



# ASX ANNOUNCEMENT

10 October 2012

## COMPANY SNAPSHOT

**LODESTAR MINERALS LIMITED**  
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### CAPITAL STRUCTURE

**Shares on Issue:**  
116,489,477(LSR)

**Options on Issue:**  
4,750,000 (Unlisted)

**ASX:** LSR

### PROJECTS

**Peak Hill – Doolgunna:**  
Base metals, gold

**Penfold:**  
Nickel

**Kimberley:**  
Nickel, copper, PGM's



## Extensive Copper Anomalism Defined within Major Structural Corridor - Four High Priority Targets for Immediate Drilling

### Highlights

- *Promising drill targets defined within a highly prospective tectonic basin margin geological environment in a district with significant and widespread copper mineralisation.*
- *Targets associated with major faults within regional structural corridors - a setting common to the Thaduna copper camp and DeGrussa*
- *The extent and tenor of the geochemical anomalism consistent with the development of strong hydrothermal mineralising systems*
- *A drilling program to test these primary base metal targets is planned for the December quarter.*

Comprehensive geochemical sampling on Lodestar's Neds Creek tenements has highlighted four high priority base metal targets within extensive areas of copper anomalism.

The potential of these targets is supported by geological mapping which has confirmed close relationships between zones of anomalous copper/base metal geochemistry, hydrothermal brecciation (fault-related fluid injection and fragmentation) and structure related to regional basin margin faulting. These exploration criteria are key geological elements associated with base metal mineralisation elsewhere in the Yerrida Basin and in Proterozoic sedimentary basin sequences globally.

The Neds Creek tenements extend over 830 square kilometres of the eastern Yerrida Basin 170 kilometres north east of Meekatharra and are located immediately east of Sipa Resource's Enigma copper prospect and 7 kilometres east of the Thaduna/Green Dragon copper mines, currently being evaluated by Ventnor Resources.



The project area covers a prospective tectonic basin margin volcano-sedimentary sequence which terminates against regional structures, the Jenkin and McDonald Well Faults, at the tectonic margins of the large Proterozoic, Yerrida Basin. This geological/tectonic setting has parallels in many of the world's major Proterozoic sediment-hosted base metal camps, highlighting the region as a potential major base metal province.

Exploration, which has included regional and close spaced LAG geochemical sampling, rock chip sampling, RAB drilling and geological mapping, has defined four areas of immediate interest for follow up drilling at McDonald Well North, Breccia Hill, McDonald Well South and Little Well (Figure 1).

