ASX Announcement

15 June 2020

Metals Australia Delivers High-Grade Maiden JORC Resource at Lac Rainy Graphite Project, Quebec

Highlights:

- Maiden JORC (2012) Mineral Resource Estimate for the high-grade Lac Rainy Graphite Project:
  - **Indicated and Inferred Resource of 13.3Mt @ 11.5% Total Graphitic Carbon (TGC) for 1.529Mt of contained graphite** using a 5% TGC cut-off, made up of:
    - **South-East Carheil Resource: High-grade Indicated Resource of 9.6Mt @ 13.1% TGC for 1.257Mt of contained graphite** using a 5% TGC cut-off
    - **North-West Carheil Resource: Inferred Resource of 3.7Mt @ 7.3% TGC for 0.270Mt of contained graphite** using a 5% TGC cut-off
  - **resource outcrops at surface** with 90% of global resource defined within the first 100m
  - based on an open cut mining method modelled down to 150m
- Ranks as one of the highest-grade global graphite deposits
- Only the first 1.6km of strike of the 4 km of strike along the Main Carheil Graphitic Trend has been drill tested. The SE and NW strike extensions and the recently discovered West Carheil Graphitic Trend are still to be drilled – **planning is currently underway for extensional drilling**
- Deposit is open to the north and south along strike, as well as down-dip and plunge, indicating significant exploration upside and drill ready targets
- **Strike length along the Main Carheil Graphitic Trend including the recently discovered SE and NW extensions total approximately 4km**
- Detailed metallurgical and mineralogical test work on Lac Rainy drill core is progressing well – **final report from SGS is expected shortly**
- Product specification test work and **scoping study** to commence once the results of the metallurgical testing program are received – **graphite marketing program to commence following completion of scoping study and product specification test work**

Metals Australia Ltd (ASX: **MLS**) (**Metals Australia** or the **Company**) is pleased to announce the maiden JORC (2012) resource at its 100% owned Lac Rainy Graphite Project located in Quebec, Canada.

The Mineral Resource has been prepared in accordance with the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, ("JORC Code (2012)") and is estimated at **13.3Mt at 11.5% TGC** in the category of Indicated and Inferred **for 1.529Mt of contained graphite**, using a 5% TGC cut-off.

The mineral resource at Lac Rainy offers significant flexibility for potential development into a long life, high-grade graphite mining operation. Lac Rainy has the potential to be mined using open cut mining methods with low strip ratios, with more than 90% of the current global resource defined within the first 100m.

Drilling completed to date has only tested the first 1.6km of the approximate 4km of strike along the Main Carheil Graphitic Trend with the SE and NW strike extensions and the recently discovered West Carheil Graphitic Trend still to be drilled. The Company is currently planning an extensional drilling program to further grow the resource base and drill test some of the other high-priority targets which have been identified.

The deposit at Lac Rainy remains open to the north and south along strike, as well as down-dip and plunge, indicating significant exploration upside and drill ready targets.

The global resource is made up of the high-grade South-East Carheil Graphite Deposit which is classified in the Indicated category and the North-West Carheil Graphite Deposit which is classified in the Inferred category, as shown in Table 1 (below).

Table 1 – JORC (2012) Mineral Resource Estimate

Deposit	Classification	Tonnes	Total Graphitic Carbon (TGC)	Contained Graphite (Tonnes)	S %
South-East Carheil Graphite Deposit	Indicated	9,600,000	13.1%	1,257,600	9.8
North-West Carheil Graphite Deposit	Inferred	3,700,000	7.3%	270,000	7.3
	Total[1]	**13,300,000**	**11.5%**	**1,529,500**	**9.1**

1. Mineral Resource estimated at a 5% TGC cut-off

Commenting on the successful delivery of the maiden JORC (2012) Mineral Resource for the Lac Rainy Graphite Project, Director of Metals Australia, Mr Gino D'Anna stated:

"The delivery of the maiden resource estimate at Lac Rainy signifies the culmination of our significant exploration efforts over the last 18 months. When we acquired Lac Rainy, it was a greenfield exploration project. Today, Lac Rainy possesses a significant high-grade resource which remains open along strike as well as down-dip and plunge, indicating significant exploration upside.

Our resource is readily and rapidly expandable. We demonstrated that through the discovery of the West Carheil Graphitic Trend, which has a similar genesis as the Main Carheil Graphitic Trend. The Lac Rainy project offers significant flexibility, it has projected low strip ratios, can be readily accessed through open cut mining methods and has consistently delivered exceptionally high-grade results.

The metallurgical and mineralogical test work program undertaken with SGS (Canada) Inc. is nearing completion and the final report is expected imminently. This will be the catalyst for the Company to commence its first round of product specification test work, including spheronization test work and electrochemical exfoliation test work. We will then build this into a scoping study and commence our graphite marketing program.

The Lac Rainy Graphite Project offers significant upside and we look forward to building on this great success."

Overall, this is an excellent outcome for shareholders. The Lac Rainy project has the potential to deliver attractive economics due to its potentially significant size, high grades and extensive surface outcrop that offers low strip ratios. Metallurgical studies to date indicate a straightforward processing flowsheet. The Company plans on commencing its first round of product specification test work and will be aiming to deliver a scoping study during late-2020.

The Company's ongoing focus is to develop this Mineral Resource into a low-cost mining operation.

The Company believes that the Lac Rainy project offers considerable flexible and exploration upside, which can be unlocked not only through additional drilling and other exploration methods, but also through refining the metallurgical flowsheet to determine the most appropriate graphite products that can be produced and marketed with the Lac Rainy graphite concentrate.

In 2018, the Company completed a preliminary round of metallurgical test work using a mini-bulk sample of sub-surface material collected from Lac Rainy. The test work which was completed by SGS (Canada) Inc. demonstrated that the in-situ graphite at Lac Rainy can produce a commercial-grade graphite concentrate.

Summary results included:

- High sample head grades of 36.5% and 22.0% Ct (Total Carbon)
- Graphite recovery up to 91.0% using simple and low-cost processing routes
- Concentrate grades of up to 96.2% Ct – exceeding standard cut-off grades for commercial-grade graphite concentrates
- Total carbon grades up to 98.8% in large and jumbo flake size fractions
- Low levels of potentially deleterious elements – outstanding result which will differentiate Lac Rainy graphite concentrate from many of its competitors

The metallurgical program was based on a flowsheet using publicly available information for the nearby Lac Knife graphite deposit which is 100% owned by Focus Graphite Inc. These results, which although cannot be relied upon as being representative, are considered significant and highly encouraging given that the flowsheet was not optimised for the Lac Rainy project and given that the surface samples collected and tested were likely to have been affected to some degree by oxidation.

Refer to ASX Announcement dated 17 January 2018 and titled "Metallurgical Test Results for the Lac Rainy Graphite Project" and Appendix 1 of this announcement for further information.

Following the completion of its 2019 Diamond Drilling Programme at Lac Rainy the Company re-engaged SGS (Canada) Inc. to undertake a further more advanced metallurgical and mineralogical testing programme to follow on from the 2018 testing programme using the split drill core from the 2019 diamond drilling campaign completed at Lac Rainy. The Company has been notified by SGS (Canada) Inc. that all test work has been completed and the results have been analysed and interpreted. The results are currently being summarised into a final report. The Company expects to receive the final report from SGS (Canada) Inc. shortly and once received, the results of the test work will be announced to shareholders.

The Company looks forward to providing shareholders with further updates as we continue to achieve our milestones at Lac Rainy.

This announcement was authorised for release by the Board of Directors.

ENDS

For more information, please contact:

Gino D'Anna
Director
Metals Australia Ltd
Phone: +61 400 408 878

Martin Stein
Company Secretary
Metals Australia Ltd
Phone: +61 8 9481 7833

Caution Regarding Forward-Looking Information

This document contains forward-looking statements concerning Metals Australia. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

Competent Person Declaration

The information in this announcement that relates to Exploration Results is based on information compiled by Mr. Jean-Paul Barrette P.Geo, B.Sc. Mr Barrette is Project Geologist with Magnor Exploration Inc. and a consultant to Metals Australia Limited. Mr Barrette and is a member of the Ordre des Géologues du Québec (OGQ) with member number OGQ #619. Mr. Barrette has sufficient experience (35 years) 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. Barrette consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Resource Estimation is based on information compiled by Simon Coxhell, Principal Consultant of CoxsRocks Pty Ltd. Mr Coxhell is a consultant to the Company. Mr Coxhell is a Member of the Australian Institute of Mining and Metallurgy. Mr Coxhell has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which he is undertaking 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" ("JORC Code"). Mr Coxhell consents to the inclusion in this report of the Matters based on this information in the form and context in which it appears. Mr Coxhell has not been to the Lac Rainy site but is familiar with graphite deposits around the world and has completed numerous resource estimates for this commodity.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Appendix 1 – JORC (2012) Mineral Resource Estimate Methodology

Pursuant to ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more information please refer to Table 1, Sections 1 to 3 included below in Appendix 2).

Background

The Lac Rainy Graphite Project is located in northern Quebec approximately 20 kilometres due south of Fermont and 10 kilometres north east of another graphite project (Lac Knife) owned by Focus Graphite Inc. (TSX: FMS) and comprising a mineral resource of 12.1 mt @ 14.6% Cg.

The Lac Rainy Graphite Project is located in a similar geological environment to Lac Knife comprising a complex series of principally sedimentary rocks of the Ferriman Group and described as slate and turbiditic sediments which are now metamorphosed into quartz-biotite-garnet ± graphite gneiss, and pelitic-mica-graphite rich schists of the Nault Formation which also hosts the Lac Knife deposit.

The Carheil Prospect is located in the south eastern corner of the Lac Rainy project area, within the Carheil trend extending from the southeast to northwest across portions of the Lac Rainy Project tenement package where graphite mineralisation has been mapped for approximately 4.0 kilometres. A number of high-grade graphitic carbon rock chip results at nearby occurrences highlight the strong potential for further graphite mineralisation to be identified at the Lac Rainy Graphite Project. The current resource area which has been drill tested covers approximately 1,600 metres of the known four kilometres of potential strike.

Within the Lac Rainy Graphite Project, the graphite is hosted in biotite-quartz-feldspar paragneiss and schist of the Nault Formation. High-grade metamorphism and folding has resulted in the formation of concentrations of graphite mineralization of various sizes and form.

