



ASX Announcement: 20th September 2019

DETAILED GRAVITY SURVEY TO HELP UNLOCK LONG-TERM EXPLORATION POTENTIAL AT GIDGEE GOLD PROJECT, WA

New high-quality geophysical dataset to pinpoint location of prospective Granodiorite contact, identify key controlling structures and refine drill targets

HIGHLIGHTS

- Detailed ground gravity survey recently completed over the majority of the Company's highly prospective Gidgee Gold Project in WA. The survey covered an area of 162km² (Figures 1 and 2).
- The gravity survey has provided a high-quality dataset that will:
 - Precisely locate the prospective contact of the Montague Granodiorite, allowing more accurate drill targeting.
 - Provide the basis to develop a 3D model to understand the location of key geological contacts at depth.
 - Define regionally significant structures that have a controlling effect on the locations of gold mineralisation.
- Integration of the gravity data with existing geophysical (e.g. airborne magnetic) and geochemical datasets will also facilitate targeting of other discovery opportunities across the wider Gidgee Project. These opportunities include:
 - The identification of additional granitic intrusions similar to the Montague Granodiorite.
 - Establishing the potential for syenitic intrusions, analogous to the multi-million ounce Wallaby gold deposit (Laverton District, WA).
 - Locating sub-volcanic intrusions that form part of the volcanic hosted massive sulphide (VHMS) copper-zinc-gold system identified previously at Gidgee.

Gateway Mining Limited (ASX: GML) (**Gateway** or **Company**) is pleased to advise that it has completed a detailed ground-based gravity survey over the majority of its 100%-owned **Gidgee Gold Project**, Western Australia as part of its ongoing commitment to unlock the Project's potential as a Tier-1 gold exploration and development opportunity.

The investment of time and money into collecting high-quality technical datasets provides a key platform for efficient and effective exploration and reflects Gateway's commitment to technical excellence and the adoption of a systematic approach to exploration that leverages off the full range of available exploration methodologies.

Importantly, the Montague Granodiorite can be accurately modelled using gravity methods, providing the Company with a relatively effective and efficient exploration targeting strategy by allowing it to pinpoint the location of the prospective contact over its tenements.

Gravity surveys have proven to be an invaluable exploration targeting approach at other granite-hosted gold deposits in Western Australia such as Red 5's King of the Hills deposit.

The gravity data will be integrated with existing geophysical, geochemical and geological datasets to provide a key platform for the Company's ongoing targeting processes at Gidgee.

KEY POINTS

- The detailed ground gravity survey provides a high-quality dataset that clearly and precisely maps out the prospective contact of the Montague Granodiorite (Figures 1 and 2).
- Accurate positioning of the targeted contact allows for more effective planning of drilling programs.
- Modeling of the contact in 3D will provide a key understanding of the contact geometry at depth.
- The data provides greater clarity on the key structures interpreted to control the gold mineralisation across the wider Gidgee Gold Project.
- The data, particularly when integrated with the airborne magnetic data, allows for targeting of intrusions similar to the Montague Granodiorite that have not previously been identified in the region. These intrusions would be considered as high-ranking targets for future programs of exploration.
- In addition to the Montague analogue targets, gold deposit styles based on Kanowna Belle and Wallaby are considered as viable targets throughout the wider Gidgee Gold Project and will be actively targeted.
- Historical exploration has identified a significant volcanic hosted massive sulphide (VHMS) copper-zinc-gold system at the Flametree Prospect. This new gravity dataset can now be utilised to help identify sub-volcanic intrusions that would help focus any future exploration initiative targeting base metals.

