



ASX RELEASE

17th April 2012

ASX: MGV

Musgrave Minerals Commences Drilling at Valen

- **A 1,000 metre diamond drilling program has commenced at the Valen nickel-copper prospect in South Australia**
- **The drilling will test a strong ground electro-magnetic (“EM”) conductor co-incident with Giles Complex mafic host geology**

Musgrave Minerals Limited (“Musgrave Minerals”) (ASX: MGV) is pleased to announce that diamond drilling has commenced on its Valen nickel-copper prospect in the Musgrave Province. The Valen nickel-copper prospect is within the Deering Hills project area in northern South Australia.

This is the second drilling program Musgrave Minerals’ has commenced in April. Drilling is also underway at the Moorilyanna copper prospect (see ASX announcement dated 10th April 2012).

The drilling will test two basement targets at shallow depths under thin sand cover. The Valen target is a late time, highly conductive, strong ground EM target co-incident with interpreted Giles Complex mafic host rocks. Late-time, highly conductive EM responses may reflect accumulations of sulphide mineralization.

The Giles Complex mafics are host to BHP Billiton’s large Nebo-Babel nickel-copper sulphide deposit in the western portion of the Musgrave Province.

The Deering Hills Project is situated on wholly-owned tenements in the centre of the Musgrave Geological Province located approximately 200km west of the Stuart Highway and Adelaide to Darwin railway line (Figure 1).

Musgrave Minerals Managing Director Rob Waugh said: “The Valen target is one of a cluster of high quality EM conductors following a trend under shallow sand cover adjacent to outcropping Giles Complex mafic intrusives. This is a highly conductive target in a very prospective geological area. The exploration team is eagerly looking forward to drill testing this and other targets on the project.”

The drilling program will consist of up to six diamond drill holes for a total of approximately 1,000 metres. Drill hole depths are expected to vary from 120m to 200m. First assay results are expected to be received in June.

19 Richardson Street, WA 6005

Telephone: (61 8) 9324 1061 Fax: (61 8) 9324 1014

Web: www.musgraveminerals.com.au Email: info@musgraveminerals.com.au

ABN: 12 143 890 671

Moorilyanna Update

Musgrave Minerals is currently drilling at its wholly owned Moorilyanna prospect, part of the Mimili Project in the east Musgrave. This drilling is testing six basement copper targets at shallow to moderate depths and has just recently commenced. All six of the targets are co-incident with existing near-surface copper mineralisation and induced polarisation (“IP”) geophysical anomalies. Drilling is progressing well and results will be announced when assays are available.

The Company is in a very strong financial position with more than \$14.8 million in cash and has an aggressive exploration program planned for the next 12 months.

Mr Waugh said the Company looked forward to providing further updates to investors as exploration continues and results become available.

About Musgrave Minerals

Musgrave Minerals Ltd is an active copper, nickel and gold explorer and has a massive exploration footprint in the Musgrave Province in South Australia, with tenements covering an area of approximately 50,000km². The Company has a powerful shareholder base with six mining and exploration companies participating as cornerstone investors.

The Musgrave Province is one of the last under-explored exploration frontiers in Australia and is prospective for a number of commodities. The centrepiece is the recognition of, and access to, the unexplored potential of the Giles Complex, a 1080Ma aged mafic-ultramafic layered intrusive complex that hosts significant nickel and copper sulphide deposits (such as the Nebo/Babel deposit) in the Western Australian portion of the Province.

Musgrave Minerals recently completed a successful IPO raising \$20 million before expenses and listed on the Australian Securities Exchange on 29 April 2011.

Enquiries:

Robert Waugh

Managing Director

Musgrave Minerals Ltd

0439 955 415

Nicole Harrison

Investor Relations

NWR Communications

0451 184 148

The information in this report that relates to Exploration Results is based on information compiled by Mr Robert Waugh. Mr Waugh is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a member of the Australian Institute of Geoscientists (AIG). Mr Waugh is Managing Director of Musgrave Minerals Limited. Mr Waugh has sufficient industry experience to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Waugh consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

