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**ASX LIMITED**

**Electronic Lodgement**

**COINCIDENT (VTEM) ELECTROMAGNETIC AND FLOAT  
SAMPLE ANOMALY ON REGIONAL STRUCTURE PARALLEL  
TO JENKIN FAULT**

**HIGHLIGHTS**

- **The Company has identified two significant late-time VTEM anomalies in proximity to a float sample recovered from a stream bed that returned 10ppm (g/tonne) Ag and 805ppm Pb.**
- **Soil sampling over the VTEM anomalies will commence shortly, to be followed by RC drilling of these promising targets.**
- **In addition, a number of other early to mid-time VTEM anomalies have been identified. A first-pass RAB drilling program is planned to follow the regional geochemistry and VTEM surveys, once final data has been received.**

Lodestar Minerals Limited (ASX: LSR, “Lodestar” or the “Company”) has recently received initial results from the versatile time domain airborne electromagnetic (VTEM) survey carried out over the Marymia tenements (E52/2492 & E52/2544, Figure 1) at the Peak Hill-Doolgunna Project.

***VTEM Survey***

A VTEM survey of 1432 line kilometres was completed over the Marymia tenements on 200m spaced, west-east flight lines. The survey was designed to test the north eastern extension of the Jenkin Fault and deformed Proterozoic sediments in faulted contact with older granite and greenstone. The VTEM method is able to identify electrical conductors, such as massive sulphide mineralisation, below the surface and provides rapid assessment of large areas that cannot be explored cost-effectively by surface EM methods.

Initial results received from the survey have identified two late-time anomalies, representing bedrock conductors below the base of weathering, developed at the western margin of the Proterozoic sedimentary sequence. These anomalies are unique in the surveyed area and are developed between a series of east to north east trending faults that appear to be splays off a major north east striking structure of regional extent i.e. parallel to the Jenkin Fault (Figure 2). The anomalies lie approximately 8 kilometres off the Jenkin Fault, which controls the geometry of the south eastern margin of the basin.

Modelling of the northern conductor indicates that it dips shallowly to the east at approximately 10 degrees. This is consistent with geological dips in the area, suggesting that the conductor is oriented parallel to sedimentary layering. A secondary anomaly, situated on the eastern margin of the main conductor, has also been identified and requires further interpretation.

The Company is encouraged by the results of early stage exploration in an area that has no record of previous base metal exploration, particularly the co-incidence of the VTEM anomalies and indications of Ag-Pb mineralisation from a stream float sample obtained downstream of the anomalies. The Company will carry out a comprehensive exploration program to thoroughly assess the area, commencing with a soil geochemistry survey (200m x 50m grid) and refinement of VTEM modelling with a surface electromagnetic (EM) survey to assist in the design of the initial drilling program.

### ***Exploration Update***

- Significant progress has been made on the regional geochemical sampling program which is now 70% complete. Sampling has been completed over the E52/2456 (McDonald Well) and E52/2493 (Marymia) tenements and 650 samples have been submitted for assay. Assay results from these samples are expected to be available in the next few weeks. Detailed soil sampling of the VTEM anomaly area on E52/2492 (Marymia) will now take priority and the regional sampling program will resume once the soil program is completed.
- McDonald Well Phase II drilling program (E52/2456) – the Company has been advised that the Aboriginal Heritage clearance for the planned drilling program is scheduled for mid-May. This delay is unexpected, however it will allow the results of the geochemical program to be interpreted and integrated with the geophysical and geological data with aim of identifying additional drill targets.

Yours sincerely,



**Bill Clayton**  
**Managing Director**

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 2000 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 is embarking on an aggressive exploration program to assess the excellent potential of the emerging and under-explored north Murchison base metal province.

