

**NEWS RELEASE**  
January 22, 2013

**Symbol: MMS: TSX, OTCQX: MMSDF**  
For Immediate Dissemination

## **UPDATE ON MACARTHUR IRON ORE PROJECTS**

**Macarthur Minerals Limited (TSX: MMS, OTCQX: MMSDF)** (the “Company” or “Macarthur”) is pleased to provide an update on the Company’s iron ore projects and plans for 2013.

The Company’s immediate focus remains on the development of the Ularring Hematite Project in Western Australia.

### 2012 Highlights

- Positive metallurgical test results confirmed the feasibility of upgrading the Ularring Hematite Project’s Mineral Resource through conventional gravity and magnetic beneficiation. A consequence of this was a significant reduction in cut-off grade and a substantial increase in the hematite/goethite Mineral Resource inventory lifting the Indicated Mineral Resource from 13.01 Mt @ 55.2% Fe to 54.46 Mt @ 47.2% Fe and the Inferred Mineral Resource from 16.95 Mt @ 55.6% Fe to 25.99 Mt @ 45.4% Fe (news release dated June 14, 2012, NI43-101 Technical Report dated June 29, 2012, Technical Report filed June 29 2012). No further resource drilling is envisaged in 2013 as the Company has an adequate resources inventory to commence development;
- The Company completed a technical and financial evaluation in the Preliminary Feasibility Study (“PFS”) that concluded, based on the information available, the Ularring Hematite Project is economically viable and robust and that further project development is justified. Key PFS metrics were (news release dated August 16, 2012, NI43-101 Technical Report dated September 27, 2012);
  - Project pre-tax real Net Present Value (“NPV”) of A\$456 million at an 8% discount rate.
  - 13 year mine life (based on a probable Mineral Reserve of 42.95 Mt @ 47.0% Fe).
  - Total capital cost estimated at A\$262.7 million. This includes provision of A\$52.4 million for rehabilitation and sustaining capital expenditures over the life of mine and A\$49.1 million for indirect capital costs.
  - Total revenue estimated at A\$3.238 billion (rounded).
  - Total project costs (direct & indirect operating costs, capital expenditure including contingencies of A\$27 million, and sustaining capital) estimated at A\$2.438 billion (rounded).
- Macarthur entered into a Capacity Reservation Deed with the Esperance Port Authority (“EPSL”), securing a commitment for a 2 Mtpa export allocation (news release dated August 8, 2012) subject to completion of the proposed expansion of the iron ore export facilities at the Port of Esperance (“Port”) and commercial terms being entered into between Macarthur and the operator of the proposed facility;

- Macarthur participated in the EPSL Market Sounding process, designed to identify all interested parties in the Port capacity expansion. Macarthur registered an interest in the Port expansion in its own right and also participated in a larger consortium group with a similar interest (news release dated August 8, 2012);
- Macarthur has completed its environmental investigation for mining and processing to support the Ularring Hematite Project Mining Approval. The available information was collated into an impact assessment framework for review by the Environmental Protection Authority (“EPA”). The EPA set an assessment level as Assessment on Proponents Information (“API”), category ‘A’ classification (the lowest level of review). That means that, subject to the setting of conditions, the Ularring Hematite Project has a high probability of obtaining approval;
- Macarthur appointed two new non-executive directors to further build upon the capability of the Board and to extend its reach in the North American financial sector;
  - Mr Jeffrey Charles Wall, CBE (news release dated, June 15 2012); and
  - Mr Richard Patricio (new release dated, September 18 2012).
- Macarthur completed a successful water resource drilling program with groundwater being identified on Macarthur’s tenements and nearby Vector Resources Limited’s Gwendolyn Gold Project. Additional groundwater drilling commenced on January 17, 2013 within 5km of the Snark deposit on Macarthur’s tenements. Sourcing water nearby was one area identified in the PFS as requiring further investigation on the basis that considerable cost savings may be achieved through identifying a local water source and the establishment of a local bore field.
- The 2012 year was completed with the appointment of Brookfield Financial Australia Securities Limited (‘Brookfield’) to assist Macarthur to achieve the following (news release dated October 22 2012):
  - Port of Esperance Access
    - Development of alternative strategies for access to port capacity.
  - Capital Raising
    - Equity and debt capital raising activities for its Ularring Hematite Project and Moonshine Magnetite Project. This includes negotiating with offtake parties to support capital raising activities.
  - Strategic Partnership
    - Secure strategic partners for its Ularring Hematite Project and Moonshine Magnetite Project. Brookfield Financial will assist Macarthur to negotiate construction solutions for rail loading facilities, haulage roads, camp-related and mine infrastructure.