The Carheil Graphite Prospect is located at the south eastern corner of the Lac Rainy project area. The Carheil Trend extends from south east to north west across the Lac Rainy Project tenement package. Graphite mineralisation has been mapped for approximately 4 km in a north west direction.

A number of high grade rock chips have also been identified over 900 metres of strike length located to the west of the higher grade South-East Carheil Graphite Deposit (known as the West Carheil Graphitic Trend) and additional graphite resources are likely to be defined with additional drilling.

Geology and Geological Interpretation

The project area geology (hosting the Lac Rainy graphite deposit) is situated within the Gagnon Group, which is the metamorphosed equivalent of the Ferriman Group in the Labrador Trough. The formations within the Ferriman Group consist of Wishart (arenitic quartzite with variable mica and calcite), Ruth (ferruginous mudstone chert), Sokoman (iron formation), and Menihek (mudstone/mica schist), as well as intrusive basalt. The Nault Formation of the Gagnon Group, comprised of graphite-bearing quartz biotite garnet paragneiss (metamorphized equivalent of the Menihek Formation), underlies the majority of the Lac Rainy Property and is the primary target rock unit.

The graphite zones are consistently present throughout the host rock but display variations in the amount of graphite (Bonneau & Raby, 1990) and calcsilicate bands (Birkett, Godue, & Marchildon, 1989).

The host lithology consists of a sub-vertical, lithologically continuous unit of very fine-grained dark grey to black graphite rocks containing between 1-28% graphitic carbon and appreciable quantities of sulphides ranging in grade from 0.01-18.8% sulphur. A number of parallel units have been identified from the mapping, channel sample and drilling.

The lithological units are variably folded and faulted, with true widths up to 70m and have local continuity over hundreds of metres and regionally extend over many kilometres. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation.

The graphitic rock units may have originated as early accumulation of organic compounds occupying large, flat lying sedimentary basins extending over several hundred kilometres. Subsequent deformation, possibly related to domal and or doubly plunging folded intrusives have metamorphosed and tilted the units to the sub-vertical orientations presented today.

Mineralogy and Metallurgical Considerations

SUMMARY OVERVIEW

In 2018 SGS Canada Inc. (SGS) based in Lakefield, Ontario were selected by the Company to complete initial sighter metallurgical testwork on the mini-bulk sample of graphite mineralisation collected from the Lac Rainy Graphite Project. The primary objectives of the program were to determine the metallurgical response of the samples and to characterise the graphite concentrate in terms of flake size distribution and total carbon grades of different size fractions.

The testwork comprised:

1. Sample preparation;
2. Sample characterisation (chemical and mineralogical); and
3. Flotation testing.

The testwork parameters were selected in order to provide the Company with basic metallurgical information about the mineralisation at Lac Rainy and demonstrate that the graphite had mineralogical characteristics suitable for the production of a commercial concentrate. A flowsheet based on publicly available information for the nearby Lac Knife graphite deposit was selected as the initial conditions for the testwork.

The mineralogy on the samples highlighted the presence of quartz, moderate mica and graphite, minor K-feldspars, and plagioclase, and trace amounts kaolinite, garnet, jarosite, rutile and andalusite. Optical microscopy has confirmed the presence of graphite (~10-35 vol%) with graphite grains range from <20 µm to ca. 2 mm as both individual flakes and polycrystalline particles.

The main conclusions from the mineralogy was as following:

- Graphite in both samples has a bimodal grain size distribution; it occurs as fine-grained minerals, variably locked in non-sulphide gangue, and relatively coarse particles (<2 mm) that occur as liberated grains or intergrowths with non-sulphide gangue.
- Liberation is expected to vary and will reflect the proportion of coarse and fine-grained graphite. Intergrowths of graphite with other minerals are simple to moderately complex and should liberate well at the proper grind target (<500 µm).
- Graphite in sample 129076 is better liberated than that in sample 129077.
- The main difference between the samples is that sample 129077 contains significant pyrite while sample 129076 does not.

The preliminary metallurgical scoping studies were completed on two samples of the Lac Rainy graphite deposits with the primary objective to develop a preliminary understanding of the metallurgical response of the material and to characterize the graphite concentrate in terms of flake size distribution and total carbon grades of different size fractions.

Two cleaner flotation tests were carried out on each of the two composites from the Lac Rainy graphite prospect. The conditions that were chosen for the first two tests were derived from the published Lac Knife flowsheet and these were modified in the second set of tests to take into account recent technological advancements. The combined concentrate grade of 96.2% for the 129076 composite and 92.5% C(t) for the 129077 composite are encouraging given that the test program was only at a scoping level. Due to the proximity to the Lac Knife project, the same flowsheet was applied without any confirmation that the mineralogical composition of the two prospects are comparable.

The graphite concentrates of both composites contain between 28.5% and 44.9% of the mass in the -325 mesh size fraction, which has little commercial value. It may be possible to reduce the mass

recovery into this size fraction by tailoring the cleaning flowsheet to the specific properties of the Lac Rainy mineralization. Further, even if 35% of the graphite concentrate mass will not be marketable, the high head grades will still provide a high mass recovery into a saleable concentrate, per tonne of mill feed.

Stirred media grinding in the secondary cleaning circuit improved the overall graphite concentrate in terms of mass recovery into the large and jumbo flake sizes and the total carbon grades of the medium and small graphite flakes. The fact that the Lac Rainy mineralization does not include magnetic sulphide minerals in the combined flash and rougher concentrate suggests that the mineralogy may be different from the Lac Knife material despite its proximity.

It should be noted that flake size distribution and concentrate grade are only two properties of the graphite concentrate, and a range of other variables will determine the suitability of these products for specific applications. Further metallurgical work on diamond core samples is underway to provide additional information on potential processing options for the extraction of the graphite into a saleable concentrate.

Further details are provided in the following sections.

TESTWORK METHODS AND RESULTS

Sample Preparation

Two composite samples of the Lac Rainy graphite mineralisation (sample numbers 129076 and 129077) weighing a total of approximately 120 kg were supplied to SGS. The two composite samples were stage-crushed to -6 mesh and homogenised. The material was rotary split into 2 kg test charges for metallurgical testing. Representative sub-samples were extracted for chemical and mineralogical characterisation.

Sample Characterisation

The representative head samples of the two composites extracted during sample preparation were subjected to the following chemical analysis:

- Total (Ct) and graphitic (Cg) carbon,
- Sulphur,
- Whole rock and trace elements by ICP-OES.

The carbon assays of the samples indicate high grade Ct of 36.5% and 22.0% for samples 129076 and 129077, respectively (Table 2). Similarly, the Cg grade of the samples was high at 35.1 and 21.7%. Sulphur contents of sample 129076 was very low at 0.23% S, while sample 129077 contained 6.57% S.

The latter result was confirmed by mineralogical examination (see below) that showed sample 129077 contains significantly more pyrite than sample 129076.

Table 2 - Sample head analysis

Sample ID	Assays (%)		
	Total Carbon (Ct)	Graphitic Carbon (Cg)	Sulfur (S)
129076	36.5	35.1	0.23
129077	22.0	21.7	6.57

Whole rock (Table 3) and trace element analysis (Table 4) showed show no elevated concentrations of typical deleterious elements except potentially for vanadium.

Note that element contents in the feed samples may not necessarily translate to higher grades in the final purified graphite concentrate.

Table 3 - Results of whole rock analysis

Sample ID	Assays (%)						
	SiO_2	Al_2O_3	Fe_2O_3	MgO	CaO	Na_2O	K_2O
129076	47.0	5.66	6.64	1.12	0.14	0.31	2.32
129077	47.3	5.00	12.3	1.59	0.52	0.19	1.66
Sample ID	**TiO_2**	**P_2O_5**	**MnO**	**Cr_2O_3**	**V_2O_5**	**LOI**	**Sum**
129076	0.40	0.25	0.06	0.02	0.47	35.6	100
129077	0.24	0.38	0.42	0.02	0.23	29.9	99.7

Table 4 - Results of trace element analysis

Sample ID	Assays (ppm)								
	Ag	As	Ba	Be	Bi	Cd	Co	Li	Ni
129076	<5	<30	475	<2	<20	<2	<4	<20	<20
129077	<5	<30	201	<2	<20	22	41	<20	363
Sample ID	**Pb**	**Sb**	**Se**	**Sn**	**Sr**	**Tl**	**U**	**Y**	
129076	115	<30	<30	<20	71.4	<30	<20	30.0	
129077	<60	<30	<30	<20	54.1	<30	50	51.6	

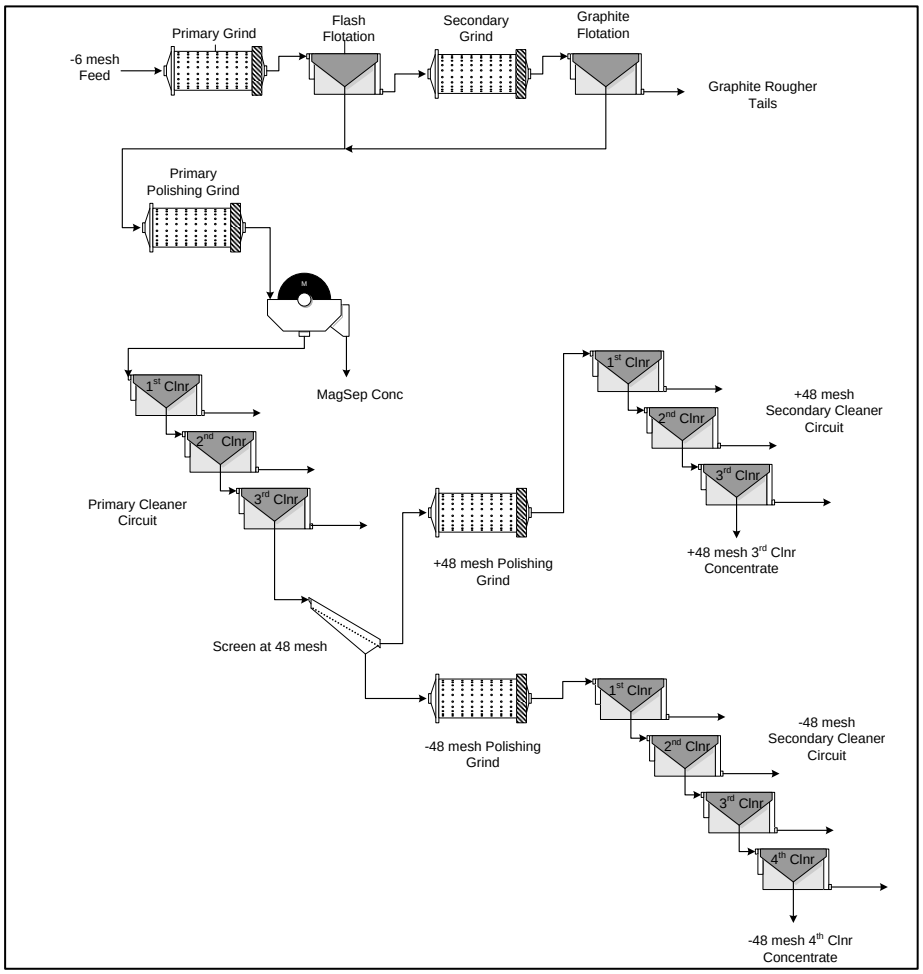
Mineralogical examination of the feed samples included optical mineralogy in transmitted and reflected light to determine the occurrence of graphite and its association with gangue minerals. The main conclusions of the analysis are that:

1. Graphite in both samples has a bimodal grain size distribution; it occurs both as fine-grains variably locked in non-sulphide gangue minerals, and as relatively coarse particles (<2 mm) that occur as liberated or intergrowths with non-sulphide gangue.
2. Graphite liberation is considered low at this grind (-6 mesh). Liberation is expected to vary and will reflect the proportion of coarse and fine-grained graphite. Intergrowths of graphite with other minerals are simple to moderately complex and should liberate well upon the proper grind target (<500 µm).
3. Graphite in sample 129076 is better liberated than that in sample 129077 due to a higher proportion of coarse particles.
4. A main mineralogical difference between the samples is that sample 129077 contains significant pyrite while sample 129076 does not.

Flotation Testing

Two open circuit cleaner tests were carried out on each of the two composites. The first test employed the flowsheet that was presented in the feasibility study of Focus Graphite's Lac Knife project, which is depicted in Figure 1. The second set of tests included a finer classification of the intermediate concentrate at 80 mesh instead of 48 mesh and stirred media mills instead of polishing mills in the secondary cleaning circuits. The improved conditions used the same flowsheet, but used a stirred media mill in the secondary cleaning circuit instead of the polishing mill. This alternative grinding mill tends to be more effective when dealing with interlayered graphite

Figure 1 - Flowhsheet of flotation testwork for the Lac Rainy graphite samples



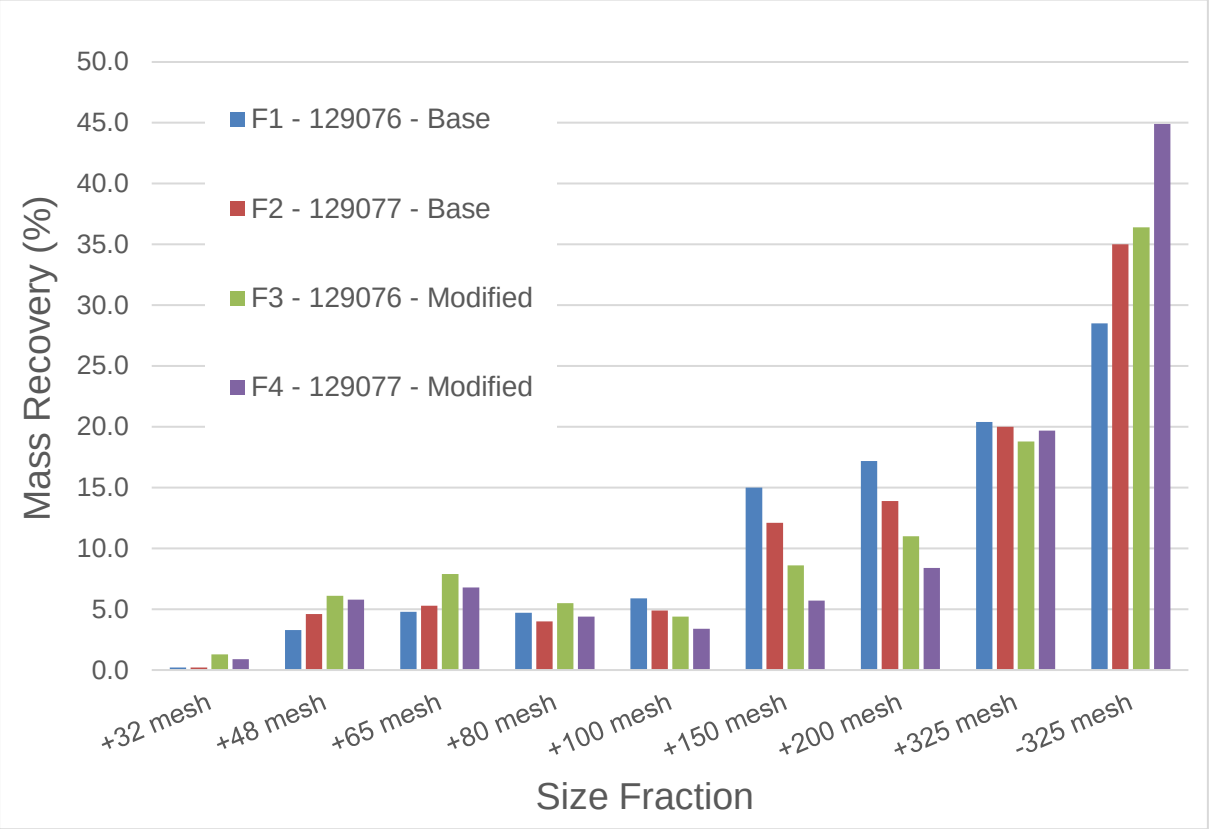
METALLURGICAL TESTWORK RESULTS

The open circuit carbon recovery was significant at 85.6% to 91.0%. Tests F1 and F2 using the base case Lac Knife flowsheet produced combined concentrate grades of 95.0% Ct for the 129076 composite and 87.1% for the 129077 composite. The circuit modifications that were carried out in tests F3 and F4 produced a grade improvement of 1.2% to 96.2% C(t) for the 129076 composite and 5.5% to 92.5% Ct for the 129077 composite. These results are encouraging given that the test program was not optimised for the Lac Rainy mineralisation.

In order to determine the flake size distribution and total carbon grades of the various flake sizes, the final cleaner concentrates were subjected to a size fraction analysis. The mass recovery and total carbon grades of the various size fractions are depicted in Figure 2 and Figure 3, respectively.

The combined mass recovery into the jumbo and large flake categories of +80 mesh yielded 13.0% for the 129076 composite and 14.1% for the 129077 composite using the baseline conditions. These values increased to 20.8% for the 129076 composite and 17.9% for the 129077 composite in tests F3 and F4 with the modified conditions. The medium sized flakes of -80 mesh/+150 mesh contained between 9.1% and 20.9% of the graphite concentrate mass. The remaining 66.1 to 73.0% of the concentrate mass reported to the -150 mesh size fractions. Approximately 50% of the -150 mesh material reported to the size fraction of -150/+325 mesh, which is generally utilized for battery applications.

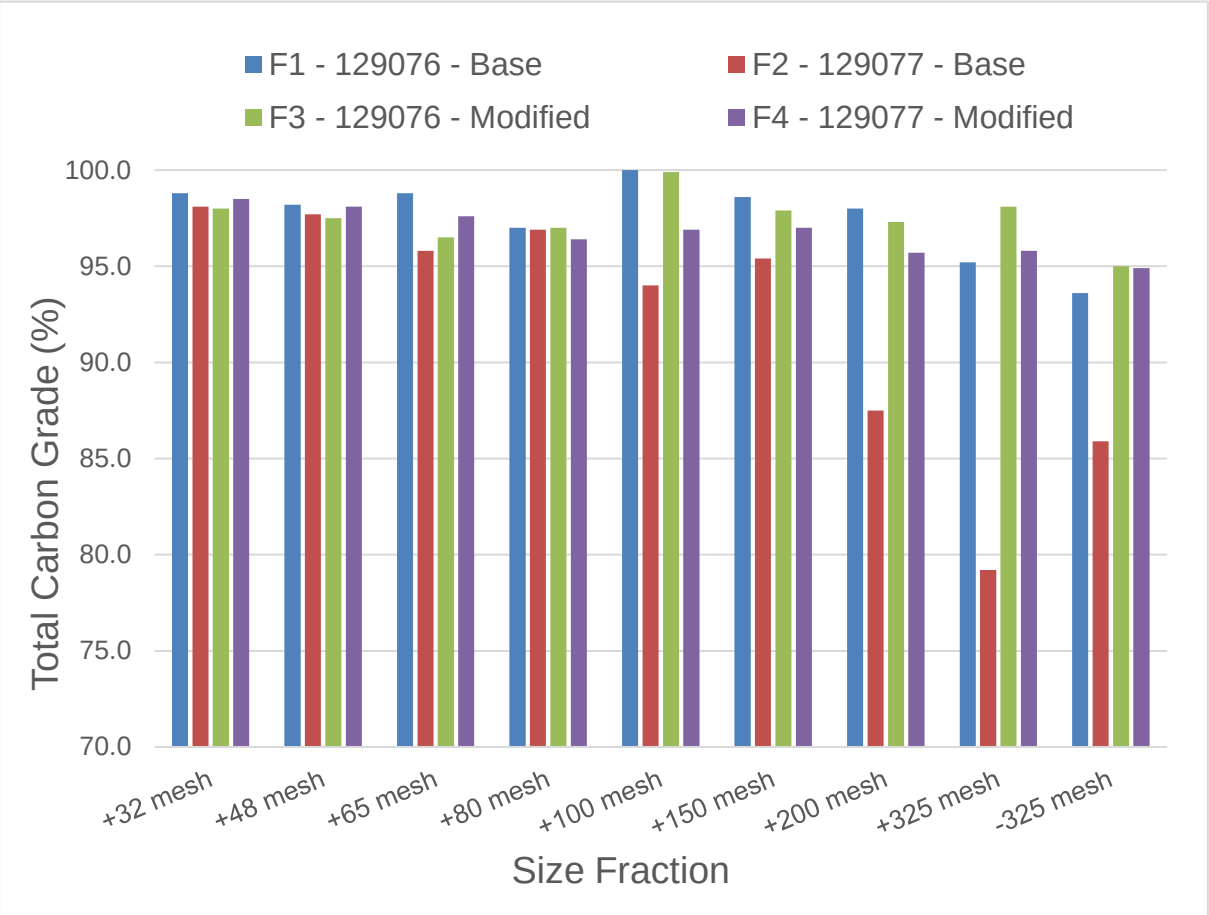
Figure 2 - Graph of mass recovery for each of the graphite particle size fractions, for all of the four sighter tests completed



In terms of concentrate grades, all large and jumbo size fractions produced total carbon grades of at least 95.8% Ct. While the concentrate grades for the large and jumbo flakes did not improve with the stirred media mill, the coarser product suggests that stirred media grinding is the superior technology.