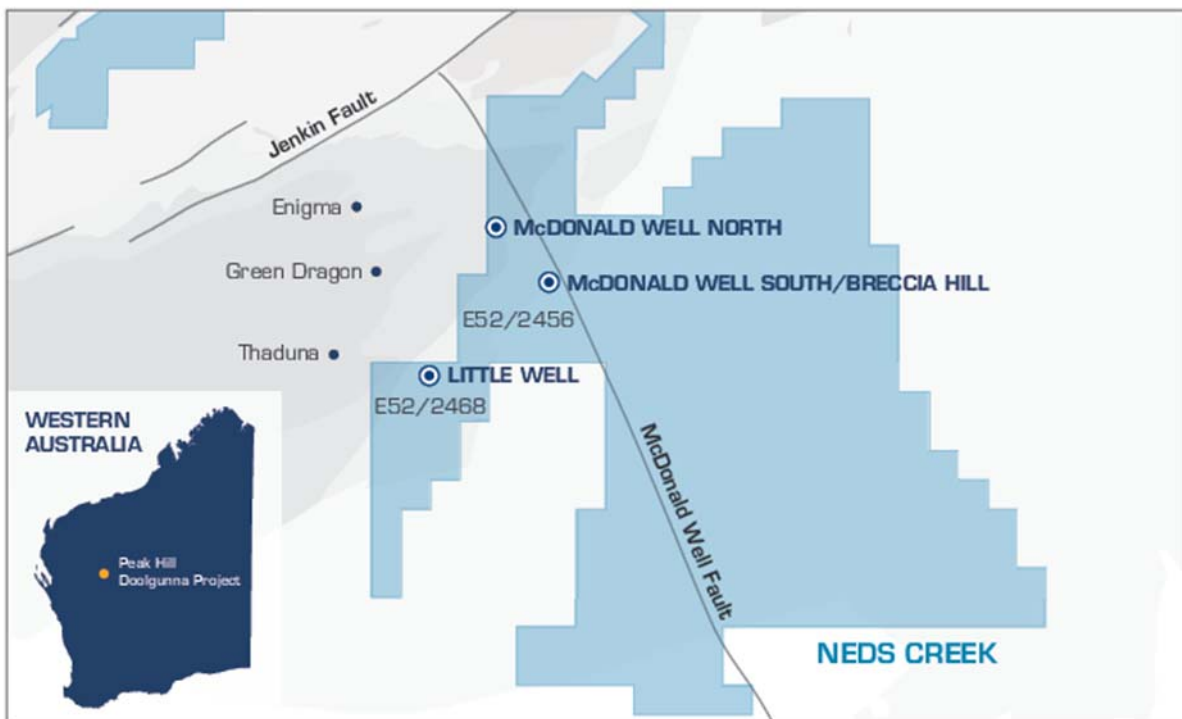


Figure 1 Location of Lodestar's Neds Creek Base Metal Anomalies

The prospective structural corridor in which these targets are located extends for more than 20 kilometres beyond the area sampled to date within the Lodestar tenements.

### McDonald Well North

Lag geochemical sampling has identified a large (1600m x 800m) copper, tellurium and coincident lead-arsenic-antimony anomaly within an area of widespread copper anomalism defined by earlier wide-spaced RAB drilling. The axis of the peak copper anomaly defined by drilling extends over 1000m and includes wide intercepts of elevated copper, including 16m at 928ppm Cu, to a maximum 1290ppm Cu. Geological observations suggest a structural control parallel to the northwest trending tectonic basin margin. Evidence of widespread strong copper anomalism and a favourable structural setting make this anomaly an attractive drill target.

