hydrothermal and/or supergene alteration minerals. These element maps will also highlight minerals that can be dated to place the gold mineralisation within the complex geological history of this part of South Australia.

By understanding the controls on gold deposition at Weednanna, and their chemical and mineralogical signatures, CSIRO will provide a framework to predict the key aspects of similar gold mineral systems in the Gawler Craton enabling targeted exploration.

This proposal aligns with and extends a current research collaboration between Alliance, CSIRO, and Australian university researchers. The current project investigates the timing of igneous activity adjacent to the deposit, the deposit-scale mineralogy and how it can be combined with automated logging techniques using multi-element geochemical data from rock chips.

This project underlines the commitment of Alliance as a proactive mineral exploration company in the Gawler Craton, using innovative research techniques to improve future exploration and mining success.

Alliance's Managing Director, Mr Kevin Malaxos, commented; *"We are delighted to receive the support of the South Australian Government to complete research activities on the Weednanna Deposit. This work will benefit both Alliance and South Australia, by building a better understanding of the processes and timing of gold mineralisation at Weednanna. We expect that this knowledge will assist Alliance prioritise gold targets resulting in more cost-efficient exploration for gold in the greater Weednanna area and other encouraging new gold exploration sites across the region. Outcomes of this research project will benefit the state of South Australia by adding knowledge to the mineral systems models in the southern Gawler Craton thereby de-risking exploration across the region. The diamond core generated will be submitted to the South Australia Drill Core Reference Library for public viewing and the data acquired using CSIRO's state-of-the-art research facilities will feed into developing machine learning technologies being developed to characterise host rocks and identify exploration tools."*

Diamond drilling will commence in early July, with the outcomes of the research project expected to be submitted to the South Australian Government in Q2 2022.

## **Research Project**

Six diamond holes for ~1,500 metres, will be drilled at the Weednanna Au-Fe Deposit to provide drill core samples for research by the CSIRO (Figures 1 to 3). Five of these holes are designed to intersect known high-grade gold mineralisation at Shoots 1, 3, 4 and 5E and the sixth hole is designed to test the host rocks, potential mineralising structures, and granite intrusions at depth beneath the deposit.

All drill-core will be cut and analysed for gold and a broad range of elements before being sent to the CSIRO's facility for drill-core characterisation, specifically the Maia Mapper micro-X-ray fluorescence imaging instrument. Maia Mapper provides a detailed trace element image within each mineral grain while retaining the petrographic and spatial contexts by imaging an entire 0.5 metre long core section. The technology is relatively new but has been used on a number of resource projects including in Cu, Au, base metals and Ni, successfully adding value on top of conventional imaging techniques. Specifically, much of the micro-analysis completed in traditional research focuses on individual mineral grains or small mm<sup>2</sup>-cm<sup>2</sup> areas due to time or cost limitations. In contrast, the Maia Mapper provides images of up 0.5 metres of solid drill core and at the spatial resolution which is only reached by conventional laser or ion-beam techniques on the micro-scale. In essence, the Maia Mapper technique ensures that the high-resolution work is representative of the entire core sample and thus provides the basis for relevant and robust data-to-knowledge driven understanding of mineralisation.

This work will support ongoing research to date intrusions adjacent to the Weednanna Deposit and provide a broad outline of the alteration. The research project will locate minerals that can be used to date the intrusive history and the hydrothermal alteration(s) associated with gold and iron mineralisation. This will test whether the gold and iron enrichments are of the same age, and how they relate to the possibility of generations of intrusions and metamorphic events in the region.

All outcomes will be documented and reported to the Department for Energy and Mining (DEM) in accordance with the ADI Investment Guidelines and the DEM Mineral Exploration Reporting Guidelines. Upon completion of the research project all drill core will be offered to the Adelaide Drill Core Reference Library. It is expected that a minimum of ½ core will be retained for all drill holes.