While the 129076 composite maintained high concentrate grades in the medium and small flakes sizes in test F1, the 129077 composite produced noticeably lower grades with a minimum of 79.2% Ct in the -200/+325 mesh size fraction. Introducing stirred media grinding in the secondary cleaning circuit produced superior results overall with total carbon grade improvements of as high as 16.6%.

Figure 3 - Graph of total carbon grade (Ct) for each of the particle size fractions, for all of the four sighter tests completed



DISCUSSION OF RESULTS

Metallurgical testwork has successfully demonstrated that a commercial graphite concentrate grade and recovery can be achieved from the mineralisation at Lac Rainy. Furthermore, as these were samples 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 have a better metallurgical performance.

Composite 129076 outperformed the other composite sample in terms of concentrate grade, recovery and flake size distribution. This composite had a significantly higher head grade (36.5% Ct) which may have contributed to this result. Testing achieved a combined concentrate grade of 96.4% Ct for the baseline test using the Lac Knife test conditions that are available in the public domain. The second test on this composite material with the modified flowsheet conditions produced a combined grade of 96.7% Ct. The second test also produced a higher mass recovery into the large and jumbo flake categories (20.8% in test F3 compared to 13.0% in test F1).

Sample 129077 composite yielded a lower head grade of 22.0% Ct and also proved harder to upgrade. The baseline test produced a concentrate grade of 87.9% Ct with a mass recovery of 14.1% into +80 mesh size fractions. The mass recovery into the same size fractions increased marginally to 17.9% in test F4 and the direct concentrate grade increased to 92.5% Ct.

Based on the information obtained for the two sample composites, the testwork results are considered encouraging given that the material was tested using an existing, non-optimised flowsheet. A flowsheet based on publicly 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.

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 samples, is a hinderace in graphite processing, with performance typically improving with the use of unoxidised samples. The Company therefore considers that significant upside exists in the performance of the graphite mineralisation within the parameters of the metallurgical testwork.

FURTHER WORK

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.

SGS made the following recommendations for future testing:

- Future testing should be carried out on a composite that represents a larger area of the mineralisation. This will ensure that the observed metallurgical response is somewhat representative of a potential future mill feed;
- Development of the flowsheet to take into account the specific mineralisation of the Lac Rainy mineralisation;
- Evaluate a secondary cleaning circuit to determine the maximum concentrate grades and associated flake size distribution that can be achieved for the Lac Rainy material;
- Confirm the robustness of the proposed flowsheet and conditions on a small number of variability composites, which represent significant areas or domains of the Lac Rainy mineralisation;
- Preliminary comminution tests such as Bond ball mill grindability, Bond Abrasion, and Low Energy Impact tests;
- Preliminary environmental tests to quantify the acid generating potential and metal leaching risk of the flotation tailings stream; and
- Evaluate a desulphurisation circuit for the graphite rougher tailings to obtain a low-mass high-sulphide tailings product and a high-mass low-sulphide tailings product.

Following completion of the 2019 Diamond Drilling Program the Company re-engaged SGS (Canada) Inc. to undertake a more advanced metallurgical and mineralogical testing program using the split diamond core from the 2019 drilling program. The test work follows on from the 2018 testing program and follows the recommendations made by SGS (Canada) Inc. for further testing which are set out above. The Company has been advised by SGS (Canada) Inc. that all test work has been completed and the results have been analysed and interpreted. SGS (Canada) Inc. are currently summarising the results into a final report which the Company expects to receive shortly.

Resource Estimation

Sampling and Sub Sampling

The estimate was based on all drilling completed at the Lac Rainy graphite deposits totalling 17 diamond holes for 2,317 metres and reported as public data to the ASX in 2019. In addition, detailed rock chip and channel sampling has been used to help the interpretation and understand the distribution of the graphite rich units. Individual statistics for the drilling at South-East Carheil and North-West Carheil are presented in Table 2 below.

Table 5 – Drilling statistics for the South-East Carheil and North-West Carheil Deposits

Deposit	No Holes	No Metres	Section and Hole Spacing	Length	Average Width	Depth Extent
EAST	10	1179	40 metres/180 metres	480	90 metres	150 metres
WEST	7	1138	80 metres	480	60 metres	150 metres

All drilling completed was diamond drilling and conducted by Magnor Exploration Inc. The diamond drilling was completed using WL66 core drilling equipment (HQ) with a diameter of 63.5 mm. Core orientations was completed using a Reflex ACT 3 core orientation tool and downhole surveying completed using a Reflex EZTrac survey instrument. Core recoveries are measured by the drillers for every drill run. The core length recovered is physically measured for each run, recorded and used to calculate the core recovery as a percentage of core recovered. Any core loss is recorded on a core block by the drillers.

The sampling method is half core sampling of the HQ diamond core, with quarter core sampling adopted where a duplicate sample has been taken. Samples were delivered to ALS Laboratories Ltd in Val d'Or, Quebec where the core was cut and sampled. The sample preparation follows industry best practice sample preparation whereby the samples are finely crushed with 70% passing <2mm then reduced in a splitter whereby a reject sample and a 250g sample is produced. The 250g sample is then pulverised with 85% passing <75 microns which completely homogenises the sample. A sub-sample of pulp is taken for analysis using ALS packages Code 4F-C,S, and 4F-C-Graphite using a graphite specific preparation (RX1- Graphite). Total carbon as well as graphitic carbon are reported and Sulphur %.

No blanks or standards were submitted by the Company with laboratory blanks, standards, and duplicates relied upon, with results reviewed by the Company's consultants and found to be satisfactory with no material concerns. A QAQC report has been prepared by Maxwell Geoservices QAQC Reporter which provided support for the validity of all sample results.

Resource Estimation, Methodology and Assumptions

All data was validated for the collar, survey lithology and assay accuracy prior to loading into Micromine Mining Software (64 bit) and running drill hole validation processes. Further validation was completed in three-dimension visualisation (3D) using Micromine, 3D Vizex.

Geological logging and a lower grade cut off of 5% graphitic carbon were used for interpreting the 11 individual wireframes of the resource modelling of the graphite horizon ("min"), with separate wireframes and domains constructed for the different areas and deposits. This cut-off accurately relates to the geology characterised as the logged and visually distinct graphite geological horizon. No top cuts were applied to the data. A digital terrain model was used to trim any blocks extending outside of the natural surface topography.

All of the material is classified as fresh with in situ bulk densities (ISBD) based on a mean bulk density of 2.80 g/cc (t/bcm) for all mineralization. This is determined from a total of 34 drill core measurements of the graphite unit from the deposits. The methodology used was ALS OA-GRA08b which completes specific gravity measurements on pulps using a pycnometer which gave a range of 2.75→3.29 with a mean of 3.00.

Micromine Mining Software (V2016) was used for the block modelling interpolation and due to the orientation of the mineralisation relative to the UTM Nad83 - Z19 projected grid a rotated block model (ellipse of rotation) utilizing the search orientation of the interpolation window was used. Adopted block model parent block size was X(E) 4m x Y(N) 40m x Z (RL) 5m and the block models were aligned along the principal strike directions with sub-blocks of 2m x 20m x 2.5m to accurately fill the wireframes. A variable strike directions of 300-320 degrees parallel, consistent with the trend of the graphite lithology was used for the principal interpolation direction.

A single pass estimation strategy was employed with search parameters documented in Table 3.

Table 6 - Block Model Search Estimation Parameters

Deposit	Azimuth	Dip	N Search Dimension	E Search Dimension	Z Search Dimension
EAST	300-320 degrees	-75 -->-90 SW	200 metres	8 metres	150 metres
WEST	300-320 degrees	-75 -->-90 SW	200 metres	8 metres	150 metres

Inverse Distance Weighting (Power 3) was used for estimation of Cg % and S % in the graphite horizon. A series of plans, cross section and long section of the Lac Rainy Graphite Deposit/s are presented below in Figure 4 to Figure 8.