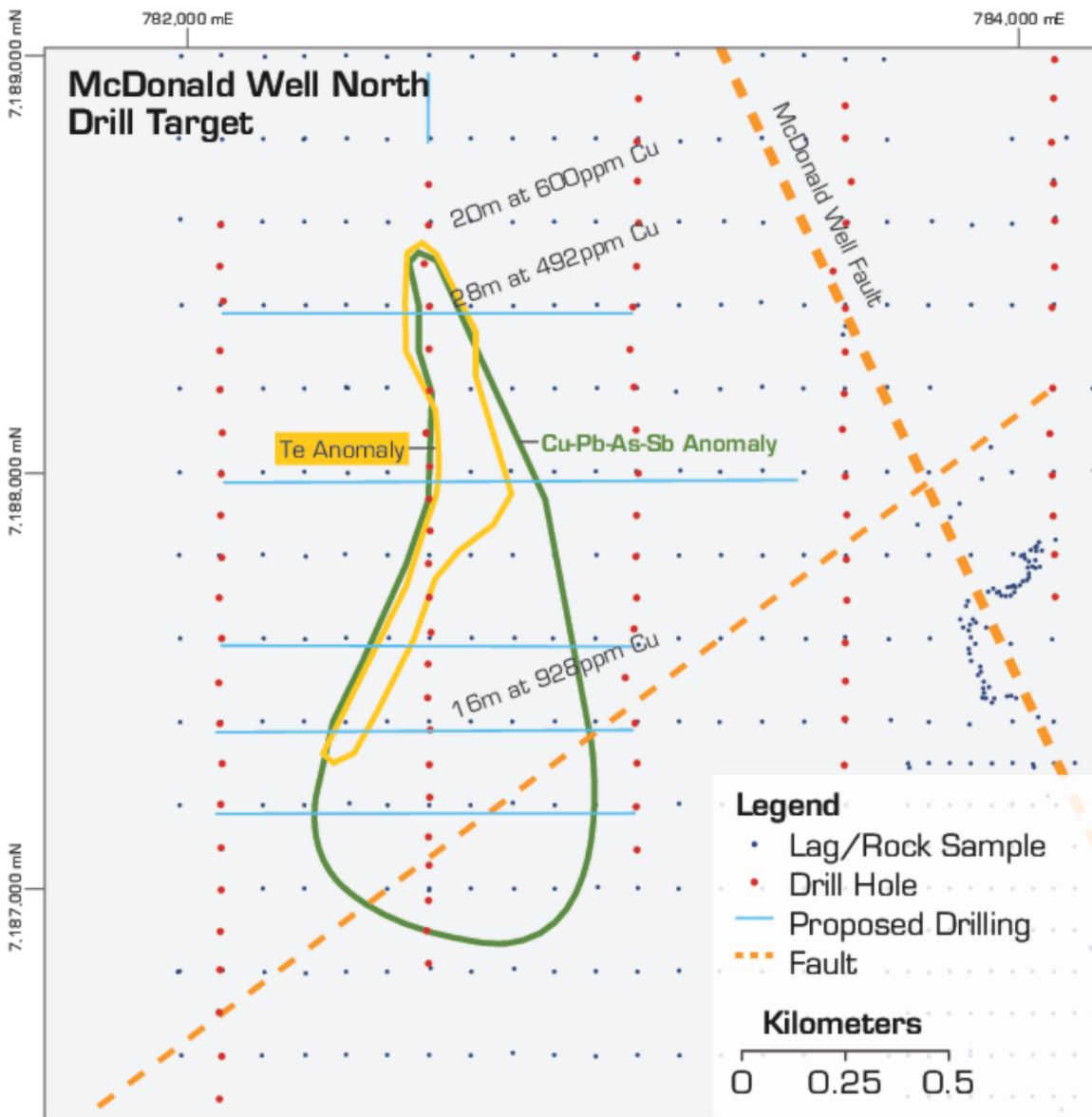


Figure 2 McDonald Well North – multi-element lag anomaly within structural break and broader copper anomaly defined by RAB drilling

**Breccia Hill**

A large (800m x 200m) copper-zinc and tellurium anomaly in soil lag sampling defines a northwest trending zone extending up to 1 kilometre from the McDonald Well Fault (Figure 4). Within this anomaly outcropping veined and brecciated ferruginous shale reporting up to 345ppm copper and 681ppm zinc has been mapped. Initially, drilling is proposed to test beneath the anomalous outcrop and the adjacent McDonald Well Fault.

