

ASX Announcement

21 March 2023



Nickel-Copper Targets Defined at the Fairbairn Project

Highlights

- Interpretation of Helicopter-borne electromagnetic (EM) data completed for the Fairbairn Nickel-Copper Project, with seven compelling nickel-copper targets defined.
- Fairbairn Project highly prospective for magmatic nickel-copper deposits and located in a similar geological setting to both the Julimar and Nova Deposits, on the northern margin of the Yilgarn Craton.
- Little previous exploration has been completed over the Fairbairn Nickel-Copper Project, with the work undertaken in the 1980s - 1990s focused on diamond exploration.
- Seven high-priority EM targets defined, with a number of these adjacent to magnetic highs.
- Magnetic highs interpreted to represent mafic-ultramafic units, prospective for magmatic nickel-copper deposits, obscured by shallow sedimentary basin cover.

Great Western Exploration Limited (ASX: GTE) ("Great Western" or "the Company") is pleased to announce new targets defined from the helicopter-borne EM survey completed in January 2023, at the Company's Fairbairn Nickel-Copper Project.

Fairbairn Nickel-Copper Project

GTE 100% (E69/3443)

The Fairbairn Nickel-Copper Project is located 900km north-east of Perth, on the northern margin of the Yilgarn Craton and within the Earraheedy Basin. The Yilgarn Craton margin is highly prospective for

base metal deposits and host to both the Julimar and Nova Deposits (Figure 1). Little previous exploration has been completed at Fairbairn, with work completed during the 1980s and early-1990s focussed on diamond exploration rather than magmatic nickel-copper style mineralisation.

