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ALLIANCE RESOURCES LTD

ASX: AGS

ABN: 38 063 293 336

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Shares on issue: 104,293,923

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**Projects:**

**Wilcherry JV, SA (right to acquire 100%):** gold, iron, base metals, graphite

**Gundockerta Sth, WA (100%):** nickel-gold

**Nepean South, WA (100%):** nickel-gold

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## NINE NEW GOLD TARGETS INDICATED IN 3DIP SURVEY AT WEEDNANNA

### *Potential to Significantly Grow Resource*

The results of the 3DIP survey completed at the Weednanna Gold Deposit using the DIAS32 system have been received and indicate:

- Nine new targets, including five shallow targets, highlighting the remaining near-surface potential to grow the mineral resource
- Many of the chargeable bodies extend down to >200m below surface
- Some of the largest chargeable anomalies are bounded by a NW-SE trending fault which is known to host gold but has limited drilling

The Board of Alliance Resources Ltd (Alliance) is pleased to announce it has received the report on the results of the 3DIP survey at the Weednanna gold deposit, which forms part of the Wilcherry Project Joint Venture between Alliance (81.41%) and Tyranna Resources Ltd (ASX Code: TYX) (18.59%), with Alliance moving to 100% ownership in mid-March.

A Three Dimensional Induced Polarisation (3DIP) surface geophysical survey was completed over the Weednanna Gold Deposit during October 2018 by DIAS Geophysical and Gap Geophysics using the DIAS32 system, which is the leading acquisition technology in this field, to help target further areas of mineralisation.

The survey methodology and parameters are summarised in Appendix 1.

#### Observations and Survey Results

The following observations are noted:

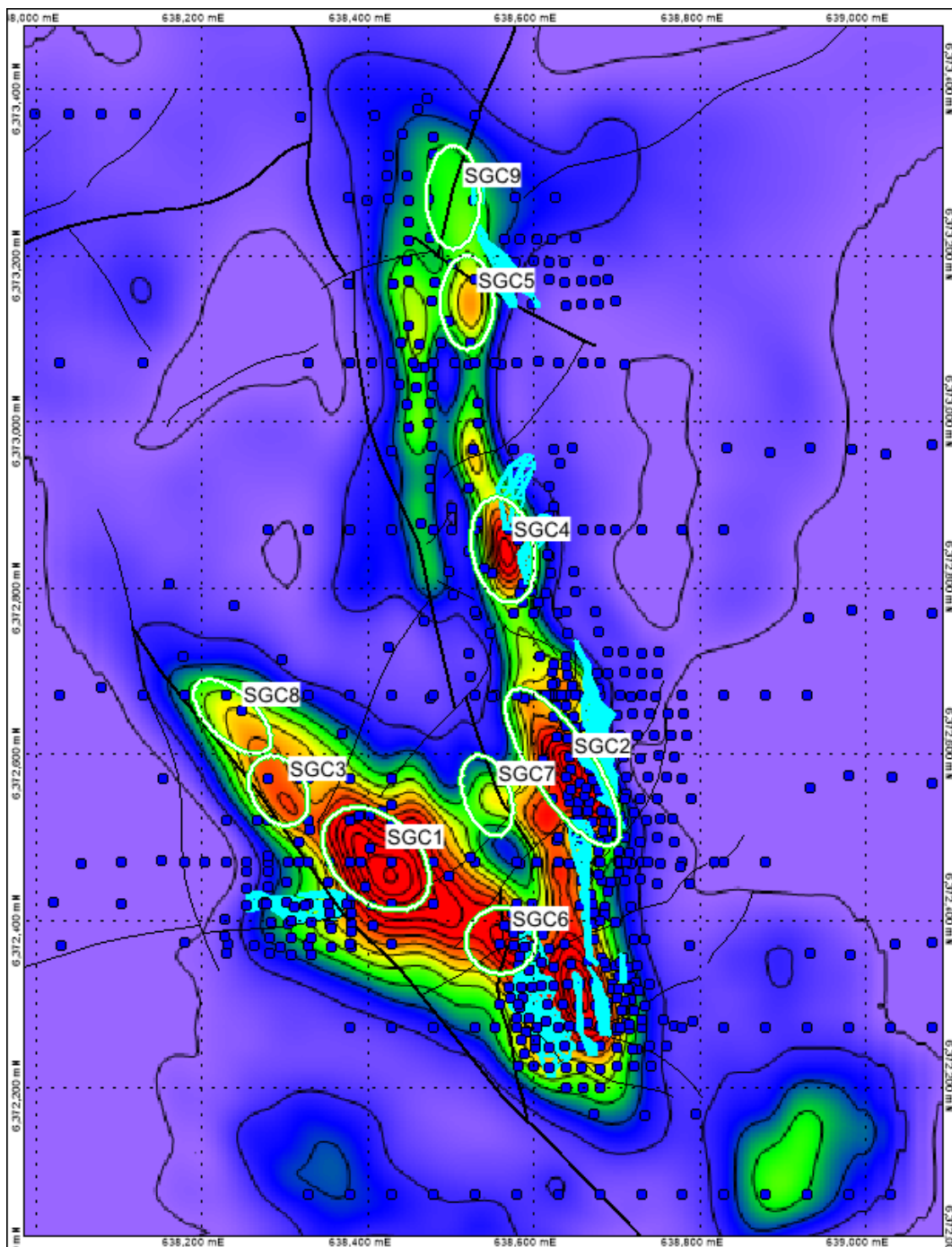
- Gold mineralisation is closely associated with chargeability bodies that exhibit moderate to high chargeability (>~10mV/V);
- The chargeable bodies extend down to greater than 200m below the surface, and
- There is a strong correlation between high density (from the April 2018 gravity survey), high chargeability and high gold concentrations at Weednanna.