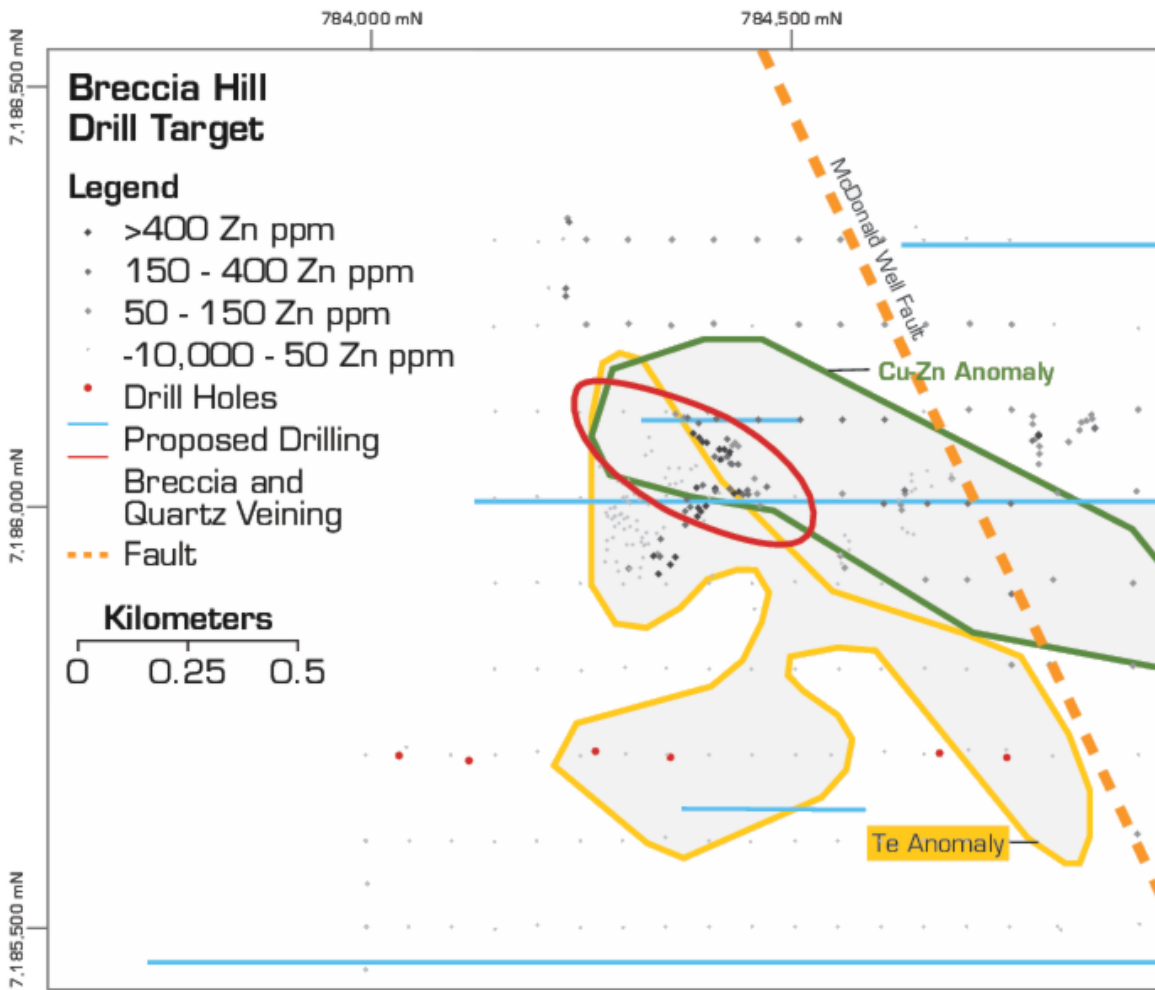


Figure 3 Breccia Hill – Extensive Copper – Zinc anomaly extending from area of outcropping veined shale to the McDonald Well Fault

### McDonald Well South

A large copper - zinc anomaly of 2000m x 800m defined by drilling and soil lag sampling extends across a discrete magnetic anomaly and straddles the stratigraphic sequence west of the McDonald Well Fault (Figure 5). The anomaly overlies a sequence of shale, black shale and dolomite.

Widespread strongly anomalous copper was reported from numerous RAB drill holes surrounding the magnetic anomaly with the maximum value of 1980ppm copper reported from shallow drilling within a dolomite near the western end of the traverse. This dolomite unit is interpreted to be the strike extension of the dolomitic sandstone unit that hosts secondary copper mineralisation at Sipa Resource’s Enigma prospect and is a priority for deeper drilling.

