

ASX ANNOUNCEMENT

ASX: APC



9 April 2021

Massive Nickel Sulphide Targets Identified at Laverton Downs Project

- VTEM™ survey returns high priority massive nickel sulphide targets
- Geochemistry supports nickel targets with fertile ultramafic rock identified
- Legacy drill sampling aids gold and nickel exploration targeting
- Initial high-level drill program for gold and nickel sulphide targets planned

Australian Potash Limited (**ASX: APC** or the **Company**) is pleased to advise that ongoing work at the Company's 100% owned Laverton Downs Project (LDP) has returned compelling targets with Kambalda-style massive nickel sulphide potential. A limited program of Versatile Time Domain Electromagnetic (VTEM™) surveying has returned six well defined conductive plates interpreted to be indicative of massive sulphides. The geological setting and initial geochemical analysis support the potential for these plates to represent nickel sulphides. Three high priority target areas have been defined and plans for drill testing are being advanced.

Electromagnetic geophysics is an excellent discovery tool for massive sulphide metal deposits, including copper and nickel, and is routinely used in WA with success. Alongside the VTEM™ survey the Company has located and resampled 450 legacy drill holes that will extend the geochemical model over the project area, with results and analysis from this sampling program pending.

Australian Potash Managing Director and CEO, Matt Shackleton said, "The strength of the VTEM™ targets generated from the first time use of this technology at Laverton Downs is highly encouraging.

"We are following a similar pathway to creating value as we did at the Lake Wells Gold Project where initial low-cost exploration by APC defined targets which attracted a major partner to fund on-going work. Beginning with high-precision geochemical analysis and interpretation by external consultancy CSA Global, we then opportunistically flew a limited VTEM™ program. The strength of the EM response at these compelling conductor targets suggests we go directly to a drill program targeting massive nickel sulphide mineralisation.

"With both gold and nickel sulphide targets, APC's exploration team are planning a first pass drill program to create further value in this strategically located asset."

Technical Discussion

The VTEM™ program was extremely successful with several very strong EM anomalies identified that show all the hallmarks of massive sulphide mineralisation consistent with the Kambalda-style komatiite-hosted massive nickel sulphide deposit model. Kambalda-style deposits are characterised by massive pyrrhotite-pentlandite sulphide mineralisation that is highly conductive and magnetic, meaning they are amenable to detection with electro-magnetic geophysics.

Nickel sulphide fertile komatiite rocks have been confirmed with geochemistry as part of the CSA Global project evaluation. The combination of VTEM™ and geochemical analysis provides very robust targets for massive sulphide mineralisation, with drill testing the next priority.

The VTEM™ survey reported here identifies six modelled conductive plates forming three separate high priority target areas (Figure 2).

