

6 October 2022

## EXPLORATION UPDATE - NED'S CREEK

- Magnetic target along strike from gold anomalies tested by three RC drill holes
- 40m of silica-pyrite alteration with gold potential intersected in LNRC104
- Samples delivered to the laboratory; assay results awaited

Lodestar Minerals Limited (“Lodestar” or “the Company”, ASX:LSR) provides the following initial assessment of the recent RC drilling program completed on the Ned’s Creek Project JV (Vango Mining (ASX:VAN) earning 51% interest).

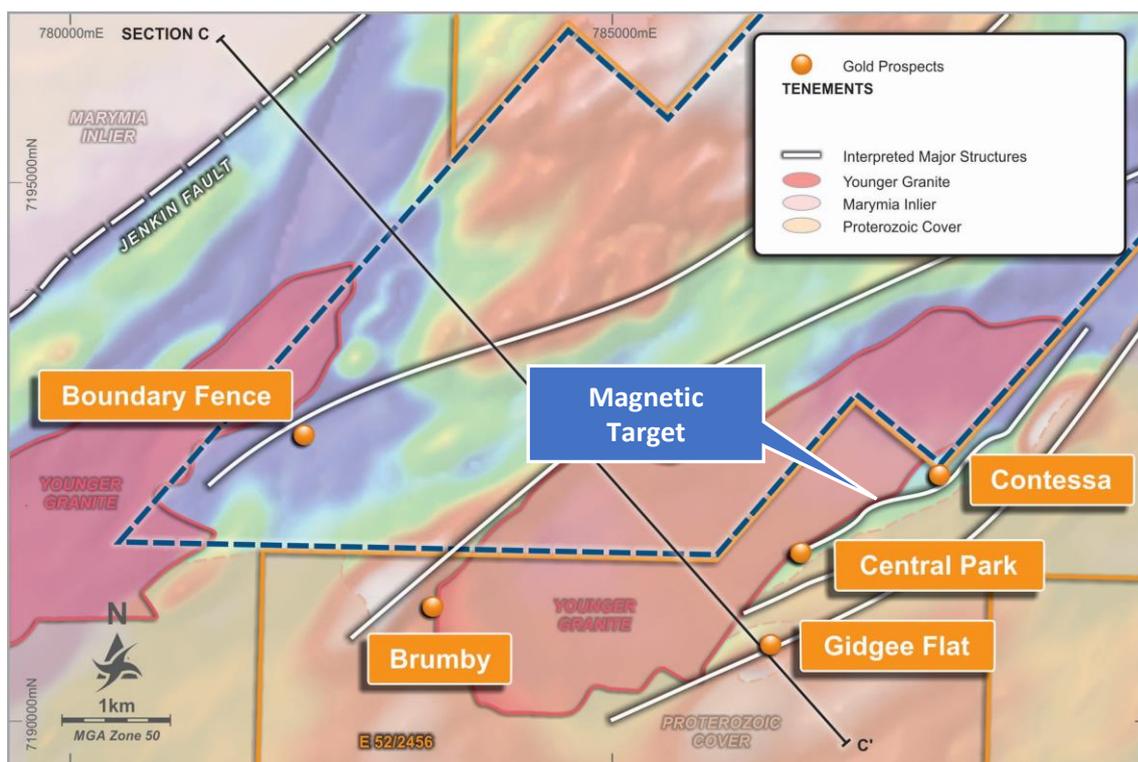


Figure 1 Location of drilling program, Ned's Creek JV.

The program was designed to test a discrete magnetic anomaly within the mineralised Contessa shear zone, adjacent to the granite contact (see Lodestar’s ASX announcement dated 12<sup>th</sup> September 2022). The program comprised three holes completed to a maximum depth of 218m for a total of 594m (see Table 1). The magnetic target is along strike from significant gold intersections in previous drilling and was interpreted as a mafic unit with

potential to host gold in areas of brittle deformation or hydrothermal magnetite alteration related to mineralisation.

The drilling intersected several zones of silica-pyrite alteration within diorite that have potential to host gold mineralisation.

Hole locations and an interpreted geology cross section are shown in Figures 2 and 3. The target lies within a narrow, linear belt of greenstone, wedged between the Contessa granite and a smaller granite intrusion to the south, concealed beneath Proterozoic sediments, interpreted from airborne EM and aeromagnetic data.

