

## Initial Results Confirm Primary Gold Target at Contessa

### Highlights

- First 29 results returned from 220 core samples from two diamond holes completed at Contessa to scope the extent of mineralisation and alteration on target contact.
- Gold mineralisation up to 2.34g/t Au over a 1 metre interval within a 7.8m intersection of hydrothermal quartz veining and alteration.
- Intersection located approximately 15m below aircore hole LNR906 (4m at 4.35g/t Au).
- Diamond drill results impacted by core loss due to intense weathering on the contact.
- Proximity to extensive supergene gold mineralisation in aircore drilling indicates potential for a primary target of significant size.
- Breakthrough in identifying the key structural control is an essential first step in unlocking the bedrock potential at Contessa and demands systematic follow up drilling. A step-out RC drill hole to test down-dip from LND001 is planned for November.

West Australian gold explorer Lodestar Minerals Limited (**ASX: LSR**) (“Lodestar” or “the Company”) provides the following update from recently completed EIS co-funded drilling at the Contessa gold prospect. Contessa is located on the Company’s 100%-owned Neds Creek project, 170 kilometres north of Meekatharra and 35km east of the 5Moz Plutonic Gold Mine (see Figure 1).

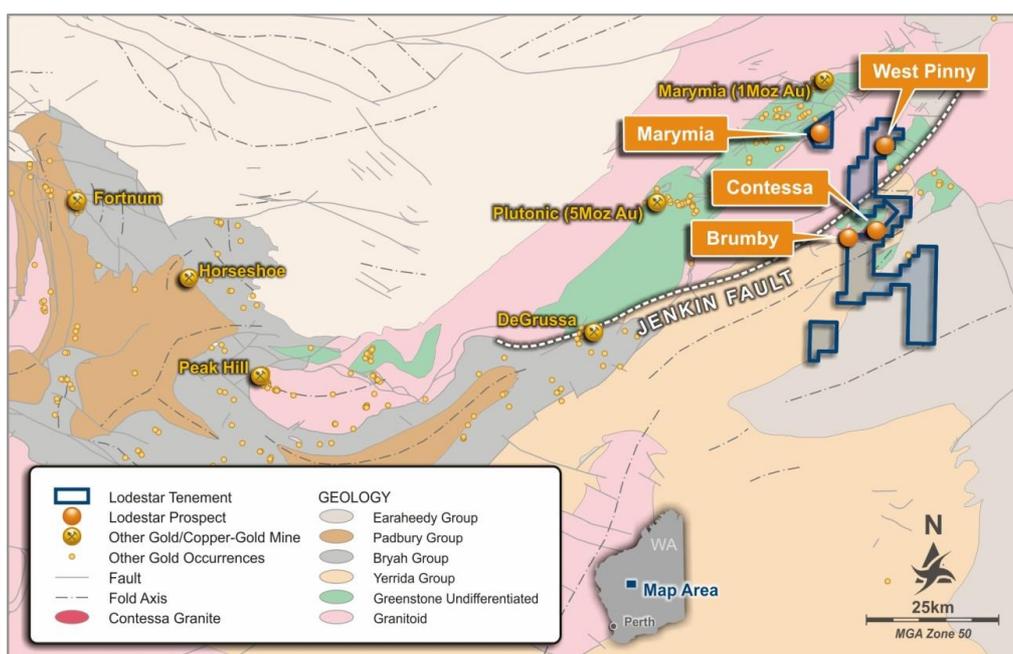


Figure 1: Location plan showing the Contessa Prospect.

Lodestar completed two diamond drill holes targeting a zone of primary gold mineralisation intersected at the end of hole in the previous program of aircore drilling (see ASX announcements dated 18 October 2017 and 31 October 2017). Results for the first 29 of 220 core samples submitted for assay have been received with significant results listed in Table 1 and all results listed in Appendix 1.

**Table 1: Significant assay results (greater than 0.1g/t Au) from contact zone (quartz vein zone highlighted in yellow).**

Hole	Drill Type	Easting	Northing	mRL	Depth (m)	Dip	Azim	From	To	Length (m)	Au g/t	Core Size	Core Recovery %
LND001	Core	788025	7192339	574.3	214.9	-60	130	91	91.86	0.86	0.25	HQ	100
								91.86	92.39	0.53	0.16		100
								92.39	93.2	0.81	0.06		100
								93.2	94.6	1.4	1.88		71
								94.6	95	0.4	2.34		100
								95	96.4	1.4	1.52		78
								96.4	96.8	0.4	0.99		100
								96.8	97.3	0.5	0.63		100
								97.3	99.05	1.75	0.93		54
								99.05	100	0.95	0.04		100
								100	101	1	0.98		100

Drilling encountered deep weathering and significant core loss through the contact zone (see Figure 2) and therefore gold assay results in zones of core loss are considered indicative only. There is potential the assay results understate the in-situ gold grade.

