

31 July 2024

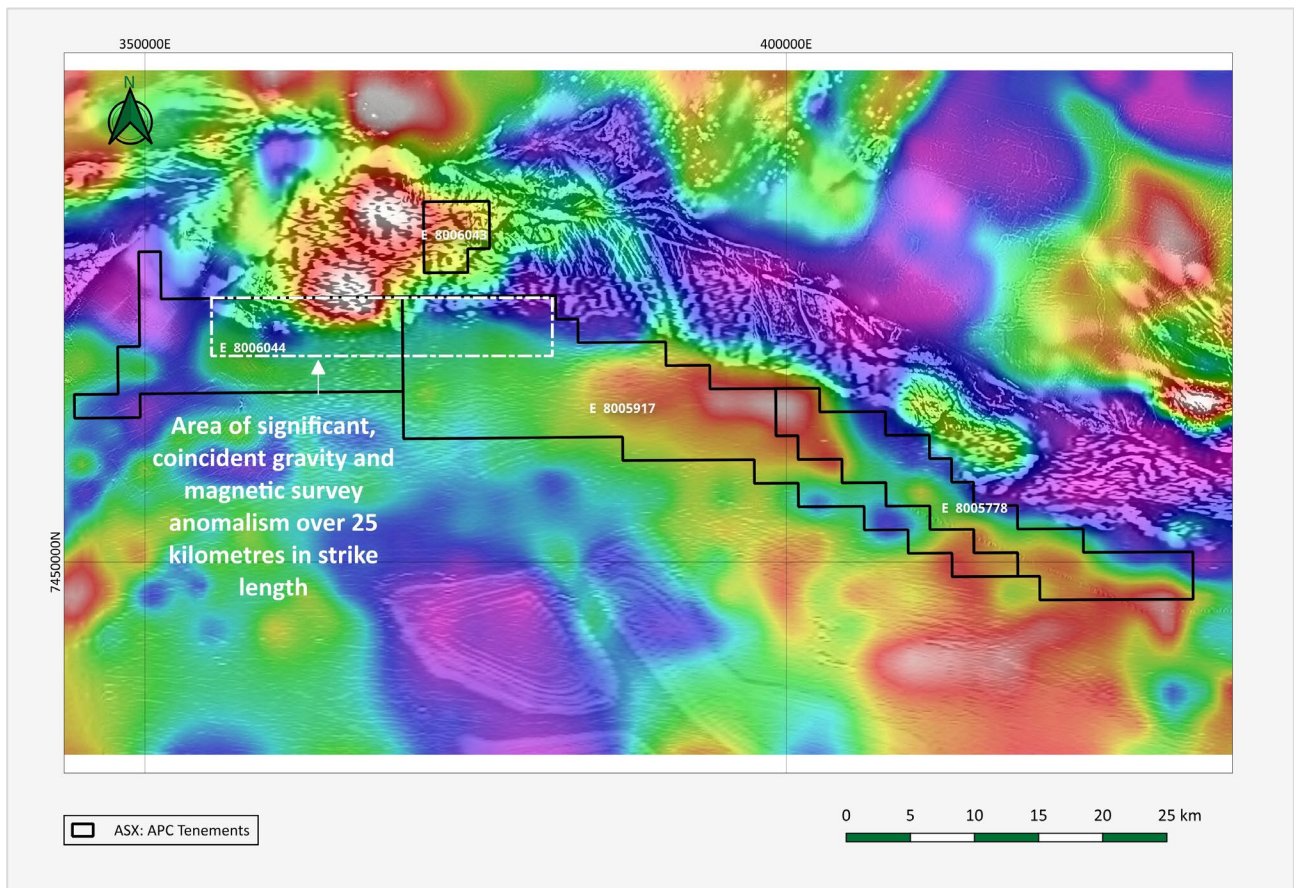
## Carbonatite Exploration Strategy

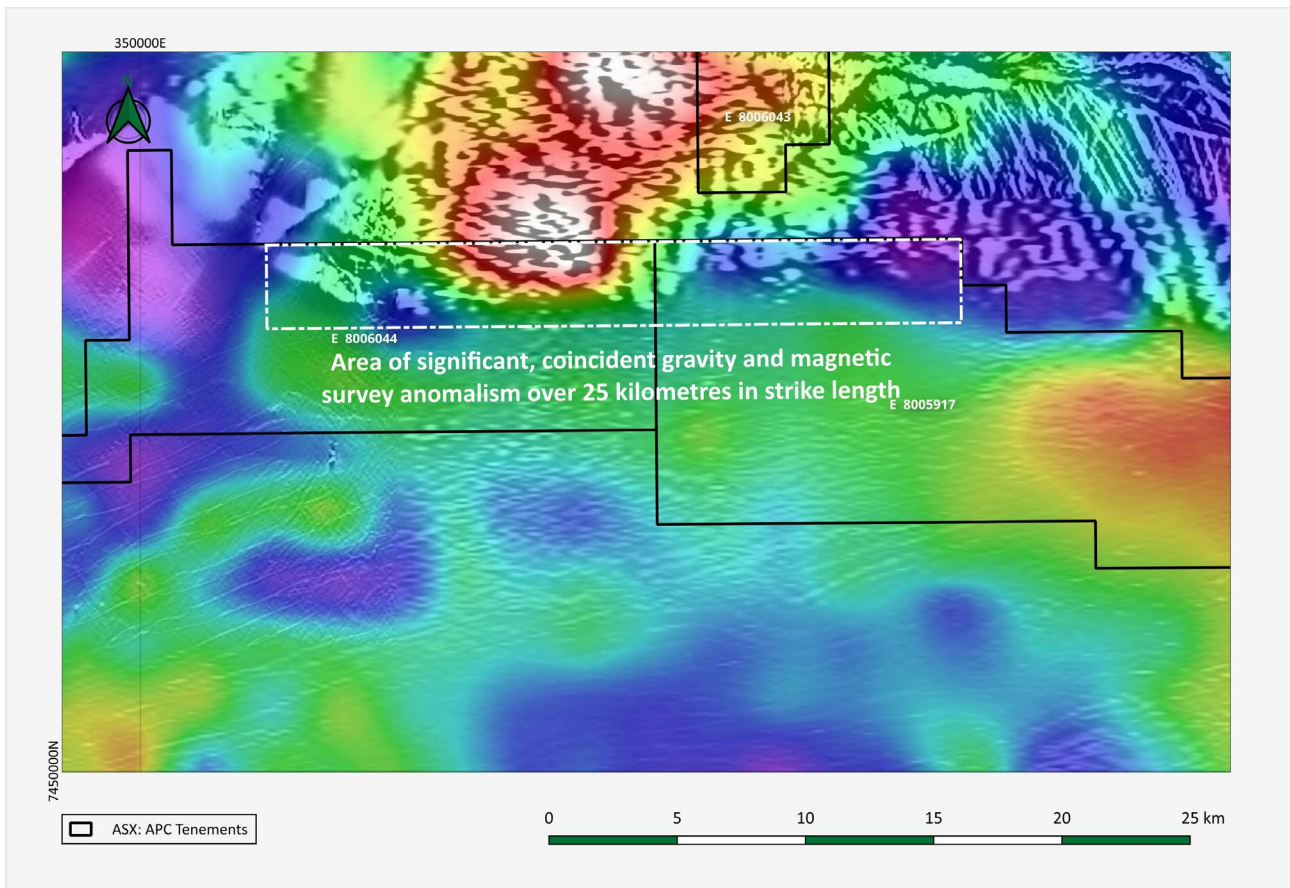
### Nexus Project, West Arunta

Australian Potash Limited (**ASX: APC** or the **Company**) is pleased to provide the following preliminary review of exploration targeting at its 100% owned Nexus Project (**Project**) in the highly prospective carbonatite - niobium rich West Arunta region of Western Australia. Successful exploration for niobium rich carbonatite intrusions across the West Arunta has been led by modelling of gravity and magnetic survey anomalism, with carbonatites typically comprising dense rocks and minerals which can generate gravity and magnetic 'high's'.