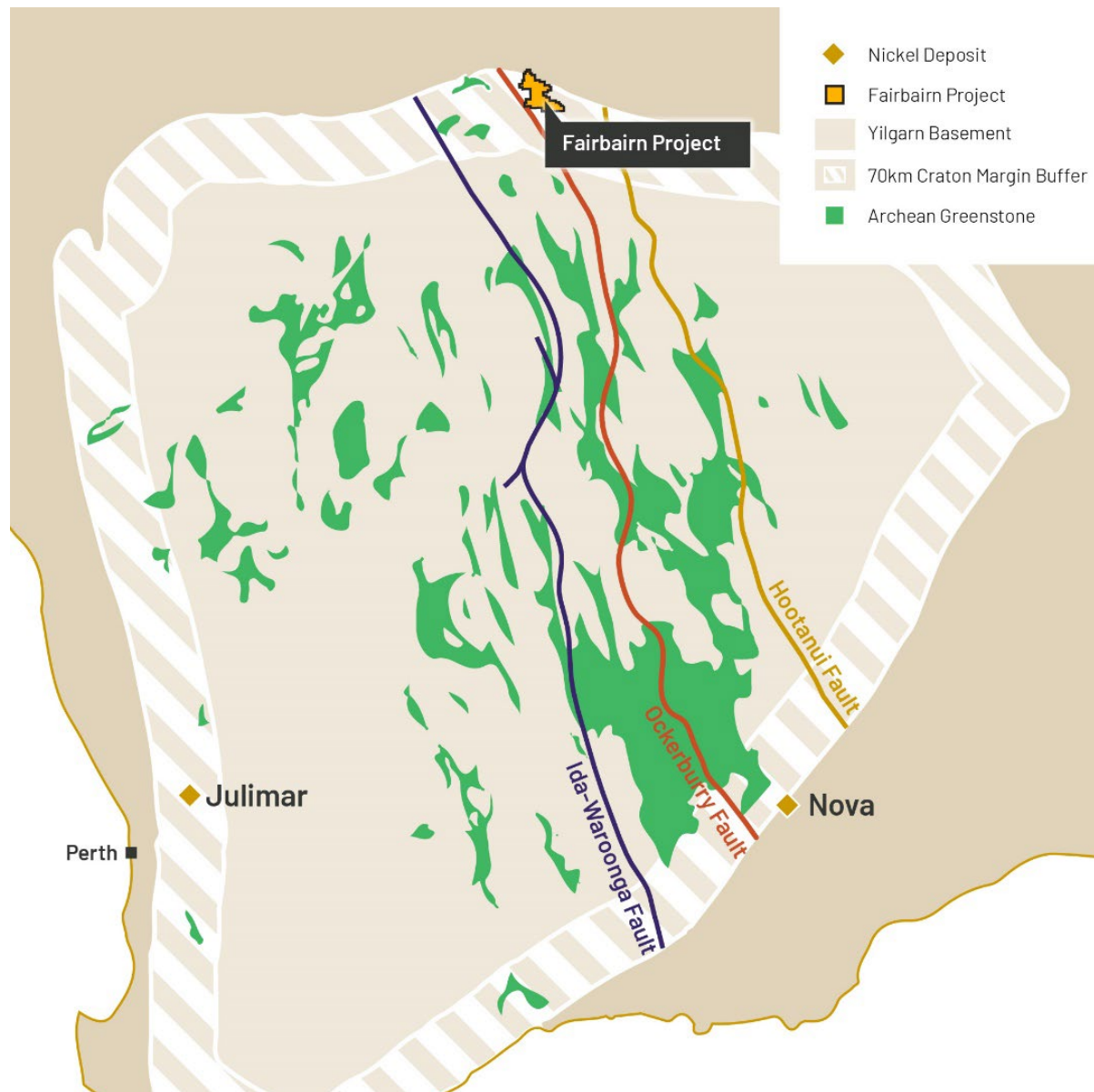


Figure 1: Location of the Fairbairn Base Metal Project on the margin of the Yilgarn Craton, and the interpreted “mantle tapping” Ockerburry Fault, a potential conduit for metal deposit formation.

A helicopter-borne electromagnetic (EM) survey was completed in January 2023 at the project (GTE ASX Announcement 11 February 2023¹), with the aim of delineating magmatic nickel-copper targets. Interpretation of this data identified seven targets, defining plates with significant lateral extents, measuring up to 900m along the plate’s length (Figure 2). The plates sit below the government mapped and modelled sedimentary rocks of Earacheedy Basin, with basement interpreted to be mafic and ultramafic rocks of Archean Greenstone Terrain, prospective for magmatic nickel-copper deposits.

