



ASX ANNOUNCEMENT

8th August 2016

Electronic lodgement

COMPANY SNAPSHOT

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CAPITAL STRUCTURE

Shares on Issue:
386,224,233 (LSR)

Options on Issue:
43,550,127 (unlisted)

ASX: LSR

PROJECTS

Peak Hill – Doolgunna:

Camel Hills – gold

Neds Creek – gold

Marymia – gold

Imbin – gold and base metals



Gold Target Extended at Brumby

HIGHLIGHTS

- Rock sampling returns up to 2.08g/t gold from a new zone of mineralisation at Brumby.
- Anomalous rock samples overlap with a >50ppb gold lag geochemical anomaly extending for 400m.
- Anomaly represents a significant new drill target east of previous aircore drilling.
- Samples from earlier RC drill hole at Brumby submitted for assaying.

West Australian gold explorer Lodestar Minerals Limited (ASX:LSR; "Lodestar" or "the Company") advises that detailed mapping of the Contessa granite and the Brumby prospect has resulted in the discovery of new gold anomalous rock chip samples in an area where lag sampling completed in 2013 reported values greater than 0.1g/t gold along a 400m trend. The Brumby prospect is located within Lodestar's 100% - owned Ned's Creek project on the northern Yilgarn margin, 170 km north of Meekatharra, Western Australia and 4.7km west of the Contessa gold prospect (see Figure 1).

Recent mapping of the Contessa granite, completed by Lodestar's geological consultant, Dr Walter Witt, has identified new gold anomalous rock samples in an area of limited outcrop, located east of Lodestar's drilling (see Figure 2).

At Brumby, the granite consists predominantly of two types of intrusive: a granodiorite-monzogranite located on the western extremity of the intrusion, enclosing two outcrops of syenite, and alkali granite which comprises the majority of the eastern interior of the granite. A 300m wide, north west trending transition zone of mixed composition (the central zone) separates these two dominant intrusions. The new gold

occurrence is located on the eastern margin of the central zone, parallel to the strongly developed northwest structural trend that may act as a local control on gold mineralisation.

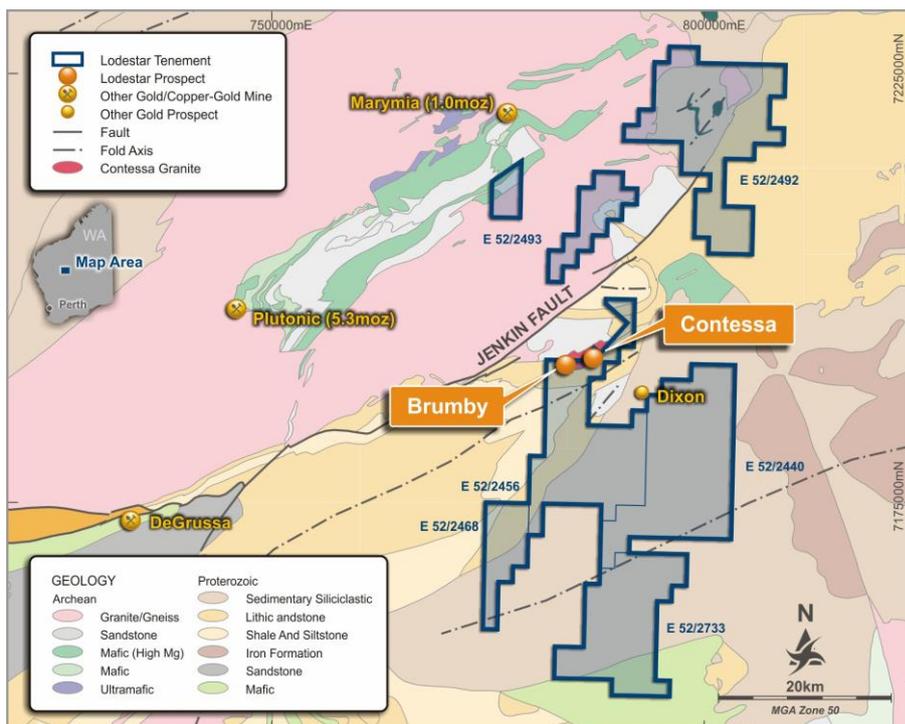


Figure 1 Location Plan showing the Brumby gold prospect on the Ned's Creek project.

