

ASX Announcement

15th December 2017

Preliminary Metallurgical Testwork Completed for the Lac Rainy Graphite Project, Quebec, Canada

Highlights:

- **Metallurgical testwork completed on a characterisation sample of graphite mineralisation from the Lac Rainy Graphite Project located in northern Quebec, Canada**
 - **Preliminary results are considered encouraging, particularly given that the flowsheet used was not optimised for the Lac Rainy deposit and the samples used are likely to have been affected to some degree by oxidation**
 - **Sighter tests completed on two composite samples, including sample preparation; sample characterisation (chemical and mineralogical); and flotation testing**
 - **Metallurgical flowsheet based on publically available information for the nearby Lac Knife graphite deposit, 100% owned by Focus Graphite Inc.**
 - **Full metallurgical results, including chemical and mineralogical characterisation, expected in January 2018**
 - **A diamond drilling program is planned for the first half of 2018 to test the grade and continuity of graphite mineralisation as well as obtain representative core samples for continued metallurgical testwork**
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Diversified metals exploration company, Metals Australia Ltd (ASX: **MLS**) is pleased to announce that preliminary metallurgical testing of graphite mineralisation sampled at the Lac Rainy Graphite Project has been completed.

SGS Canada Inc. (SGS) were selected to undertake the sighter testwork program on two composite graphite samples collected from the Lac Rainy Project in September 2017 (see ASX announcement dated 12th October 2017). Testwork included sample preparation, chemical and mineralogical characterisation of the feed samples, and flotation tests based on a flowsheet comparable with the process proposed for the nearby Lac Knife graphite deposit being developed by Focus Graphite Inc.

Preliminary results of the testwork have been provided to the Company by SGS and a comprehensive report is expected during early January 2018. Preliminary metallurgical results are encouraging and indicate that graphite recoveries and grade are potentially suitable for the production of a commercial graphite concentrate product.

Characterisation samples used for the testwork were collected from surface exposures and, although fresh material was targeted, the samples collected may still have been partially oxidised, due to the outcropping nature of the graphite mineralisation. Oxidation, inherent to surface

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samples, are a hindrance in graphite processing, with performance typically improving with the use of unoxidised samples. The next phase of testwork is expected to be completed on unoxidised drill core material, providing for more representative samples going forward. The Company therefore considers that significant upside exists in the performance of the graphite mineralisation within the parameters of the metallurgical test work. In addition, an existing non-optimised flowsheet was used as a starting point for the initial testwork. Therefore, the use of fresh drill core material, coupled with the optimisation of the flowsheet, is expected to improve the metallurgical performance of the mineral processing work.

Commenting on the metallurgical testwork results at Lac Rainy, Mr Gino D'Anna, a Director of MLS stated:

"These preliminary results are a strong indication that the graphite at Lac Rainy has the necessary grade and metallurgical characteristics to potentially produce a commercial graphite product. Given that the test work was based on the flowsheet from Focus Graphite Inc., which is publicly available, we consider that significant upside exists in the performance of the graphite mineralisation in future metallurgical processing, particularly given the scope to modify and fine tune the flowsheet. We look forward to receiving the comprehensive report from SGS in coming weeks which will include the full analytical and mineral characterisation for the testwork samples. Metals Australia is planning to complete a diamond drilling program at Lac Rainy in early 2018 that will test the grade, thickness and continuity of the high grade graphite mineralisation that has already been identified at the project."