The results of the 3DIP survey have defined nine new target zones based on

where the high chargeability zones correlate with high density zones and are in close proximity to, or along strike from, known high grade gold shoots delineated via drilling. Figure 1 highlights the target zones identified using the magnetic, gravity and 3DIP inversion results.

Five out of nine targets are shallow, which highlights the remaining near-surface potential to significantly grow the mineral resource.

Some of the largest chargeable anomalies (e.g. SGC 1) are bounded by a NW-SE trending fault which is known to host gold and but has limited drilling to date.



**Figure 1. Target zones (ellipses) on 100 m chargeability depth slice. Light-blue regions represent high grade gold shoots and dark-blue dots represent drill collars**

## Discussion

Induced Polarisation (IP) is a geophysical technique used to identify chargeable zones relating potentially to disseminated sulphides. Because gold at the Weednanna Deposit is associated with disseminated sulphide mineralisation IP is an appropriate exploration tool to test for chargeable anomalies potentially associated with gold.

The 3DIP survey has produced a chargeability model that closely correlates with underlying geological detail/mapping and known gold mineralisation. Many of the targets appear to correlate with the margins of the known gold shoots and some have clear structural control observed in aeromagnetic and gravity datasets.

The highly chargeable zones also correlate well with high density zones identified by a detailed 3D gravity inversion model generated in 2018. The 3D inversion model suggests there is clear potential for further discoveries at deeper levels than have been currently tested. The NW trend with multiple chargeable centres is bounded by a NW-SE trending fault; this is also known to host gold but has not been thoroughly drill tested to date.

## Current and Future Work

Ongoing RC drilling programs are planned for late March to continue to grow the size of the Weednanna Gold Deposit by stepping out from existing gold shoots.

The 3DIP survey results will be further analysed in conjunction with the most recent drilling results and existing geophysical datasets to rank targets and plan drill holes for testing in CY2019.

On 6 September 2018, Alliance announced a maiden Mineral Resources estimate for the Weednanna Gold Deposit (2018 MRE), as follows:

Classification	Tonnes	Grade (g/t gold)	Gold (Ounces)
Indicated	590,000	4.6	88,000
Inferred	507,000	5.7	93,000
<b>Total</b>	<b>1,097,000</b>	<b>5.1</b>	<b>181,000</b>

The reported Mineral Resource is that proportion of gold contained within \$2,000 AUD pit shells (>0.5 g/t gold) and >2.0 g/t gold underground potential.

Alliance has engaged consulting firm Mining One to manage a Scoping Study level assessment into the commercial viability of establishing a standalone mining and processing operation at the Weednanna Gold Deposit, based on the 2018 MRE. The study is anticipated to be completed during March 2019.

Alliance is acquiring 100% interest in the Wilcherry Project tenements that host the Weednanna Gold Deposit and an 80 person camp located 45 kilometres from the deposit, in the township of Kimba. Refer to Alliance's ASX Announcement dated 31 January 2019. Completion is on target for mid-March 2019.