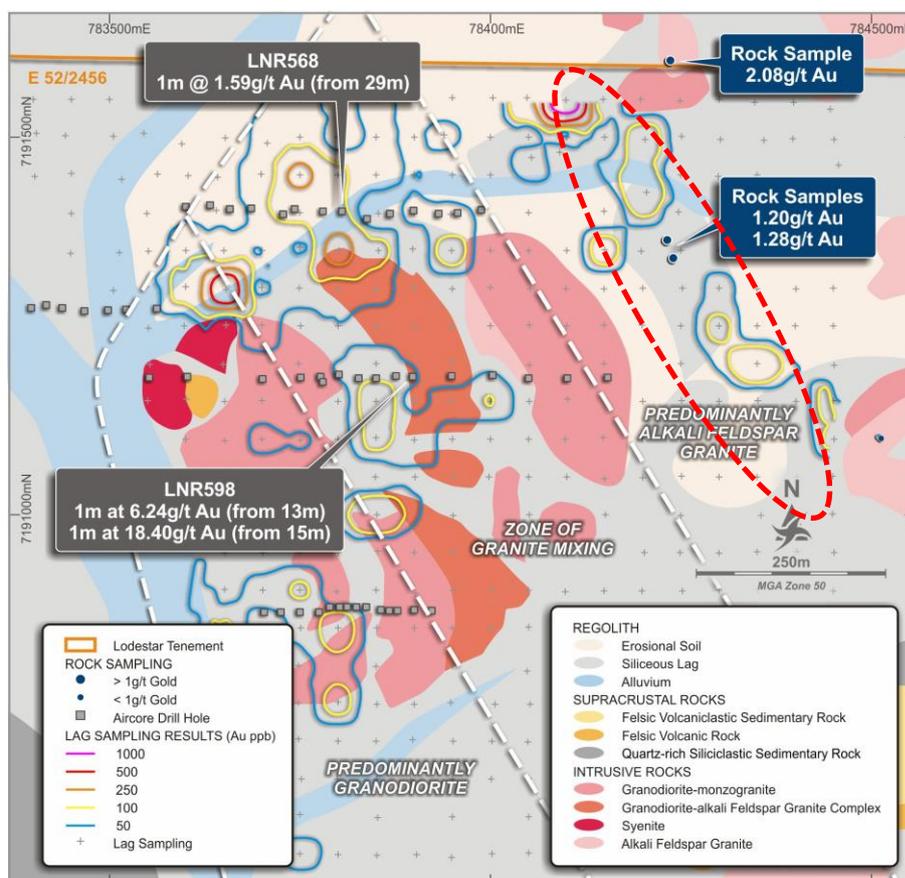


Figure 2 Geology map showing target outline east of current drilling.

Wide-spaced aircore drilling completed in 2013 reported low-level gold anomalism with higher grade intersections from the central zone¹.

- **LNR568 – 9m at 0.59g/t gold from 25m, including 1m at 1.59g/t gold from 29m**
- **LNR579 – 8m at 0.23g/t gold from 25m**
- **LNR581 – 9m at 0.27g/t gold from 16m and**
- **LNR598 – 1m at 6.24g/t gold from 13m; 1m at 18.4g/t gold from 15m and 7m at 0.46g/t gold from 18m.**

Within the target area mineralised rock samples contain limonite (iron oxide) as disseminated relicts and veinlets in weathered granite, suggesting that gold occurs with disseminated sulphides. High grade gold associated with minor outcropping sulphide-rich quartz veins has also been discovered in the central zone².

The granite composition, style of mineralisation and metal association seen at Brumby, although unusual, is similar to high-level, intrusion-related (I-type or mafic granite-related) gold systems and syenites that show a close spatial relationship with gold in the Yilgarn Craton (e.g. the 8Moz Wallaby deposit and Dacian Gold Limited's Jupiter gold prospect). These deposits characteristically have a strong structural control on the emplacement of intrusions and related mineralisation.

The discovery of gold mineralisation in the eastern domain is further evidence of a widespread mineralising event and there is considerable potential for several styles of gold mineralisation to occur in the Contessa-Brumby area. An extensive drilling program to test targets at Brumby and on the granite margins will be planned.

