

# 331% Increase in JORC Mineral Resource Estimate tonnes at the High-Grade Ridee Ganga Vein Graphite Deposit, Western Province, Sri Lanka

# HIGHLIGHTS

- New JORC 2012 Mineral Resource Estimate ("MRE") of approximately 1,724,610 tonnes grading 76.32% Total Graphitic Content ("TGC") for Ridee Ganga Vein Graphite Deposit, Western Province, Sri Lanka
- Represents a 331% increase in tonnes over maiden MRE completed in March 2019
- Indicated Resources now stand at approximately 582,610 tonnes grading 75.83% TGC for 441,790 tonnes of contained graphite: representing a four-fold increase in tonnes from the 2019 MRE
- Major MRE upgrade and expansion has greatly increased the Company's confidence in the robustness and viability of the Project
- Progressing the Feasibility Study to assess bulk underground mining opportunity
- Vein graphite mineralisation remains open in all directions at Ridee Ganga
- Exploration program continues in parallel with project development to test other geophysical targets near the Ridee Ganga Deposit



Figure 1: Sri Lankan Vein Graphite

Emerging Sri Lankan graphite producer, **Margosa Graphite Ltd ("Margosa" or the "Company")** is pleased to release its new MRE for the Company's Ridee Ganga Vein Graphite Project, at Pathakada, Sri Lanka. A global JORC 2012 MRE totalling approximately **1,724,610 tonnes, at 76.32% TGC and approximately 1,316,190 tonnes of contained graphite** was estimated by the Company's independent mining and resource consultants, Measured Group, Brisbane, Australia.

This resource upgrade represents a 331% increase in tonnes to the maiden MRE completed by the Company in March 2019 in accordance with JORC Code (2012). In addition, Indicated category Resources have been increased four-fold, which further enhances the Company's confidence in the viability of the Project. This forms the basis of the progressing Feasibility Study that will now look at underground mining opportunities to deliver greater production and processing optionality.

## Mineral Resource Estimate

The MRE finalised on 30 April 2020, which in accordance with the JORC 2012 Code, utilised geological data from 8,652 metres of diamond core drilling from 49 holes (Table 1). The first drilling campaign (2013) has been disregarded due to QAQC investigations which included six diamond drill holes.

Ridee Ganga Graphite Project Mineral Resources Estimate April 2020				
	Total Mineral Resources Estimate			
Tonnes     TGC (%)     Contained Graphite(Tonnes)				
Indicated	582,610	75.83	441,790	
Inferred	1,142,000	76.57	874,400	
TOTAL	1,724,610	76.32	1,316,190	

Table 1: Ridee Ganga Graphite Project Mineral Resources April 2020

NOTES:

1 Total estimates are rounded to reflect confidence and resource categorisation
 2 Classification of Mineral Resources incorporates the terms and definitions from the
 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
 (JORC Code, 2012) published by the Joint Ore Reserve Committee (JORC)

# Comparison to Previous Model

The March 2019 model was based on veins that were greater than 10cm. After the completion of the March 2019 MRE report and model; graphite veins between 5-10cm were retrospectively sampled due to the boudinage structure of the graphite veins. Sampling the 5-10cm veins enabled more veins to be linked between drill holes and increased confidence in the continuity of veins. Preliminary mining studies have shown that underground bulk mining methods would likely require a greater volume around large veins to be mined. Therefore, veins between 5-10cm could potentially contribute to the mined volume and should be included in the resource, since they may be economically extracted. Furthermore, due to the boudinage structures observed in these veins, it is likely that the thinner veins observed in one hole will be associated with thicker veins in an adjacent hole, which increases overall confidence in the continuity of the veins.

For details of this previous mineral resource estimation, refer to the Company's announcement dated 28 May 2019 – "*Pathakada Maiden JORC Resource*".

In the March 2019 model, the deepest hole drilled was 230.5m, whilst in the April 2020 model, the deepest hole drilled was 389.15m adding significant depth to the model. In the March 2019 model, there were 21 modelled veins, whilst in the April 2020 model 83 veins were modelled adding significant tonnage to the previous estimate. The comparison of the April 2020 MRE to the March 2019 MRE is presented in Table 2. The estimated tonnes have increased by 331%, whilst the grade has decreased slightly (2.8%) due to the extra modelling of lower grade veins in the shallower parts of the Project, which is reflected in the total contained graphite tonnes that have increased by 316%.