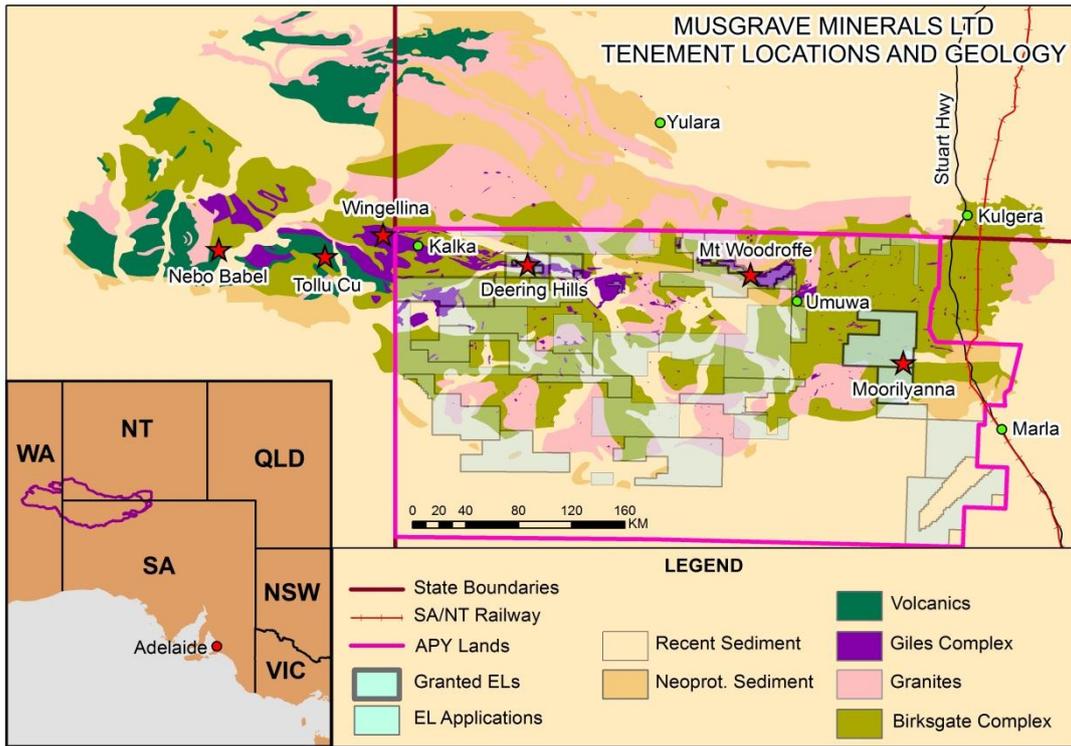


Figure 1: Location of Deering Hills project area

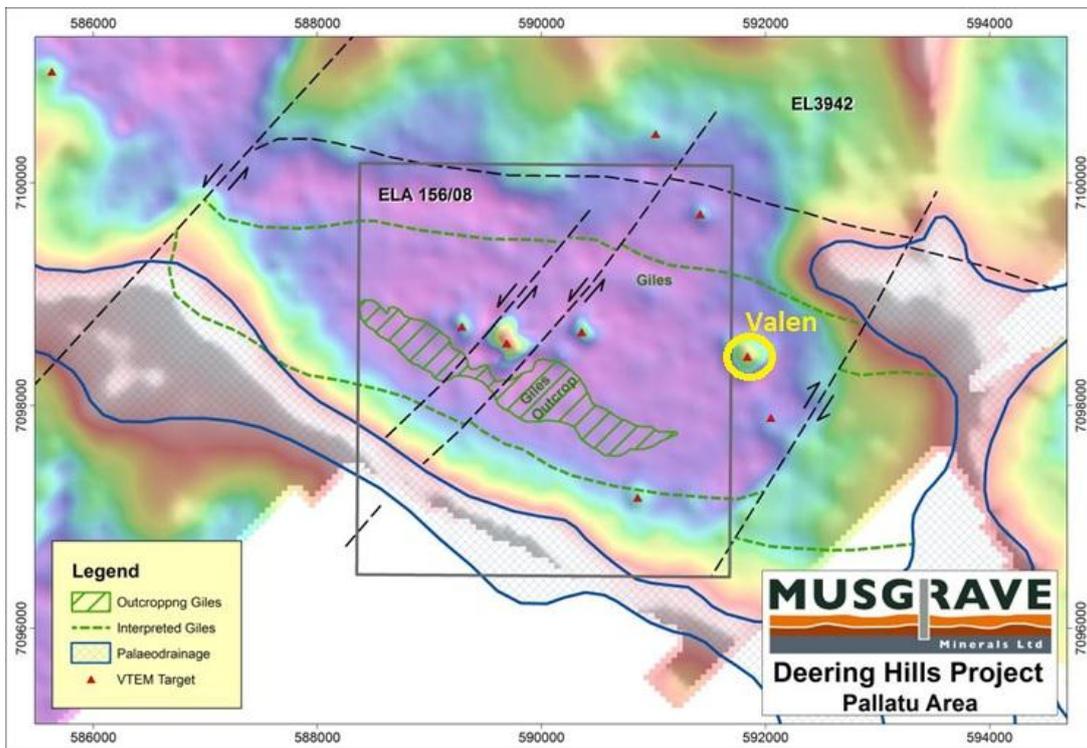


Figure 2: Valen drill target shown on conductivity image within the Deering Hills Project