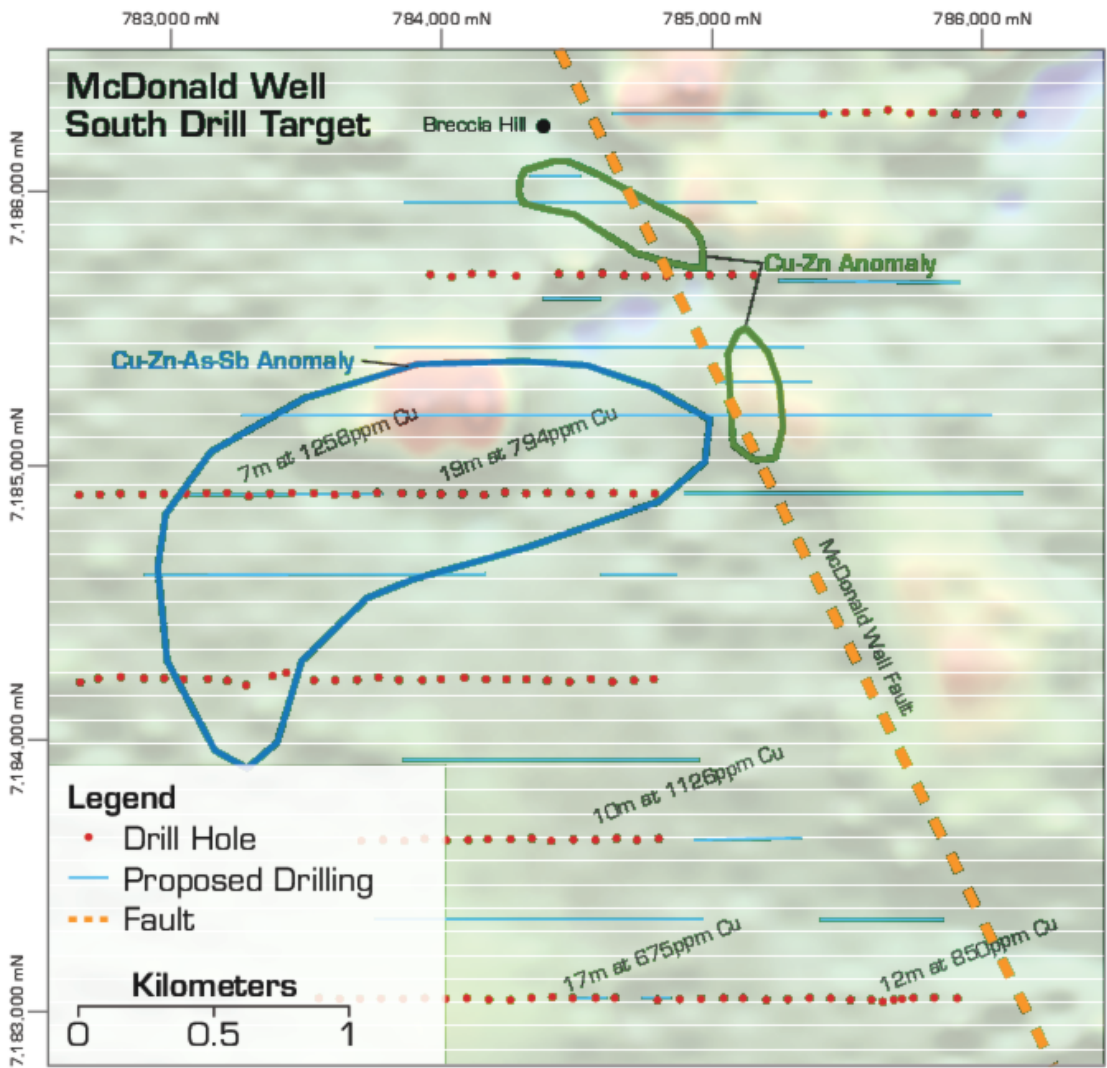


Figure 4 McDonald Well South – Large Copper-Zinc anomalies extend across the geological sequence and magnetic anomalies (RTP aeromagnetic image)

**Little Well**

Geochemical lag sampling has identified extensive copper and zinc anomalies located near the intersection of a major east northeast trending structure and the eastern termination of the folded magnetic host unit to the Thaduna copper deposits (Figure 6).

This geochemical anomaly is comprised of two zones; a 1200m x 1500m copper anomaly extending south of the structure in an area of no outcrop and a 900m x 400m copper anomaly enclosing an outcrop of quartz veined and brecciated siliceous dolomite representing the surface expression of the structure. Lag soil values range up to 320ppm copper and 131ppm zinc, rock samples have reported up to 1280ppm copper from shale and breccia outcrops. The scale and tenor of these anomalies and proximity to the eastern truncation of the Thaduna magnetic unit make this area a priority for drilling.