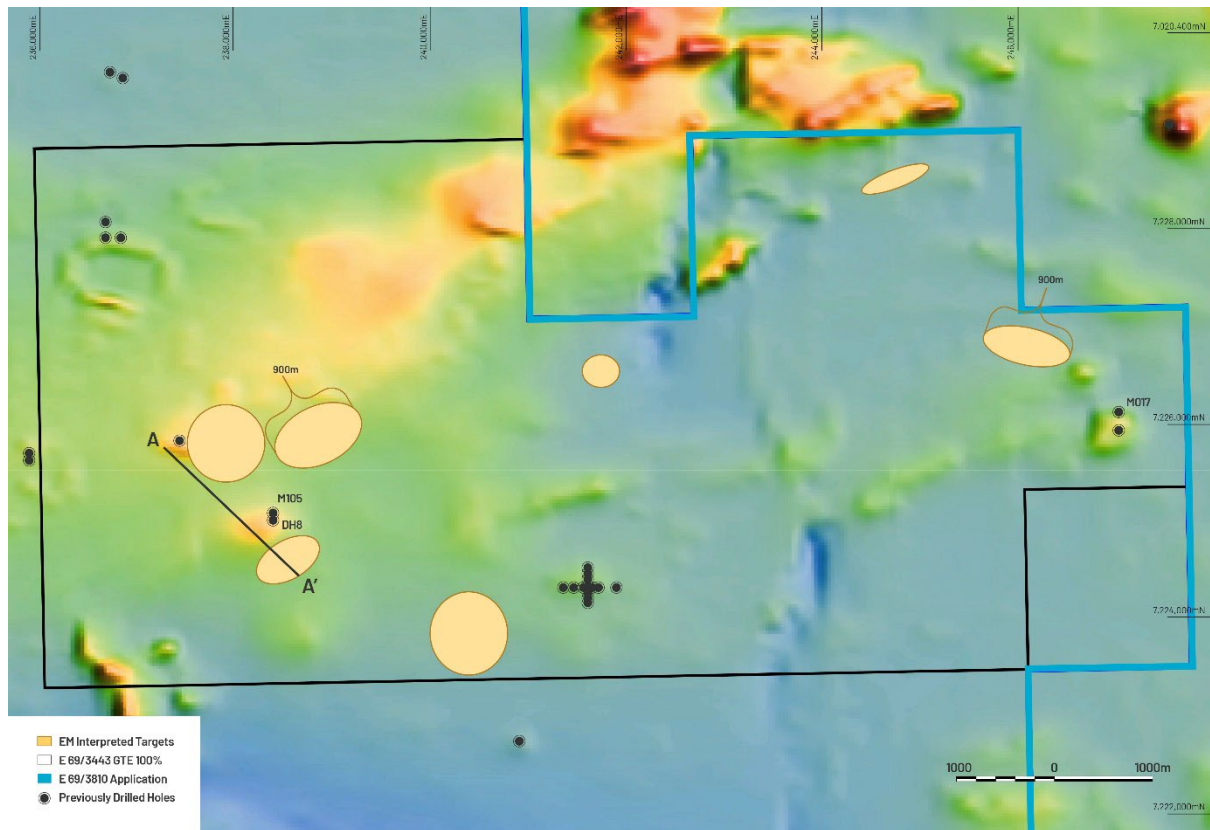


Figure 2: Location of interpreted plates from the helicopter-borne EM Survey in yellow, overlaid on reduced to pole magnetic data. Note location of previously drilled holes M017, M105, and DH8, in relation to the newly defined targets.

Magnetic highs (Figure 2) supports a greenstone basement interpretation, and legacy drilling completed in the 1990s intersected mafic and ultramafic rocks below basin cover and returned previously reported anomalous results of 20m @ 1,214ppm Ni from 28m (M017), from the limited suite of elements assayed at the time (GTE ASX Announcement 21 March 2022²).

Review of government open file data found 1990s drilled holes M105 and DH8 (Figure 3) intersected ultramafic rocks with quartz-calcite veins and copper-sulphide mineralisation (described as chalcopyrite - DH8), which are adjacent to two modelled EM plates. No assays are available for this interval. These drilled intercepts potentially represent distal mineralisation from a mineralised source, making the modelled EM conductor plates a highly compelling target.