	Ridee Ganga Mineral Resource Comparison				
Mineral Resource	Mineral Resource Total Tonnes Indicated Tonnes Inferred Tonnes Total TGC % Total Contained Graphite				
March 2019	400,340	138,030	262,310	79.12	316,750
April 2020	1,724,610	582,610	1,142,000	76.32	1,316,220
Difference	1,324,270	444,580	879,690	2.80	999,470
% Difference	331	322	335	2.80	316

## Table 2: Ridee Ganga Mineral Resource Estimate Comparison

## Robust Opportunities for Future Growth

An approximate 880 Kt of additional Inferred Resources defined within the new resource model has provided a focus for further infill drilling, whilst the mineralisation remains open in all directions.

Along strike of the Ridee Ganga Deposit several largely untested geophysical conductors require further drilling. Whilst a number of high priority targets outside of the Pathakada Exploration Licence were delineated during the Company's 2017/18 airborne EM survey and subsequent ground-truthing, these will be systematically explored over the coming 12 to 24 months.

## About Vein Graphite

Sri Lanka is the only country in the world that produces commercially viable vein graphite for export. High-grade, crystalline vein graphite that is unique to Sri Lanka can be used in high-end applications including; electrical componentry, lubricants, lithium batteries, fuel cells, nuclear and solar power devices, graphene, water purification, anticorrosion paints, polymer composites for a multitude of auto, aeronautical, shipping and industrial applications.

Deposits of vein graphite are typically of high purity with some vein graphite reaching 99.5% graphitic carbon in its natural state. Due to its hydrothermal emplacement and high degree of crystalline perfection, vein graphite offers superior performance over other forms of graphite with higher thermal and electrical conductivity.

In addition to its superior physical and chemical qualities, the demand for this product is steadily on the rise as the world recognises the need for more sustainable and environmentally friendly energy sources and production methods.

Per the 2016 and 2020 United States Geological Survey statistics mineral commodity sheets, import prices for lump and chip vein graphite have averaged in excess US\$1,900/tonne over the past decade. The 2019 sale prices were reported at US\$2,370/tonne.

## **Executive Comment**

Margosa's Executive Chairman John Shackleton had the following to say with regards to the upgrades of the Ridee Ganga Mineral Resource estimate: *"Since completion of the infill and extension drilling program, Exploration Manager, Mr Hamish Fraser and his team, along with Mr Chris Grove and the Measured Group team, have been working tirelessly during these challenging times to deliver the MRE. The results have been beyond our highest expectations and only further strengthen the Company's confidence in the project".* 

"Margosa has a large graphite endowment, continuing impressive exploration potential and developing production-ready infrastructure that provides excellent leverage for the Company to move towards the operations phase, with a view to maximising value for Margosa shareholders".

#### Ridee Ganga Deposit Area

The Ridee Ganga Vein Graphite Deposit is located in the Company's 100% controlled Pathakada Exploration Licence (EL/219) Western Province, Sri Lanka. The Project is readily accessible from the capital city of Colombo, which is located approximately 40km north northwest of the project area via the Southern Expressway and good condition sealed roads.

Historically, Ridee Ganga area has witnessed some shallow underground development, but it appears that only the weathered saprolitic horizon above the fresh rock was tested i.e. surface to 30 metres. Limited surface evidence of old mine infrastructure exists, but the discovery of the deposit was a result of ground and downhole electromagnetic surveying that the Company pioneered in Sri Lanka.

#### Ridee Ganga Mineral Resource Estimate Interpretation and Calculation

Margosa contracted independent mining consultants Measured Group to deliver a JORC (2012) Resource Estimate for the Ridee Ganga Vein Graphite Project, utilising the geological observations and geochemical analysis data from 49 diamond drill holes.

On 30 April 2020, Measured Group reported a Total Mineral Resource Estimate of **1,724,610 tonnes**, containing **76.32% TGC**; consisting of an Indicated Mineral Resource Estimate of 582,610 tonnes at **75.83% TGC and an Inferred Mineral Resource Estimate of approximately 1,142,000 tonnes, containing 76.57% TGC** reported in accordance with JORC (2012).