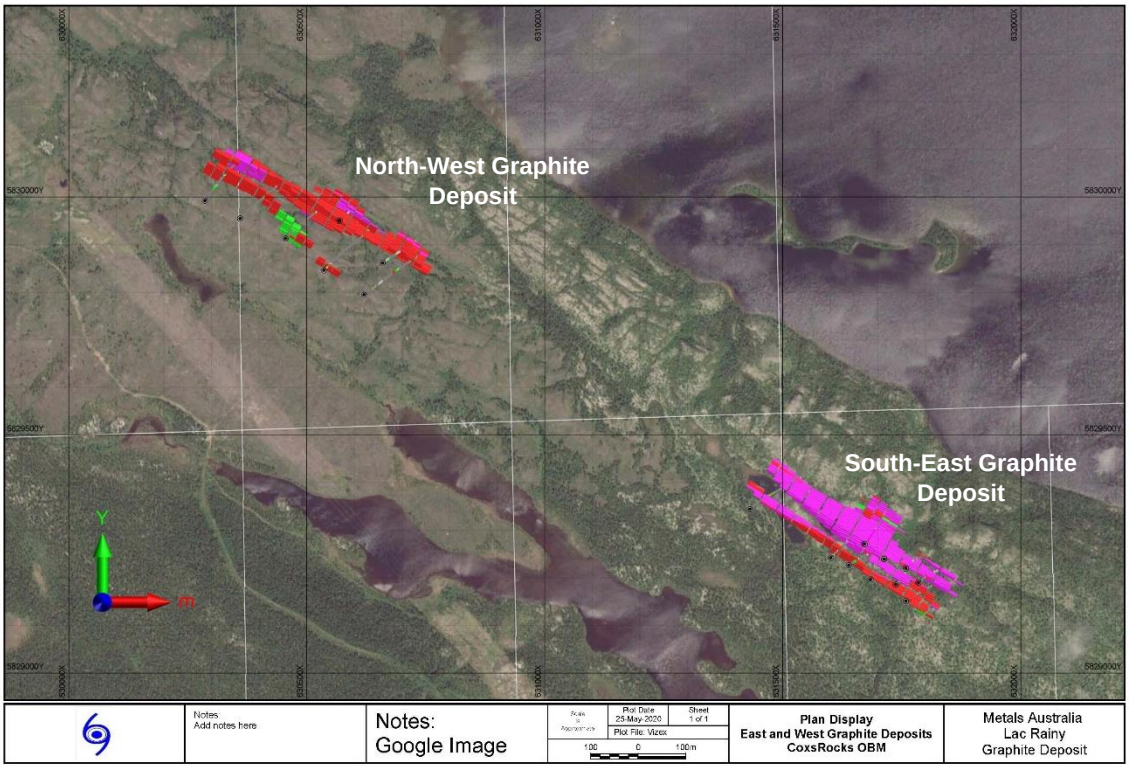


Figure 4 - Plan Display Google Image: Lac Rainy Graphite Deposits

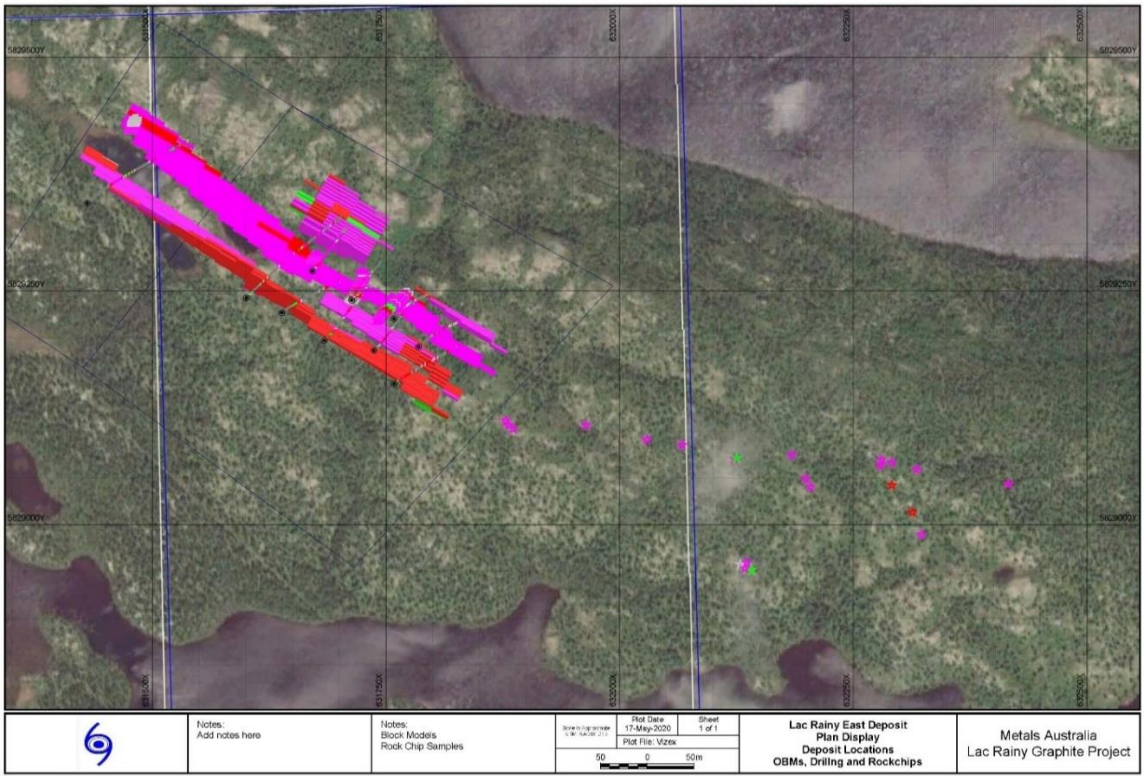


Figure 5 - Plan Display Google Image: South-East Lac Rainy Graphite Deposit and location of eastern rock chip samples to the west (West Carheil Graphitic Trend)

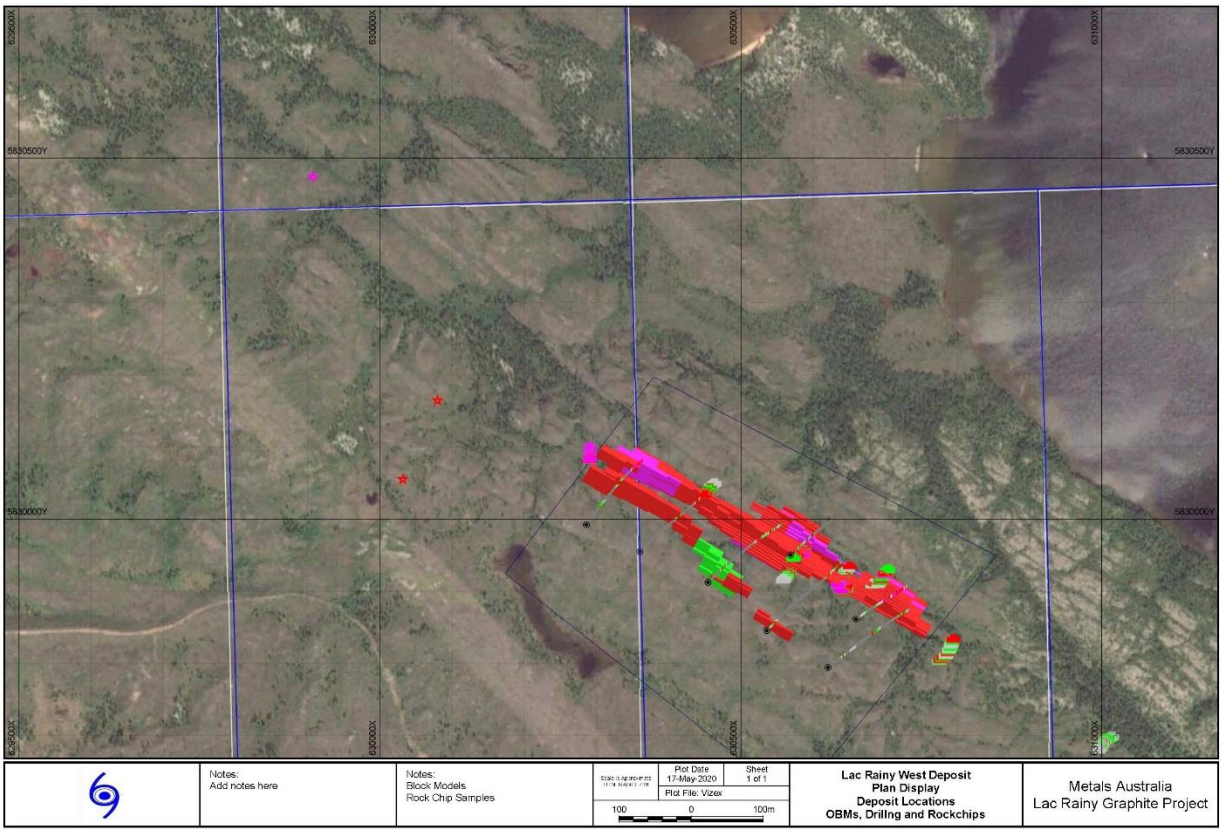


Figure 6 - Plan Display Google Image: North-West Lac Rainy Graphite Deposit

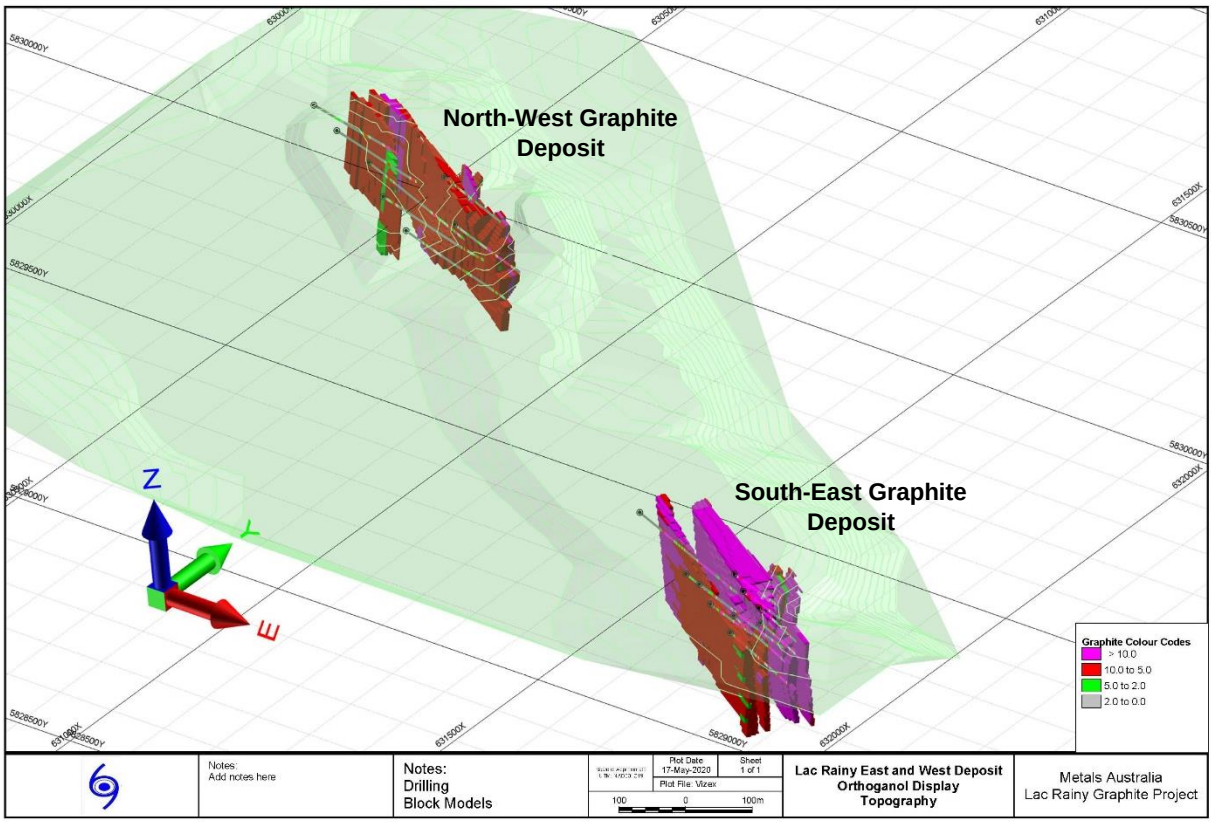


Figure 7 - Orthogonal Perspective (looking northeast): South-East Lac Rainy and North-West Lac Rainy Graphite Deposits

