

# MASON GRAPHITE

## MASON GRAPHITE REPORTS 31% INCREASE IN MEASURED AND INDICATED MINERAL RESOURCES TO 65.7 MILLION TONNES AT 17.2% Cg USING 5% COG<sup>(1)</sup>;

HIGH GRADE ZONE (> 25% Cg) INCREASES FROM 6.7 TO 9.7 MILLION TONNES AT 31.2% Cg

December 15, 2014

Montreal, Quebec, Canada

Mason Graphite Inc. ("Mason Graphite" or the "Company") (TSX.V: LLG; OTCQX: MGPHF) is pleased to announce the completion of an updated mineral resource estimate for its 100%-owned Lac Guéret graphite project in northeastern Quebec.

Highlights of the updated mineral resource estimate include:

- Measured and Indicated ("M&I") mineral resources increased 31% from 50 million tonnes ("Mt") to 65.7 Mt; grade also increased from 15.6% Cg to 17.2% Cg at 5% COG;
- Mineral resources in the Measured category increased 323% from 4.5 Mt to 19.1 Mt; with grade also increasing from 15.5% Cg to 17.9% Cg at 5% COG; and
- The high grade mineral resources in the M&I category (see unit "U3" in Table 1) increased 45% from 6.7 Mt to 9.7 Mt, with an average grade of 31.2% Cg using a COG of 25%.

Table 1 - December 2014 Mineral Resource Estimate

Categories	Unit	Tonnes	Grade (Cg)	Graphite in-situ (t)
<b>Measured (M)</b>	U1/U2 (5 to 25% Cg)	15,730,000	15.16%	2,385,000
	U3 (> 25% Cg)	3,375,000	30.58%	1,032,000
	<b>All units</b>	<b>19,105,000</b>	<b>17.88%</b>	<b>3,417,000</b>
<b>Indicated (I)</b>	U1/U2 (5 to 25% Cg)	40,257,000	14.59%	5,873,000
	U3 (> 25% Cg)	6,332,000	31.58%	2,000,000
	<b>All units</b>	<b>46,589,000</b>	<b>16.90%</b>	<b>7,873,000</b>
<b>M + I</b>	U1/U2 (5 to 25% Cg)	55,987,000	14.75%	8,258,000
	U3 (> 25% Cg)	9,707,000	31.23%	3,032,000
	<b>All units</b>	<b>65,694,000</b>	<b>17.19%</b>	<b>11,290,000</b>
<b>Inferred</b>	U1/U2 (5 to 25% Cg)	15,201,000	14.90%	2,265,000
	U3 (> 25% Cg)	2,450,000	31.75%	778,000
	<b>All units</b>	<b>17,651,000</b>	<b>17.24%</b>	<b>3,043,000</b>

Notes: - Numbers were rounded to the nearest thousand.

- A cut-off grade of 5% Cg was used for this mineral resource estimate.

- See additional notes on mineral resource estimation methodology.

The updated mineral resource estimate was carried out by Goldminds Geoservices and Roche Ltd. using 25,956 carbon graphite (Cg) assays obtained from 283 diamond drill holes (43,324 metres) and 4 trenches (987 metres).

Benoît Gascon, President and CEO of Mason Graphite, commented “We are very pleased with the results of the updated resource. The update has further increased our knowledge and confidence in the Lac Guéret mineral deposit, which will be very helpful in identifying further optimization opportunities as we develop the Feasibility Study for the project. Furthermore, since only the Measured and Indicated categories are considered in the calculation of mineral reserves, the increases in the size and grade of these categories could result in a larger mineral reserve than what could have been expected with the previous mineral resource estimate. We expect to update the technical report in respect to the Lac Guéret project in conjunction with the Feasibility Study completion in 2015.”

(1) COG: Cut-Off Grade.