Details regarding the estimation of the Mineral Resource for the Ridee Ganga Project are given in the attached JORC Table One (Appendix 1).

## Geology and Geological Interpretation

The Ridee Ganga Vein Graphite Project lies on the western limb of a smaller scale synform with a northwest-southeast axial trace. There are no significant lineaments or mapped structures transecting the licence. The surface rock is weathered, and there is poor outcrop which inhibits observations. Lithologies recorded within the region are high grade, granulite facies metamorphic rocks with two dominant rock types, biotite hornblende gneiss and a garnet biotite gneiss

Lithological, structural and assay data from 49 diamond drill holes (8,652m) spaced between 10 and 35m apart (Figure 2), were used to build graphite mineralisation wireframes (Figure 2: Ridee Ganga Drill Hole Location).



Figure 2: Ridee Ganga Drill Hole Location



Figure 3: Ridee Ganga cross-section 731070mN

In areas where the mineralisation bodies are structurally complex (folded and boudinaged), the drill hole spacing has been tightened to between approximately 10 to 20 metres. The drill hole spacing increases in areas where the geological continuity of mineralisation (in terms of strike direction, thickness and TGC grade) is well developed. In some areas, the margins of the mineralisation wireframes were extrapolated past the last drill hole, but this occurred only where geological continuity could be interpreted through the presence of an EM anomaly.

The largest extrapolation was 20m to the southeast and 15m to the northwest, which was supported by the continuation of the EM anomaly. Overall, the extrapolated areas are less than 5% of the overall JORC Mineral Resource estimate.

Geological interpretation of the graphite mineralised domains is based on EM anomalies and drilling information variably spaced throughout the deposit.

The interpretation has been completed on cross-sections and is based on:

- Lithological logging and recorded vein graphite intersections
- TGC content based on selected sampled intervals

## Sampling and Analysis

Initially, selective sampling of diamond drill core was completed where graphite intercepts of greater than 10cm were geologically logged in the core. Between July and November 2019, a selective resampling program was undertaken. This new sampling regime included graphite samples between 5 – 10cm. The intervals of graphite selected for sampling were photographed, cut into quarter (along the axis of the core) and sampled, ensuring all orientation marks were retained. This methodology of sampling drill core is industry standard and deemed appropriate.

PT01 – PT03 Drill Hole cores were sent to ANZAPLAN in Germany and have not been used in this study, as no representative sample was remaining for intersection validation.

PT05 - PT06 were sent to ALS in Newcastle and ALS Brisbane for analysis – not used in this MRE PT07 – PT49 and PT54 were sent to Nagrom Perth, for TGC and LOI analysis

PT52 – Geotechnical hole – Graphite was not sampled PT50 & PT51 – RC holes - no sample collected

## Estimation Methodology

Grade estimates for TGC were made by ordinary kriging, and no cut-off grades were applied.

For grade interpolations, the search method used was ellipsoidal with a major search axis length of 85m and the semi-major and minor search axes proportioned using the ranges of the relevant variograms.

Mineralisation was modelled as three-dimensional blocks of parent size 10m X 10m X 10m with subcelling allowed to 0.5m X 0.5m X 0.01m. Computer-assisted estimations were made using Vulcan 3D software.

#### Mining Factors

The MRE has been completed with the assumption that it will be mined using either open cut or underground mining methods. No other detailed assumptions have been made to date. Margosa is currently conducting a Feasibility Study using this resource estimate as a key input, and when completed, more detailed assumptions will be applied.

## Classification of Mineral Resource estimate confidence

The Ridee Ganga Vein Graphite Project mineral resource estimates are classified by the independent Competent Person as 'Indicated' and 'Inferred' based on the current understanding of geological and grade continuity. The classification reflects the Competent Person's confidence in the location, quantity, grade, geological characteristics and continuity of the Mineral Resources. The Mineral Resource Estimate (MRE) has been classified as Indicated and Inferred based on the following relevant factors:

- Drill hole density;
- Style of mineralisation and geological continuity;
- Data quality and associated QA/QC and grade continuity;
- The extents of the EM anomalies that are the result of the graphite mineralisation;
- The consistency of the thickness and grade results from drill holes targeting the EM anomalies.