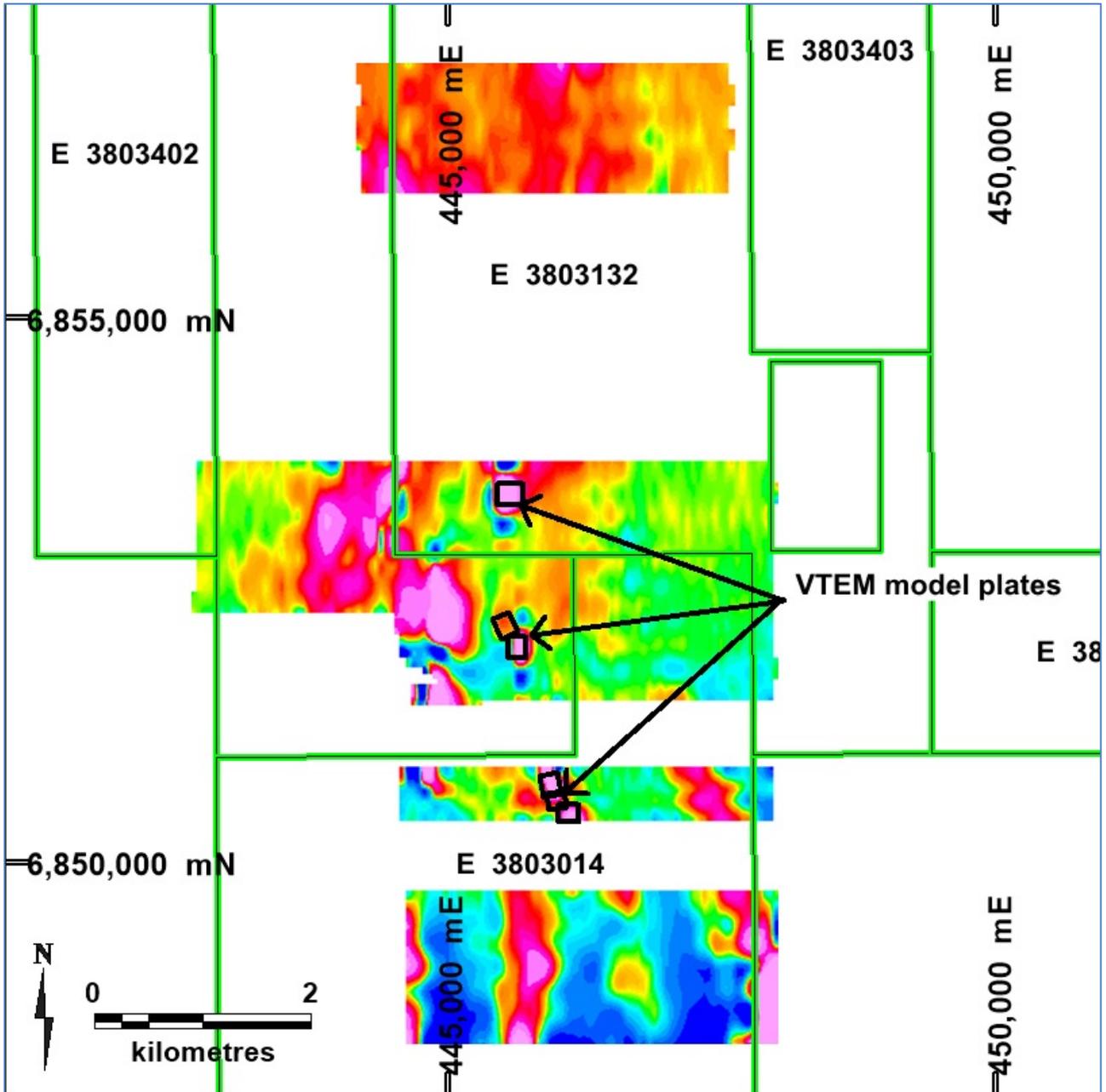


Figure 1: Laverton Downs Project initial VTEM™ survey extent with modelled conductor plates. VTEM™ image is dZ45 HDV, where the pink colours are conductive.

VTEM™ Survey

In November 2020 a small portion of the project area was flown with a VTEM™ survey (Figure 1). Covering 100 linear kilometres at 100 metre line spacing, with 50 metre infill lines over one target, the program was designed to detect massive nickel sulphide mineralisation within highly prospective rocks identified in the CSA Global project evaluation. VTEM™ is an airborne electromagnetic geophysical technique that is designed as a first pass massive sulphide detecting method (Figure 2).



Figure 2: Helicopter-borne VTEM™ survey in action over the Laverton Downs Project.

Priority targets generated from the VTEM™ survey are high amplitude, late-time, discrete anomalies. Conductor plate modelling suggests the conductor sources to be shallow, starting from approximately 100-150 metres below surface. Despite being considered shallow, these targets are deeper than the deepest

historical drill hole that targeted nickel and are consistent with the most recent mineralisation models for the style of deposit targeted.

Nickel Prospectivity

Regional geology, including known nickel deposits, highlight the potential for nickel sulphide mineralisation within the LDP (Figure 3).