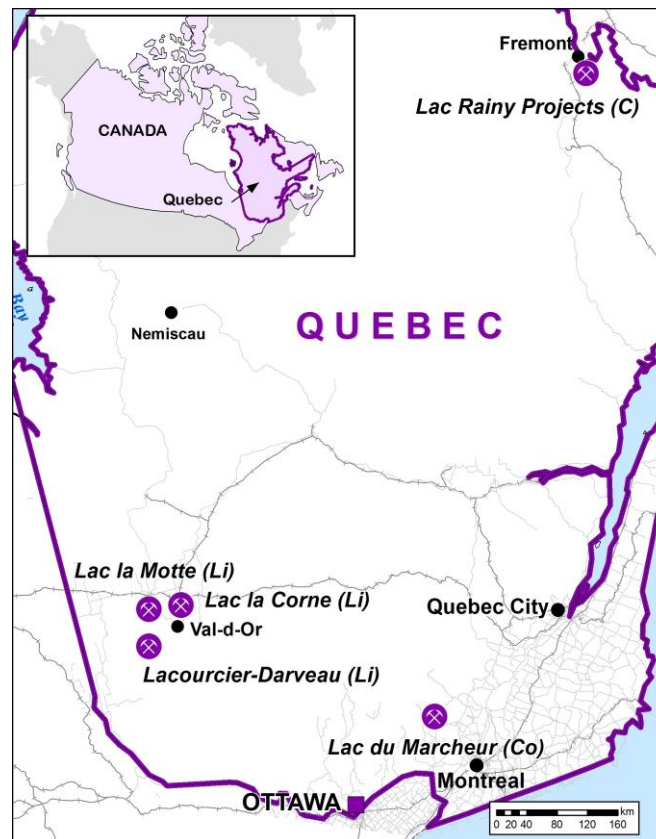


Figure 1: Location of the Lac Rainy Graphite Project and other MLS projects in Quebec, Canada

Lac Rainy Graphite Project

The Lac Rainy Graphite Project is located in one of the premier graphite geological regions of Quebec. It sits approximately 20 km southwest of the historic iron ore mining town of Fermont in northern Quebec (Figure 1), and 260 km north-northeast of the city of Sept-Îles. The Lac Rainy Graphite Project is approximately 15 km east of Route 389, a paved highway which travels north to Fermont. The company holds two contiguous claim blocks (Lac Rainy Nord and Lac Rainy Est) that together comprise 86 claims over an area of 4,450 ha.

The Lac Rainy Graphite Project is located adjacent to claims that cover the Lac Knife Graphite Deposit 100% owned by Focus Graphite Inc. (Focus) which is located less than 4 km south-west of the Project boundary) and hosts a Measured and Indicated Resource of 13.6 Mt @ 14.95% Cg and an Inferred Resource of 0.8 Mt @ 13.90% Cg at a 3.0% Cg cut-off (refer Focus Graphite TSX-V market announcement dated 6 March 2017).

Metallurgical Testwork Summary

In September 2017, the Company completed a channel and characterisation sample collection program at the Lac Rainy Graphite Project. Dahrouge Geological Consulting Ltd. were engaged to undertake the work (see ASX announcement dated 12th October 2017).

SGS Canada Inc. (SGS) based in Lakefield, Ontario were subsequently selected by the Company to complete initial sighter metallurgical testwork on the characterisation sample of graphite mineralisation collected from the Lac Rainy Graphite Project. The testwork comprised: 1) sample preparation; 2) sample characterisation (chemical and mineralogical); and 3) flotation testing.

The testwork parameters were chosen to provide the Company with basic metallurgical information about the mineralisation at Lac Rainy and provide an indication of whether the graphite at Lac Rainy has mineralogical characteristics potentially suitable for the production of a commercial concentrate. A flowsheet based on publically available information for the nearby Lac Knife graphite deposit was selected as the initial conditions for the testwork and further scope for optimisation remains, indicating that significant upside exists in the performance of the graphite mineralisation in future testing.

Preliminary results indicate that a commercial graphite concentrate grade and recovery can potentially be achieved from the mineralisation at Lac Rainy. This is encouraging as the testwork is non-optimised and is based on the flowsheet for a separate (though geologically similar) deposit. Furthermore, as these characterisation samples were collected from surface, it is likely that they have a certain degree of oxidation. Unoxidised samples from deeper within the graphite deposit are expected to provide a better metallurgical performance.