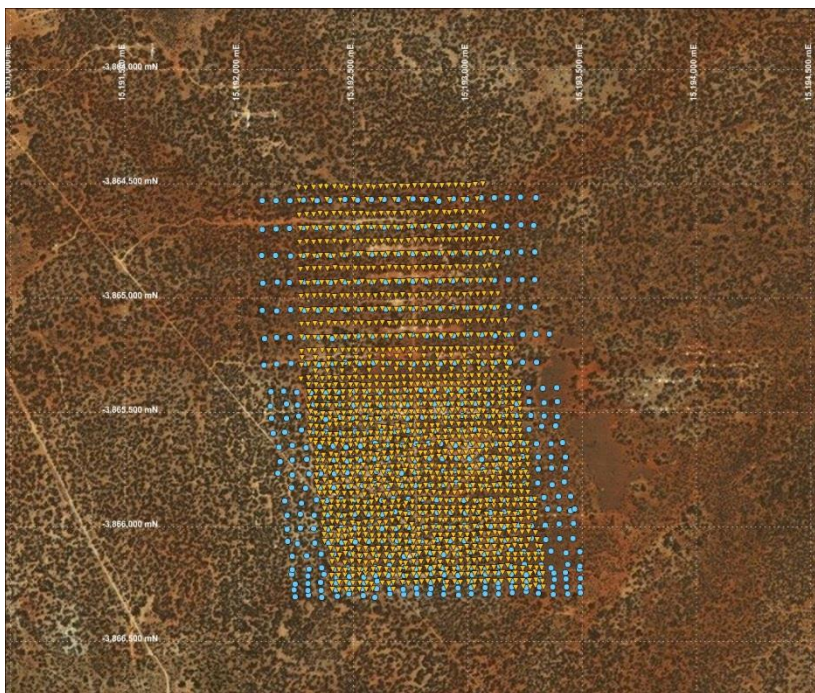
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## APPENDIX 1

### Survey Methodology and Parameters

The 3D distributed Array induced polarisation survey using the DIAS32 system was performed during September and October 2018, by DIAS Geophysical (DIAS) and Gap Geophysics (GAP). The survey electrode locations are illustrated in Figure A1 and the survey parameters are summarised below in Table A1.



**Figure A1. Final recorded IP electrode positions. Transmitter electrodes in blue, Receiver electrodes in orange**

**Table A1. DIAS 3DIP Survey Parameters**

Contractor	Gap Geophysics / DIAS Geophysical
Survey Dates	September - October 2018
Dipole Length	25-160m
Dipole Separation (N level)	0.4 to 36.5
Transmitter	GDD TXII 5kW
Base Frequency	0.125 Hz (2s on, 2s off)
Receiver	DIAS32
Receiver Electrodes	Porous pots

The survey generated a very large volume of data given the full 3D nature of the method - in excess of 800,000 data points. During acquisition, data quality was monitored by Southern Geoscience Consultants (SGC) to ensure meaningful results were acquired. A significant number of measurements were considered to be excessively noisy and were discarded/removed from final data inputs to the inversion process. Despite this, SGC is satisfied that, with this appropriate editing, the dataset is of sufficient quality to enable sensible interpretations to be made.

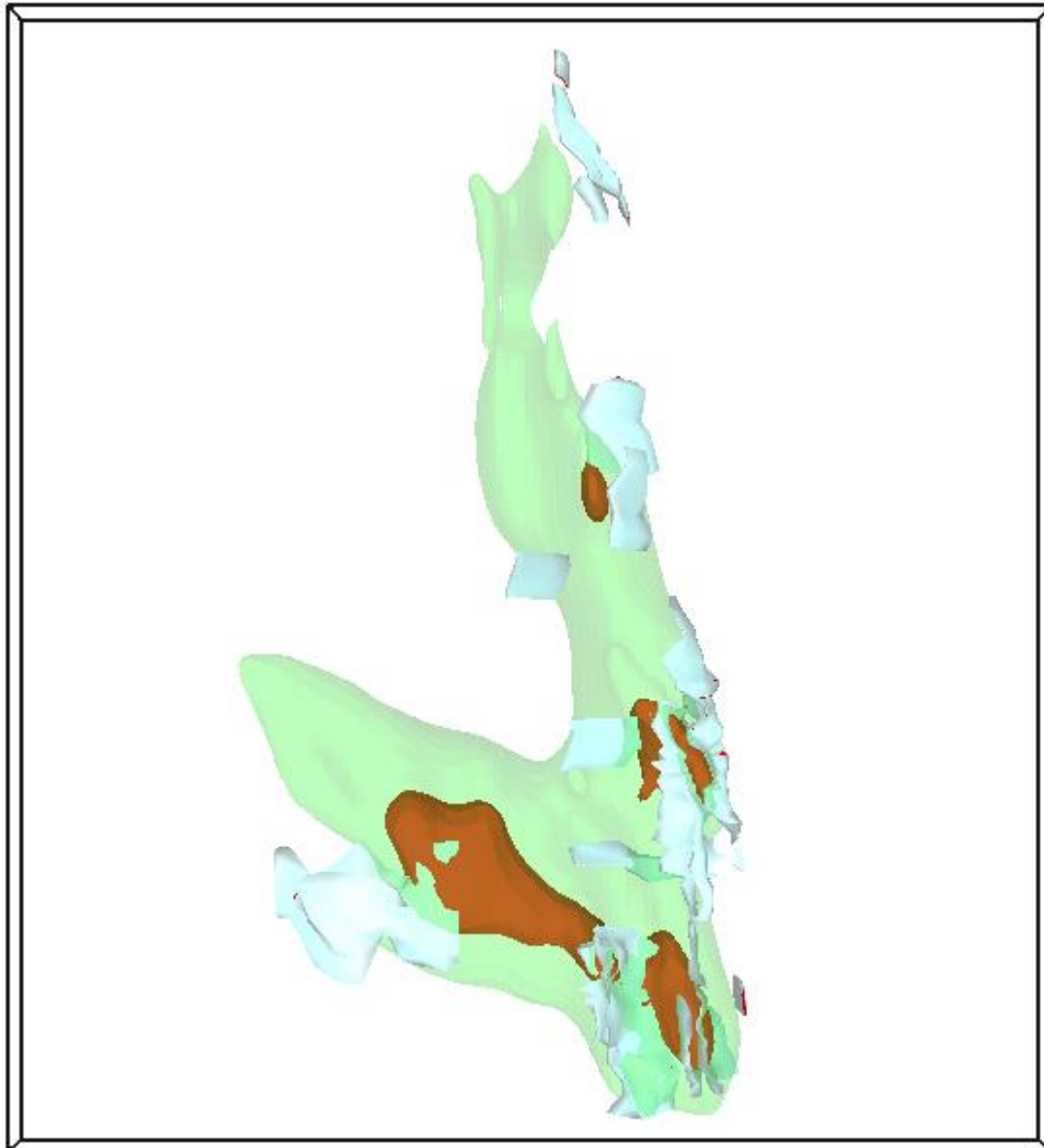
Data editing and processing was performed by GAP/DIAS prior to inversion modelling.