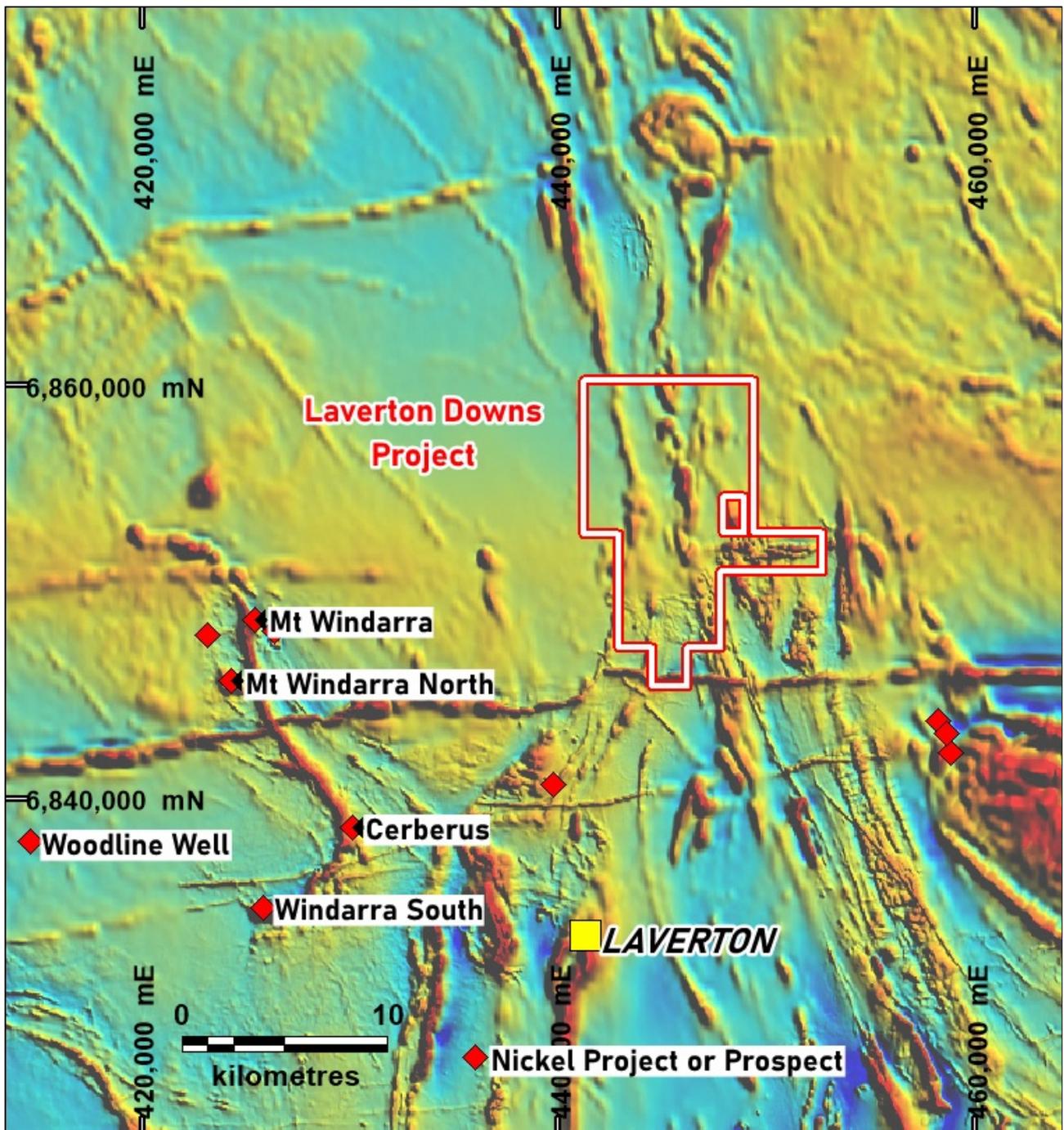


Figure 3: Regional location of the Laverton Downs Project showing known nickel sulphide deposits. Regional RTP magnetic image as background.

The initial project evaluation 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 confirms the presence of magmatic nickel sulphides through the relationship of Fe vs S.

This release was authorised by the Board of the Company.

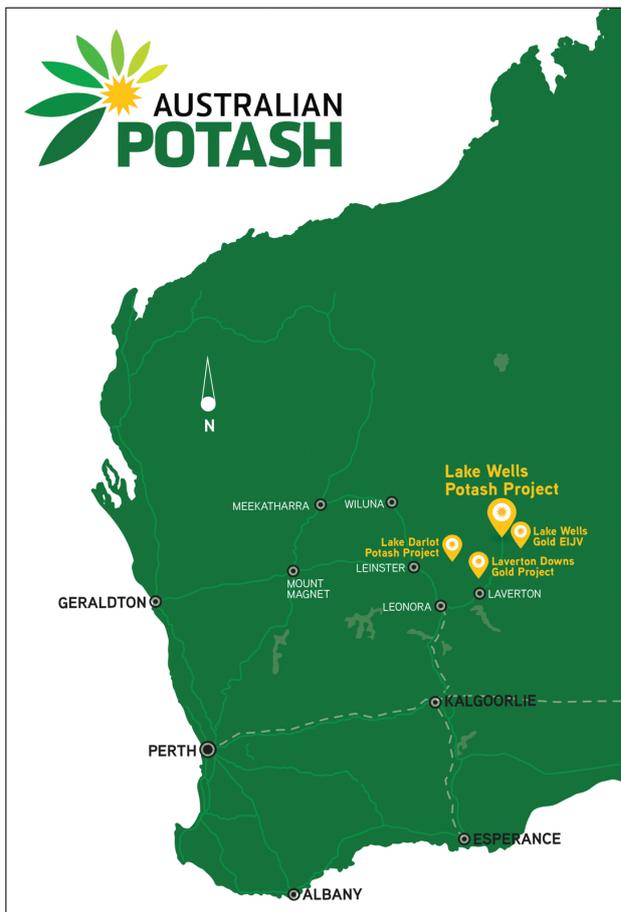
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“Using the sun and the wind, with high-penetration renewable power, Australian Potash is going to produce organically certified, environmentally sustainable green Sulphate of Potash that will go to the world’s most productive and high-value markets.”