The remaining ~190 assay results are expected to be received in November. This includes samples that displayed pervasive silica and pyrite alteration, which is commonly associated with shear-hosted gold mineralisation, adjacent to the structural contact. Evidence of sulphide mineralisation is widespread in the weathered zone; as iron oxide casts after disseminated pyrite and as iron oxide filling fractures and stringers.

### Conclusion and next steps

Diamond drilling has provided an important breakthrough in our understanding of the primary gold target at Contessa. It is apparent that previous drilling was concentrated to the south of the target and drilled parallel to the main structure. The target is identified as a mineralised structural contact between geological units, adjacent to a major shear zone developed on the margin of the Contessa granite. This structural setting is a characteristic of many well-documented, structurally controlled gold deposits including major deposits such those in the Granny Smith area.

Currently the contact has been tested by only one drill hole (LND001) and the target remains open down-dip and along strike, where diorite has been intersected in aircore drilling over a distance of 2,000 metres. A program of follow-up RC drilling is required to systematically test the potential of the wider area and an RC rig has been scheduled for November, commencing with an initial step-out hole below LND001 to test for down dip extensions.



Figure 2 Brecciated and strongly ferruginous (brown) quartz vein system located on the contact between felsic schist and diorite. Vein interval is shown by the yellow arrows.

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### About Lodestar

Lodestar Minerals is an active Western Australian gold explorer with a prospective tenement package spanning more than 2,000km<sup>2</sup> at the edge of the Pilbara and Yilgarn Cratons. Lodestar has three main projects – Ned’s Creek, Camel Hills and Imbin – and is also earning an 80% interest in Vango Mining’s Yowereena project which is adjacent to Ned’s Creek.

Lodestar’s main focus is Ned’s Creek where it has made a greenfield gold discovery at the Contessa prospect. Contessa is one of many partly explored gold anomalies located within a large shear zone developed along the margins of 6 kilometre long, elongate composite granite intrusion.