The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing between boreholes for resource classification at the Ridee Ganga Vein Graphite Project. These were:

- Variogram methodology which analyses the different proportions of the sill;
- An estimation variance methodology.

The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for the MRE and classification, and the results appropriately reflect the Competent Person's view of the deposit. An isometric view of the Ridee Ganga Vein Graphite Deposit displaying the resource categories and drilling is presented in Figure 4.



*Figure 4: Isometric view of the Ridee Ganga Deposit displaying resource categories and drilling* 

#### About Margosa Graphite Ltd

Margosa is an unlisted public company based in Perth, Australia that is focused on becoming the world's leading producer of high-grade crystalline vein graphite through exploration and development in Sri Lanka. Margosa has built a strong board and management team with a wealth of knowledge and history of converting projects from green fields to production. Margosa pegged its first graphite licences in 2012. Through its Sri Lankan subsidiaries, the Company currently holds 11 granted exploration licences plus 4 applications to explore 283km<sup>2</sup> of land containing historical graphite mines, and which is considered prospective geologically. Over their eight years in Sri Lanka, Margosa has built strong government and local community relationships, and their close ties to Sri Lankan industry will provide the company with competitive and operational opportunities now and into the future.

For more information about Margosa Graphite and its projects, visit: www.margosagraphite.com

#### Competent Person's Statement

Statements contained in this announcement relating to exploration results are based on, and fairly represents, information and supporting documentation prepared by Mr Hamish Fraser, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 304984. Mr Fraser is a full-time employee of the Company and has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Fraser consents to the use of this information in this announcement in the form and context in which it appears.

Statements contained in this announcement relating to the Ridee Ganga Project Mineral Resource Estimation, are based on, and fairly represents, information and supporting documentation prepared by Mr Chris Grove, who is a member of the Australian Institute of Mining & Metallurgy (AusIMM), Member No 310106. Mr Grove is a full-time employee of the mineral resource consulting company "Measured Group", who were contracted by Margosa Graphite Limited to prepare an estimate of the Mineral Resource at Ridee Ganga. Mr Grove has sufficient relevant experience in relation to the mineralisation styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC) Code 2012. Mr Grove consents to the use of this information in this announcement in the form and context in which it appears.

## Forward Looking Statements

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to

commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non- occurrence of any events.

The Company confirms that further drilling needs to be completed to improve classification of the Inferred Resource. Whilst it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration, due to uncertainty of Inferred Mineral Resources it should not be assumed that such upgrading will occur.

# APPENDIX 1

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 Edition)

# 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.	<ul> <li>Drilling</li> <li>6 NQ2 sized diamond core holes (PT01-PT06) were drilled in 2013, by McCallum Group Limited – not used in this MRE due to QAQC validation.</li> <li>12 NQ3 sized diamond core holes (PT07-PT18) were drilled in 2017 and early 2018, by Margosa Graphite Limited</li> <li>21 HQ triple tube sized diamond core holes (PT19 – PT39) were drilled in 2018 – 2019, by Margosa Graphite Limited.</li> <li>13 HQ triple tube sized diamond core holes (PT40 – PT54) were drilled in 2019 – 2020, by Margosa Graphite Limited.</li> <li>2 RC holes were drilled (PT50-PT51) for hydrological studies</li> <li>A total of 9463.77m have been drilled at the Ridee Ganga Vein Graphite Project.</li> <li>Sampling</li> <li>Initially, selective sampling of drill core was completed where graphite intercepts of greater than 10cm were geologically logged in the core. Between July and November 2019, a selective resampling program was undertaken. This new sampling regime included graphite samples between 5 – 10cm. The intervals of graphite selected for sampling were photographed, cut into quarter (along the axis of the core) and sampled, ensuring all orientation marks were retained. This methodology of sampling drill core is industry standard and deemed appropriate.</li> <li>Analysis</li> <li>PT01 – PT03 Drill Hole cores were sent to ANZAPLAN in Germany and have not been used in this study, as no representative sample was remaining for intersection validation.</li> <li>PT05 - PT06 were sent to ALS in Newcastle and ALS Brisbane for analysis – not used in this MRE due to QAQC validation.</li> <li>PT07 – PT49 and PT54 were sent to Nagrom Perth, for TGC and LOI analysis</li> <li>PT51 – RC Holes - no sample collected</li> </ul>
Drilling techniques	Drill type (eg 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	PT01 – PT06 were drilled NQ2 sized, diamond core and were not orientated PT07 – PT18 NQ3 sized diamond core holes were drilled and orientated with an orientation spear with a chinagraph pencil attached.