#### Highlights

- Processing and interpretation of open-file magnetic, radiometric and elevation data, as well as surface geology maps suggest Neoproterozoic host rocks favourable for niobium-REE carbonatite and iron-oxide-copper-gold (IOCG) mineralisation in the northern portion of the Project
- Broad spaced gravity data indicates anomaly highs coinciding with prospective Neoproterozoic bedrock: gravity anomalies are typical of WA1's Luni and Encounter Resources' Emily and Crean deposits
- On-ground rock-chip, geochemical sampling and gravity and magnetic surveying to effectively identify drill target sites for niobium-REE carbonatites and IOCG deposits now planned on completion of pending Land Access agreement





Figures 1 & 2: APC's West Arunta Nexus Project tenements over a filtered gravity colour image on top of a filtered magnetic image, highlighting regional gravity anomaly highs coinciding with an outcropping to sub-cropping belt of prospective Neoproterozoic bedrock over a 25-kilometre strike length. This area will be the initial focus for non-invasive on ground exploration following successful agreement with the traditional owners, the Kiwirrkurra People, for Land Access.

## Location

The Nexus Project sits in the West Arunta region of Western Australia, approximately 630kms to the west of Alice Springs. Located 80kms south-west of WA1 Resources Ltd (**ASX: WA1**) Luni Niobium deposit and 80kms south of Encounter Resources Ltd (**ASX: ENR**) Crean & Emily carbonatite-Niobium deposits and proximate to Rincon Resources Ltd (**ASX: RCR**) Avalon and Pokali prospects. The Nexus Project covers an area of 660km<sup>2,1</sup>.

## Gravity Anomalism

Analysis of widely spaced gravity data indicates the presence of regional gravity anomaly highs. These anomalies are associated with an outcropping to sub-cropping belt of promising Neoproterozoic bedrock.