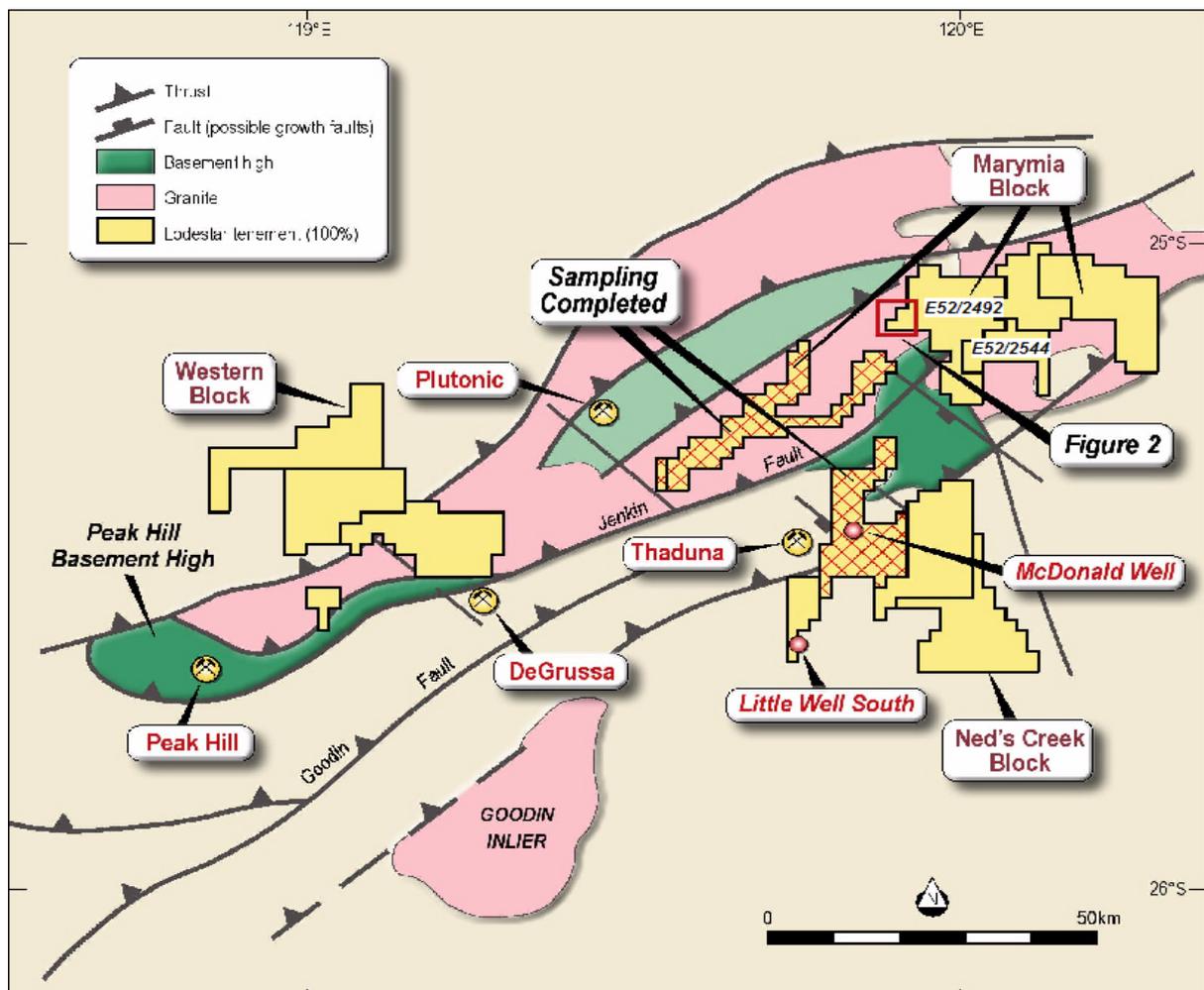
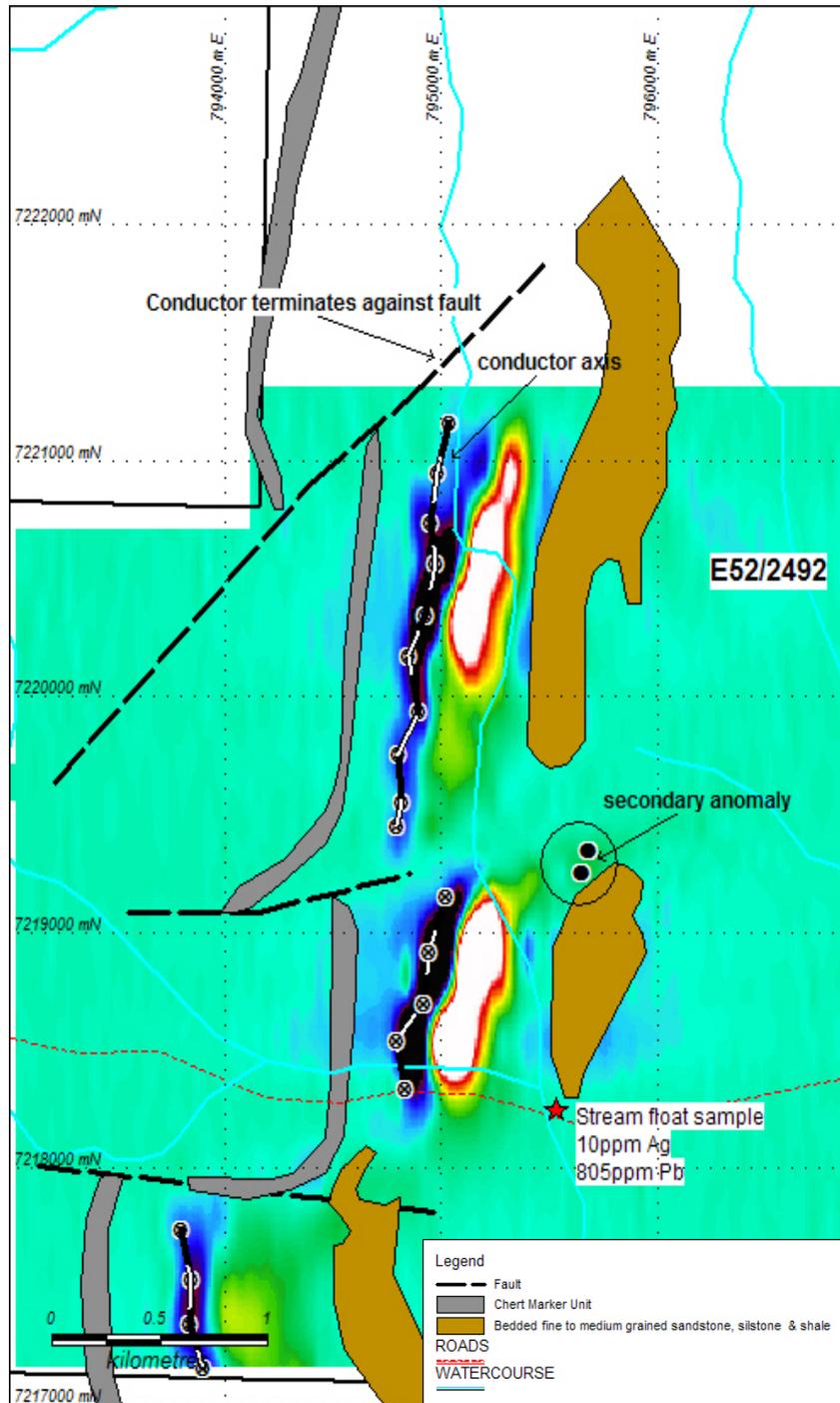


Figure 1 Location Plan, Ned's Creek and Marymia Tenements, Peak Hill-Doolgunna Project



**Figure 2** Late time VTEM anomalies (conductors) developed on the margin of Proterozoic basin, upstream of anomalous float sample. The background image shows areas of maximum VTEM response (Channel 47) in white. (grid coordinates MGA94 Zone 50)