

## JUBILEE WELL ACQUISITION – 8km ALONG STRIKE FROM 9moz SUNRISE DAM

### HIGHLIGHTS

- Tenement located along strike from Sunrise Dam gold mine, similar geological sequence.
- 3.7km of strike covers north north-west trending regional shear system associated with gold mineralisation.
- Preliminary review identifies gold anomalies in historic drilling, 2km along strike from 100 000oz Au<sup>1</sup> Golden Delicious deposit, as primary drill target.

Lodestar Minerals Limited (“Lodestar” or “the Company”) (ASX:LSR) advises that it has acquired a 100% interest in E38/3054 located 8.6km north of the 9Moz Au Sunrise Dam mine and 18km south of the 8moz Au Granny Smith mine (see Figure 1). The tenement, known as Jubilee Well, represents a strategic foothold in one of Western Australia’s premier gold producing districts and was acquired through the purchase of the assets of private company Oro Del Sur Pty Ltd for a consideration of \$50,000. The acquisition was presented exclusively to Lodestar via the directors of GoldFellas Pty Ltd.

The Laverton tectonic zone includes the world-class Sunrise Dam, Granny Smith and Wallaby deposits and numerous smaller gold deposits that have a spatial relationship to a series of major north north-west trending shears that continue through the tenement. The 100 000oz Au Golden Delicious deposit, currently the subject of a mining proposal by AngloGold, is located less than 2km south of the tenement boundary.

The geological sequence within the tenement is similar to that at Sunrise Dam and exploration drilling by previous explorers has targeted BIF-hosted, supergene and palaeochannel hosted gold mineralisation in the western and central areas of the tenement and intrusion-hosted “Golden Delicious” style mineralisation in the eastern area.

A preliminary review of historic drilling data has been completed and a priority target identified north of the Golden Delicious deposit.

Two phases of RC drilling completed between 1991 and 1996 targeted the strike continuation of the Golden Delicious mineralisation. The drilling (MKWB prefix), on a 200m traverse spacing, outlined a gold anomaly related to an altered quartz dolerite<sup>2</sup>. Follow up RC drilling (JWRC prefix) in 1996 by Acacia reported gold mineralisation associated with local zones of strongly haematite-carbonate-silica altered andesite and the contacts of a quartz porphyry

---

<sup>1</sup> See Golden Delicious Mining Proposal, DMIRS Environmental Registration ID 83347

<sup>2</sup> See DMIRS open file report WAMEX A35400

intrusive<sup>3</sup> (significant intercepts (>0.1g/t Au) are listed in Table 1 and drill hole locations are shown in Figure 2). The anomaly is located directly north, along strike from the Golden Delicious deposit, the structural controls are not known and given the current relatively wide-spaced drill pattern, it represents a significant opportunity for follow up exploration drilling.

A program of work is now being developed for the Jubilee Well project, including acquisition of aeromagnetic data, a detailed review of historic exploration data and planning a first-pass drilling program to follow up historic gold anomalies.



Figure 1 Location Plan E38/3054, Jubilee Well

<sup>3</sup> See DMIRS open file report WAMEX A50186

**Table 1 Significant drill intersections in historic drilling.**

HoleID	East_AMG84	North_AMG84	RL	Dip	Azimuth	From	To	Au g/t	TotalDepth
MWBK9	447200	6792400	407.1	-60	270	58	62	0.19	80
						62	66	1.74	
MWBK64	447160	6792600	406.8	-60	270	76	80	0.92	83
						80	83	0.3	
MWBK99	447160	6792800	406.1	-60	270	80	85	0.22	85
MWBK105	447240	6792200	407.7	-60	270	72	76	0.099	77
JWRC001	447000	6792800	405.8	-60	90	104	105	0.76	123
JWRC002	447100	6792800	406.3	-60	90	103	104	0.62	123
JWRC003	447000	6792600	406.5	-60	90			<i>nsi</i>	123
JWRC004	447174	6792600	406.7	-60	90			<i>nsi</i>	108
JWRC005	447075	6792400	407.1	-60	90			<i>nsi</i>	96
JWRC006	447150	6792400	407.2	-60	90	65	66	1.28	126
						74	75	1.46	
						77	78	1.44	
JWRC007	447100	6792200	407.8	-60	90			<i>nsi</i>	130
JWRC008	447200	6792200	407.7	-60	90			<i>nsi</i>	104

**Table 2 Tenement information.**

Tenement	Current Holder	Grant Date	Expiry Date	Area (ha)	Annual Commitment
E38/3054	Oro Del Sur Pty Ltd	13/09/2017	12/09/2022	2064	\$30,000