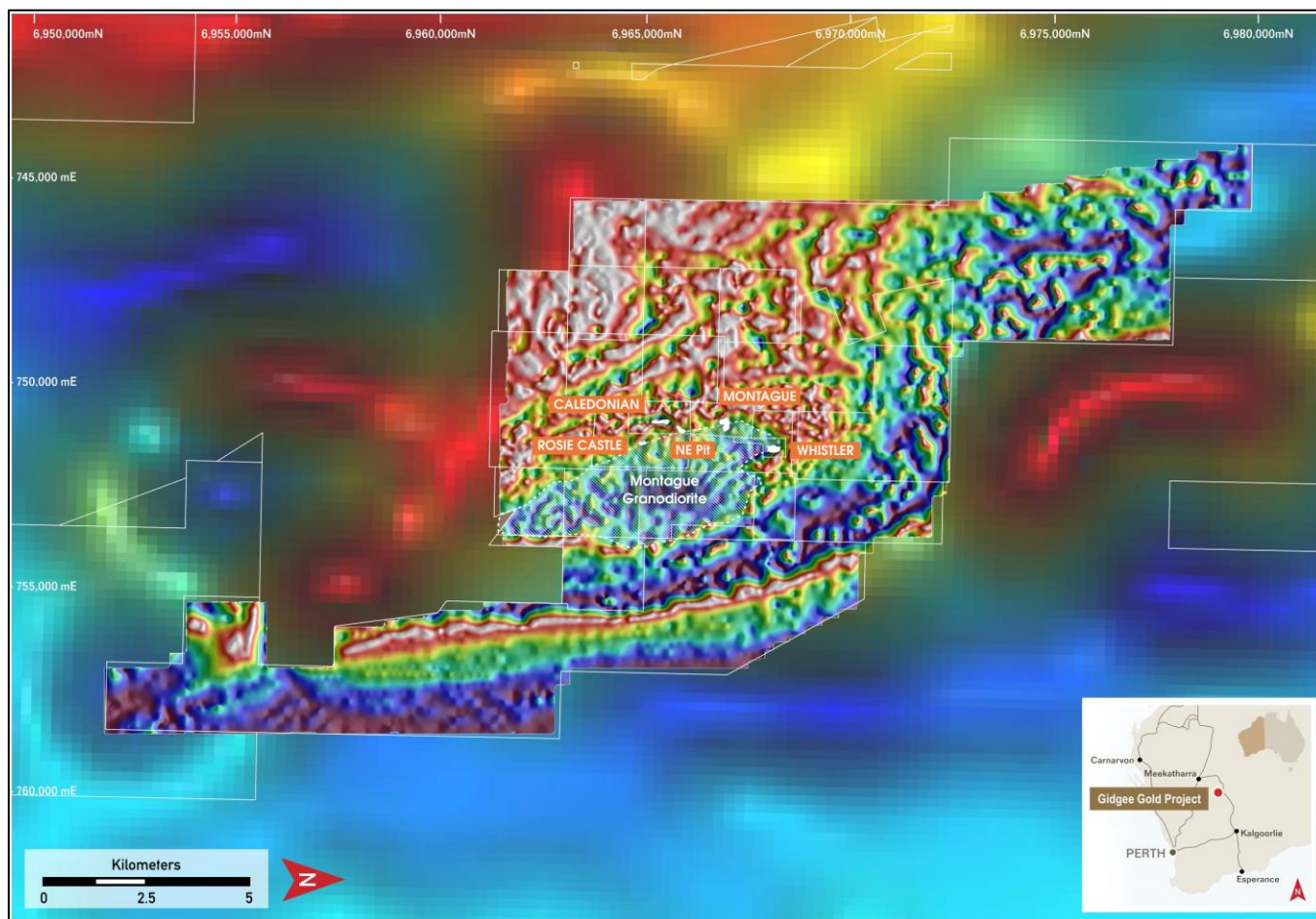


Figure (1): Gidgee Gold Project
Recently acquired detailed gravity Image over open source regional gravity data (Tilt N_Shade)

