

MACARTHUR MINERALS' 2012 GEOLOGICAL PROGRAM

- 14,000 meter hematite resource definition drilling by May 2012
- Objective to expand hematite resource by drilling 10,000 meters on untested targets
- Further diamond drilling to support metallurgical studies
- Geological interpretation of magnetite drilling results for release mid-year
- 5,000 meters of additional water resource drilling

Macarthur Minerals Limited (TSX: MMS, OTCQX: MMSDF) (the "Company" or "Macarthur") is pleased to announce that the 2012 field exploration program has commenced with reverse circulation ("RC") drilling and diamond drilling at the Ularring Hematite Project.

The geological objectives of the 2012 exploration program are to:

Ularring Hematite Project

1. Define further potential direct shipping ore ("DSO") hematite resources to support the Ularring Hematite Project pre-feasibility study by completing an infill drilling program. This aims to convert the current 16.95Mt at 55.6% Fe inferred resource (as reported in press release dated January 24, 2012; NI43-101 Technical Report will be filed by March 9, 2012) to indicated status. To achieve this, Macarthur will drill approximately 14,000 meters by May 2012.
2. Expand the hematite resource base through a further 10,000 meters of RC drilling on untested targets within the Company's tenements.
3. Determine hematite resources that are suitable for beneficiation. A 2012 diamond drilling program has been underway since early January 2012 and 10 holes for 334 meters have been completed. This diamond core will be used to support the metallurgical testing study to gauge the materials' susceptibility to gravity, particle size and/or magnetic beneficiation to increase Fe content.
4. Identify ground water resources to support the Ularring Hematite Project. This program is well advanced and the Company has already had success in delineation of possible sources of ground water suitable to support development of the Ularring Hematite Project. Over the next few months a further 5,000 meters of water exploration drilling will occur to identify additional water resources to support a potential wet beneficiation process. This will also be dependent on metallurgical test work being undertaken.

Moonshine Magnetite Project

5. Update the Moonshine Magnetite Project resource based on results from the 2011 drilling program. During 2011, 30 new RC holes for a 7,568 meter advance were completed. In addition 376 meters of diamond drilling (including an RC pre-collar) was undertaken for metallurgical testing purposes. The results of this activity are currently subject to geological interpretation for release mid-year.
6. The Company will also undertake diamond drilling to further test the high grade magnetite zone at the northern end of the Moonshine magnetite mineralized zone. This will be part-funded by the Western Australian Government as part of their Exploration Incentive Scheme (refer to press release dated January 25, 2012).
7. In past drilling programs, the Company encountered a 12.5 meter magnetite section at the Moonshine deposit grading at 59.3% Fe (Refer to press release dated August 23, 2010). This mineralized section was also intersected by a further 4 RC holes along an 800 meter strike length. (Refer to press release dated January 25, 2012).

Macarthur's President, Chairman and CEO, Alan Phillips commented that, "This year's program is focused on completing the detailed geological assessment that commenced back in 2006. From modest beginnings we have now drilled over 1,750 RC and diamond holes delineating a 1.3 Bt¹ inferred magnetite resource and a potential DSO hematite resource of 13.01 Mt indicated and 16.95 Mt inferred².

In Q1 2010, the Company embarked on the potential DSO drilling program with a goal of reaching 10 Mt inferred. The Company has now exceeded this goal threefold and there is an active development and study program underway to commercialize its hematite resource. The Company's 1.3 Bt¹ inferred Moonshine Magnetite Project resource should not be overlooked as it reflects a world class mineralized resource, and the Company this year will seek strategic partners to advance this resource development".

QUALIFIED PERSONS

Mr David Larsen, BSc (Geology), a member of the Australian Institute of Geoscientists, is a full-time employee of Macarthur and is a Qualified Person as defined in National Instrument 43-101. Mr Larsen is in charge of Macarthur's exploration programs and has reviewed and approved the technical information contained in this news release.

ABOUT MACARTHUR MINERALS LIMITED (TSX: MMS, OTCQX: MMSDF)

Macarthur Minerals Limited is an Australian based resource development company currently focused on developing its Ularring Hematite Project, located in the Yilgarn iron ore district in Western Australia. The Ularring Hematite Project is located 110 km from rail infrastructure with a direct connection to the iron ore exporting Port of Esperance, Western Australia.

The Ularring Hematite Project has an indicated resource of 13.01 Mt at 55.2% Fe and an inferred resource of 16.95 Mt at 55.6% Fe (press release dated January 24, 2012; NI43-101 Technical Report will be filed by March 9, 2012). In addition, Macarthur's Moonshine Magnetite Project has an inferred resource of 1.3 Bt at 30.1% Fe (press release dated December 15, 2010; NI43-101 Technical Report dated March 25, 2011).

Positive Preliminary Economic Assessments were released to the market on the Ularring Hematite Project in November 2011 (press release dated November 21, 2011) and the Moonshine Magnetite Project in February 2011 (press release dated February 7, 2011).

On behalf of the Board of Directors,

MACARTHUR MINERALS LIMITED

"Alan Phillips"

Alan Phillips, President, Chairman & CEO

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UPCOMING EVENTS

MACARTHUR will be attending the 2012 Prospectors and Developers Association of Canada (PDAC) International Convention and Investors Exchange in Toronto, March 4-7 at the Metro Toronto Convention Centre, South Building.

We invite you to meet the Macarthur team at Booth #2818. The conference will provide current and prospective shareholders an opportunity to speak with management about the Company's recent developments.

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¹ at 30.1% Fe (NI43-101 Technical Report dated March 25, 2011).

² indicated resource of 13.01 Mt at 55.2% Fe and an inferred resource of 16.95 Mt at 55.6% Fe (press release dated January 24, 2012; NI43-101 Technical Report to be released by March 9, 2012).

Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. With respect to forward-looking statements contained in this press release, assumptions have been made regarding, among other things, the reliability of information prepared and/or published by third parties that are referenced in this press release or was otherwise relied upon by the Company in preparing this press release. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials, the discovery of new large low cost deposits of iron magnetite and the general level of global economic activity. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.