### 3D Inversion

A 3D inversion model of the dataset was generated by DIAS and delivered to SGC for assessment/interpretation.

A 3D workspace was produced that allowed comparisons with other exploration and geological information to assist interpretation/further targeting.

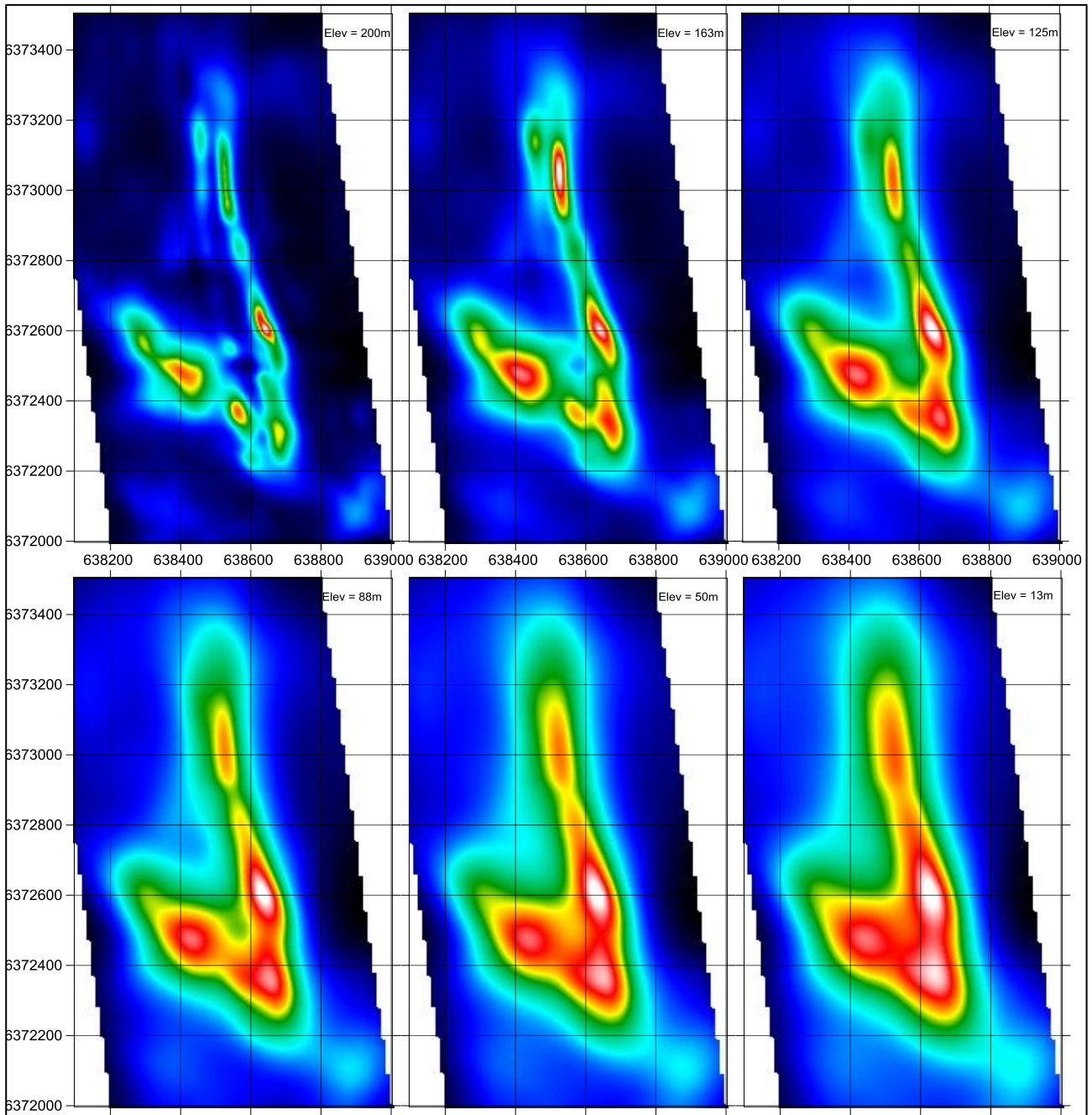
Figure A2 highlights the 3D chargeability isosurfaces derived from the 3D inversion model together with gold mineralisation shoots interpreted from drilling information to date. This figure defines that the gold mineralisation is closely associated with units that exhibit a chargeability level in excess of  $\sim 10\text{mV/V}$ .