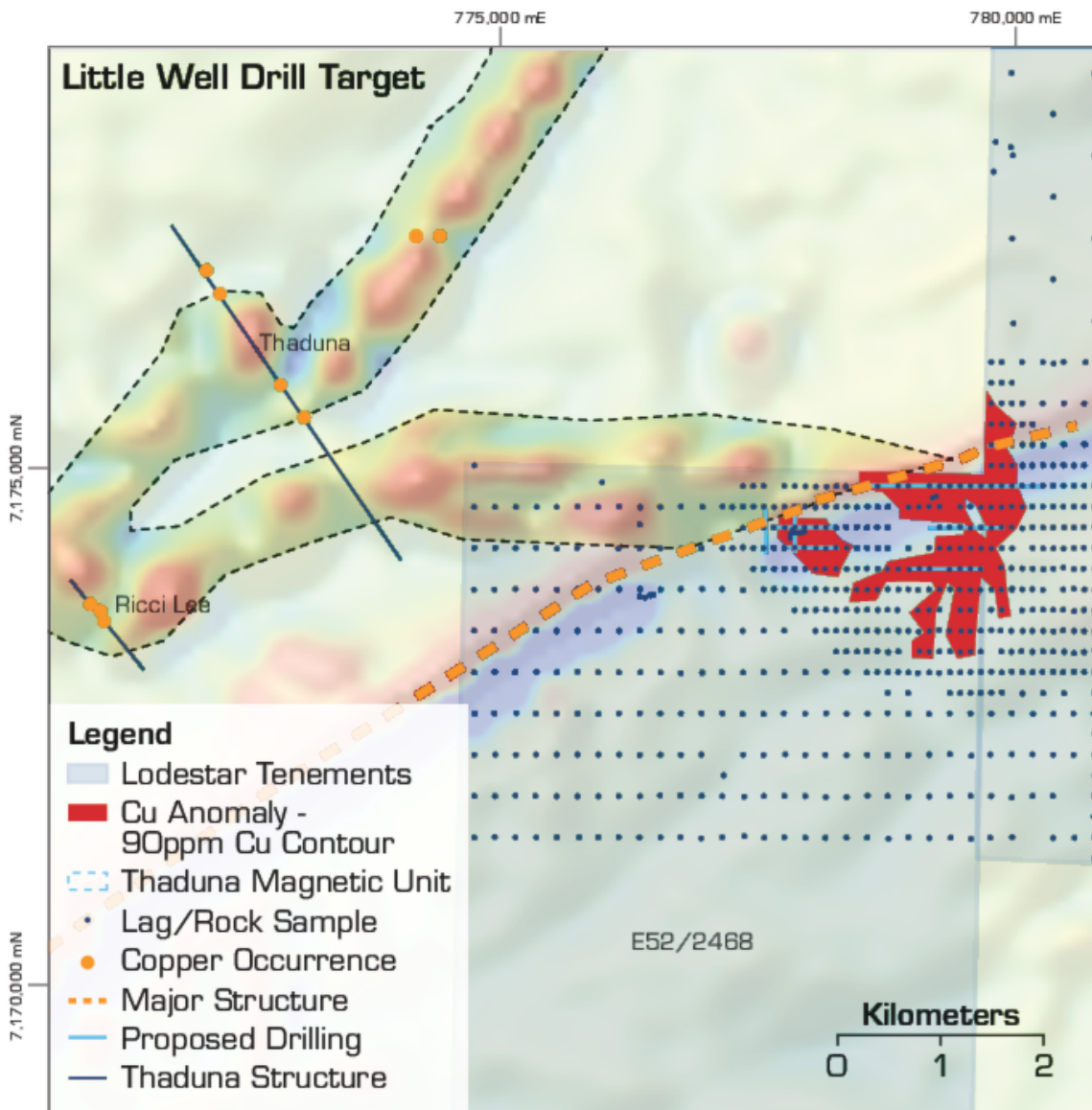


Figure 5 Little Well Target showing lag /rock sampling, major structures and 90ppm copper contour on RTP aeromagnetic image

**Conclusion**

Detailed geochemical sampling and shallow RAB drilling have confirmed the existence of regionally significant multi-element base metal anomalies within the Neds Creek tenement area.

The selected targets demonstrate strong base metal anomalism within a prospective geological sequence and have a close association with first and second order structures, consistent with observations of mineralisation within the Thaduna district and in Proterozoic sediment-hosted base metal camps worldwide. Lodestar is planning an extensive campaign of drilling to fully evaluate these geochemical targets.

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**Managing Director**

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**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 2004 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.*

**About Lodestar Minerals**

Lodestar Minerals Limited is a Perth-based explorer with projects in the Kimberley, Peak Hill and Kalgoorlie regions. Lodestar acquired the Peak Hill-Doolgunna project in March 2010. The Peak Hill-Doolgunna project forms the core of Lodestar's project portfolio and represents a strategic landholding of 2300 square kilometres covering 120 kilometres of the Jenkin Thrust Belt, a regional fault system that is adjacent to the recently discovered DeGrussa Cu-Au deposit. Lodestar believes the region has potential to host a number of styles of base metal deposit and is embarking on an aggressive exploration program to assess the potential of the under-explored north Murchison base metal province.