Hole LNRC102, targeted the south east dipping magnetic anomaly, intersecting an upper, intensely silicified shear zone above intermittently epidote, haematite and carbonate altered diorite. The key intervals include a zone of silicification and pyrite mineralisation from 142m to 145m and below 187m where haematite altered granite intrusives appear with silicified, pyritic diorite. A hydrothermal molybdenite-pyrite vein marks the contact with sericite altered granite at 208m. The hole continued in altered granite, bearing veinlets of molybdenite-pyrite-fluorite, to the final depth of 218m. It is not known whether this granite represents the Contessa granite, which would indicate a southerly dip to the granite contact.

Hole LNRC103 was drilled as a scissor hole to LNRC102 to a depth of 212m. The hole intersected diorite to end of hole with the interval from 116m to 146m displaying partial silicification with trace of pyrite.

Hole LNRC104 was drilled below LNRC103 and intersected the Contessa granite from surface to 48m. An intensely silicified shear zone is developed below the granite contact. Silica-pyrite and chlorite altered diorite was intersected from 66m to 97m with a granite intrusion between 97m to 109m. Silica-pyrite altered diorite, with minor zones of epidote and carbonate alteration continued to 125m. The hole terminated in partly silicified diorite at 164m.

In summary, drilling intersected a diorite body, thought to be responsible for the magnetic signature, bounded by major shear zones. Intense alteration within the diorite occurs on or near the contacts with granitic intrusives and the observed alteration style is consistent with gold-hosting hydrothermal alteration zones within the known prospects at Contessa, Gidgee Flat and Contessa. Samples from the program have been delivered to the laboratory and assay results will be announced when received.

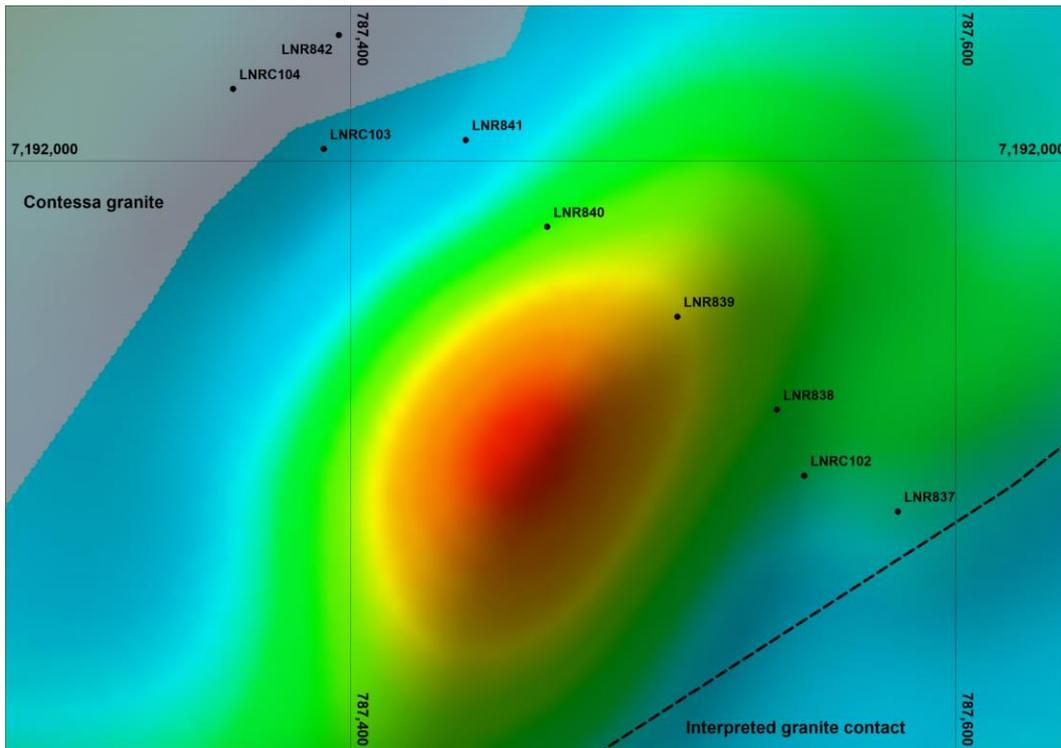


Figure 2 Drill collar location plan, showing magnetic anomaly, MGA94 zone 50.