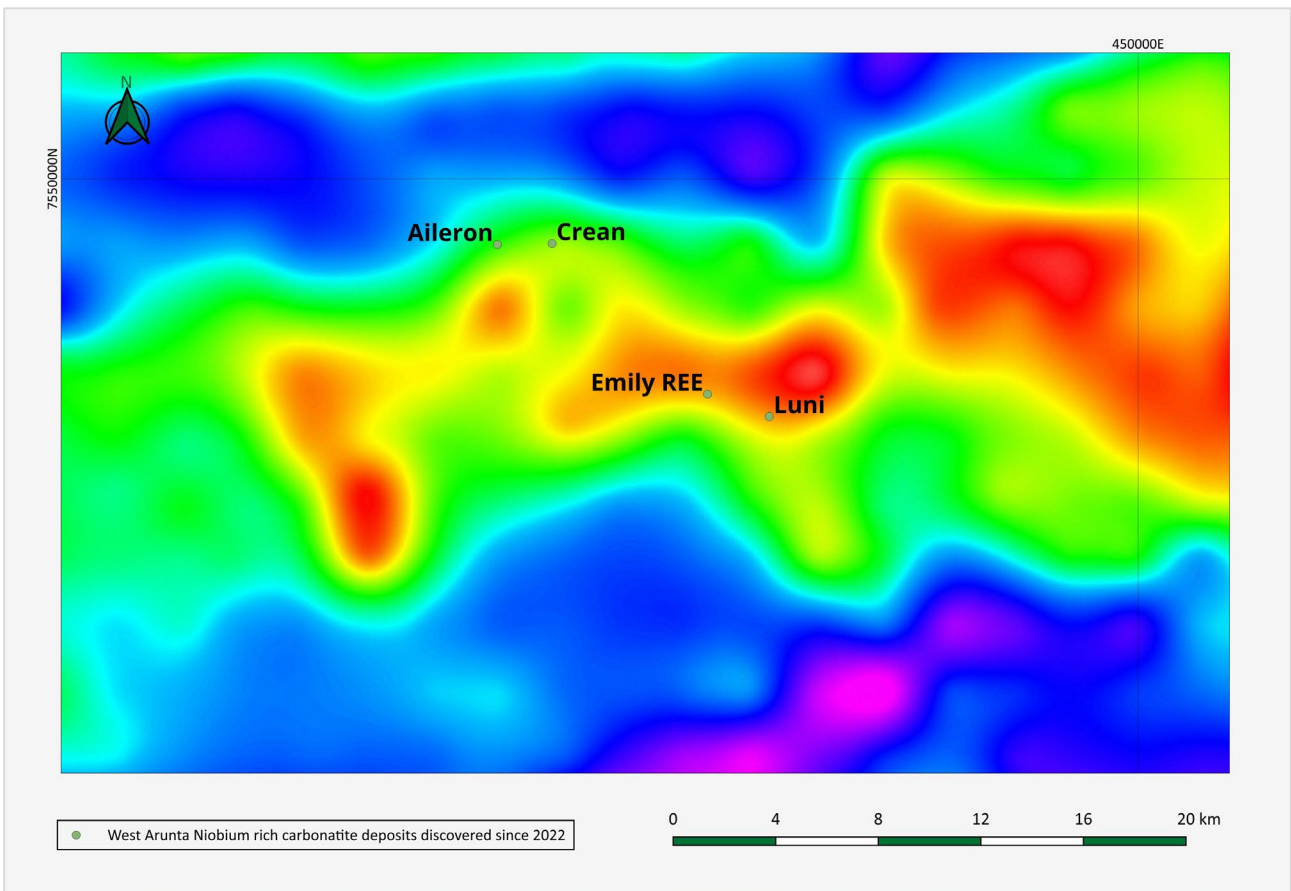
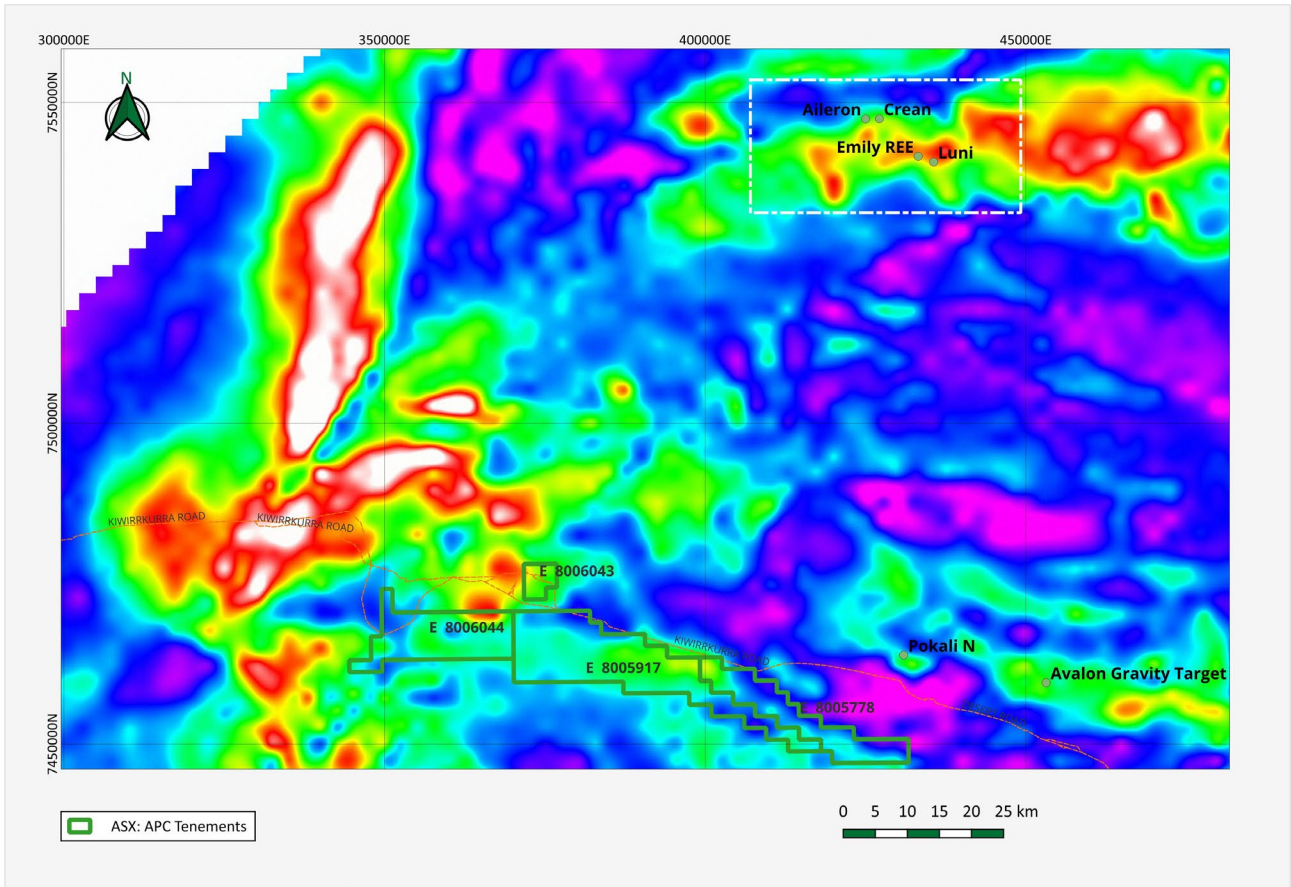
The accurate targeting and subsequent discovery of the Luni Niobium deposit (*Inferred MRE 200Mt at 1.0% Nb<sub>2</sub>O<sub>5</sub> including high-grade 53Mt at 2.1% Nb<sub>2</sub>O<sub>5</sub><sup>2</sup>*) followed, among other things, ground gravity surveys conducted using 400m x 400m station spacing data points<sup>3</sup>.