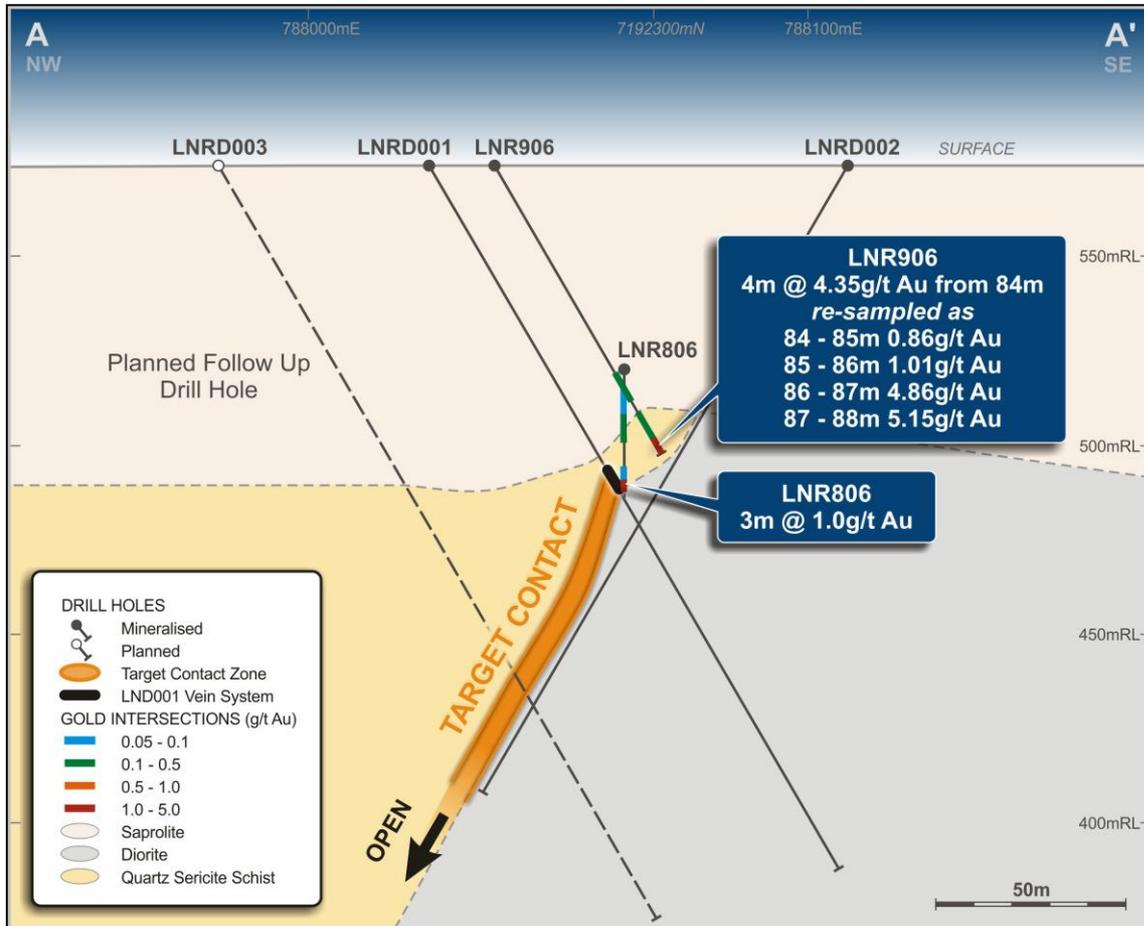


Figure 3 Cross section view of LND001 and interpreted geological contact, showing planned down-dip drill hole test.

## Appendix 1

HoleID	Type	Easting	Northing	RL	TotalDepth	Dip	Azimuth	From	To	Length(m)	Au g/t
LND001	Diamond	788025	7192339	574.3	214.9	-60	130	83	84	1	<0.1
								84	85	1	<0.1
								85	86	1	<0.1
								86	87.5	1.5	<0.1
								87.5	88	0.5	<0.1
								88	89	1	<0.1
								89	89.6	0.6	<0.1
								89.6	90	0.4	<0.1
								90	91	1	<0.1
								91	91.86	0.86	0.25
								91.86	92.39	0.53	0.16
								92.39	93.2	0.81	<0.1
								93.2	94.6	1.4	1.88*
								94.6	95	0.4	2.34
								95	96.4	1.4	1.52*
								96.4	96.8	0.4	0.99
								96.8	97.3	0.5	0.63
								97.3	99.05	1.75	0.93*
								99.05	100	0.95	<0.1
								100	101	1	0.98
								101	102	1	<0.1
102	103	1	<0.1								
103	104	1	<0.1								
104	105	1	<0.1								
105	106	1	<0.1								
106	107	1	<0.1								
107	108	1	<0.1								
108	109	1	<0.1								
109	110	1	<0.1								

\* Denotes core loss

### **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 18th October 2017 "Completion of Drilling at Contessa" and 31st October 2017 "September 2017 Quarterly Activities and Cash Flow Report". These announcements are 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.*