The full conditions and results of the metallurgical testwork described above will be provided when available from SGS.

ENDS

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Competent Person Statement

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves, as applicable, is based on information compiled by Mr. Darren L. Smith, P. Geol., a Competent Person who is a Professional Geologist registered with L'Ordre des géologues du Québec, in Canada. Mr. Darren L. Smith, P.Geol, is an employee of Dahrouge Geological Consulting Ltd. (Dahrouge). Dahrouge Geological Consulting Ltd. and all competent persons are independent from the issuer of this statement, Metals Australia Limited. Mr. Smith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Smith consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	The characterisation sample collected for metallurgical testing comprised two composite samples of graphite mineralisation from two sites with a total combined weight of approximately 110 kg. The samples were excavated from a surface outcrop, with care taken to clean the exposure of soil and vegetation and to remove a layer of weathered material.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	No drilling completed.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Not applicable, no drilling completed
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Not applicable, no intersections logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Composite samples weighing 50-60 kg each supplied to laboratory. The samples were stage-crushed to -6 mesh after a section of the material was removed for mineralogical evaluation. The crushed material was homogenized and split into 2 kg test charges.



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<p>The composites were subjected to the following chemical analysis:</p> <ul style="list-style-type: none"> Total and graphitic carbon analysis, Sulphur, Whole rock analysis, ICP-OES. <p>No blanks, standards, or duplicates were submitted by the company for analysis with the samples. Internal laboratory blanks, standards, and duplicates have been relied upon for quality control.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<p>Documentation of primary data will be completed by SGS Canada Inc. in the form of a detailed technical report.</p> <p>No adjustments to the assay data are expected to be undertaken.</p>
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Handheld GPS used for location of sample points using NAD83 datum, UTM grid, Zone 18 N. Such methods have a typically accuracy of 1-3 m.</p>
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<p>Data spacing is irregular due to the reconnaissance-style sampling completed to-date. Metallurgical characterisation samples were collected from two sites.</p> <p>Insufficient data is available to establish the degree of geological and grade continuity required for estimation of a resource.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<p>Insufficient data is available to determine the orientation and geometry of the mineralisation. Channel sampling was undertaken across the width of the exposed mineralisation, perpendicular to the strike direction.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>Industry standard chain of custody followed, with samples dropped off at shipping company by field supervisor, shipping with tracking number, and received direct by the laboratory.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>None completed by third parties.</p>



Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>Metals Australia Limited is the 100% owner of the Lac Rainy Graphite Project, pursuant to the binding acquisition agreement.</p> <p>There are no other material issues affecting the tenements.</p> <p>Quebec Lithium Limited, a wholly owned subsidiary of Metals Australia, is the owner of 100% of the Lac Rainy graphite project and ownership of the individual CDC claims is with Quebec Lithium Limited.</p> <p>All tenements are in good standing and have been legally validated by a Quebec lawyer specialising in the field.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>No modern exploration has been conducted by other parties.</p> <p>Government mapping records multiple graphitic carbon bearing zones within the project areas but no other data is available.</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>The mineralisation at the Lac Rainy project is consistent with a crystalline flake graphite deposit hosted by metamorphic rocks of the Menihek Formation parashist and the Sokoman Formation iron formation of the Gagnon Group of the Grenville Province. Mineralisation consists of graphite-rich bands interlayered with folded and foliated quartzo-feldspathic gneiss and schist. The graphite layers appear to be steeply dipping to sub-vertical and extend 100's metres to kilometres along strike. Layers trend in a NE to N direction, parallel to the principle metamorphic fabric in the rocks.</p> <p>The Lac Rainy and Lac Carheil graphite prospects were first discovered in 1989 and has been subject to some exploration over that time, however previous exploration was not conducted in a systematic manner and was focused more on the iron potential of the region which has meant that the true mineralisation and potential of the Lac Rainy Est graphite project has not been fully established.</p> <p>The Lac Rainy graphite project is contiguous with the Lac Knife Graphite Project which is owned by Focus Graphite Inc. The Lac Knife Deposit (which is located less than 4 km south-west of the Project) contains a Measured and Indicated Resource of 13.6 Mt @ 14.95% Cg and an Inferred Resource of 0.8 Mt @ 13.90% Cg at a 3.0% Cg cut-off.</p>