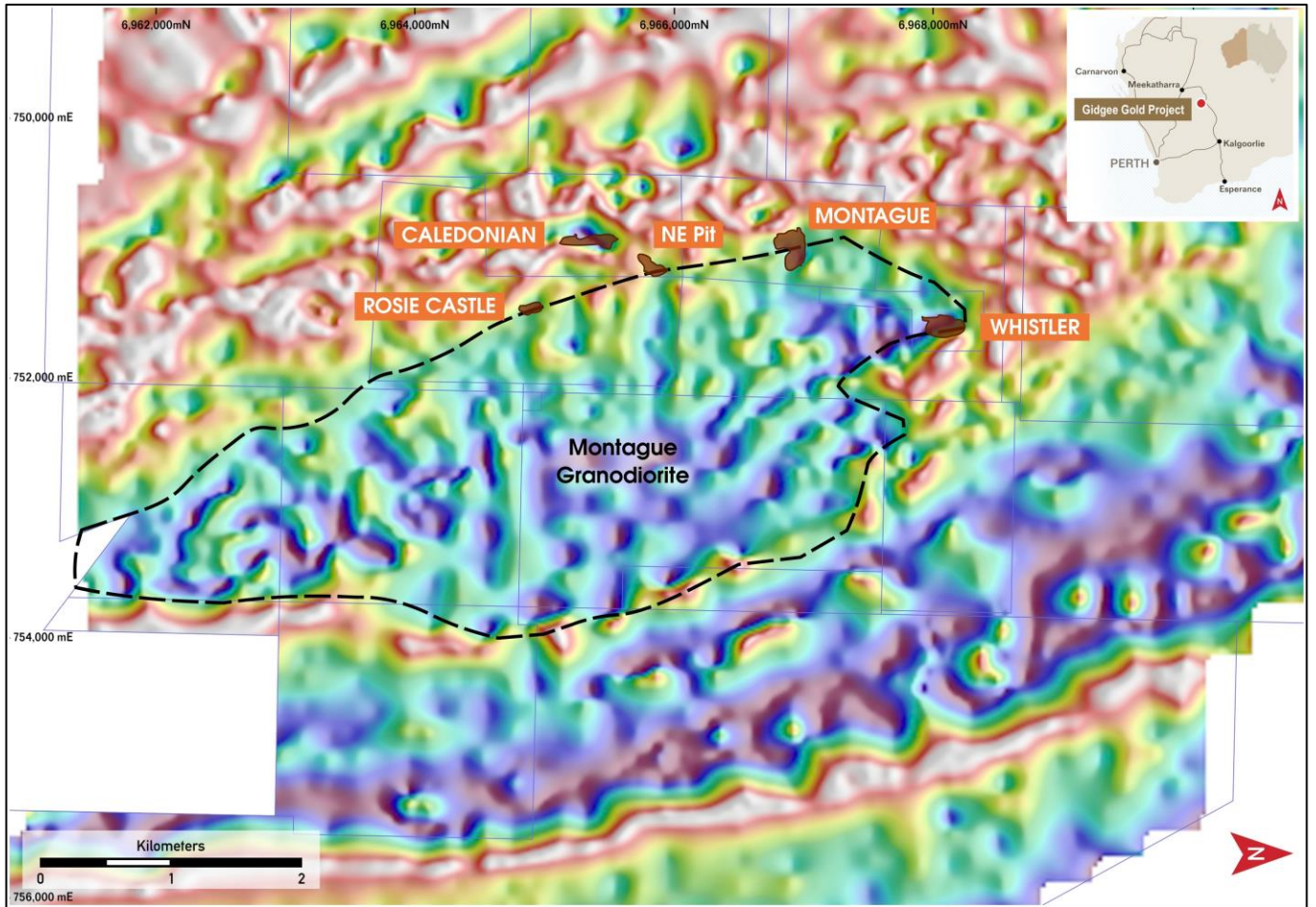


Figure (2): Gidgee Gold Project
Recently acquired detailed gravity image with outline of the Montague Granodiorite (Tilt N_Shade)

GRAVITY SURVEY DETAILS (See Table 1 for details)

- The survey data was collected by Atlas Geophysics Pty Ltd, a Perth based geophysical contracting company.
- Gravity measurements were acquired using Scintrex CG-5 AUTOGRAV Gravity Meters (SN: 276 and 410811).
- GPS positions were acquired using CHC Nav i70 Base receiver and CHC i70 GNSS Rover Receivers
- Gravity data was acquired on a nominal grid of 200m x 200m station spacing with 100m X 100m infill acquired over high priority areas.
- Gravity and GPS data were independently reviewed and verified by Southern Geoscience Consultants Pty Ltd

MANAGEMENT COMMENT

Gateway's Managing Director, Mr Peter Langworthy, said the Company's decision to invest in a gravity survey in parallel with its other ongoing exploration initiatives reflected its strong commitment to apply world-class exploration practices to unlock the Project's long-term potential.

"The amenability of the Granodiorite to modelling using gravity makes this a logical addition to our existing armoury of exploration data – which now includes extensive geophysical and geochemical datasets complemented by what we are learning from the drilling programs completed to date," he said.

“The ability to pinpoint the precise location of the Granodiorite contact should help enormously to target effective and efficient exploration along this highly prospective ‘skin’ or ‘surface’.

“At the same time, we will be able to accurately model major controlling structures and build a three-dimensional model which we believe will be a major breakthrough for our ongoing exploration of the Gidgee Project.

“The gravity data will also help us to unlock the potential of our ground to host other deposit styles, including VMS-style base metal mineralisation.”

