



NEWS RELEASE
December 1, 2009

Symbol: MMS-TSXV
For Immediate Dissemination

LAKE GILES RESOURCE ESTIMATE EXCEEDS 1 BILLION TONNES

VANCOUVER, BRITISH COLUMBIA – (Marketwire – December 1, 2009), Macarthur Minerals Limited (MMS – TSXV) is today providing the updated results of a new National Instrument 43-101 (NI 43-101)-compliant independent resource estimate for its Lake Giles project located in Western Australia. CSA Global (“CSA”), an independent, internationally recognized mineral industry consultant, carried out the estimate. The results are a significant improvement on the 2008 Mineral Resource and cover only a portion of the mineralizing system identified to date, with potential from a further 49 targets.

Updated Lake Giles NI 43-101 Mineral Resource Estimate

The Lake Giles NI 43-101 Mineral Resource estimate has been updated by CSA with the addition of a new estimate for the Moonshine deposit. The Moonshine deposit is located within the Lake Giles Project, to the south. No new estimates were completed for the company’s four other deposits within the Lake Giles project.

The resource estimate is based on the Stage 7 drilling data, new geological interpretation and mapping over the last 6 months.

The updated Mineral Resource estimate is shown in Table 1. The Lake Giles project is at an early stage of evaluation. Macarthur has not established the economic viability of the Mineral Resources, and no Ore Reserve estimates have been produced for the deposit. The extent to which mining, metallurgical, marketing, infrastructure, permitting, marketing and other financial factors may affect Mineral Resource estimates is not yet well defined.

The new Moonshine Inferred Mineral Resource estimate increases the company’s total Inferred Mineral Resource estimate for the Lake Giles project to 1,051 million tonnes at 28.3 % Fe (Table 1).

| Table 1: Lake Giles Inferred Mineral Resource Estimate (NI 43-101) | | |
|---|-----------------------|-------------|
| Deposit | Million Tonnes | Fe % |
| Snark | 26.3 | 27.5 |
| Clark Hill North | 130.0 | 25.8 |
| Sandlewood | 335.0 | 31.1 |
| Clark Hill South | 48.5 | 21.9 |
| Moonshine | 511.0 | 27.8 |
| Total | 1,051 | 28.3 |

(rounding errors may occur)

Notes for table 1:

- Figures contained within Table 1 have been rounded. % Fe grades are rounded to 1 decimal figure.
- Davis Tube concentrate results is the proportion of sample extractable by magnetic separation.
- Magnetite mineralization at Moonshine is interpreted to comprise several sub-vertical northwest trending zones of banded iron formation (BIF) associated with ultramafic rocks. The mineralized interpretation used for the estimates extends from the base of oxidation at an average of approximately 60 metres below surface. Where drilling is shallow the interpretation is projected to 250 mRL, about 230m below the surface. Where drilling is deeper the interpreted mineralisation is projected to 0.6 times the search radius below the drill samples, about 280m below the surface.
- The Moonshine deposit has been sampled by 108 RC holes drilled. Drill hole coverage of the area is irregularly spaced with spacing between drill holes varying from less than 100 metres to approximately 350 metres.

Updated Moonshine Estimate

The updated independent estimate for Lake Giles is a result of an increase to the Inferred Mineral Resource estimate for the Moonshine magnetite iron ore project in Western Australia to 511 million tonnes at 27.8% Fe which is a 203% tonnage increase, based on the previous Mineral Resource estimate of 253 million tonnes.

This increase is a result of the inclusion of the recently completed Stage 7 drilling programme which completed a total of 47 holes for an advance of 9,028 metres. The Moonshine deposit strike length was doubled from 3km to over 7km in length.

The total Inferred Mineral Resource for Moonshine is shown in Table 2.

Drilling has not yet defined the limits of the Moonshine magnetite mineralization. There is potential for substantial additional mineralization from further drilling.

| Table 2: Moonshine Inferred Mineral Resource (NI 43-101) | | | |
|---|----------------|---------------|-----------------|
| | Tonnes (Mt) | Grade % Fe | % Mass Recovery |
| In-Situ | 511 | 27.8 | |
| Davis Tube Concentrate | 130 | 65.7 | 25.5 |

Notes for table 2

- Figures contained within Table 2 have been rounded. % Fe grades % Mass Recovery are rounded to 1 decimal figure.
- Davis Tube concentrate results is the proportion of sample extractable by magnetic separation.

Macarthur Minerals Director, Mr Alan Phillips said an NI43-101 Technical Report for the project will be lodged with Sedar within 45 days

For the new resource update, the Company supplied CSA with a new geological interpretation based on new surface mapping of contacts, re-logging of drill holes and re-interpretation of the dip of the banded iron formation (BIF) contacts together with the drill hole database comprising collar location, downhole survey and geology logs.

Analytical data for mineralised portions of these holes include Davis Tube concentrate results which measure the proportion of sample extractable by magnetic separation. Material concentrated by the Davis Tube test was assayed by X-ray fluorescence (XRF) for iron and other elements of interest.

A cut-off of 15% Davis Tube Recovery (DTR) was applied. The oxide boundary was revised based on Macarthur's new logging of weathering and magnetism of drill chips, the DTR % recovery and the calculated % Fe recovered.

A block model was constructed using the three dimensional geological wireframes. Density estimates were based on 533 density values from nearby Macarthur deposits at Lake Giles, 296 of which were for BIF. A fixed average density of 3.3 g/cm³ was applied.

Variograms were produced for head grades, DTR and concentrate grades for each element including Fe, SiO₂, Al₂O₃, P, S, and LOI. The data were split into two domains for the west and east lodes. The variograms demonstrate the mineralisation has high spatial continuity within the stratigraphic boundaries.

The Moonshine resource were estimated by Ordinary Kriging. Interpolating the grades a single search ellipse was used to ensure the same set of samples was used for each cell, but each element was interpolated using its own variogram models. A minimum of 12 samples and a maximum of 30 samples were used, and grades were interpolated into 25 x 25 x 10m parent cells.

QUALIFIED PERSONS

Mr. Chris Allen, BSc(Hons) MBA MAIG, who is a full-time employee of CSA and is an Independent Qualified Person, has reviewed and approved the above technical information relating to the Moonshine, Clark Hill North and Sandalwood Mineral Resource estimate contained in this release.

Mr. Jonathon Abbott, MAusIMM, who is a full-time employee of H&S and is an Independent Qualified Person, has reviewed and approved the above technical information relating to resource estimates for Snark and Clark Hill South contained in Table 1.

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"

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