Criteria	JORC Code explanation	Commentary
	other type, whether core is oriented and if so, by what method, etc).	<ul> <li>PT19 – PT49 and PT52 - PT54 HQ triple tube sized diamond core holes were drilled and were orientated with an orientation spear with a chinagraph pencil attached.</li> <li>PT50 and PT51 RC drilled for water testing – no orientation</li> </ul>
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 recovery is recorded by the geologist in discussion with the driller, recovery of core at the Ridee Ganga Vein Graphite Project has been greater than 95%.
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.	Quantitative geological and geotechnical information was recorded by Margosa Graphite staff during the logging of the drill core. The geological and geotechnical information was recorded to a sufficient level of detail to support Mineral Resource estimation, mining studies and metallurgical studies. The core was photographed with the sample divisions labelled. The entirety of each drill hole was lithologically logged.

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	Graphite samples are selectively sampled when they were equal or greater than 5 – 10 cm; all graphite samples were selected when they were greater than or equal to 10cm in length. The core is quarter cut, preserving any orientation lines that may be recorded on the sample. The sample size is appropriate for the grain size.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	<ul> <li>Standards were inserted randomly with the samples. Nagrom inserted their own standards to ensure accuracy and carried out duplicates.</li> <li>5% of pulps were sent to ALS in Brisbane for external laboratory checks.</li> <li>Drill core samples were sent to Nargom Analytical Servies, Perth, Australia where they were: <ul> <li>Log 01: received, sorted, log and batch samples</li> <li>Dry01: Dry samples at 105°C</li> <li>CRU01: Fine crushing to a nominal topsize of 6.3mm</li> <li>SPL01: Riffle split all samples and retain a coarse reserve</li> <li>Pul01: Pulverise to 80% passing 75µm</li> </ul> </li> <li>Total Combustion Analysis: <ul> <li>HCI dissolution followed by heating at 375°C, Graphite Analysis by Total Combustion</li> </ul> </li> <li>Loss on Ignition</li> <li>The prepared sample is heated to 105°C to remove moisture, then ignited at a specific temperature. LOI is calculated once constant mass is reached. LOI is the percentage of mass change due to igniting the dry sample.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by independent contractors and alternative company personnel.
ussaying	The use of twinned holes.	Margosa Graphite has not twinned any of the historical or recent drill holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Before PT41 all drill logs, geotechnical data and sampling lists were captured in Microsoft Excel. This data has been transferred into the AZEVA Database and validated. For boreholes PT41 – PT54 all data is logged directly into Azeva. This data is appropriate for this stage of exploration/mineral resource definition. The data stored in the AZEVA database is a cloud-based system which has multiple backup procedures in place.
	Discuss any adjustment to assay data.	The assay data has not been adjusted
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.	The drill holes were positioned, and their coordinates verified post-drilling using an RTK-GPS (Real-time kinematic). The accuracy and quality of this survey are deemed to be sufficient for Mineral Resource estimation.
	Specification of the grid system used.	Datum: WGS84 UTM zone 44N
	Quality and adequacy of topographic control.	The topographical survey was carried out by SURVEY ENGINEERING CO. (PVT) LTD #15/5 Kuda Edanda Road, Wattala, 11300 Sri Lanka. A Control Transverse Survey covering the property was carried out in WGS84. A 0.5m contour plan was calculated from a 5 x 5m grid.
		The accuracy and quality of this survey are deemed to be sufficient for Mineral Resource estimation.
Data spacing and	Data spacing for reporting of Exploration Results.	The drill hole spacing between 10-35m apart.
distribution	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.	The data spacing is interpreted to be sufficient to allow for Mineral Resource estimation.
	Whether sample compositing has been applied.	The samples were not composited.