Peter Langworthy
Managing Director

For and on behalf of
GATEWAY MINING LIMITED

Competent Person Statement

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled or reviewed by Mr Peter Langworthy who is a full-time employee of Gateway Mining Ltd and is a current Member of the Australian Institute of Mining and Metallurgy. Mr Peter Langworthy has sufficient experience, which is relevant to the style of mineralisation and types of deposit under consideration and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Langworthy consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 report template

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"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 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. 	<ul style="list-style-type: none"> GNSS control was established for the new control station by submitting a 10 hour session of static data to AUSPOS, providing coordinates of the base station to better than 10mm for the x, y and z coordinates Data were acquired in a single shift of up to 12 hours duration. Each shift consisted of a single loop controlled by observations at the "South Gidgee" control station. Each loop includes at least two repeats to establish drift control and provide an interlocking network of closed loops over the entire survey area. No drilling results are included in this announcement
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> N/A
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> N/A
Logging	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> N/A

Criteria	JORC Code explanation	Commentary
	<p><i>studies.</i></p> <ul style="list-style-type: none"> • <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	<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 rifled, 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
Quality of assay data and laboratory tests	<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"> • Gravity measurements were acquired using Scintrex CG-5 AUTOGRAV Gravity Meters (SN: 276 and 410811) • GPS positions were acquired using CHC Nav i70 Base receiver and CHC i70 GNSS Rover Receivers • One new Gravity / GNSS control station was established for the survey (station 201910100001 – South Gidgee) • Gravity control for the new station was established via multiple tie-loops with existing control station 201506300001 “Gidgee Camp” • GNSS control was established for the new control station by submitting a 10 hour session of static data to AUSPOS, providing coordinates of the base station to better than 10mm for the x, y and z coordinates • Data were acquired in a single shift of up to 12 hours duration. Each shifty consisted of a single loop controlled by observations at the “South Gidgee” control station. Each loop includes at least two repeats to establish drift control and provide an interlocking network of closed loops over the entire survey area.
Verification of sampling and assaying	<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"> • Gravity and GPS data were independently reviewed and verified by Southern Geoscience Consultants Pty Ltd.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All gravity positions are processed from the GNSS raw data (base station and rover units) to produce positional data with sub-decimeter accuracy.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Gravity data were acquired using 200m x 200m stations spacing with 100m x 100m infill acquired over high priority target areas
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> Gravity station spacings were taken at a nominal spacing.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> N/A
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Gravity and GPS data were independently reviewed and verified by Southern Geoscience Consultants Pty Ltd.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> E57/405, E57/417, E57/687, E57/688, E57/793, E57/807, E57/823, E57/824, E57/874, E57/875, E57/876, E57/888, E57/945, E57/1004, E57/1005, M57/48, M57/98, M57/99, M57/217, M57/429, M57/485, P57/1407, P57/1409, P57/1410, P57/1411, P57/1412 and P57/1413. Tenements E57/793, M57/429 and M57/485 are 75% Gateway Mining Ltd and 25% Estuary Resources Pty Ltd. The prospecting (P prefixed) tenements are held in Gateway Projects WA Pty Ltd's name but owned and operated by Gateway Mining Ltd. All other remaining tenements are held in Gateway Mining Ltd's name and are owned and operated by Gateway Mining Ltd.
Exploration done by other	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Whistler open cut was mined from November 1990 (Polaris Pacific NL) and ore was toll treated through the Herald mill. Little attention

Criteria	JORC Code explanation	Commentary
<i>parties</i>		<p>was paid to mineralisation other than gold.</p> <ul style="list-style-type: none"> Montague open cut was mined from 1989-1990 (Herald Resource Ltd) and ore was toll treated through the Herald mill. Little attention was paid to mineralisation other than gold.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> High grade gold in major shear systems on the margin of a granitoid intrusion.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <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> 	<ul style="list-style-type: none"> No drilling was undertaken relative to this announcement
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <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 aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> N/A
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <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> 	<ul style="list-style-type: none"> N/A
<i>Diagrams</i>	<ul style="list-style-type: none"> <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</i> 	<ul style="list-style-type: none"> Appropriate maps are included in the text of this announcement

Criteria	JORC Code explanation	Commentary
	<i>drill hole collar locations and appropriate sectional views.</i>	
<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"> N/A
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Gravity data have been processed to generate enhanced imagery for potential field interpretation along with previously acquired airborne magnetic data. 3D UBC inversion of gravity and magnetic data have been performed to facilitate interpretation and targeting of structural setting that host gold mineralisation. 2D forward modelling of gravity and magnetic data are being undertaken to define orientation of contacts between mafic greenstones and intrusive granites.
<i>Further work</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> First pass drill testing over areas of interest.