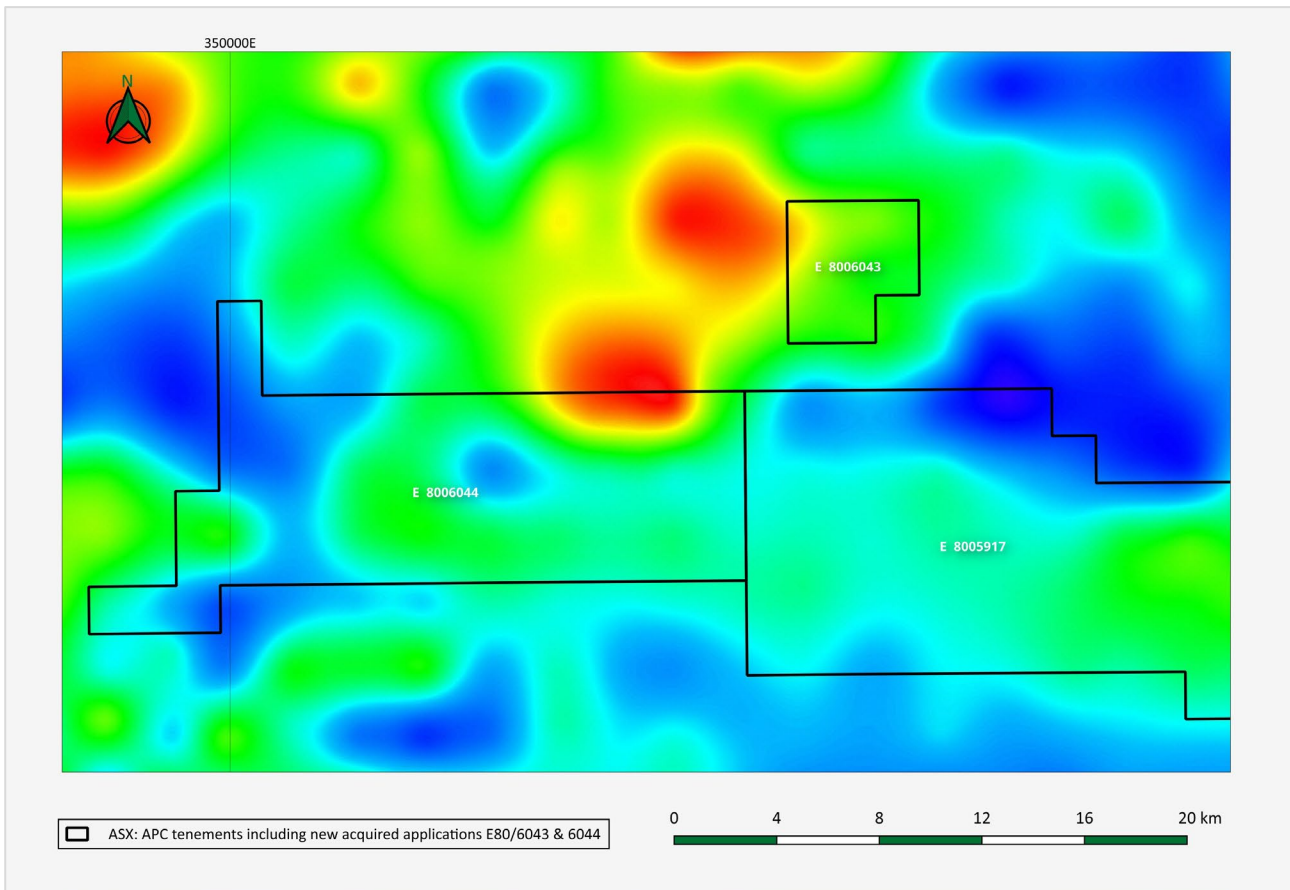
Open-file survey data collected using station spacing of 2.5km x 2.5km did not accurately identify the Luni or P2 carbonatite intrusions.