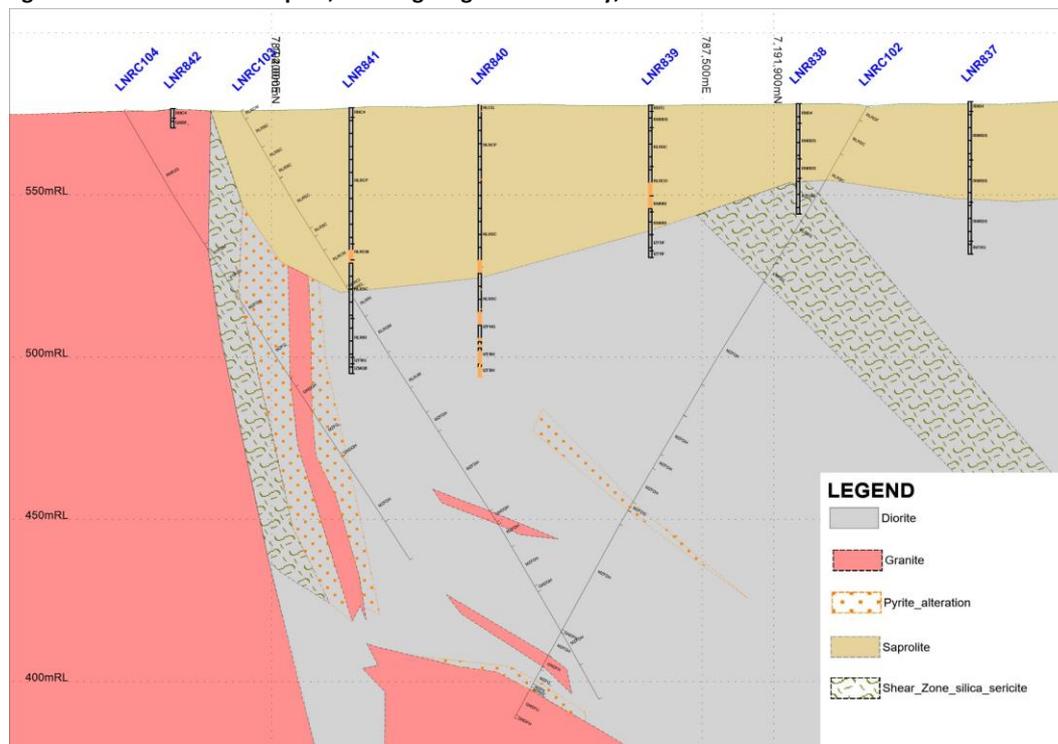


Figure 3 Interpreted geological cross-section.

**Table 1 Drill hole information**

HoleID	Easting	Northing	RL	TotalDepth	DrillType	Dip	Azimuth
LNRC102	787550	7191895	577.4	218	RC	-60	320
LNRC103	787391	7192004	575.9	212	RC	-60	134
LNRC104	787361	7192024	575.9	164`	RC	-60	133

**This announcement has been authorised for release by the Managing Director of the Company.**

### Contacts

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### About Lodestar

Lodestar Minerals is an active Western Australian gold, base metal and lithium explorer.

Lodestar's projects comprise the advanced Nepean Nickel Project JV, the Ned's Creek JV and the 100% owned Camel Hills, Earahedy-Imbin, Jubilee Well, Bulong and Coolgardie West projects.

The Earahedy-Imbin Project is a major strategic land holding in the emerging Earahedy Province, site of Rumble Resource's recent and potentially world-class Zinc-Lead discoveries. The Imbin Project is located on the northern margin of the prospective basin and is the site of significant historic copper intersections in drilling and approximately 20km of strike of the target Yelma-Frere unconformity.

Lodestar discovered multiple zones of syenite intrusion-related gold mineralisation at the Ned's Creek Project on the Yilgarn craton margin, 150km west of Imbin. Vango Mining Limited is earning a 51% interest in the Ned's Creek JV by contributing \$5M of expenditure over 3 years.

Bulong and Jubilee Well are located in highly endowed gold districts; first-pass drill programs have been planned. Coolgardie West, located 12km west of Coolgardie, has potential for greenstone hosted gold, nickel and LCT pegmatite mineralisation with priority lithium and gold drill targets identified by soil geochemistry.

