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### ASX ANNOUNCEMENT

#### 24 February 2016

#### **COMPANY SNAPSHOT**

LODESTAR MINERALS LIMITED ABN: 32 127 026 528

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#### **CAPITAL STRUCTURE**

Shares on Issue: 352,157,030 (LSR)

**Options on Issue:** 43,550,127 (unlisted) 34,067,203 (listed - 31 Mar 2016)

ASX: LSR

#### PROJECTS

Peak Hill – Doolgunna: Camel Hills – gold Neds Creek - gold Marymia – gold Imbin – gold and base metals



#### **PRESENTATION TO RIU EXPLORERS CONFERENCE 2016**

Attached is copy of the Lodestar corporate presentation to be given by Managing Director, Bill Clayton at the RIU Explorers Conference in Fremantle today.

A copy of the presentation will also be available on the Company's website www.lodestarminerals.com.au

For further information please contact:

**Bill Clayton** Managing Director (08) 9423 3200



**Electronic lodgement** 



Actively exploring for gold on the Capricorn margin

### **Important Notices**



This presentation has been prepared by Lodestar Minerals Limited (Lodestar). The information contained in this presentation is a professional opinion only and is given in good faith. Certain information in this document has been derived from third parties and though Lodestar has no reason to believe that it is not accurate, reliable or complete, it has not been independently verified or audited by Lodestar.

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#### COMPETENT PERSON STATEMENT

The information in this announcement that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Bill Clayton, who is a Competent Person and a Member of the Australian Institute of Geoscientists. Bill Clayton is Managing Director and a full-time employee of Lodestar Minerals Limited. Mr Clayton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Clayton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The information in this announcement that relates to Lodestar's previously released exploration results was disclosed under JORC code 2004 in ASX announcements dated 18 March 2013 and JORC Code 2012 in ASX announcements dated 4 June 2013, 28 August 2015, 21 September 2015, 20 October 2015 and 2 February 2016 and 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.

### **Corporate Overview**



#### **Board and Senior Management**

#### Non-Executive Chairman, Ross Taylor

- Chartered Accountant and finance professional with extensive experience in global investment banking and the financial sector
- Senior positions held with Deutsche Bank, Bankers Trust and Barclays Capital

#### Managing Director, Bill Clayton

- Geologist with 30 years' experience in WA greenfields exploration, project generation and evaluation roles
- Previous roles held with LionOre, Forrestania Gold, Outokumpu and CSA Global

#### Executive Director/Co Sec, David McArthur

 Financial and corporate management of public listed companies gained over the past 28 years

#### Capital Structure ASX code LSR 352.16m Shares on issue A\$0.031 Share price Market capitalisation A\$10.9m A\$0.35m\* Cash (31 Dec 2015) A\$0.10m Debt (1 Feb 2016) 77.6m Listed/unlisted options Top 20 shareholders 37.5% **Board of Directors** 20.0%

• Excluding underwriting of \$500,000 of 31 March 2016 options.

	BEST ON MARKET					
	Ma	Market Cap 12 month			Total	
	Company	\$m	high ¢	price ¢	return %	Conmodity
	General MiningCorp	80.8	27.5	25.5	5442.9	Uthium
	St Barbara	658.1	153.5	142.5	1257.1	Gold
	Pilbara Minerals	248.5	40.5	32	661.9	Lithium & Tantalum
	Galaxy Resources	15L7	B.5	1.5	360.0	Lithium
	<b>Blackham Resources</b>	46.4	28	23	351.0	Gold
	Neometals	97.8	22.5	T	347.4	Lithium
	Lithium Australia NL	23.1	23	16.5	192.9	Lithium
C	Lodestar Minerals	12.0	5.5	3.5	288.9	Gold
	Remeilus Resources	92.4	24.5	19.5	282.4	Gold
	European Metals	14.8	26.5	Π	277.8	Lithium