<sup>1</sup> On grant of EL application 80/6043 & 80/6044 per ASX announcement 24 July 2024 'West Arunta Acquisition'

<sup>2</sup> WA1 Resources Ltd ASX Announcement 1 July 2024 'West Arunta Project – Luni MRE'

<sup>3</sup> WA1 Resources Ltd ASX Announcement 16 November 2022 'West Arunta Project – Discovery of a Second Niobium-REE Mineralised Carbonatite System at Luni.'





Figures 3, 4 & 5: APC's West Arunta Nexus Project tenements relative to WA1 Resources Ltd's Luni deposit, Encounter Resources Ltd's Aileron, Crean and Emily deposits and Rincon Resources Ltd's Pokali and Avalon targets over regional scale 2.5km x 2.5km gravity data

This understanding of the discovery pathway for REE-carbonatite mineralisation in the West Arunta will be useful to the Company on concluding the Land Access agreement with the traditional owners, the Kiwirrkurra People, and suggests low impact mapping, rock chipping and ground gravity surveying as initial work programs.

At a minimum, on-ground gravity surveys on 400m x 400m grid spacings, across the initial area of interest as well as comprehensive rock chipping, soil sampling and geological mapping will be planned.

### Magnetic, Radiometric and Elevation Data Review

Processing and interpretation of open-file magnetic, radiometric and elevation survey data as well as state-wide surface geology maps suggest sub-crop/outcrop of Neoproterozoic hosts rocks favourable for niobium-REE carbonatite and IOCG mineralisation in the northern portion of tenements E80/6044 and E80/5917. A thorough review of historical exploration in the area has commenced.

This outcropping to shallow bedrock below young sedimentary cover further supports an initial on-the-ground geological reconnaissance and mapping, rock chip and soil geochemical sampling program to effectively identify target zones for niobium-REE carbonatites, IOCG deposits and other styles of mineralisation. In addition, follow-up detailed ground gravity and drone magnetic geophysical surveying is anticipated ahead of any proposed drilling program.

Any anticipated on-the-ground exploration work would be preceded by close engagement and consultation with the traditional owners and would have to be facilitated by the Land Access Agreement discussed here.