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Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	Not applicable, no drilling completed.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>No weighted averages or data aggregation applied.</p> <p>No metal equivalents reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<p>Not applicable with channel and characterisation samples representing surface point locations.</p> <p>True widths not known as the geometry of the graphitic zones had not been determined by drilling. However, units are considered to be generally dipping sub-vertically.</p>
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Included in body of the announcement.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Not applicable, no exploration results included.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<p>Metallurgical testwork including 1) sample preparation; 2) sample characterisation (chemical and mineralogical); and 3) flotation testing has been completed by SGS Canada Inc.</p> <p>Chemical examination of the feed samples will include the following assays:</p> <ul style="list-style-type: none"> Total (Ct) and graphitic (Cg) carbon, Sulphur, Whole rock, and Trace elements by ICP-OES. <p>Mineralogical examination will include qualitative XRD analysis to determine the bulk mineralogy, and optical mineralogy in transmitted and reflected light to determine the occurrence of graphite with gangue minerals (sulphides, silicates, carbonates).</p>



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		<p>Mineralogical examination of metallurgical samples includes optical mineralogy to determine the occurrence of graphite (liberated, locked etc.).</p> <p>Flotation Testing comprises sighter cleaner flotation tests and batch cleaner flotation tests. One sighter cleaner flotation test will be carried out on each of the composites using a scoping level flowsheet with a MF2 front-end followed by a primary cleaner circuit. The purpose of these test is to asses the metallurgical response of the Lac Rainy to a simplified cleaner flowsheet. While a sighter test typically does not produce a final concentrate grading 95% C(t), the size fraction analysis results will provide strong indications for a final cleaner circuit layout and the flake size distribution of a final concentrate.</p> <p>The graphite flotation concentrate will be submitted for a size fraction analysis. The concentrate will be screened at 48, 65, 80, 100, 150, 200, 325, and 400 mesh. The individual size fractions and the other flotation products will be submitted for C(t) analysis and the final tails for a C(g) analysis to generate a mass balance.</p> <p>One batch cleaner flotation test will be carried out on each of the composites using the Lac Knife flowsheet. Since the Lac Rainy project is located close to Focus Graphite's Lac Knife project, the Lac Rainy mineralization may yield a comparable metallurgical performance. The flowsheet, grind sizes, and reagent regime of the Lac Knife project are in the public domain in form of a feasibility study and, therefore, this information can be applied in this test program. The reagent dosages will be adjusted based on the specific needs of the Lac Rainy mineralization.</p> <p>The graphite flotation concentrate will be submitted for a size fraction analysis. The concentrate will be screened at 48, 65, 80, 100, 150, 200, 325, and 400 mesh. The individual size fractions and the other flotation products will be submitted for C(t) analysis and the final tails for a C(g) analysis to generate a mass balance.</p>
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>The sighter metallurgical testwork described above is a preliminary test of the mineralisation at Lac Rainy and the composite samples are not considered to be representative of the overall graphite deposit due to their limited size and spatial distribution. Furthermore, as they are samples collected from surface they are likely to be affected by oxidation to some degree.</p> <p>A diamond drilling program is planned to test the grade, thickness and continuity of graphite mineralisation at the Lac Rainy project during the upcoming winter drilling</p>



Criteria	JORC Code explanation	Commentary
		season in Quebec. It is expected that this drilling will provide more representative and unoxidised mineralised samples that may be amenable for further metallurgical testwork. A future program of large-diameter coring specifically for metallurgical characterisation will also be considered, depending on results.