### **Mineral Resource Estimation Methodology**

The updated mineral resource estimate is based on geological observations and geochemical data modeling: Unit 1 is defined by a content of 5-10% Cg; Unit 2 by 10-25% Cg; and Unit 3 by 25% Cg or more. Waste has less than 5% Cg.

Drill holes, cross sections, and plan views were interpreted to construct three-dimensional wireframe models using the geochemical analyses and geological descriptive logs with a nominal cut-off of 5% Cg under Genesis software. No capping value was applied to the assays. Assay intervals were composited to 3 meter lengths from the raw Cg assay values and grades were estimated using the inverse distance method. For the grade estimation, variable direction search ellipsoids following the structural folding trends were used. Anisotropy was interpreted in semi variogram and set to 60 meters along the x axis, 40 meters along the y and 15 meters along the z axis. The block model was defined by un-rotated blocks of 3 meters long by 3 meters wide by 3 meters thick sited in 401 columns, 468 rows and 134 levels and covers a strike length of roughly 1,800 meters to a maximal depth of 356 meters below the highest surface point. A fixed density of 2.9 g/cm<sup>3</sup> was applied to calculation.

Mineral resources were classified as Measured, Indicated or Inferred based on information spacing and the confidence of the geological continuity of the mineralization in accordance with the CIM guidelines and established with the use of a maximum of ten composites per block and a maximum of two composites per drill hole. The Measured resources required a minimum of eight composites per block within an ellipsoid of 40 m x 40 m x 15 m. The Indicated resources required a minimum of four composites per block within an ellipsoid of 60 m x 60 m x 15 m. The Inferred resources required a minimum of two composites per block within a sphere of 120 m radius.

Only material located within a pit shell generated from an optimized mining scenario run under Whittle software is included in this mineral resources estimate. This scenario is assuming an overall pit slope of 45°, a mining cost of CA\$ 6 per tonne and a processing cost of CA\$ 63 per tonne milled, a 100% mining recovery, no mining dilution, a mill recovery of 96.6% and an average selling price of US\$ 1,285 per tonne (CA\$ 1,371 per tonne) of concentrate at 93.7% Cg.

## **Interest Payment on Convertible Debentures**

Mason Graphite also announces that it intends to issue an aggregate of 197,619 common shares of the Company (the “Common Shares”) at a deemed price per share of \$ 0.63 in payment of \$ 124,500 in interest due and payable under the Company’s 12% convertible debentures due June 11, 2019 (the “Debentures”). Under the terms of the Debentures, the Company has the option to pay 50% of the semi-annual interest due on the Debentures in Common Shares. The balance of the interest owing under the Debentures, being \$ 124,500, has been paid in cash.

The issuance of the Common Shares in payment of interest on the Debentures is subject to the approval of the TSX Venture Exchange and the Common Shares will be subject to a four month hold period.

## **Qualified Persons**

The resource estimate was prepared by Goldminds Geoservices and Roche Ltd, both companies independent from Mason Graphite. The technical information pertaining to the mineral resource estimate in this press release was reviewed and approved by Claude Duplessis, Eng., from Goldminds Geoservices, and Edward Lyons, P.Geo., from Tekhne Research, both independent Qualified Persons as defined by National Instrument 43-101.

Yves Caron, P. Geo., M.Sc., Director of the Geology and Exploration for Mason Graphite, and Jean L'Heureux, Eng., Mason Graphite’s Executive Vice-President of Process Development, both Qualified Persons as defined by National Instrument 43-101, have reviewed and approved the scientific and technical content of this press release.