Criteria	JORC Code explanation	Commentary
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.	The drill core samples were always taken from the opposite side to the orientation mark if the sample was orientated.
Stature	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 graphite veins intercepted were normally, perpendicular to the drill hole. No holes were drilled down-dip and no sampling bias has been introduced.
Sample security	The measures taken to ensure sample security.	The drill core was stored at a secure location with 24-hour security. When samples were collected, the samples were transported to the head office in Colombo, before DHL transporting directly to the laboratory and securely stored and sampled at the laboratory by very experienced laboratory staff.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All drill hole results were collated and stored within AZEVA database; all samples were validated against the laboratory certificates. 5% of pulps were sent to the ALS for inter-lab validation.

#### Section 2: 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.	Lankan Resource & Mining (Pvt) Ltd (LRM) a 100% owned subsidiary of Margosa Graphite Pvt Ltd has the exploration licence EL219 granted by the Geological Survey and Mines Bureau of Sri Lanka in August 2019. The exploration licence is valid until August 2021.
	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.	There are no known impediments to obtaining a licence to operate
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical mining was undertaken before 1917. No modern exploration was undertaken until 2012
Geology	Deposit type, geological setting and style of mineralisation.	Ridee Ganga Vein Graphite Project lies on the western limb of a smaller scale synform with an NW-SE oriented axial trace. Lithologies recorded within the region are high grade, granulite facies metamorphic rocks. Rock types vary from Garnet Biotite Gneiss and Biotite Hornblende Gneiss Graphite veins encountered in the drilling ranged from narrow veinlets, and graphite coated partings on joints of only a few mm width to crystalline veins up to 1.92m

Criteria	JORC Code explanation	Commentary
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.	All significant mineralised intersections used to calculate the Ridee Ganga Prospect mineral resources are in the report Drill hole collars were surveyed using DGPS Dip and Azimuth were sighted by the geologist and the driller. PT07 – PT18 were surveyed during the DHEM survey. PT20-PT54 Downhole surveys were completed with a Reflex Ezi single-shot camera Hole length and intercepts were recorded by the driller and rig geologist with a run sheet, recording length of run, core recovery, rods attached Mineralised intercepts have not been included as they are deemed to be commercially sensitive at the current time.
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.	No weight averaging of exploration results has occurred. No downhole aggregation has occurred.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	The geometry of the main graphite veins is generally perpendicular to the orientation of the core angle.
	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 main graphite veins is generally perpendicular to the orientation of the core angle.

Criteria	JORC Code explanation	Commentary
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.	All relevant diagrams are reported in the body of the report.
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 known exploration results have been reported to the knowledge of the Competent Person completing this JORC Table 1.
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.	No other meaningful exploration data exists to the knowledge of the Competent Person completing this JORC Table 1.
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).	Advanced exploration planning is in progress to sink a shaft and to take a bulk sample of the graphite veins. Underground exploration drilling to enable the generation of short-term grade control models will be undertaken ahead of any detailed mining studies and subsequent mining activities.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	This information is currently not available as drilling programs have not yet been defined. However, electromagnetic intensity maps in the body of the report clearly show the areas where the electromagnetic anomalies of interest extend away from the current drilling. These areas will be the focus of further targeted exploration programs for possible extensions.

# Section 3 - Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

ains a database (AZEVA) that contains all drill hole survey, drilling details, a and assay results. Where possible, all original geological logs, hole collar survey oratory data and reports and other similar source data are maintained by AZEVA database is the primary source for all such information and was used by the
son to estimate resources.
Person undertook consistency checks between the database and original data as routine internal checks of database validity, including spot checks and the use ols in Maptek's Vulcan V12 modelling software. No material inconsistencies were
Persons have been to the site, validated procedures and observed the data- esses. The Ridee Ganga Vein Graphite Project was managed by one Competent ted in March and November 2019 by the other Competent Person. Both sons are satisfied that the data capture, sampling, and assay processes are
d define the graphite mineralisation acceptably. assay data from 49 diamond drill holes spaced between 10 and 35m, were used to nineralisation wireframes. bacing was relatively tight (10 – 20m) in areas where the mineralisation bodies are nplex. These areas are where mineralisation has occurred in extensively folded ctures; (e.g. the area in the mid to far north-western region). bacing increases in areas where the geological continuity of mineralisation in terms on, thickness and TGC grade was well developed, (e.g. the south-eastern region). the margins of the mineralisation wireframes were extrapolated past the last drill there geological continuity could be interpreted through the presence of an c anomaly. Trapolation was 20m to the southeast and 15m to the northwest which was ne continuation of the electromagnetic anomaly. Overall, the extrapolated areas % of the overall Mineral resource estimate. Trapetation of the graphite mineralised domains is based on electromagnetic drilling information variably spaced throughout the deposit.