#### The West Australian, 2 January 2016

### **Company Snapshot**



- Applying new thinking to a strategic tenement position over 2,900km<sup>2</sup> of the Capricorn tectonic margin in the Eastern Bryah-Yerrida Basin
- Three specific projects areas within a highly prospective and underexplored mineral province
- Ned's Creek (100%)
  - Gold anomalism defined over 7km with limited aircore drilling
  - Greenfield discovery at Contessa (21m @ 3.0g/t Au, 10m @ 5.6g/t Au)
  - New gold targets at Marymia have been identified
- Camel Hills (100%)
  - High grade rock chip samples up to 47,050g/t Au at Big Sky
  - RAB drilling confirms bedrock mineralisation (1m @ 5.6g/t)
  - RC drilling up to <u>6m @ 20.3g/t from 21m</u> and <u>6m @ 6.6g/t</u> <u>from 13m</u> and follow-up RC drilling to begin imminently
- Imbin (100%)
  - Extensive geochemical anomalies with a number of walk-up copper-gold drill targets
- Highly leveraged to further exploration success on a number of active project areas



### Three emerging mineralised projects along Capricorn margin

## Lodestar Projects on the Capricorn Margin



- Capricorn Margin (contact point of the Yilgarn and Pilbara Cratons) characterised by deep crustal structures and extended cyclic reactivation – the right setting for major ore deposits
- Volcanic arc and back arc environments of similar age span 600km across the northern Yilgarn margin recent work suggests Camel Hills and Imbin rocks of similar age to other discoveries in the region
- Reinterpretation of basin architecture and margin tectonics has major implications for exploration targeting and potential for new discoveries



#### Four years dedicated to developing a strong regional understanding

## **Camel Hills – a Large Gold Target**



- Large 924km<sup>2</sup> landholding targeting deep structures under shallow cover
- 100km Errabiddy Shear
  Zone linked to Cardilya Fault at depth
- Major structures penetrate the crust – fluid and magma transfer from the mantle creates potential for major mineral deposits
- Extensive work completed by GSWA including stream, soil and laterite sampling and seismic surveying
- GSWA mineral systems analysis highlights potential for orogenic gold deposits (eg Glenburgh, Peak Hill)



#### Cardilya-Errabiddy Shear Zones – potential for a major gold system

### **Camel Hills – a Large Gold Target**

- Gascoyne Resources' 1Moz Glenburgh project (60km NW) comprises a series of shearhosted gold deposits in high grade metamorphics on a parallel northeast trend
- Glenburgh was discovered by a 2ppb – 17.25ppb Au stream sample anomaly
- Historic stream samples at Camel Hills reported anomalous results up to 27ppb Au and soil sampling returned up to 907ppb Au from a 4.2km strike
- Sparse drilling with widespread, low-grade results



### Stream sampling defines a 6km by 2km target within a broad 15km anomaly

### **Camel Hills – High-Grade Big Sky Target**



- Discovery of very high grade gold in rock chips (up to 47,050g/t) on northern contact of magnetic unit within Errabiddy Shear Zone
- Contact spans 12km and has seen only minimal geochemical sampling and previous drilling
- Shallow trenching and RAB drilling on 50m traverses completed in August 2015
- Best RAB drill results near high grade rock chip samples:
  - 5m at 1.1g/t Au from 5m
  - 5m at 1.3g/t Au from 10m
  - 5m at 1.37g/t Au from 5m



### Emerging greenfield discovery at Big Sky

## **Big Sky – Shallow, High-Grade Drill Results**



- Maiden RC drill program completed in October 2015 returned shallow, high-grade results including:
  - 6m at 6.6g/t Au from 13m in LCC011, including 1m at 33.3g/t Au from 13m
  - 6m at 20.3g/t Au from 21m in LCC012, including 1m at 105g/t Au from 21m
  - 1m at 12.8g/t Au from 26m
- Auger sampling (>1,000 samples) in December 2015 defines 150m long target
- High priority for follow-up RC drilling to begin in February – March 2016



### Second round of RC drilling about to commence

# Marymia scheduled for follow-up

## Ned's Creek – Gold Potential

- Large 830km<sup>2</sup> landholding hosting a combination of gold and base metal greenfields targets and existing discoveries
- Southern margin of Plutonic Well greenstone belt and Tectonic north eastern margin of Yerrida Basin – orogenic gold potential
- Greenfields gold discovery at Contessa in 2013 following extensive field work and aircore and RC drilling
- New gold targets generated at Marymia scheduled for follow-up work in 2016