## Land Access Agreement for Prospecting and Exploration

The Company has been advised that it may be extended an invitation to present to the traditional owners of the country in the West Arunta, the Kiwirrkurra people, at the planned September 2024 meeting of the Tjamu Tjamu (Aboriginal Corporation) RNTBC (**Tjamu Tjamu**). On the assumption that APC and Tjamu Tjamu are able to mutually agree on the terms of access it is anticipated that a binding agreement will be executed shortly after the September meeting.

This release was authorised by the Managing Director & CEO of the Company.

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## About APC

APC holds a 100% interest in the West Arunta Nexus Project (Nexus), located approximately 1,000kms east-southeast of Port Hedland in Western Australian. Comprising of two exploration licenses across an area of 660km<sup>2</sup> Nexus is an early stage exploration opportunity surrounded by globally significant and emerging rare earth and critical mineral element deposits. The West Arunta is WA's most exciting exploration frontier with strong potential to hold sedimentary, IOCG, SEDEX & carbonatite hosted mineral deposits.

APC holds a 100% interest in the **Lake Wells Gold Project (LWGP)**, located approximately 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields. Forming part of the project areas on listing the LWGP was held under an earn-in joint-venture by a third-party between 2018 – 2022. The opportunity to consolidate the data set generated during the JV with existing data has generated a new exploration model with several untested, highly prospective targets.

APC holds a 100% interest in the **Laverton Downs Project (LDP)**, located 5kms north of Laverton, in Western Australia's Eastern Goldfields. The LDP is prospective for nickel and other base metal sulphides and is located in the prominent gold bearing Lancefield sequence trending north of Laverton town site.

Please visit [www.australianpotash.com.au](http://www.australianpotash.com.au) for more information.

**Competent Person Statement:** The information in this announcement that relates to Geophysical Results is based on information compiled by Sharna Riley who is a Fellow of the Australian Institute of Geoscientists, is employed by Resource Potentials Pty Ltd, and an independent consultant to the Company. Miss Riley has sufficient experience which is relevant to the style of mineralisation and deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Miss Riley consents to the inclusion in the announcement of the matters based on this information in the form and context in which it appears.

**Cautionary Note Regarding Forward-Looking Statements and information:** Certain of the statements and information in this announcement that are not historical facts are forward-looking statements. Forward-looking statements are statements that are not historical and consist primarily of projections — statements regarding future plans, expectations and developments. Words such as "expects", "intends", "plans", "may", "could", "potential", "should", "anticipates", "likely", "believes" and words of similar import tend to identify forward-looking statements. All forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied, including, without limitation, business integration risks; uncertainty of production, development

plans and cost estimates, commodity price fluctuations; political or economic instability and regulatory changes; currency fluctuations, the state of the capital markets, uncertainty in the measurement of mineral reserves and resource estimates, the Company's ability to attract and retain qualified personnel and management, potential labour unrest, reclamation and closure requirements for mineral properties; unpredictable risks and hazards related to the development and operation of a mine or mineral property that are beyond the Company's control, the availability of capital to fund all of the Company's projects and other risks and uncertainties identified under the heading "Risk Factors" in the Company's continuous disclosure documents filed on the ASX. You are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. The Company cannot assure you that actual events, performance or results will be consistent with these forward-looking statements, and management's assumptions may prove to be incorrect. The Company's forward-looking statements reflect current expectations regarding future events and operating performance and speak only as of the date hereof and the Company does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change other than as required by applicable law. For the reasons set forth above, you should not place undue reliance on forward-looking statements.

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• The GDA94, MGA Zone 52 co-ordinate system was used for representing locations and data in this report.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Existing regional ground gravity data is based on 2.5km x 2.5km spacings and airborne magnetic data has survey line spacing of 400m and 100m.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>• Not applicable</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Audits or reviews</i>	<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>• Regional interpretation of publicly available gravity and magnetic data has been quality controlled by external consultants.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• E80/5778</li> <li>• E80/5917</li> <li>• E80/6043 (Application)</li> <li>• E80/6044 (Application)</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Balance reporting</i>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>