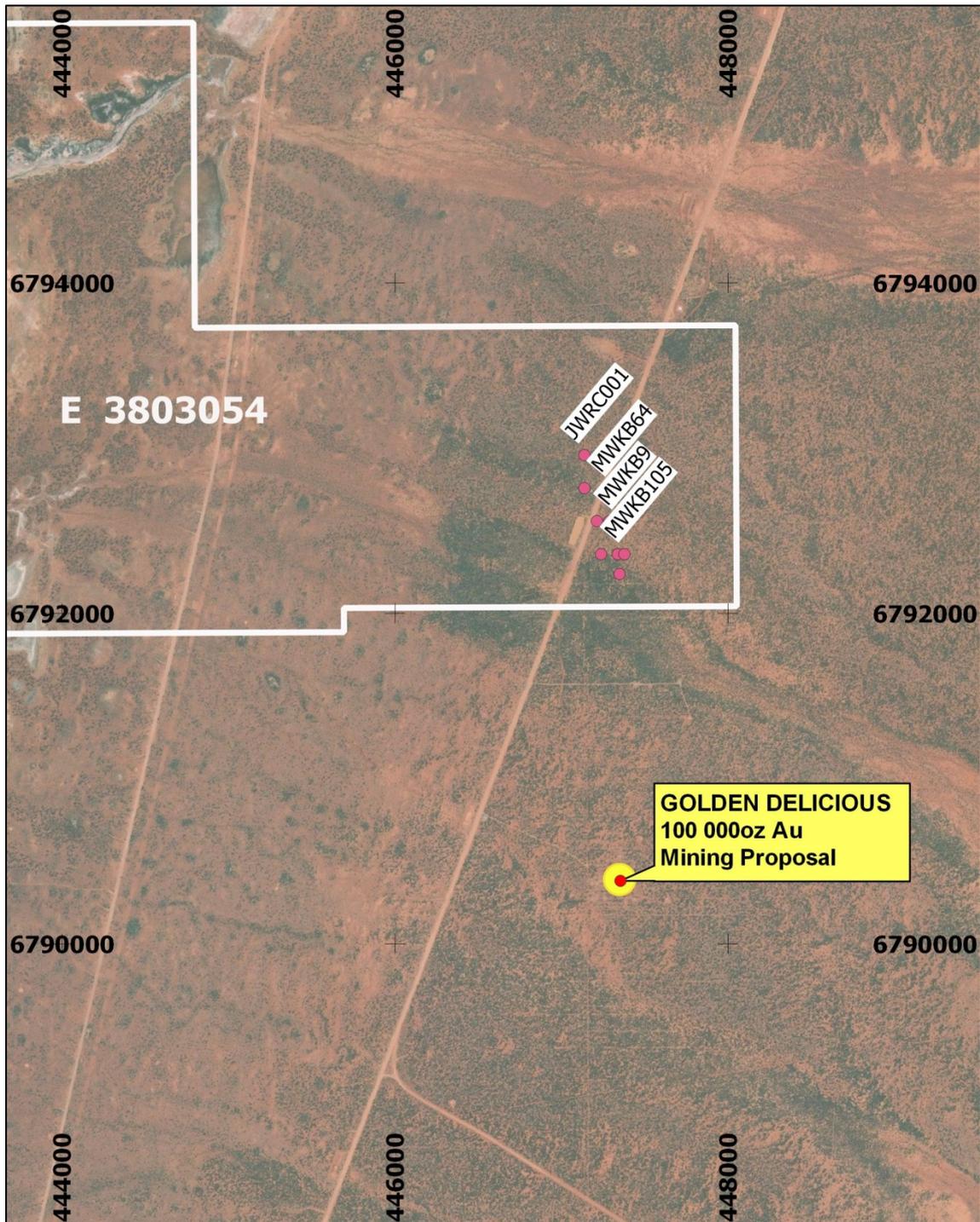


Figure 2 Plan view of significant historic drill holes, E38/3054 (GDA94 Zone 51).

### Contacts

Bill Clayton	Media enquiries
Managing Director <a href="mailto:info@lodestarminerals.com.au">info@lodestarminerals.com.au</a> +61 8 9435 3200	Michael Vaughan, Fivemark Partners <a href="mailto:michael.vaughan@fivemark.com.au">michael.vaughan@fivemark.com.au</a> +61 422 602 720

### About Lodestar

Lodestar Minerals is an active Western Australian gold explorer with a prospective tenement package spanning 1,560km<sup>2</sup> at the edge of the Pilbara and Yilgarn Cratons. Lodestar has three main projects – Ned’s Creek, Camel Hills and Imbin.