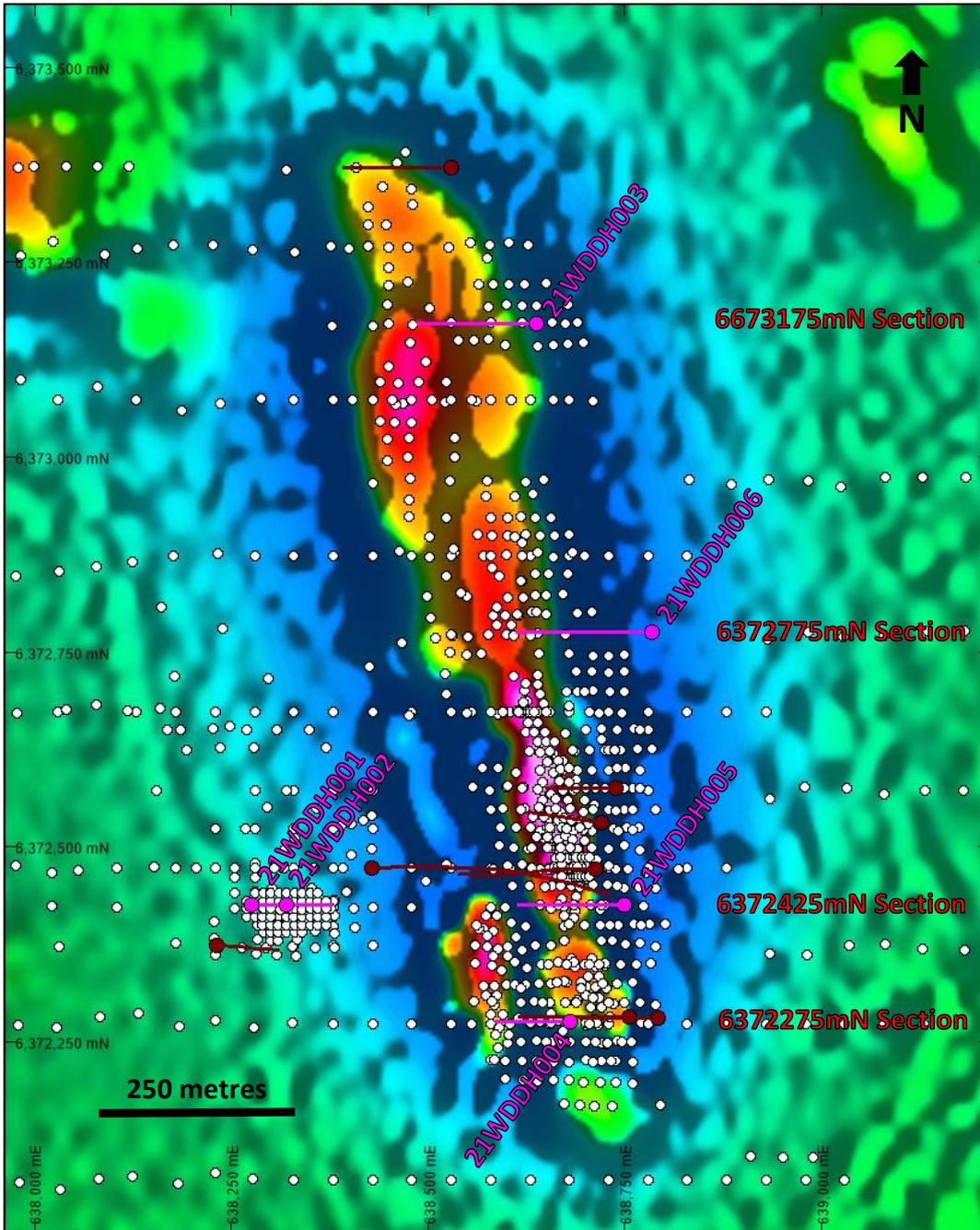


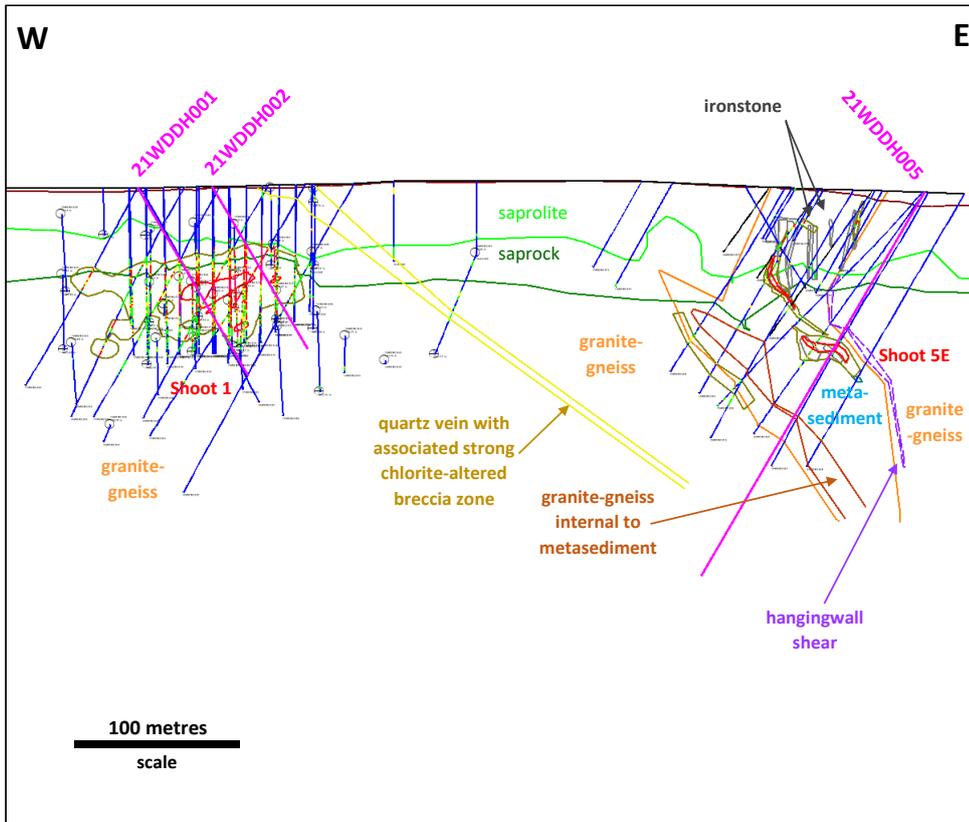
Figure 1. Weednanna: Location of ADI diamond holes relative to historic drill holes on a RTP 1VD aeromagnetic image

*Legend-*

*White dots: historic drill hole collar locations*

*Magenta dots and lines: ADI diamond hole collar locations with drill hole trace*

*Brown dots and lines: diamond holes currently held at the Adelaide Drill Core Reference Library*



**Figure 2.** Weednanna 6372425mN Section representing drilling into mineralized structures (refer to Figure 1 for cross-section location)