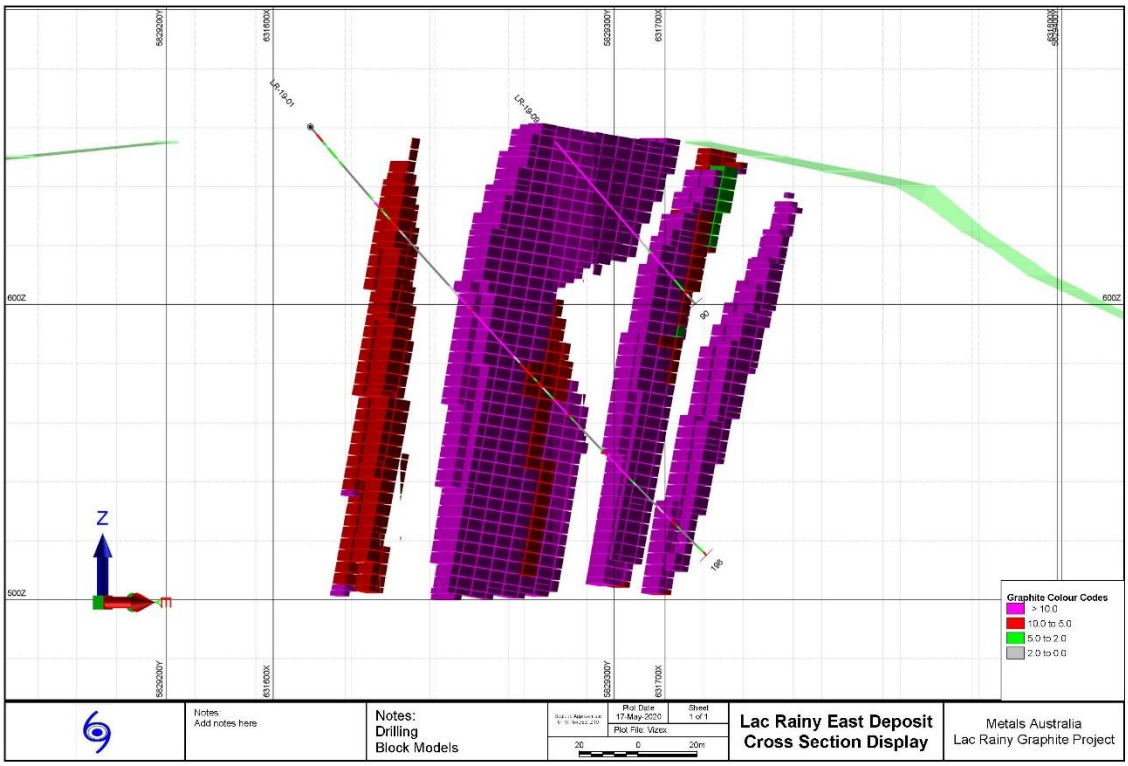


Figure 8 - Cross Section Display: South-East Lac Rainy Graphite Deposit

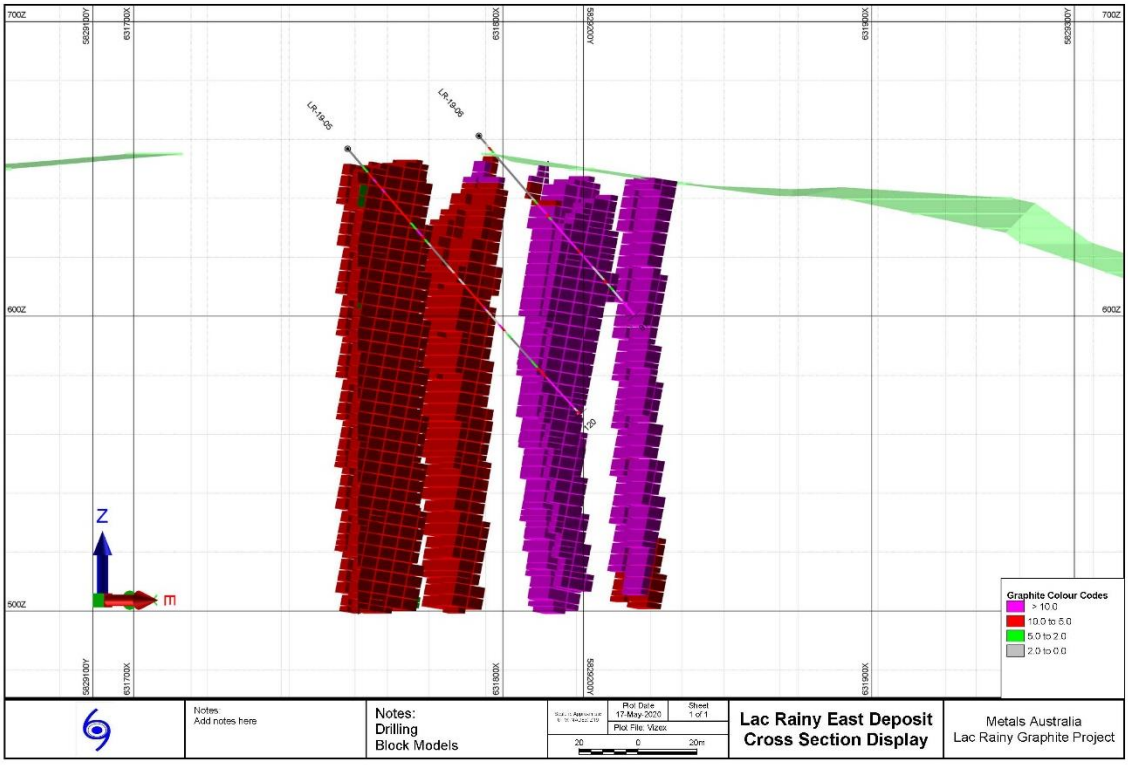


Figure 9 - Cross Section Display: South-East Lac Rainy Graphite Deposit

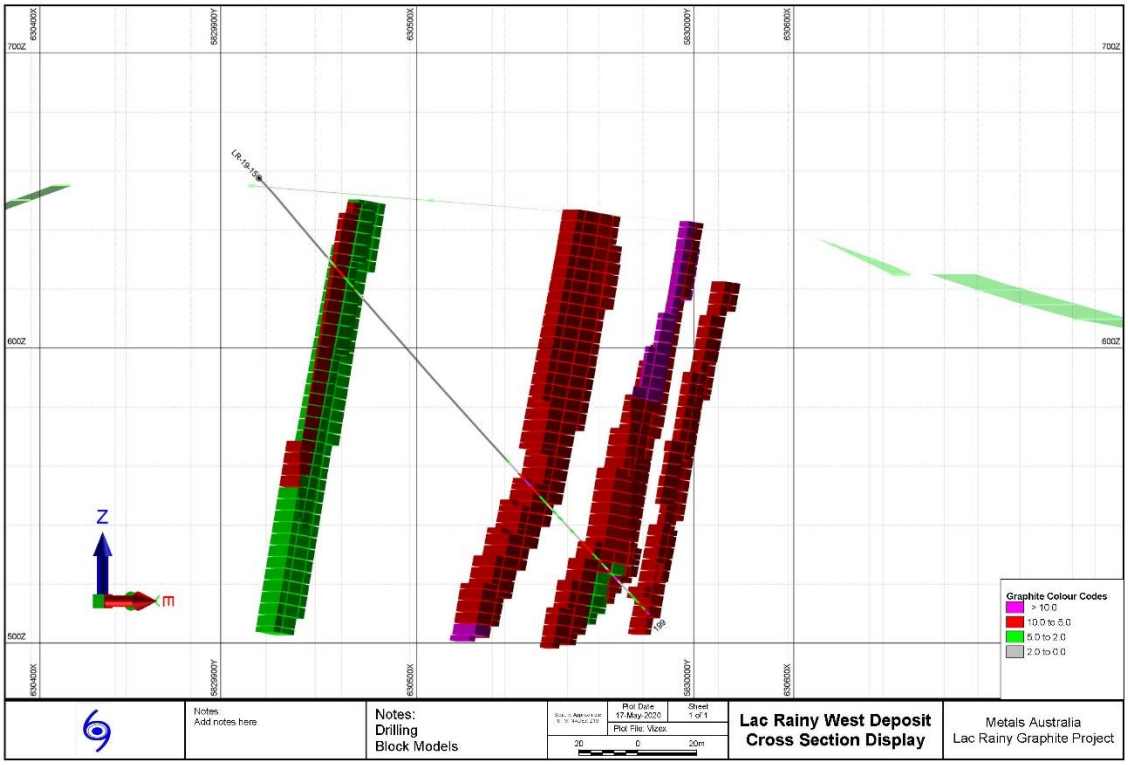


Figure 10 - Cross Section Display: North-West Lac Rainy Graphite Deposit

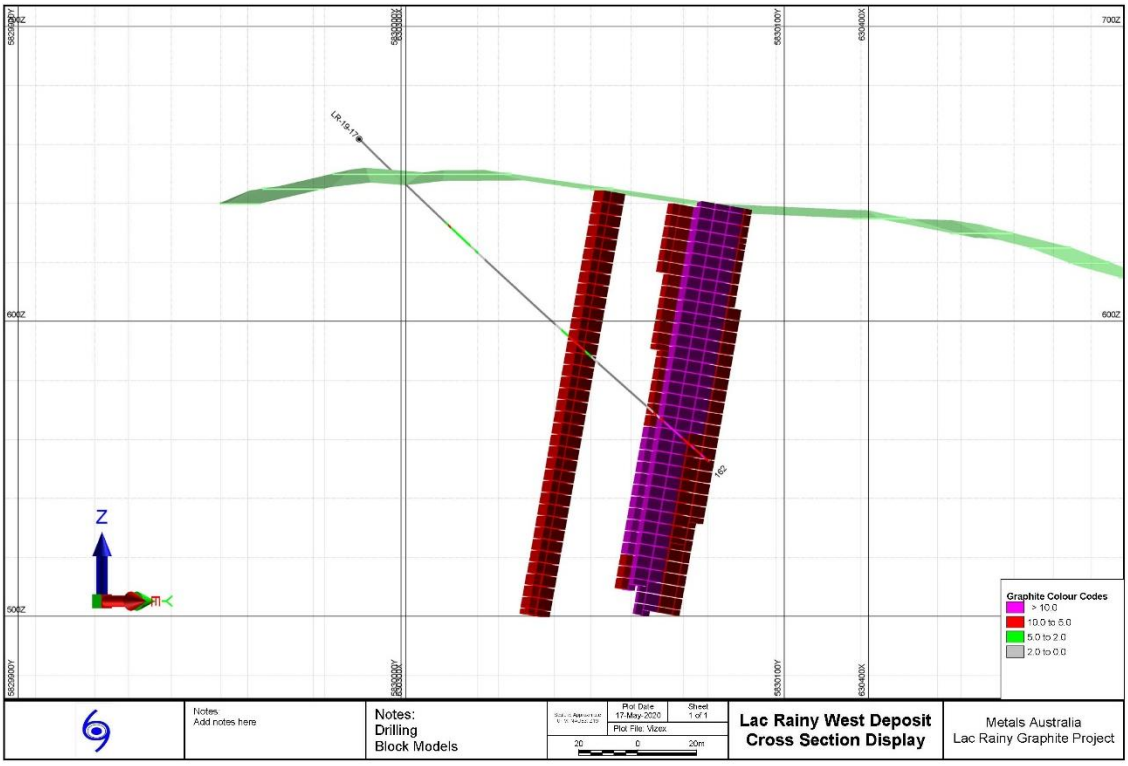


Figure 11 - Cross Section Display: North-West Lac Rainy Graphite Deposit

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling method is half-core sampling of HQ diamond drill core (HQ:63.5mm). Quarter-core sampling utilised where a duplicate sample has been taken. • Sampling was carried out using Magnor Exploration Inc sampling protocols and QAQC procedures as per industry best practice, delivered by ALS.. • Diamond drilling completed using WL66 coring equipment. Drillholes have been sampled on geological intervals or nominal 1.5 m intervals where appropriate (approx. 3kg/sample). All samples have been crushed, dried and pulverised (total prep) to produce a sub sample for multi-element analysis by four acid digest with ICPMS, total graphitic carbon and sulphur by Leco.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	• Diamond drilling completed by Magnor Exploration • WL66 (HQ) conventional diamond drilling with core diameter of 63.5mm. • All drillholes have been orientated. • Downhole surveying completed using a Devico Deviflex downhole survey instrument.
Drill sample recovery	• *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.*	• Core recoveries are measured by the drillers for every drill run. The core length recovered is physically measured for each run, recorded and used to calculate the core recovery as a percentage of core recovered. Any core loss is recorded on a core block by the drillers. • Careful drilling techniques in areas of broken ground are employed with communication between the geologist and drillers to maximise core recovery. • A sampling bias has not been determined.
Logging	• *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.*	• All drillcore has been transported from the drill sites to the laboratory by company representatives for cleaning, reconnection of core lengths and measurement of metre marks where required, over the entire hole. • Geological logging has been completed on the entire length of all holes by Magnor exploration who has significant experience in this style of exploration and mineralisation. • The lithological, mineralogical, alteration and structural characteristic of the core has been logged in digital format and following established procedures. • All drillholes have been photographed in both wet and dry states.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sub-sampling techniques and sample preparation	• *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.*	• Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories - ALS Laboratories Ltd in Val d'Or, Quebec. Code RX1-graphite was completed as preparation. Samples are crushed to 80% passing 10 mesh, riffle split (250 g), and pulverized to 95% passing 105 micron. • Analysis used ALS packages Code 4F-C,S, and 4F-C-Graphite using a graphite specfic preparation (RX1-Graphite). Total carbon as well as graphitic carbon are the primary deliverables. • Sampling techniques utilized, as described above, ensure adequate representativeness and sample size. During the drilling, industry standard sampling techniques were followed with fresh material sampled. • No blanks or standards were submitted by the company with laboratory blanks, standards, and duplicates relied upon, with results reviewed by the companys consultants and found to be satisfactory with no material concerns. Maxwells Data management systems for appraisal of the QA/QC indicated no issues • The sample sizes are considered appropriate for the type of mineralisation under consideration.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Quality of assay data and laboratory tests	• *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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Selected samples are assayed for total graphitic carbon and sulphur via Leco furnace. Graphitic carbon is determined by digesting the sample in 50% HCl to evolve carbonate as CO2. Residue is filtered, washed, dried and then roasted at 425ºC. The roasted residue is analysed for C and S by high temperature Leco furnace with infrared detection. • The analytical methods are considered appropriate for this style of mineralisation. • No geophysical tools or handheld instruments were utilised in the preparation of this announcement. • Duplicate sampling has been completed at a rate of 1:40 where practicable; duplicate results for all holes are satisfactory. • Certified reference material standards and blanks have been inserted at a rate of approximately 1:20; standard and blank results for all holes are within accepted limits. • Laboratory QAQC methods include the insertion of certified reference material standards, blanks, and duplicates.