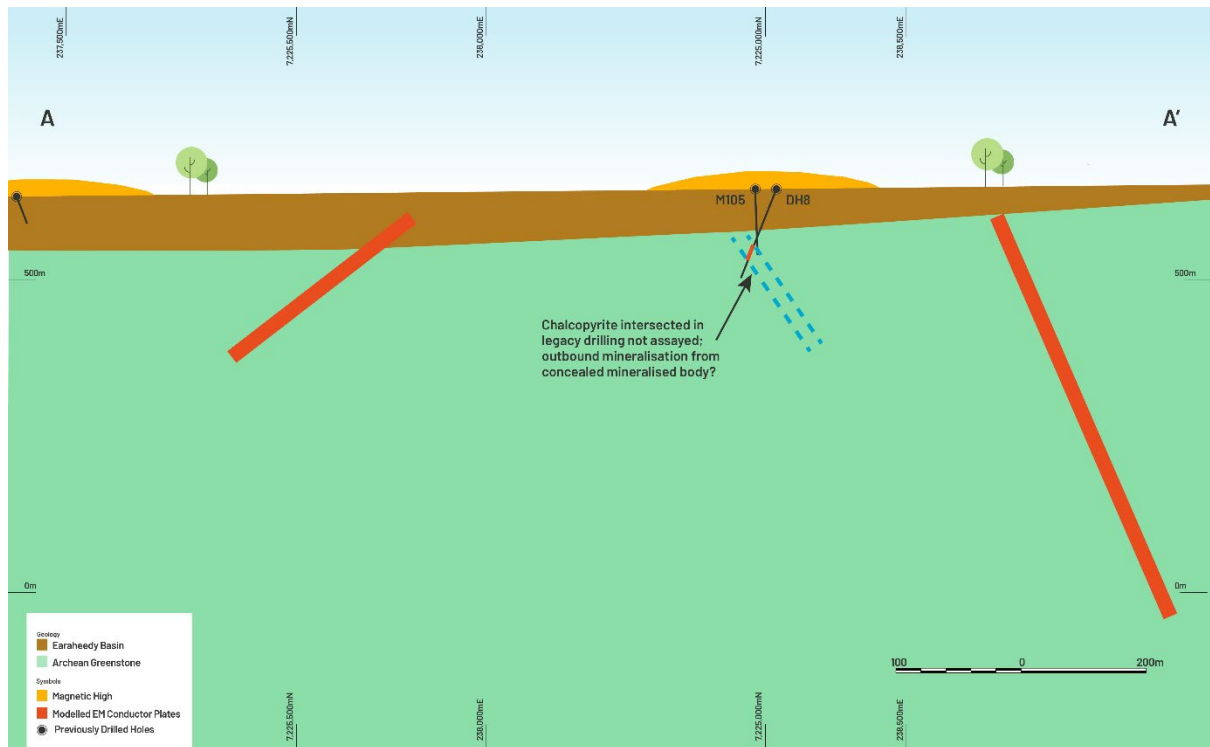


Figure 3: Cross Section (A-A', refer Figure 2) showing modelled EM plates and 1990s legacy drilling where copper-sulphide mineralisation was described.

Great Western has prioritised further exploration on this project, which will include field inspections and ground electromagnetic surveys, to precisely delineate the interpreted EM conductor plates for targeted drill testing.

About Great Western Exploration

Great Western Exploration (GTE.ASX) is a copper, gold and nickel explorer with a world class, large land position in prolific regions of Western Australia. Great Western's tenements have been underexplored or virtually unexplored (Figure 3).

Numerous field work programmes across multiple projects are currently underway at different stages of the Company's exploration pipeline, providing diverse opportunities for a significant discovery.



Figure 4: Location of Great Western's Exploration Tenure.

Authorised for release by the board of directors of Great Western Exploration Limited.

Tony Walsh

Company Secretary

Great Western Exploration Limited

Tel: 08 6311 2852

Email: enquiries@greatwestex.com.au

Previous ASX Releases – GTE.ASX

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| 1. | 11 February 2023 | Completion of Fairbairn Nickel Copper Project EM Survey |
| 2. | 21 March 2022 | Nickel Exploration Programme at Fairbairn |

Competent Person Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Shane Pike who is a member of the Australian Institute of Mining and Metallurgy. Mr. Pike is an employee of Great Western Exploration Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Pike consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Company's Exploration Results is a compilation of Results previously released to ASX by Great Western Exploration (11 February 2023 and 21 March 2022) Mr. Shane Pike consents to the inclusion of these Results in this report. Mr. Pike has advised that this consent remains in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters in the market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Appendix 3.