The opening days of 2013 have seen a strong recovery in the iron ore price which enhances the potential for the commercial viability of Macarthur’ Projects.

## Macarthur's 2013 Program

Q1 – Q2 will focus on:

1. with the continued assistance of Brookfield, advancing the Company's infrastructure development timeframe for the EPSL;
2. negotiation of conditions for the Assessment on Proponents Information (API) assessment by the EPA;
3. development of the Mining Proposal for lodgement with the Department of Mines and Petroleum ("DMP") in Western Australia for final Mining Approval;
4. 2,500 metre water resource drilling program to explore for large quantities of water on the Company's tenements in the vicinity of the Snark deposit;
5. Further definition of the magnetite Mineral Resource for the Moonshine Magnetite Project;
6. completion of a bulk sampling program to support pilot process plant trials to confirm key engineering design parameters and key commercial factors. The program is also expected to produce sufficient product for market acceptability testwork in the form of 'sinter pot' and value in use studies; and
7. preliminary evaluation of the nickel and gold potential of the existing Macarthur tenements. Prior to Macarthur's involvement with these tenements there had been two previous periods of limited exploration activity. The area was briefly explored for nickel during the late 1960's nickel boom and was then explored by several companies for gold in the mid 1990's. At these times only very limited shallow drilling was undertaken. Combined with the available historical data, new geological, geophysical and geochemical data obtained during Macarthur's extensive geological investigation of the banded iron formations (BIF) (2007 – 2013) has continued to indicate there is strong potential for nickel sulphide and gold mineralisation within the extensive ultramafic rock package hosting the BIFs. A preliminary soil sampling program has already commenced and further exploration over the coming year will be undertaken.

Q3 – Q4 will focus on:

1. lodgement of the Ularring Mining Proposal for review by the Department of Mines and Petroleum (DMP) in Western Australia;
2. finalisation of transport and logistics studies for the road and rail components of the Ularring Hematite Project;
3. identification of parties for contracting the following services:
  - a. mining;
  - b. process beneficiation;
  - c. transport and logistics activities; and

- d. on-site infrastructure, such as camp and power generation facilities;
4. the identification of a 'farm-in' partner for the development of the Company's substantial Magnetite resource.
5. Securing financing for the construction of the Ularring Hematite Project and associated beneficiation, transport and logistics infrastructure, following clarity on Port access.

Macarthur's President, Chairman and CEO, Alan Phillips commented that, "2012 has been a solid consolidation period for the Company where a number of technical risks have been effectively removed from the Ularring Hematite Project. It is pleasing to see the Company, again, has exceeded its exploration goals (outlined in news release, February 29, 2012) and the completion of a resource inventory to allow for a 13 year mine life.

*During the last three years, exploration of the Company's tenements has identified some very interesting nickel and gold prospects and these areas are now being subjected to geological desk top assessment. If these prospects mature, the Company may seek a farm-in partner to further the geological investigation.*

*Macarthur waits solely for the Port development timeframe to be announced so that it can complete the final stages of the program leading to commercial development for the benefit of all shareholders".*

Macarthur is well funded, progressive operation intent on bringing its Ularring Hematite Project to market. Currently in the pre development stage, Macarthur has a strong and capable Board and professional management, geological and engineering teams. Macarthur is now well advanced to move into the development stage and is well positioned for future success. Macarthur has 44,820,630 shares on issue held predominantly by institutional investors in Canada, USA and Hong Kong.

## **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 Mineral Resource of 54.46 Mt at 47.2% Fe and an inferred Mineral Resource of 25.99 Mt at 45.4% Fe (press release dated June 14, 2012; NI43-101 Technical Report dated June 29, 2012). In addition, Macarthur's Moonshine Magnetite Project has an inferred Mineral Resource of 1.3 Bt at 30.1% Fe (press release dated December 15, 2010; NI43-101 Technical Report dated March 25, 2011).

A Positive Preliminary Feasibility Study was released to the market on the Ularring Hematite Project in August 2012, which included a probable Mineral Reserve of 42.95 Mt at 47% Fe (press release dated August 16, 2012; Technical Report dated September 27, 2012). A Positive Preliminary Economic Assessment on the Moonshine Magnetite Project was released in February 2011 (press release dated February 7, 2011, Technical Report dated March 25, 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 2013 Prospectors and Developers Association of Canada (PDAC) International Convention and Investors Exchange in Toronto, March 3-6 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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**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.