MD & CEO
Matt Shackleton

About Australian Potash Limited

APC holds a 100% interest in the Lake Wells Sulphate of Potash project, located approximately 500kms northeast of Kalgoorlie, in Western Australia's Eastern Goldfields. The Lake Wells Sulphate of Potash project will be a long life, low capital and high margin SOP producer.



K-Brite is a registered trademark brand of Australian Potash Limited (ASX: APC), representing the premium Sulphate of Potash (SOP) to be produced from the Company's flagship Lake Wells Sulphate of Potash Project (LSOP). The LSOP's K-Brite has been certified by ECOCERT as suitable for use in international organic farming, in compliance with European regulations as allowed under European regulation EC 834/2007. The organic farming market is fast growing as the world moves to more sustainable farming practices.

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

Competent Persons' 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 Mr 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.

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.

LAVERTON DOWNS - 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"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The Heli-borne EM survey was conducted by UTS/Geotech utilising the VTEM Max™ system. • V`TEM™ MAX CONFIGURATION • Transmitter loop diameter – 35 m • Peak dipole moment – 700,000 NIA • Transmitter Pulse Width – 7 ms • transmitter frequency of 25Hz • VTEM max Receiver – Z,X, coils
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • No drilling undertaken
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • N/A
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the</i> 	<ul style="list-style-type: none"> • All survey data was collected by the geophysical contractor, checked daily and made available to Resource Potentials, our geophysical consultant for initial review

Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • N/A
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • N/A
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Survey data was checked by the survey contractor, and our consultant geophysicist. • Data was cross-referenced to aerial imagery with any anomalies flagged that may have been influenced by cultural effects (cattle grids, buildings, farm plant and machinery etc)
<i>Location of data points</i>	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • A GPS system utilising a Novatel GPS receiver provides in-flight navigation control. This system determines the absolute position of the helicopter in three dimensions. With as many as 11 GPS satellites monitored at any one time. Autonomous GPS is used for flight navigation.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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</i> 	<ul style="list-style-type: none"> • Lines were flown at a nominal 100m line spacing over the selected target ultramafic trends. • Infill 50m spaced lines were flown over one area of interest to refine/define anomalies in that target zone. • Flight line spacing used is considered

Criteria	JORC Code explanation	Commentary
	<p><i>applied.</i></p> <ul style="list-style-type: none"> • <i>Whether sample compositing has been applied.</i> 	<p>appropriate for the style of mineralisation being sought.</p>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Planning of Flight lines was done to fly close to perpendicular to the general strike of the ultramafic trends
<p><i>Sample security</i></p>	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Chain of Custody of data is controlled by the survey contractor with data stored in a password protected FTP site via Geotech Canada
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • QA/QC has been conducted on all data received along with peer review of the final data. • Internal review of data and products conducted by geophysical consultant Resource Potentials.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<p><i>Mineral tenement and land tenure status</i></p>	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Tenements subject to the survey included all or part of, E38/2724, E38/3014, E38/3132 • The company is not aware of any material issues that could affect security of tenure, nor access.
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • There have been numerous historical holders of the project area which covers over ~94 square kilometers. • Exploration has been conducted and reported on by numerous companies over the past 60+ years and includes but not limited to: Goldphyre Resources Ltd, Goldfields Australia Ltd, Australian Potash, Kennecott Exp Aust Pty Ltd, Aurion Gold, Ezzo Australia Ltd.
<p><i>Geology</i></p>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The tenement package covers Archaean greenstones within the highly prospective Laverton and Burtville Terranes of the Yilgarn Craton. Rocks within the tenement package are considered prospective for gold and nickel sulphide mineralisation.

Criteria	JORC Code explanation	Commentary
<i>Drill hole information</i>	<ul style="list-style-type: none"> • 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"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • 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. 	<ul style="list-style-type: none"> • N/A
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • 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. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • N/A
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • 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'). 	<ul style="list-style-type: none"> • N/A
<i>Diagrams</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Figure 2 in the body of the announcement show the coverage of the VTEM survey, and results from channel 45 (late time).
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • This report outlines the extent of the VTEM survey completed. • Selection of targets from VTEM data is based on an integrated view of the entire data set and other supporting information such as magnetic data. • Other targets may be generated with further data processing and review as this is an

Criteria	JORC Code explanation	Commentary
		ongoing process.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • This report covers a recently completed VTEM geophysical survey. • Other work completed includes geochemical sampling, magnetic data acquisition and processing, review of legacy drilling and related work programs from the WAMEX database.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <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> 	<ul style="list-style-type: none"> • Drill holes are necessary, and planning is advanced, to identify the source of the VTEM anomalies.