## Ned's Creek – Contessa Gold Discovery



- Greenfield discovery made by Lodestar in 2013 located within the highly endowed Kalgoorlie Terrane, Eastern Goldfields province
- Surface sampling identified 6km gold anomaly overlying Archaean granite-greenstone
- Aircore drilling over 700m of strike in 2014 intersected widespread alteration and confirms the presence of a large gold system
- Gold associated with disseminated pyrite and alteration within large diorite (Au-Bi-Ag-Te-S association) suggests clear potential for Archaean gold deposit
- Multiple lode gold targets identified
- Located 30km from Northern Star's Plutonic mine, now reportedly for sale following a number of approaches



### A greenfield gold discovery of growing significance

## **Contessa – Significant Drill Results**



- Best intercepts in aircore drilling of:
  - 21m @ 3.0g/t Au from 40m
  - 15m @ 3.1g/t Au from 40m
  - 10m @ 5.6g/t Au from 55m
  - 5m @ 6.6g/t Au from 55m
  - 10m @ 1.2g/t Au from 50m
- Supergene gold displaced from primary source
- Maiden RC drill programme intersected grades to 6g/t Au in diorite with extensive silicapyrite alteration
- RC targets planned on geochemistry, no structural information
- Gold sulphide relationship indicates geophysical targeting may be effective



#### Exceptional early gold results in a world-class province

### **Contessa – Gold Geochemistry**



- Extensive near-surface gold anomalies developed over 4km strike along the Contessa trend
- Spatial association between the Contessa granite, diorite, magnetic anomalies (litho-structural domain) and gold mineralisation



An extensive, sparsely drilled gold system

### **Contessa – The Next Phase**



- Review completed with independent expert – five walk up drill targets within a 4km corridor to test for primary source beneath supergene halo
- Interpreted fault overstep very favourable environment for intrusion-related and orogenic gold
- This structural setting analogous to deposits of the EGP – Wallaby, St Ives
- IP geophysics trial expected to improve drill targeting
- Options for 2016 work program being considered, including joint venture



### The right setting for a major gold discovery

## Imbin – a Potential Bryah Basin Analogue



- Interpreted back arc rift setting along north Yilgarn margin with similar characteristics to the Bryan Basin (DeGrussa, Monty discoveries)
- Imbin Rift defined by gravity anomalies, large volume of Bryah age felsic volcanics and probable maficultramafic volcanics
- Prospective for volcanic hosted massive sulphide (VHMS) deposits, sediment-hosted copper and orogenic gold
- Copper in historic drilling 36m at 0.76% Cu from 91m including **2m at 4.65% Cu** and 3m at 1.97% Cu
- Numerous copper-gold anomalies extend over >15km strike, large areas under shallow sand cover remain untested





#### An untested, Bryah-age, volcanic rift defined at Imbin

Catalina - Large magnetic feature adjacent to copper anomaly

## Imbin – High Value Drill Targets

- Encouraging results from regional drilling include:
  - 11 m at 337 ppb Au
  - 16 m at 1791 ppm Cu in TCRC09-12
- Copper anomaly open to south over large, magnetic feature identified by MIM Holdings and not previously drill tested.
- Potential mafic intrusive/extrusive sequence within sediment-dominated back arc rift setting.
- Cu-Au association is characteristic of Bryah VHMS.
- Geological review needed to provide further context for anomalous drill results.





### Conclusion



- Applying new thinking to a strategic tenement position over 2,900km<sup>2</sup> of the Capricorn tectonic margin
- Exploring for high value gold and base metal discoveries in an underexplored and fertile province.
- A technically driven and scientific approach to target generation.
- Low administration and corporate overheads to maximise exploration investment and shareholder returns.
- Recent underwriting agreement for \$500,000 worth of March 2016 options provides near-term funding certainty.
- Follow-up RC drilling of high-grade Big Sky discovery at Camel Hills about to commence
- Highly leveraged to further exploration success on a number of active project areas



### Three emerging mineralised projects along Capricorn margin