Shareholders are advised that samples from the hole completed at Brumby in early July and from the final hole from the four hole program at Contessa, have been submitted for assaying. Weather conditions in the region had delayed the transport of the samples from site; however the samples were retrieved in the first week of August. Assay results are expected in the second half of this month.

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Managing Director

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¹ See Lodestar's ASX announcement dated 30th April 2013.

² See Lodestar's ASX announcement dated 27th November 2012.

Table 1: Rock chip assay results – Brumby Prospect.

SampleID	Easting	Northing	RL	SurveyMethod	Au_ppb
LSR102223	784510	7191104	590	GPS	-1
LSR102224	784511	7191103	590	GPS	-1
LSR102225	784512	7191102	590	GPS	-1
LSR102226	784513	7191101	590	GPS	1
LSR102228	784240	7191340	590	GPS	1280
LSR102229	784232	7191364	590	GPS	1200
LSR102230	784238	7191600	590	GPS	2080

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 2004 in the ASX announcement dated 27 November 2012, "Encouraging Gold Results from Brumby Quartz Vein System" and JORC 2012 in the ASX announcement dated 30 April 2013, "March 2013 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

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (egg '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. 	<ul style="list-style-type: none"> Rock chip samples of 3-4kg were collected by hand from weathered outcrops. Sample representivity is maintained by placing samples in a calico bag with a numbered ticket and corresponding sample book entry. Laboratory repeat and standard samples are included with the assay report. Samples were analysed for gold and multi-elements using an aqua regia digest and ICP, a method suitable for early stage exploration. Sample locations are recorded using a hand-held GPS.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> No drilling was carried out.
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"> No drilling was carried out.
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"> No drilling was carried out.
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 representivity 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"> No drilling was carried out. Samples are dried and crushed to - 3mm. The crushed sample is riffle split to obtain a 2.4kg split which is pulverised to 90% passing 75microns. A 40g second split is obtained by rotary splitter and submitted for assay. No field duplicates or Lodestar standards were submitted for this program. The laboratory duplicate results are included in the assay report. Visible or coarse gold was not observed and the sample size is

Criteria	JORC Code explanation	Commentary
		believed appropriate for early stage exploration.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	<ul style="list-style-type: none"> Using a 40gm charge, gold is determined by aqua regia digest and ICP (Method AR001). The method approximates a total extraction of gold. Laboratory QAQC involves the use of internal laboratory standards, duplicate and replicate samples. The results indicate acceptable precision.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> There has been no independent verification of assay data. No drilling was carried out. Field and laboratory data are collected electronically and entered into a relational database. Data collection protocols are recorded in Lodestar's operation manual. There has been no adjustment to assay data.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> No drilling was carried out. GPS location of sample sites using a Garmin GPSMap64. Positions are accurate to $\pm 10\text{m}$. Sample locations were recorded in GDA94 Zone 50 grid. Topographic control is limited to the GPS estimate.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> No drilling was carried out.
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"> No drilling was carried out.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples are stored at Lodestar's exploration camp under supervision prior to dispatch by licenced courier service (TOLL IPEC) or Lodestar staff to Bureau Veritas (Ultratrace) Laboratories.
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"> No audits or reviews have been carried out.

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"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • 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
<i>Geology</i>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<p>The geology of the project area comprises the northern margin of the Proterozoic Yerrida Basin. The geology forms two discrete units; o 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. 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 widely exposed at surface. The intermediate rocks (diorite) and the adjacent granite host the gold mineralisation and may be Palaeoproterozoic or Archaean in age. The supracrustal rocks are similar to the sequences that host the lode gold deposits in the Plutonic and Baumgarten greenstone belts.</p>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> • <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent</i> 	<ul style="list-style-type: none"> • Tabulated data is provided in Table 1, attached.

Criteria	JORC Code explanation	Commentary
	<i>Person should clearly explain why this is the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No data aggregation methods are applied.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> No drilling was carried out.
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> A plan showing sample locations (Figure 2) with significant results is included in this report.
<i>Balanced reporting</i>	<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 relevant sample data is reported in Table 1.

Criteria	JORC Code explanation	Commentary
<i>Other substantive exploration data</i>	<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"> None to report.
<i>Further work</i>	<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"> Untested drill targets have been identified in the area of the Brumby prospect. First-pass aircore drilling of these targets is planned.