### Competent Person Statement

*The information in this report that relates to Exploration Results is based on information compiled by Bill Clayton, Managing Director, who is a Member of the Australasian Institute of Geoscientists and has sufficient experience*

*of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Clayton consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

*The information in this announcement that relates to previously released exploration results was disclosed under JORC 2012 in the ASX announcements dated*

- *12<sup>th</sup> September 2022 "Drilling Commences at Ned's Creek".*

*This announcement is available to view on the Lodestar website. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. 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 announcement.*

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <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 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></li> </ul>	<ul style="list-style-type: none"> <li>• RC drill holes were sampled at 1m intervals throughout, with 4m composites routinely collected from exploration drill holes. Samples collected from the cyclone were laid in sequence on the ground in rows of 20.</li> <li>• Sample representivity is maintained by placing the samples in a pre-numbered calico bag with a corresponding sample book entry, maintaining dry sampling and good drilling practice. Certified reference materials, field duplicates and laboratory repeat samples are analysed routinely.</li> <li>• 1m RC samples were collected as a 2.5kg split in calico bags attached to the on-board cone splitter. Composite 4m metre samples were collected by spearing the pile using a PVC spear and combined to create a 2.5 to 3.0kg composite sample. The samples were submitted to a commercial laboratory for drying, crushing, and pulverising to produce a 40g charge for fire assay of gold or aqua regia digest for gold and multi-elements by multi-acid digest.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling using a 5.5" face sampling hammer.</li> <li>• RC holes were surveyed with a north-seeking Champ Pilot gyro survey tool.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Sample recoveries and wet samples were monitored and recorded qualitatively in Lodestar's drill hole database. Recoveries were generally 80 -100% and less than 1% were reported as wet samples.</li> <li>• High pressure air used to maintain a dry sample and drill sampling equipment was cleaned regularly to minimise contamination.</li> <li>• Assay data awaited..</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Chip samples were routinely geologically logged throughout the hole.</li> <li>• Logging is qualitative in nature.</li> <li>• All RC holes are geologically logged in full.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No core samples taken.</li> <li>• Individual 1m split samples collected from the cone splitter or composites of 1m chip piles are submitted for assay. Most samples were dry. Selected</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>intervals were composited from 1m bulk samples to produce a 2.5kg 4m composite using a PVC spear. All samples for assay are stored in pre-numbered bags and submitted to Bureau Veritas Laboratories for sample preparation and analysis.</p> <ul style="list-style-type: none"> <li>• Sample preparation for drill samples involves drying the whole sample, crushing to 3mm and pulverising to 90% passing -75 microns. The pulverised sample was split with a rotary sample divider to obtain a 40 gram charge. Duplicate field samples (1:40), certified reference standards (1:40) and laboratory repeats are used to monitor satisfactory reproducibility.</li> <li>• Sample size is appropriate for early exploration drilling where mineral grain size is unknown.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• The aqua regia digest is considered a partial digest for refractory minerals but is widely used for gold analysis. The fire assay method is a standard method for gold and approaches a total analysis. Multi-elements will be analysed after a multi-acid digest that will bring most refractory minerals into solution. Selected 1m split samples will be analysed for gold by fire assay and ICPMS, the analytical method is industry standard and approaches a total assay.</li> <li>• No geophysical tools were used to determine any element concentrations.</li> <li>• Reference standards and duplicates were inserted at 1:40 throughout the program. Assay results awaited.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Assay results awaited.</li> <li>• Twinned holes were not drilled in this program.</li> <li>• Field and laboratory data are collected electronically and entered into a relational database. Data collection protocols are recorded in Lodestar's operation manual.</li> <li>• Assay data awaited..</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A hand-held GPS has been used to locate the drillholes with estimated 3-5m accuracy.</li> <li>• Drill hole coordinates were recorded in MGA94 Zone 50 grid.</li> <li>• The topography within prospect areas is generally flat. In the Contessa and Central Park areas drill hole collar RL's have been adjusted to the DEM surface derived from a detailed aeromagnetic survey using Bendix/King radar altimeter equipment with a resolution of 0.3m.</li> </ul>