# JORC Code, 2012 Edition

## Section 1 Sampling Techniques and Data

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>• Sampling and assaying of drill core is underway. The RC precollar of the diamond drill holes was sampled at 1m intervals and samples collected from the cyclone were laid in sequence on the ground in rows of 25. Re-sampling of selected aircore drill holes, using the original bagged 1m samples was also carried out.</li> <li>• Sample representivity is maintained by placing the samples in a pre-numbered calico bag with a corresponding sample book entry. Certified reference materials, field duplicates and laboratory repeat samples are analysed routinely.</li> <li>• Sample results from aircore re-sampling are reported in Table 2. Samples were retrieved from the original samples by spearing consistently down the side of bagged 1 metre samples using a PVC spear. Approximately 2.5kg of material was dried, crushed pulverised and split to produce a 40g charge for fire assay determination of gold and mixed acid digest and ICPMS determination of pathfinder elements.</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>• Diamond drilling – Precollar - 5.5" face sampling hammer. HQ and NQ2 drill core. LND001: precollar to 80m; HQ core to 116.7m; NQ2 core to 214.9m. LND002: precollar to 75m; HQ core to 113.6m; NQ2 to 191.5m. Core orientation using an ACT Mk 2 core orientation tool. Hole surveyed using a multi-shot electronic 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>• Precollar sample recoveries and wet samples were monitored and included in Lodestar's drill hole database. Core recoveries recorded, based on geologist's mark-up and measurement of individual core runs and comparison with driller's measurements.</li> <li>• HQ drilling through upper part of hole to maximise recovery in highly weathered zone. Precollar samples collected from a cyclone at 1 metre intervals and laid in rows of 25 sequentially. Drill sampling equipment was cleaned regularly to minimise contamination.</li> <li>• Drill core and precollar assay results are awaited.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>• Drill core and chip samples were routinely geologically logged. The drilling was an initial drill test of the target in weathered rocks and the results are not intended to support Mineral Resource estimation.</li> <li>• Logging is qualitative in nature.</li> <li>• All drill core and precollar samples are geologically logged.</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> <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>	<ul style="list-style-type: none"> <li>• Core sampling and assaying processes are underway and incomplete. Core is being sampled as half core.</li> <li>• Re-assay of aircore samples involves rotary splitting to obtain a 40g sub-sample.</li> <li>• All samples for assay are stored in pre-numbered bags and submitted to Bureau Veritas (UltraTrace) Laboratories for sample preparation and analysis.</li> <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 and laboratory repeats are used to monitor satisfactory reproducibility.</li> <li>• Sample size is appropriate for early exploration drilling where mineral grainsize 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>• Aircore re-sampling - A 40 gram charge was submitted for fire assay (with ICP-OES finish), the detection limit is 1ppb. Selected pathfinder elements were determined by mixed acid digest and ICP-MS.</li> <li>• No geophysical tools were used to determine any element concentrations.</li> <li>• Laboratory QAQC includes the use of laboratory standards and replicates.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>• Significant intersections have not been independently validated at this time.</li> <li>• No twinned holes have been completed.</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>• There has been no adjustment to assay data.</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>• Drill hole locations are fixed by handheld GPS, accuracy is estimated to be +/-5 metres.</li> <li>• Drill hole coordinates were recorded in MGA94 Zone 50 grid.</li> <li>• The topography within prospect areas is generally flat; RL's are averaged from GPS readings of individual drill holes in each area and are subject to significant error. In the Contessa area 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 distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes have variable spacing, generally 40 metres on section and ranging from 80 to 320 metres between sections.</li> <li>• The data is insufficient to establish continuity for Mineral Resource estimation.</li> <li>• Compositing has not been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drilling - The target contact is interpreted to dip towards grid north at approximately 60 degrees, based on limited information.</li> <li>• Intersection widths, based on the interpreted northerly dip, are believed to represent 1.15 times true thickness.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were stored at Lodestar's exploration camp in sealed bags or covered core trays and under supervision prior to dispatch by registered courier or Lodestar staff to Bureau Veritas - UltraTrace Laboratories.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews have been carried out.</li> </ul>

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Contessa is located on E52/2456, within Lodestar's Ned's Creek project. The tenement is owned by Audacious Resources, a wholly-owned subsidiary of Lodestar Minerals and expires on 16/09/2020. The tenement is within the native title claim WC99/46 of the Yugunga-Nya Group. Lodestar has signed a Heritage Agreement with the traditional owners to carry out mineral exploration on the tenement.</li> </ul>
<b>Exploration done by other parties</b>	<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> </ul>
<b>Geology</b>	<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 and 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 are not well exposed at surface. The mafic-ultramafic rocks and the adjacent granite that hosts gold mineralisation are thought to be Archaean in age but may be part of the Glenburgh orogenic event along the northern Yilgarn margin. Identification of syenite-hosted, intrusion-related gold mineralisation at Brumby indicates that this region differs in comparison with 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>Tabulated data is provided in Table 1.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>Assay data are reported as 1 metre samples. Where aggregate intersections are stated a 0.1g/t Au cut-off has been applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Drilling at Contessa was generally oriented -60 degrees towards 310 degrees, recent aircore drilling and diamond drilling specifically targeted the contact between diorite and felsic schist and was drilled towards 130 degrees and 310 degrees. The geological interpretation implies that the contact and related vein system dips at approximately 60 degrees towards 310 degrees and the intersection widths in LND001 are 1.15 times the true thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>See Figures 2 and 3.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>All drill holes are reported in Table 1.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>None to report.</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>Extensive zones of anomalous gold greater than 100ppb (0.1g/t) have been identified in drilling at Contessa. The anomalies remain open at depth and along strike along the granite contact. In-fill drilling at Contessa has extended a zone of supergene gold mineralisation in several areas where extensive zones of low grade mineralisation persist into the transition zone below supergene mineralisation. The contact between diorite and felsic schist has been identified as significant bedrock target for follow-up systematic drilling and is believed to be the source of supergene gold.</li> </ul>