The Ned’s Creek Gold Project has syenite intrusion-related gold mineralisation within a craton margin setting with significant gold intersected in drilling at the Contessa, Central Park and Gidgee Flat prospects. Contessa is one of many partly explored gold anomalies located within a large shear zone developed along the southern margin of a 6 kilometre long, elongate composite granite intrusion. The Yowereena area north of Contessa includes the unexplored northern margin of the Contessa granite and under-explored prospective Archaean greenstone terrane within a region of major gold endowment and production.

The Ned’s Creek project is subject to a Farm-In and Joint Venture with Vango Mining Limited whereby Vango are earning a 51% interest by expending \$5M over 3 years.

### 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.*

# 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"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>MWKB-series holes (Poseidon, 1991); RC drilling using a Kitt bit, with samples collected at 1m intervals from a conventional cyclone. Samples were composited over 4m intervals. Sample size not reported. Samples were analysed for gold only using an aqua regia digest, AAS/carbon rod finish with a detection limit of 1ppb Au. Methods to maximise sample representivity are not recorded. JWRC-series holes (ACACIA, 1996); RC drilling, samples were collected from a cyclone at 1m intervals and composited to 4m intervals to the base of transported material. Samples below the transported interface were allowed to dry and 1m samples were riffle split to 25% to submit for assay. Sample size is not reported. Composite samples were analysed for gold using BLEG cyanide leach and 1m samples were analysed for gold by fire assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>MWKB-series holes, Schramm T64 reverse circulation using a Kitt bit, &gt;5 inch bit diameter and 350psi/650cfm compressor. JWRC-series holes; RC drill type not reported.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>MWKB-series holes; sample recoveries not recorded, wet samples are recorded in logs. JWRC-series holes; sample recoveries not recorded in logs.</li> <li>Measures taken to maximize sample recovery and to ensure the samples are representative are not recorded.</li> <li>There is no evidence of a relationship bias between sample recovery and grade, the drilling represents early stage exploration.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes have not been logged to the level of detail required for Mineral Resource Estimation.</li> <li>Drill holes were geologically logged by previous operators. Logging is</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>studies.</p> <ul style="list-style-type: none"> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<p>qualitative in nature; the total depth of drill holes has been logged for geology and sampled for analysis.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• All drilling is non-core drilling</li> <li>• MWKB-series holes; sub-sampling techniques not reported, analysis of 50g sample by ALS Method PM205. JWRC-series holes; 1m samples below the base of transported material were allowed to dry and riffle split to obtain a 25% fraction for submission to commercial laboratories.</li> <li>• MWKB-series holes; the sample preparation technique is not described. JWRC-series holes; All samples were dried crushed and pulverized to 90% passing 75 microns. Samples from transported cover were composited to 4m intervals (method not disclosed) and samples were submitted for gold analysis by BLEG. A 500g sample is bottle rolled for 24hrs after which gold is extracted from the liquor with DIBK and assayed using AAS/carbon rod with a detection limit of 0.1ppb Au. The 1m samples were assayed for gold by fire assay –aqua regia-AAS using a 50g sub-sample.</li> <li>• Information on quality control measures is not reported, nor is information on sample field duplicates or standards.</li> <li>• Sample size submitted to the laboratories is not reported, however the two episodes of drilling have confirmed the same gold anomaly.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Laboratory processes are not reported in detail, samples from both episodes of drilling were analysed using standard methods by commercial laboratories. For transported material BLEG analysis is considered a partial extraction but well suited to first-pass exploration with a very low level of detection. The aqua regia/AAS and fire assay/AAS methods are considered highly effective for extraction of gold and suitable for first pass exploration drilling.</li> <li>• No geophysical instruments were used.</li> <li>• The quality control measures are not reported.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Historic significant intersections have not been verified; two phases of drilling, targeting the prospect area over a distance of approximately 800m, have identified a poorly constrained gold anomaly.</li> <li>• Twinned holes have not been completed</li> <li>• Documentation is limited, logging codes and related information for JWRC-series holes are provided in statutory reports (WAMEX report</li> </ul>