**Figure A2. 3D inversion model isosurfaces (green: 10 mV/V, brown: 18 mV/V) with gold shoots (light blue) from drill hole data**

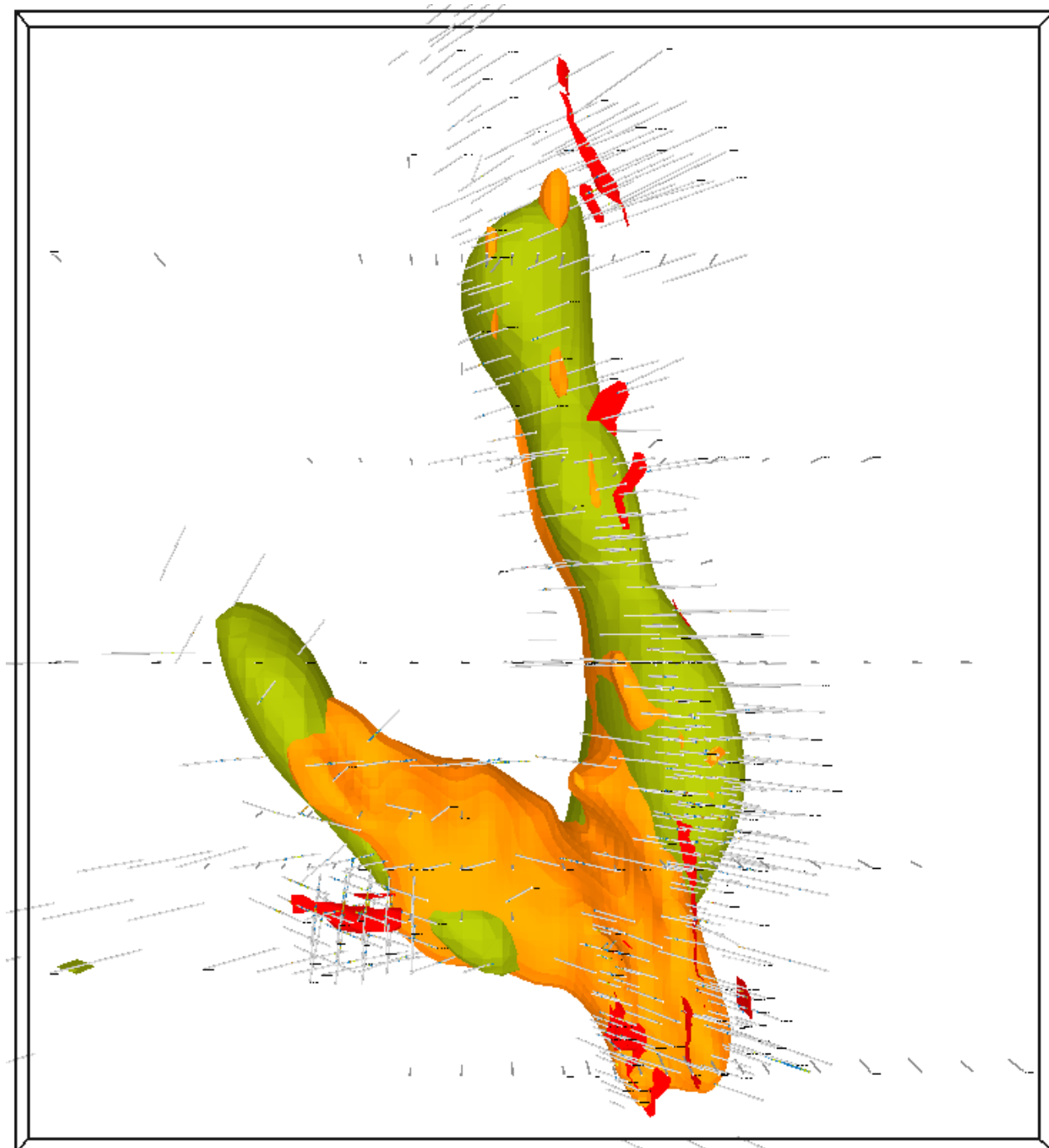


Figure A3 illustrates a series of depth slice images that defines the distribution of chargeable material at various elevations. These images suggest that the chargeable bodies extend down to greater than 200m below the surface.



**Figure A3. Elevation slices from the DIAS 3D chargeability inversion model showing chargeable materials deeper than 200 m below the surface**

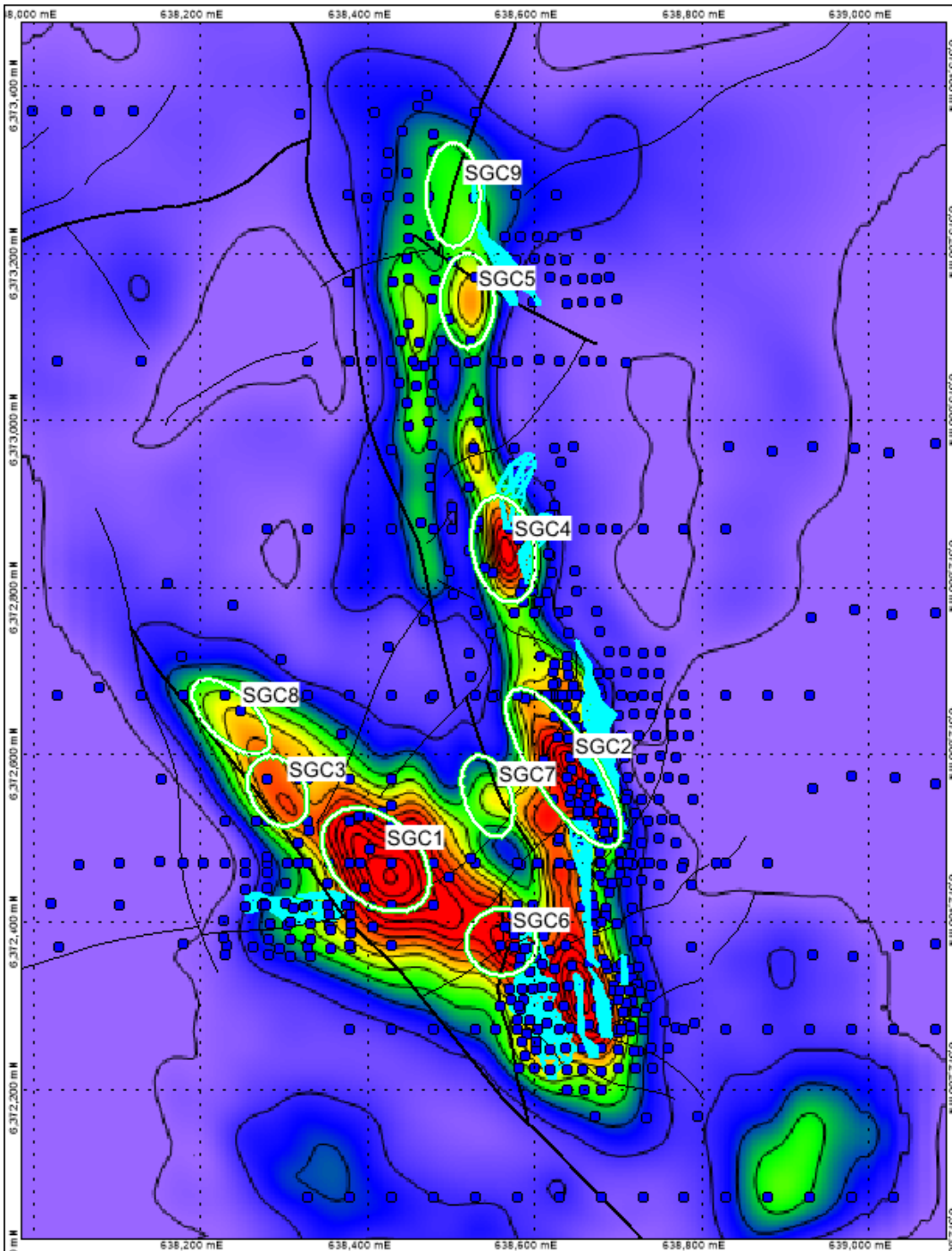
Figure A4 highlights the 12mV/V isosurface along with the 2.82 g/cc density isosurface derived from a 3D gravity inversion of data collected in 2018. There is a strong correlation between high density, high chargeability and high gold concentrations (shown in red in the figure) in this area. Although not shown in this document, the north-south high chargeability unit is also strongly magnetic in parts, whereas the northwest oriented branch does not exhibit anomalous magnetism. The high grade gold in this area is associated with sulphide replacement of magnetite along the granite contact/structure.