<b>Data spacing and</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of</i></li> </ul>	<ul style="list-style-type: none"> <li>• Single traverse of drill holes to test</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>distribution</b>	<p>Exploration Results.</p> <ul style="list-style-type: none"> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>magnetic anomaly. Drill hole spacing is adequate for this purpose.</p> <ul style="list-style-type: none"> <li>Exploration drilling not for resource estimation.</li> <li>Sample compositing over 4m intervals throughout the drilling program with 1m split samples available for check assays where anomalous grades are reported.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The granite contact is believed to dip towards the north based on limited drilling however a southerly dip is possible.</li> <li>Drilling is oriented perpendicular to strike and true thickness is interpreted to be approximately 0.6x drill hole intercepts.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were stored at Lodestar's exploration camp in sealed bags under supervision prior to dispatch by Lodestar contractors to Bureau Veritas Laboratories in Canning Vale.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Assay results awaited.</li> </ul>
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling is located on E52/2456, within Lodestar's Ned's Creek project. Vango Mining Limited are earning a 51% interest in the Ned's Creek project by spending \$4.5M. The tenement is owned by Audacious Resources, a wholly-owned subsidiary of Lodestar Minerals and expires on 16/09/2022. An application for extension of term has been submitted. The tenement is within the Gingirana #4 native title claim and Lodestar is in negotiations to implement an access and heritage with the claimants.</li> <li>Lodestar has applied for an extension of term for E52/2456 and awaits the outcome of this application.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration commenced at McDonald Well in the late 1960's, WMC explored for Zambian Copper Belt style mineralisation and completed regional geological mapping and sampling, followed by minor percussion drilling. CRA Exploration completed regional mapping and auger sampling, also at McDonald Well. No significant anomalies were identified on the tenements. Minor exploration drilling by Barrick and CRA Exploration east and south of Contessa intersected ultramafic lithologies, confirming the extent of the greenstone sequence in this area. There has been no material exploration by other parties over the Contessa area.</li> <li>Gold exploration in the Plutonic Well greenstone belt commenced in 1986.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>Marymia Exploration, in their 1994 report, declares that there had been little or no previous exploration within the Yowereena (Ned's Creek) tenements.</p> <ul style="list-style-type: none"> <li>• The geology of the project area comprises the northern margin of the Proterozoic Yerrida Basin. The geology forms two discrete units; Proterozoic sediments of the Yerrida Basin that are prospective for sediment-hosted copper and base metal mineralisation in black shale and carbonate sequences, with evidence of secondary and primary copper mineralisation in the Thaduna district. The sediments overlie Archaean basement rocks on the northern margin of the Yerrida Basin. The basement-sediment contact trends east-west and Lodestar's exploration has identified extensive gold anomalism adjacent to this contact. The basement consists of granite and fringing mafic to intermediate and ultramafic rocks that have minimal outcrop. The mafic-ultramafic rocks and the adjacent granite that hosts gold mineralisation are thought to be Archaean in age. Identification of syenite-hosted, intrusion-related gold mineralisation at Brumby and Gidgee Flat indicates that this region differs from other lode gold occurrences in the Plutonic Well greenstone belt and the surrounding Proterozoic fold belt and does not form part of the adjacent Marymia Inlier.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>• <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"> <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> </li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Tabulated drillhole data is provided in Table 1.</li> <li>• Northing and easting data generally within 3-5m accuracy</li> <li>• RL data +/-0.3m</li> <li>• Down hole length =+/- 0.1 m</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Assay results are awaited.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Material and should be stated.</i></p> <ul style="list-style-type: none"> <li>• <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. The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i> <ul style="list-style-type: none"> <li>◦ <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> </ul> </li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling of the magnetic anomaly was oriented perpendicular to the south east dipping model (LNRC102 at 320degrees), perpendicular to the regional strike of magnetic body. LNRC103 &amp; LNRC104 were drilled towards 130 degrees, perpendicular to the regional strike. Measurement of foliation in the area indicates steep dips. Mineralisation is interpreted to dip steeply to the north west with true thickness approximately 60% of drill hole intersections however the regional dip of the granite contact has not been established and south east dipping layering has been observed in drill core. A contact dipping towards the south east is possible.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Refer Figures 1 &amp; 2 for drillhole locations.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Assay results are awaited.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• None to report.</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC drilling has confirmed a large hydrothermal alteration system on the southern margin of the Contessa granite. Drilling of a magnetic anomaly adjacent to the granite contact has intersected variably altered diorite, with intense alteration developed adjacent to intrusive contacts. Follow up work will be determined by the results of the current program.</li> </ul>