



NEWS RELEASE

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For Immediate Dissemination

2010 ACTIVITY AND DRILLING OF HEMATITE (DSO) COMMENCES

VANCOUVER, BRITISH COLUMBIA – (Marketwire – February 1, 2010), Macarthur Minerals Limited (MMS – TSXV) (“the Company”) is pleased to advise that its 2010 field activities have commenced at its 100% owned Lake Giles Iron Ore project located in the Southern Yilgarn Iron Ore Province in Western Australia.

The priority and focus for the exploration activities for the March 2010 quarter will be reverse circulation (RC) drilling of the recently announced hematite (DSO) occurrences. Drilling is scheduled to commence on mid February and will initially test the outcropping hematite on 200m sections lines at Moonshine and Banjo where up to 62.5% Fe has been recorded from rock chip sampling. Mr Alan Phillips stated “2010 will be a very exciting time for Lake Giles project. We have now discovered three significant outcropping hematite occurrences that have the potential to deliver Direct Shipping Ore (“DSO”) if the hematite is continuous at depth”.

Mr Phillips continued to state that the company plans to finalise the reference terms for the commencement of a pre-feasibility study during the quarter. Based on the significant increase in the company’s resource last year (refer December 2, 2009 the company released an Inferred Mineral Resource estimate for to 1,051 million tonnes at 28.3 % Fe) the company is confident that further resource increases will be achieved. The key activities and milestone for 2010 include:

- Increasing the inferred magnetite resources to 1.5Bt.
- Delineating Hematite (DSO) mineralisation.
- Commencing Prefeasibility Study.
- Advancing transport option via seeking Memoranda of Understanding (MOU) with the Westnet Rail and Esperance Port Authority.
- Seeking offtake and development agreements with leading Chinese partners.

The company plans to carry out preliminary optimisations on the current resources to establish the optimal areas to focus exploration efforts to increase the resource size and achieve Indicated status. It is likely the company will increase the Base Case Production rate to 10mt/annum magnetite concentrate for its future studies.

QUALIFIED PERSON

Mr. Andrew Spinks B.App.Sc, Grad.Dip (Mining), a member of AusIMM, and a consultant geologist, is a Qualified Person as defined in National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"), in charge of the exploration on the Lake Giles project.

On behalf of the Board of Directors,
MACARTHUR MINERALS LIMITED

"Alan Phillips"

Alan Phillips, President, Chairman & CEO

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