*Legend-*

Weathering

Brown: base of transported cover

Light green: base of saprolite

Dark green: base of saprock

Geology

Orange: meta-sediment / granite-gneiss contact

Dark orange: granite-gneiss internal to meta-sediment

Pink: k-spar rich granite-gneiss

Grey: ironstone and magnetite skarn containing > 55% Fe

Turquoise: amphibolite

Yellow: quartz vein with adjacent strong chlorite-altered breccia zone

Purple dashed line: biotite-rich hangingwall shear

Drill Hole Traces

Magenta lines: ADI diamond holes

Black segments: not assayed for gold

Blue segments: <0.1 g/t Au

Green segments: 0.1 – 0.5 g/t Au

Yellow segments: 0.5 – 1.0 g/t Au

Red segments: 1.0 – 5.0 g/t Au

Magenta segments: >5.0 g/t Au

Gold Contours

Gold contour: >0.2 g/t Au

Red contour: > 2.5 g/t Au

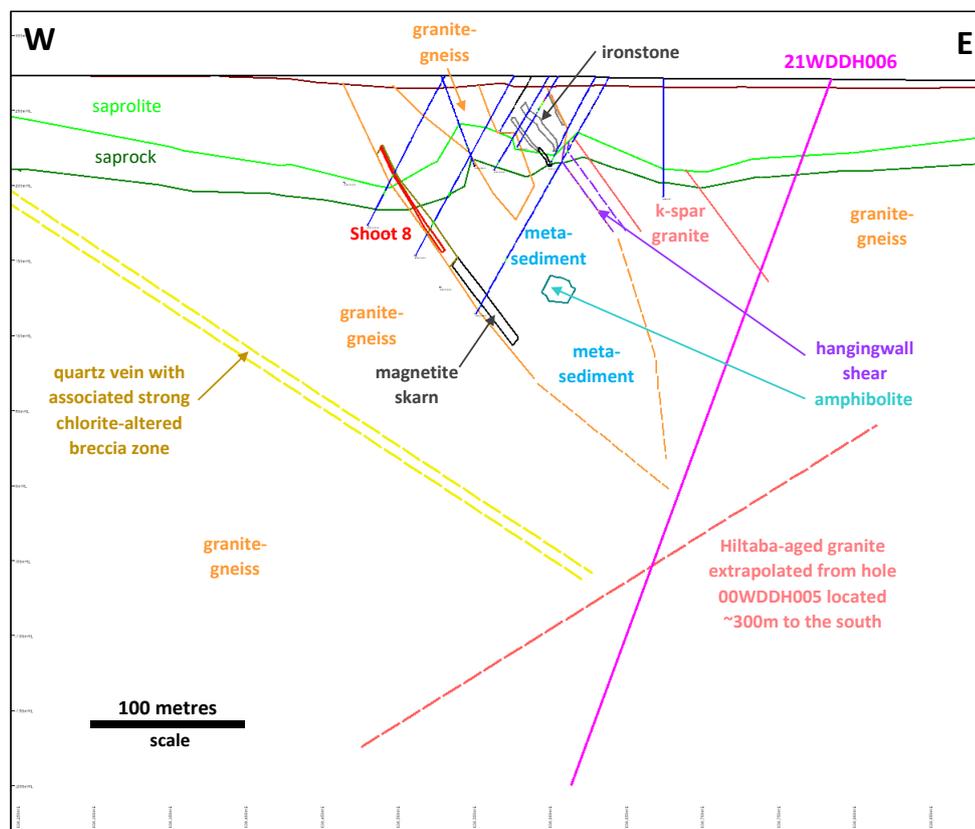


Figure 3. Weednanna 6372775mN Section testing deep controlling structures and host rocks below the deposit. (refer to Figure 1 for cross-section location, refer to Figure 2 for legend)

This announcement has been authorised for release by the Board.

**Kevin Malaxos**  
Managing Director

### **About Alliance**

Alliance Resources Ltd is an Australian gold and base metals exploration company with 100% owned projects in South Australia and Western Australia.

The Company's flagship project is the Wilcherry Project, located within the southern part of the Gawler Craton, approximately 45 km north of the township of Kimba, South Australia.

The Mineral Resource estimate for the Weednanna Gold Deposit, part of the Wilcherry Project, is 1.106 Mt grading 4.3 g/t gold for 152,000 oz gold (classified 85% Measured & Indicated and 15% Inferred). Refer to ASX announcement dated 9 November 2020 for details concerning the Mineral Resource and the Competent Persons consent. The maiden iron resource for the Weednanna project was announced on 19 November 2020 and totals 1.15 Mt grading 59.4% Fe (classified as 65% Measured & Indicated and 35% Inferred). Refer to ASX announcement dated 19 November 2020 for details concerning the Mineral Resource and the Competent Persons consent. There is potential to increase the size of these Mineral Resources with further drilling.

Alliance is not aware of any new information or data that materially affects the information included in the above-mentioned announcements. All material assumptions and technical parameters underpinning the above-mentioned Mineral Resource estimates continue to apply and have not materially changed.

An independent scoping study reported a positive outcome and supports a new, 250,000 tpa gold processing plant at Weednanna. Total indicative capital cost is approximately \$44 million. Refer to ASX announcement dated 18 April 2019 for details concerning the scoping study including the above-mentioned financial information. All material assumptions underpinning the above-mentioned financial information continue to apply and have not materially changed.

Detailed Engineering design and Mine design studies have commenced to produce Detailed Feasibility Study (DFS) level designs and cost estimates for the gold processing plant and proposed open pit and underground mining operations.

Alliance also owns an 80 person camp located on leased land in the township of Kimba which will be utilised during construction and production.

## **Competent Person**

The information in this report that relates to the Exploration Results is based on information compiled by Mr Anthony Gray. Mr Gray is a Member of the Australian Institute of Geoscientists and is an employee of Alliance Resources Ltd. Mr Gray has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gray consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.