JORC Code, 2012 Edition (Table 1) – Fairbairn EM Survey

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 (e.g. 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. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g., submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> In January 2023, UTS Geophysics undertook a VTEM™ Max survey at the Fairbairn Project for Great Western Exploration Ltd. It has a high-sensitivity cesium magnetometer for mapping geologic structure and lithology and a cesium magnetometer base station for diurnal correction. The Radar altimeter has an accuracy of approximately 1 meter. A real time (WAAS) GPS Navigation System providing an in-flight accuracy up to 1.5 metres. VTEM™ Max Configuration: <ul style="list-style-type: none"> Transmitter loop diameter – 35 m Peak dipole moment – 700,000 NIA Transmitter Pulse Width – 7 ms VTEM max Receiver – Z, X, coils Line spacing – 150m Tie-line spacing – 1500m Frequency – 25Hz Number of Lines – 86 Line Kilometres – 667.6km
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-</i> 	<ul style="list-style-type: none"> Not applicable. No drilling reported.

Criteria	JORC Code explanation	Commentary
	<i>sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	
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"> • Not applicable. No drilling reported.
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 studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> • Not applicable. No drilling reported.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples. • 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. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • Not applicable. No drilling reported.

Criteria	JORC Code explanation	Commentary
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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> Not applicable. No drilling reported.
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"> Newexco Exploration Pty Ltd inspected the VTEM™ Max survey data and applying quality control protocols. All digital data was inspected daily to ensure that good quality data was acquired in the field.
Location of data points	<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"> The grid system used for the survey flight lines as was GDA94 MGA zone 51.
Data spacing and distribution	<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 applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> The survey was flown on 150m spaced north-south lines with 1500m spaced east-west tie lines for a total of 86 lines and 667.5-line kilometres. The EM data is not being utilised for Mineral Resource or Ore Reserve estimations. No drilling or sample compositing has taken place.

Criteria	JORC Code explanation	Commentary
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"> Survey lines were orientated perpendicular to regional east-west geological structural trend. This is appropriate for the type of survey completed. No drilling completed.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Data was transmitted by UTS Geophysics in a raw data format from site to Newexco Exploration Pty Ltd for review and QAQC. Newexco provided data analysis, which was then reported to GTE representatives.
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"> Data reviewed by third party geophysical consultant Newexco Exploration 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. 	<p>Tenement No: E 69/3443</p> <p>Tenement Type: Exploration License</p> <p>Status: Granted 20-12-2016</p> <p>Location: Approximately 50km east of the Marymia Homestead, Wiluna Shire</p> <p>Size (km2) 55.89</p> <p>Ownership: 100% owned by Vanguard Exploration Ltd, a 100% owned subsidiary of Great Western Exploration Ltd</p> <p>Native Title: Prospect area covered by the Gingirana Determined Native Title claim. A Land Access Agreement in place.</p> <p>Other Agreements: none</p> <p>Non-State Royalties: none</p> <p>Other Encumbrances: none</p> <p>National Parks: none</p> <p>Other Environmental: none</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> See GTE ASX Announcement 22 March 2022: <i>Nickel Exploration Programme at Fairbairn</i>.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Fairbairn Project regional geology occupies the north-western edge of the Palaeoproterozoic Earaheedy Basin. It includes Archaean granite and greenstone rocks of the Marymia Inlier and Proterozoic sedimentary rocks of the Earaheedy Group and Collier Group.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The Project is prospective for magmatic nickel and orogenic gold deposits hosted within the Archaean to Proterozoic aged mafic/ultramafic lithologies.
Drill hole Information	<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"> Not applicable – no drilling reported.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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"> Not applicable – drill assay results not reported.
Relationship between mineralisation widths and intercept lengths	<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 	<ul style="list-style-type: none"> Not applicable – drill assay results not reported.

Criteria	JORC Code explanation	Commentary
	<p><i>nature should be reported.</i></p> <ul style="list-style-type: none"> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i> 	
Diagrams	<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 drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Relevant location maps and sections are displayed in the announcement body; Figures 1-3.
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> All results have been reported from EM survey.
Other substantive exploration data	<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"> All substantive exploration data has been reported by GTE in this announcement or previous ASX announcements.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g., 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"> Further exploration work will include geological mapping, soil geochemistry, ground EM surveys and/or drilling.