**Figure A4. 12mV/V chargeability isosurface (orange) together with the 2.82 g/cc density isosurface (light green) and high grade gold shoots modelled from drill holes (red)**

## Targets for Follow-Up

Although the Weednanna Deposit has been extensively drilled in discrete target areas where known high grade gold has been defined, there are a number of new areas that are likely candidates for further exploration efforts. These target zones are predominantly where the high chargeability zones correlate with high density zones and are in close proximity to, or along strike from, known high grade gold shoots delineated via drilling. Figure A5 highlights the targets zones identified using the magnetic, gravity and IP inversion results.



**Figure A5. Target zones (ellipses) on 100 m chargeability depth slice. Light-blue regions represent high grade gold shoots and dark-blue dots represent drill collars**



## Competent Persons

The information in this report that relates to the Geophysical Exploration Results is based on information compiled by Mr Russell Mortimer. Mr Mortimer is a member of the Australian Institute of Geoscientists and a member of the Australian Society of Exploration Geophysicists and is employed as a consultant to the Company through geophysical consultancy Southern Geoscience Consultants Pty Ltd. The information in this report that relates to the Exploration Results in support of the previously reported gold shoots in the 3D geological model is based on information compiled by Mr Anthony Gray and Mr Stephen Johnston. Mr Gray is a Member of the Australian Institute of Geoscientists and is a part-time contractor to Alliance Resources Ltd. Mr Johnston is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of Alliance Resources Ltd. Messrs Mortimer, Gray and Johnston have 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'. Messrs Mortimer, Gray and Johnston consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Section 1 – Sampling Techniques and Data (3D DIAS array IP survey)		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>	A 3D distributed Array induced polarisation survey was performed by DIAS Geophysical Limited and Gap Geophysics Australia Pty Ltd during September and October 2018 using the DIAS32 system. The survey utilised GeoPak IPTX-2500 and GeoPak PS-30 transmitters with 8 steel plate electrodes per station and operating at 0.125 Hz (8 s cycle). The current transmitter lines used 50 m line spacing with stations spaced at 50 m. Each receiver electrode utilised a dedicated single channel DIAS32 receiver (unlimited channels per system) with aluminium plate electrodes and a receiver sampling interval of 150 samples per second to acquire resistivity and chargeability data. The receiver lines used a 50 m line spacing with stations pacing at 25 m and 50 m.
	<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. In cases where ‘industry standard’ work has been done this would be relatively simple (eg. ‘reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay’)</i>	
Drilling techniques	<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>	Not applicable – data from geophysical surveys.
Drill sample recovery	<i>Method recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable – data from geophysical surveys.
	<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>	
Logging	<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>	Not applicable – data from geophysical surveys.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable – data from geophysical surveys.
	<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 maximize 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>	
Quality of assay data and laboratory tests	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Not applicable – data from geophysical surveys.
	<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, calibration factors applied and their deviation, etc.</i>	
Verification of sampling and assaying	<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>	Not applicable – data from geophysical surveys.
	<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</i>	

Section 1 – Sampling Techniques and Data (3D DIAS array IP survey)		
Criteria	JORC Code explanation	Commentary
	<i>verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</i>	
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other location used in Mineral Resource estimation.</i>	The 3DIP survey lines were positioned using a hand held GPS. Expected horizontal accuracy is claimed to be <1m in handheld GPS units from 1 July 2017 to January 2019 due to a Satellite Based Augmentation System (SBAS) test-bed trial in Australia.
	<i>Specification of the grid system used.</i>	GDA94, MGA Zone 53.
	<i>Quality and adequacy of topographic control.</i>	Topographic control is accurate in the immediate vicinity of surveyed drill collars and elsewhere is +/- 1m which is considered adequate for the data being collected.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Not applicable – data from geophysical surveys.
	<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 procedures(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	
Orientation of data in relation to geological structure	<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>	The orientation of data collection over key mineralised horizons achieves minimal sampling bias of lithological contacts and possible structures.
	<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>	The 3DIP lines are oriented east-west and ~30° to the strike of mineralisation.
Sample security	<i>The measures taken to ensure sample security.</i>	Not applicable – data from geophysical surveys.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	Data editing and processing was performed by Gap Geophysics and DIAS Geophysical prior to inversion modelling and then provided to Southern Geoscience Consultants for review and interpretation by suitably experienced geophysicists.

Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>	The Weednanna Prospect is part of the Wilcherry Project Joint Venture (Project), comprising EL's 5470, 5590, 5875, 5931, 5961, 6072 and 6188, owned by Alliance (81.41%) and Tyranna Resources Ltd (18.59%). The Project is located within the Gawler Craton in the northern Eyre Peninsula, South Australia. There is a royalty of 2% of the NSR payable to Aquila Resources Ltd.
	<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>	The tenement is in good standing and there are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	<i>Acknowledgement and appraisal of exploration by other parties.</i>	The area has been explored since the 1970's by companies including Pan Continental Mining, Asarco, Murumba Minerals, Shell Co. of Australia Ltd (later Acacia Resources Ltd), WMC Resources Ltd, Anglogold Australia Ltd, Aquila Resources Ltd, Trafford Resources Ltd, Ironclad Mining Ltd (later Tyranna Resources Ltd). RAB, AC, RC and diamond drilling have been completed at Weednanna by the following exploration companies- <ul style="list-style-type: none"> <li>• 1997-1998: Acacia Resources</li> <li>• 1999: Acacia Resources and Anglogold</li> <li>• 2000: Anglogold</li> <li>• 2002: Aquila Resources</li> <li>• 2006: Trafford Resources</li> <li>• 2007: Ironclad Mining and Trafford Resources</li> <li>• 2008-2010: Ironclad Mining</li> <li>• 2012: Ironclad Mining and Trafford Resources</li> <li>• 2017-present: Alliance</li> </ul>

Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The geology at Weednanna is characterised by a north striking and moderate to steep east-dipping unit of Paleo-Proterozoic Hutchinson Group sediments, consisting of marl and dolomite with lesser sandstone and minor basalt, which have been metamorphosed under upper-amphibolite facies conditions and altered to produce interleaving calc-silicate and magnetite skarn with lesser gneiss and minor amphibolite.</p> <p>This altered meta-sedimentary package is bounded to the east and west by Archaean Sleaford Complex granite and gneiss. The Archaean rocks appear to truncate the meta-sediments at depth at the northern and southern ends of them prospect, with the meta-sediments extending below current drilling in the central area of the prospect.</p> <p>A keel of north-striking weathered granite of uncertain age occurs near-surface within the Hutchinson Group sediments along most of the prospect area. Pink potassium feldspar-rich granites, potentially of the Hiltaba Granite suite, intrude the Sleaford Complex on the eastern side of the prospect area and minor later stage granites cut the metasedimentary package. Gold mineralisation occurs within both the Archaean Sleaford Complex granite and gneiss and Paleo-Proterozoic Hutchinson Group meta-sediments and is associated with the intrusion of Hiltaba Granites and skarn alteration.</p> <p>Gold was deposited in favourable structural and lithological areas during both the peak metamorphic event and as the host rocks have cooled.</p> <p>Due to the high regional metamorphic temperate during gold emplacement, shoots are relatively discrete and high grade.</p>
Drill hole Information	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar;</i></li> <li>• <i>elevation or RL (reduced Level - elevation above sea level in metres) of the drill hole collar;</i></li> <li>• <i>dip and azimuth of the hole;</i></li> <li>• <i>down hole length and interception depth;</i></li> <li>• <i>hole length.</i></li> </ul> <p><i>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.</i></p>	Not applicable – data from geophysical surveys.
Data aggregation methods	<i>In reporting Exploration results, weighting averaging techniques, maximum and/or minimum grade truncation (eg. cutting of high grades) and cut-off grades are usually material and should be stated.</i>	Not applicable – data from geophysical surveys.
	<i>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 aggregation should be shown in detail.</i>	Not applicable – data from geophysical surveys.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable – data from geophysical surveys.
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	Not applicable – data from geophysical surveys.
Diagrams	<i>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.</i>	Refer to figures in the body of the announcement.
Balanced	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades</i>	Not applicable – data from geophysical surveys.



Section 2 – Reporting of Exploration Results		
Criteria	JORC Code explanation	Commentary
reporting	<i>and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical 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>	The gold shoots shown in Figures 1, A2, A4 and A5 have been sourced from dxf files used in the Weednanna 3D (geological) model shown in Figure 6 of Alliance's ASX announcement dated 6 September 2018.
Further work	<i>The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling). 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>	Refer to main body of announcement.