Verification of sampling and assaying	• *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.*	• Determination of the reported downhole intervals of mineralisation have been verified by alternative company personnel both in person and via electronic photographic data. • No twin-hole drilling completed to date although several neighboring holes holes have been completed and showed excellent correlation. • All geological and location data is stored in Excel spreadsheets prior to being uploaded to the Company's database. Data entry has been by manual input and validation of the data has been done by checking input on-screen prior to saving. • No adjustments or calibrations were made to any assay data used in this report.
Location of data points	• *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.*	• Drillhole locations were planned using a combination of GIS software packages. • Drillhole locations were determined originally using a Garmin handheld GPS unit with an accuracy of +/- 1m. Drill collar azimuths were determined with a hand-held Suunto compass that has a precision of +/- 0.5 degrees. • Subsequent DGPS survey methods established drill collars to a 0.25 m level of accuracy. • Downhole surveys were completed using a Devico Deviflex downhole survey instrument at regular intervals. • Original Grid system is UTM NAD 84 Z 19 • Topographic control has been established by handheld GPS and cross- correlation with digital laser topographic imagery and is considered and is adequate for the greenfields exploration completed.

Data spacing and distribution	• *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.*	• Drill hole profile spacing varies from 25-40, to 120 metres on the margins is at 50m, 25m or 12.5m. See attached location plans, cross sections and tables. • Previous work including mapping, trenching, rock chip sampling of outcropping ore and detailed electromagnetic (EM) geophysical data show and confirm excellent continuity of the stratigraphic graphite unit. The current drillhole spacing at the East and West deposit is is considered appropriate to allow for the JORC-compliant Mineral Resource Estimate (MRE) to be completed at the Indicated and Inferred resource categories. • Through the main graphite zones, nominal 2m sampling has been applied where appropriate and sampled to geological boundaries elsewhere.
Orientation of data in relation to geological structure	• *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.*	• The drillhole orientation is considered appropriate with the drill holes being drilled perpendicular to the interpreted strike of the geological units and graphite mineralisation. The graphite units across the Project dip steeply (80- 90°) to the west and drilling to date has been completed drilling across-dip.
Sample security	• *The measures taken to ensure sample security.*	• All drill core was transported by courier transport from the project to the ALS laboratory in Quebec
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews of the sampling techniques and data have been completed to date. Results have been reviewed internally by the company's geologists, with independent assessment of the QA/QC by Mawells. With no issues have been identified.

Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *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.*	• Metals Australia Limited is the 100% owner of the Lac Rainy Graphite Project, pursuant to the binding acquisition agreement. • There are no other known material issues affecting the tenements. • Quebac Lithium Limited, a wholly owned subsidiary of Metals Australia , is the owner of 100% of the graphite project, and ownership of the individual CDC claims is held by Quebec Lithium Limited. • All tenements are in good standing and have been legally verified by a Quebec lawyer specializing in the field. • The licence is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No modern exploration has been conducted by other parties. • Government mapping records multiple graphitic carbon bearing zones within the project area, but no data is available..
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Lac rainy graphite project is located in close proximity to Focus Graphites Lac Knife Project, which is hosted in a similar geological environment. • The projects were first discovered in 1989, and has been subject to basic geological review since then. • The project area geology (hosting the Lac Rainy graphite deposits) is situated within the Gagnon Group, which is the metamorphosed equivalent of the Ferriman Group in the Labrador Trough. The formations within the Ferriman Group consist of Wishart (arenitic quartzite with variable mica and calcite), Ruth (ferruginous mudstone chert), Sokoman (iron formation), and Menihek (mudstone/mica schist), as well as intrusive basalt. The Nault Formation of the Gagnon Group, comprised of graphite-bearing quartz biotite garnet paragneiss (metamorphized equivalent of the Menihek Formation), underlies the majority of the Lac Rainy Property and is the primary target rock unit. • The host lithology consists of a sub-vertical, lithologically continuous unit of very fine-grained dark grey to black graphite rocks containing between 1-28% graphitic carbon and appreciable quantities of sulphides ranging in grade from 0.01-18.8% sulphur. A number of parallel units have been identified from the mapping, channel sample and drilling. • The lithological units are variably folded and faulted, with true widths up to 70m and have local continuity over hundreds of metres and regionally extend over many kilometres. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation. the sub-vertical orientations present today.