Criteria	JORC Code explanation	Commentary
		A50186). <ul style="list-style-type: none"> <li>No adjustments to assay data were undertaken.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>JWRC-series holes were positioned with reference to a surveyed baseline and the location confirmed on completion by Omnistar DGPS (accuracy +/- 5m).</li> <li>Hole coordinates are given in AMG84 Zone 51</li> <li>The area is generally peneplained and topographic variation is not significant at the current stage of exploration.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <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>	<ul style="list-style-type: none"> <li>MWKB-series holes; hole spacing is generally 40m on east-west traverses at 200m intervals. JWRC-series holes were collared on a 75m to 100m spacing on the same east-west traverses at 200m intervals.</li> <li>The data spacing and distribution is not appropriate for Mineral Resource reporting – project is early stage exploration.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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 structural and geological controls on mineralisation are not known.</li> <li>The relationship between drilling and the orientation of key mineralized structures is not known.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Measures to ensure sample security are not reported.</li> </ul>
<i>Audits or reviews</i>	<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>No independent audit or review has been carried out.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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</li> </ul>	<ul style="list-style-type: none"> <li>Tenement E38/3054 is located in the Mt Margaret Mineral Field of Western Australia, 40km south of the township of Laverton, on the eastern shore of Lake Carey. Lodestar has acquired a 100% interest in the tenement by the purchase of private company Oro Del Sur Pty. Ltd., for a consideration of \$50,000. The tenement is within the Mt Weld pastoral lease (PL N049826) and intersects miscellaneous licences</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>known impediments to obtaining a licence to operate in the area.</i></p>	<p>L38/62, L38/105, L38/223 and L39/31 held by AngloGold Ashanti Australia Ltd. and GSM Mining Company Pty. Ltd. The tenement lies within the Nyala Pimiku (WAD91/2019) native title claim.</p> <ul style="list-style-type: none"> <li>E38/3054 is held by Oro Del Sur Pty Ltd (a wholly owned subsidiary of Lodestar Minerals Limited) and was granted on 13/9/2017 and expires on 12/9/2022. The tenement is in good standing and no known impediments exist.</li> </ul>
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Extensive exploration for gold has been carried out in the area, including surface geochemistry, aircore and RC drilling. Drilling has targeted palaeochannel and supergene mineralisation, BIF-hosted mineralisation and intrusion-related mineralisation in bedrock. The main campaigns of drilling on the tenement have been carried out by Poseidon Exploration Limited (1991) and Acacia Resources (1996 to 1998). Poseidon and Acacia completed drilling along strike from the Golden Delicious discovery on the eastern side of the tenement.</li> </ul>
<p><i>Geology</i></p>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>E38/3054 is located within the Laverton tectonic zone; the major gold deposits of Granny Smith and Sunrise Dam (Cleo) are located along strike to the north and south of the tenement, respectively. Gold mineralisation is widespread and occurs in a variety of settings, at Sunrise Dam gold mineralisation is related to the shallow west to north west dipping Sunrise shear; gold is associated with pyrite replacement within stacked lenses of BIF that parallel to main shear zone, ankerite-silica-sericite-pyrite alteration within intermediate volcanoclastic rocks of the Sunrise shear and steeply dipping, narrow quartz-carbonate vein systems that host high grade gold. The Sunrise shear is part of a regional, north-south trending shear system that links the Red October, Sunrise and Granny Smith deposits. The Granny Smith deposit is associated with the sheared contact between a large granodiorite intrusion and surrounding metasediments. The shear trends north north west and dips to the east. Gold is associated with silica-albite-carbonate-sericite-chlorite alteration and a carbonate-quartz-pyrite-filled fracture system.</li> </ul> <p>The Golden Delicious deposit is associated with faulted granite-syenite and monzonite intrusives and contacts with the surrounding metavolcanics. Most gold is hosted by brittle structures within the intrusives. Alteration within the granite/syenite is sericite-haematite-carbonate-pyrite and as locally intense haematite and pyrite altered zones within monzonite. Away from the intrusive contacts haematite</p>

Criteria	JORC Code explanation	Commentary
		alteration is less common and sericite-pyrite veins are the main host to gold mineralisation.
<i>Drill hole Information</i>	<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>• A drill hole location table has been included in this announcement.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are reported as 4m composite samples, no cut-off grades were applied and values of 0.1g/t Au or greater were considered anomalous at this stage of target definition.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></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 (e.g. ‘down hole length, true width not known’).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geometry of the mineralisation is not known and the true thickness of drill intercepts is not known.</li> </ul>
<i>Diagrams</i>	<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>• A plan showing reported drill holes is included in the announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Historic exploration results relevant to the identified target are listed in the significant intercepts table.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No other substantive data to report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Lodestar is currently conducting a full review of all the Jubilee Well data to identify targets and determine if further drilling is warranted. An historic gold in bedrock anomaly along strike from the Golden Delicious deposit requires confirmation by drilling.</li> </ul>