## **About Mason Graphite**

Mason Graphite is a Canadian mining company focused on the exploration and development of its 100% owned Lac Guéret graphite property, located in northeastern Québec. The property hosts a National Instrument 43-101 compliant Mineral Resource featuring 65,694,000 tonnes grading 17.2% Cg, including 9,707,000 tonnes grading 31.2% Cg, in the Measured and Indicated categories and 17,651,000 tonnes grading 17.2% Cg, including 2,450,000 tonnes grading 31.8% Cg, in the Inferred category (see press release dated December 12, 2014). Excellent potential exists for further mineral growth. A Preliminary Economic Assessment (PEA) study was completed on a 7.6 Mt mineral resource estimate from July 2012 which features 22 years of production at 27.4% Cg and a pre-tax internal rate of return of 33.7% (see technical report entitled “Technical Report on the Mineral Resources Estimation Update 2013, Lac Guéret Graphite Project, Quebec, Canada” issued on January 17, 2014). The Company’s senior management team possesses significant graphite expertise from their experience at Timcal/Imerys, including Benoît Gascon, CPA, CA, who held executive positions for 20 years, including over 6 years as President and CEO of Stratmin Graphite, the only graphite mine in North America; Jean L'Heureux, Eng., Executive Vice-President, Process Development, with over 20 years of experience; and Luc Veilleux, CPA, CA, Chief Financial Officer and Executive Vice-President, with 8 years of experience. Timcal, now owned by Imerys, is one of the largest graphite producers in the world.

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## **Mason Graphite Inc.**

On behalf of the Board

“Benoît Gascon”  
President & Chief Executive Officer

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### **Cautionary Statements**

*This press release contains "forward-looking information" within the meaning of Canadian securities legislation. All information contained herein that is not clearly historical in nature may constitute forward-looking information. Generally, such forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including but not limited to: (i) volatile stock price; (ii) the general global markets and economic conditions; (iii) the possibility of write-downs and impairments; (iv) the risk associated with exploration, development and operations of mineral deposits; (v) the risk associated with establishing title to mineral properties and assets; (vi) the risks associated with entering into joint ventures; (vii) fluctuations in commodity prices; (viii) the risks associated with uninsurable risks arising during the course of exploration, development and production; (ix) competition faced by the resulting issuer in securing experienced personnel and financing; (x) access to adequate infrastructure to support mining, processing, development and exploration activities; (xi) the risks associated with changes in the mining regulatory regime governing the resulting issuer; (xii) the risks associated with the various environmental regulations the resulting issuer is subject to; (xiii) risks related to regulatory and permitting delays; (xiv) risks related to potential conflicts of interest; (xv) the reliance on key personnel; (xvi) liquidity risks; (xvii) the risk of potential dilution through the issue of common shares; (xviii) the Company does not anticipate declaring dividends in the near term; (xix) the risk of litigation; and (xx) risk management.*

*Forward-looking information is based on assumptions management believes to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, no material adverse change in metal prices, exploration and development plans proceeding in accordance with plans and such plans achieving their stated expected outcomes, receipt of required regulatory approvals, and such other assumptions and factors as set out herein. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Such forward-looking information has been provided for the purpose of assisting investors in understanding the Company's business, operations and exploration plans and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this press release, and the Company does not undertake to update such forward-looking information except in accordance with applicable securities laws.*

*Mason Graphite has not made a production decision. A decision to proceed with production will be based on the results of a feasibility study demonstrating economic and technical viability. All references herein with respect to*

*production and anticipated timelines for production assumes that Mason Graphite will complete a feasibility study and that the results of such feasibility study will be positive. The timing and results of such feasibility study are not guaranteed and no inference should be made in this regard.*

*Mineral resources that are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.*

*The quantity and grade of reported inferred mineral resources in this news release are uncertain in nature and there has been insufficient exploration to define these inferred mineral resources as indicated or measured mineral resources and it is uncertain if further exploration will result in upgrading them to indicated or measured mineral resources.*

*The PEA is preliminary in nature and includes Inferred Mineral Resources, which are considered too geologically speculative to have mining and economic considerations applied to them that would enable them to be categorized as mineral reserves. Mineral resources that are not mineral reserves do not have demonstrated economic viability. There is no certainty that the reserves development, production, and economic forecasts on which the PEA is based will be realized.*

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*