Drill hole Information	• *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:*
	  ○ *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.*
		• Drillhole information pertaining to the drilling at Lac Rainy is summarised in the figures and tables in the text of this announcement and comprehensively reported in previous ASX releases related to the drilling results Lac Rainy.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.*	• A nominal cut off of 5% graphite has been used in any reporting previously conducted. • No high-grade cut-off has been used in this announcement. • Length-weighted averaging has been used to calculate all intercepts in this announcement. Length-weighted averaging has been used given that sampling intervals were determined geologically and not always nominally. • No metal equivalents have been used in this report.
Relationship between mineralisation widths and intercept lengths	• *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 (e.g. 'down hole length, true width not known').*	• The geometry of the graphite mineralisation at the Lac Rainy Project is quite well understood and all drilling has been completed perpendicular to the strike of the mineralisation. The main hangingwall graphite unit is sub-vertical and appears to have a variable dip (~80- 90°). Several close spaced drillholes at Lac Rainy have highlighted the dip and azimuth of the mineralisedd zones • Tighter spaced drilling is required to determine the exact dip of the graphite unit but the drillhole information received to date confirms any previous interpretation. as modelled.
Diagrams	• *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.*	• Appropriate maps and cross-sections have been included in the text of this announcement. (See Figures 5→12)
Balanced reporting	• *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.*	• All significant intercepts above the nominal cut-off grade of 5% Cg have been reported. • This announcement provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	• *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.*	• A substantial amount of work has been completed at the Lac Rainy Project by Metals Australia. Work has included geophysical surveys, rock chip sampling, MMI soil sampling, trenching, diamond drilling and metallurgical testwork.

Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional metallurgical and process testwork on drillcore from Lac Rainy is currently underway.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• Data package was supplied and downloaded on as a Dropbox ™ company dataset. The data package included historic exploration data, geophysical surveys,QAQC data, rock chips, channel sampling, mineralogical and testwork data.
		• Drill data consisted of excel files for collar, survey, lithology and assay data.
		• The data was validated for the following:
		  • missing data issues
		  • missing interval issues
		  • overlapping sample interval issues
		  • depth issues
		  • id issues
		  • survey issues
		  • logging issues
		• A second validation was completed in 3D interpretation in Micromine (64 bit) geological modelling software.
		• Data plotted correctly on the topographical surface and on the collar location as planned and supported on the documentation supplied.
		• Downhole survey was checked for significant deviation. No issues were identified.
		• Assay were checked for anomalies between geology and total graphitic carbon grade (Cg). No anomalies were identified. Drill core with no sample assays were inserted with undefined (-999) Cg grade to relate the assay data file to the geology logging.

Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Simon Coxhell (Competent Person) is a Geological Consultant and has not undertaken a site visit. Mr Coxhell has been one of the chief resource estimation consultants to Talga Resources (ASX: TLG), who have a number of graphite deposits in Northern Sweden. • Core photographs and geological and analytical records were examined in detailed to verify and confirm the work completed.

Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*
	• *Nature of the data used and of any assumptions made.*
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*
	• *The use of geology in guiding and controlling Mineral Resource estimation.*
	• *The factors affecting continuity both of grade and geology.*
		• Confidence in the interpretation of the Lac rainy deposit is considered to be high given:
		  • Domain interpretation was completed with a consideration for field logs, geochemical data and surrounding holes
		  • Drill hole domains interpretation were validated visually and statistically
		• Consideration is always given to mining and estimation practicalities to ensure models are fit for purpose and realistic.
		• Graphite is distinct geochemically and visually compared to the host gabbros and dolerite dykes and is defined using a graphitic carbon grade cut-off of 5% Cg.
		• Wireframe solids and surfaces of the mineralised domain are used to generate wireframes of the interpreted mineralisation and act as 'hard' boundaries during estimation for the mineralisation and waste domains.
		• Geology and grade are generally highly continuous in mineralised graphite horizons.
		• The 5% Cg cut-off equates very well to the logging descriptions and boundary of the geology.

Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• As currently defined the Lac Rainy East mineralisation strikes 300º for a total distance of 510 metres with a dip of 75-80º towards 300º. The Lac rainy West mineralisation strikes at about 300º for a distance of 500 metres and dips steeply towards 300º at approximately 75-80 degrees. The mineralisation pinches and swells to a maximum thickness of 80m. Average true mineralisation thickness varies between 5m and 60m. • The mineralisation extends from surface to a maximum depth of 150m The mineralization would be expected to continue to greater depth and further drilling to evaluate is planned. Mineralisation is open at depth.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective*	• Samples are collected at varying sample intervals, (average of 1.5 metre) based on the graphite mineralisation (ore) domain or waste. Sample data was flagged by domains using wireframe solids for mineralisation (ore). • All assay data has been composited to 2m based on the domain. 2m composite samples were used in the estimation with minimum composite sample of length of 1m. • Initial statistical analysis was carried to provide geostatistical parameters for domain modelling. • All volume modelling, and estimations were carried out using Micromine 3D mining software. • Two block models were constructed based on the main principal strike direction 300º and dipping subvertically to

	mining units. • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	the NW. . • Block model was constructed using geological surfaces as hard boundaries. Parent block sizes (X,Y,Z) 4m x 40m x 5mRL based on quarter the nominal drill hole spacing within an area with sub blocks of 2.0m x 20m x 2.5m. Block models were aligned with strike direction. • Total Graphitic Carbon (Cg) and Sulphur (S) were estimated as in-situ grades. Both Cg and S were estimated separately. • Identical search ellipse orientations and search parameters for Cg and S grade were used for estimation based on a combination of statistical analysis and drill spacing. • A single search pass, a minimum of 8 composite samples and maximum of 12 with no more than 4 samples per drill hole was required to estimate a block. • Only data belonging to a domain was used to estimate that domain and hard boundaries were used. • No top cuts were applied, based on visual review of all data and statistical analysis of the data lying within the hard mineralised boundaries. • Validation of the final resource has been carried out in a number of ways, including: o Visually comparing block model estimated grade against drill hole by section o Comparison by mineralisation zone o Comparing statistically, by domain, wireframe and block model grades versus sample and composite grades • All modes of validation have produced acceptable results. • This is the maiden resource estimate for the Lac Rainy Graphite Deposit.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All mineralised tonnages are estimated by applying a mean bulk density of 2.80g/cc, (t/bcm). with natural moisture.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A natural mineralisation cut-off occurs at 5% Cg and was used to define the mineralised envelope. • No material change in resource occurs by using a lower cut–off, as the cut-off grade matches the logged graphite horizon.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.* • *It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.* • *Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Metals Australia is at a scoping level of study and currently envisages to use open pit mining method with a possible option for underground mining, depending on economic considerations. • Studies are underway to optimise resource extraction. The mining method and height was chosen to maximise recovery. • No geotechnical data supporting this alternative mining method exists.

Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Lac Rainy specific metallurgical testing is underway using drill core from the 2019 drilling.
		• Further details of the previous metallurgical testing completed by the Company is compiled and has been included in Appendix 1 of this announcement.
		• Given the geological similarities between the Lac Knife deposit, results of metallurgical testing of previous material have been used to examine and support reasonable prospects for economic extraction at Lac Rainy. Further metallurgical testwork to a PFS stage is now required.
		• The Competent Person determined that:
		  • based on the metallurgical and mineralogical test work that was completed by SGS (Canada) Inc. on a 120kg sample from the Lac Rainy Project, and based on his own experience with graphite ore bodies and graphite mineralisation, there is reasonable basis to conclude that the JORC (2012) Mineral Resource estimate for the Lac Rainy Project has a reasonable prospect for eventual economic extraction pursuant to clause 20 of the JORC Code.
		  • the information contained in the report from SGS (Canada) Inc. contains the required mineralogical information to define the graphite specification in terms of other minerals that comprise the graphite concentrate, pursuant to clause 49 of the JORC Code, and provides the necessary information to enable him to conclude that the Lac Rainy Project has a reasonable prospect for eventual economic extraction.

Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Based on scoping mining studies, volumes of ore and waste have been quantified. Further studies are required for waste disposal, particularly given the high Sulphur content associated with the graphite mineralisation.
		• SGS (Canada) Inc. has recommended the following:
		  • Preliminary environmental tests to quantify the acid generating potential and metal leaching risk of the flotation tailings stream; and
		  • Evaluate a desulphurisation circuit for the graphite rougher tailings to obtain a low-mass high-sulphide tailings product and a high-mass low-sulphide tailings product.
		• The impact of sulphur has no impact on the Mineral Resource estimate given that the Lac Rainy graphite concentrate produced from the preliminary metallurgical test program that was completed in 2018 has determined that a commercial-grade graphite concentrate can be produced, with sufficient mass recovery in the larger sizing fractions to demonstrate the economics of the deposit.
		• Further details of the previous metallurgical testing completed by the

		Company is compiled and has been included in Appendix 1 of this announcement. • Lac Rainy specific metallurgical testing is underway using drill core from the 2019 drilling. • The Competent Person determined that: • the high sulphur content of the waste material does not affect his conclusion that the JORC (2012) Mineral Resource estimate has a reasonable prospect for eventual economic extraction in accordance with the provisions of the JORC Code.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk densities used in the Mineral Resource Estimate are based on a mean bulk density of 2.80g/cc for all mineralisation. • The bulk density determination was as follows: ALS 0A-GRA08b, which completed specific gravity measurements using a pycnometer which gave a range of 2.75→3.29, with a mean of 3gm/cc.(t/bcm) • In future cross checks on the core using the OA-GRA09 which used the Archemedes method is recommended to take into account any voids or porosity in the natural rock. It is for this reason that an ISBD of 2.8t/bcm was adopted this resource estimate of Lac Rainy.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The Mineral Resources have been classified as the Indicated Categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code).
		• A range of criteria has been considered in determining this classification including:
		  • Geological continuity
		  • Data quality
		  • Drill hole spacing
		  • Modelling techniques
		  • Estimation properties including search strategy, number of informing data, average distance of data from blocks and estimation output from the interpolation
		• The Mineral Resource Classification reflects the views of the Competent Person.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Various aspects of the data acquisition, assaying, geological modelling and resource estimation have been independently reviewed at various times over the life of the project. Further work is planned.

Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Calculated accuracy and confidence in the Mineral Resource Estimate are not explicitly stated. • However, relative accuracy is reflected in the resource classification, based on statistical analysis, and comparing the output of the results from the interpolation techniques with the mean statistical grades lying within the individual domains and wireframes. • The Indicated and Inferred Mineral Resource Estimates are considered to represent a local estimate as there is reasonable confidence in the location of mineralisation and waste domains. • Closer spaced drilling and additional check assays and bulk density determinations is required for a Measured Resource to be estimated. • No production data is available for the Lac Rainy graphite deposit.