Criteria	JORC Code explanation	Commentary
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.	<ul> <li>Direct observations through lithological logging and photographing the vein and brecciated graphite.</li> <li>Assay values of the Total Graphitic Carbon content (TGC) were recorded within the sampled intervals.</li> <li>83 separate geological zones were identified within the area. Separate wireframes were created based on the type of geological interpretation (vein or brecciated graphite).</li> <li>Electromagnetic results and drilling results indicate that the lenses extended NW-SE along strike for over 300m and continues over 200 m down dip/plunge, and possibly further according to electromagnetic anomalies.</li> <li>The limits of mineralisation have not been completely defined and are open at depth and along strike.</li> <li>No Mineral Estimation has occurred in the weathered rock profile</li> </ul>
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>	<ul> <li>Most assays were taken over lengths of between 0.05m and 0.7m with the mode occurring at 0.14m. A compositing length of 0.1m was used for this resource estimate.</li> <li>Grade estimates for TGC were made by ordinary kriging.</li> <li>TGC grade interpolations were made using geostatistical domains which were allocated based on the number of composited TGC samples in each lens; the mean TGC grade of composited samples in each lens; the variance of TGC grades of composited samples in each lens; the proximity of lenses; and the general strike and dip of each lens.</li> <li>For grade interpolations, the search method used was ellipsoidal with a major search axis length of 85m and the semi-major and minor search axes proportioned using the ranges of the relevant variograms.</li> <li>Mineralisation was modelled as three-dimensional blocks of parent size 10m X 10m X 10m with sub-celling allowed to 0.5m X 0.5m X 0.01m.</li> <li>Computer-assisted estimations were made using Vulcan 3D software.</li> <li>No assumptions were made regarding the modelling of selective mining units.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>No assumptions were made about the correlation between variables.</li> <li>Wireframes of the geological interpretations of the lenses were used to assign lens codes to blocks in the block model. Grades were interpolated into each lens using only composited samples from within the lens.</li> <li>Statistical analyses of the TGC showed that there were no rogue outliers, that is, low- or high-grade assays that did not fit the distributions and which consequently indicated no need for cutting of grades.</li> <li>Validation of the block model was made by: <ul> <li>checking that drill holes used for the estimation plotted in expected positions;</li> <li>checking that flagged lens intersections lay within, and corresponded with, lens wireframes;</li> <li>ensuring whether statistical analyses indicated that grade cutting was required;</li> <li>checking that the volumes of the wireframes of lenses matched the volumes of blocks of lenses in the block model;</li> <li>checking plots of the grades in the block model against plots of diamond drill holes;</li> </ul> </li> </ul>
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages were estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	No cut-off grades were applied to the Ridee Ganga Resource Estimate.
Mining factors or assumptions	<ul> <li>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.</li> </ul>	The resource estimate has been completed with the assumption that it will be mined using either open cut or underground mining methods. No other detailed assumptions have been made to date. However, Margosa will be completing a Feasibility Study utilising this resource estimate model and when completed more detailed assumptions will be able to be applied.

Criteria	JORC Code explanation	Commentary
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.	Preliminary metallurgical test work has indicated that the graphite responds very positively to flotation. The metallurgical test work is still in progress, but there is no evidence that the metallurgy of the samples will affect the economics of the project.
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.	Margosa has commissioned an environmental study that is currently in progress to identify any potential environmental impacts, such as possible waste and process residue disposal options. Margosa is currently undergoing its first metallurgical test work program on the Ridee Ganga Prospect mineralisation. When the metallurgical test work results are received, initial studies into potential environmental impacts will be completed.
Bulk density	<ul> <li>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.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (i.e. vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> </ul>	Density measurements were completed by NAGROM laboratories using hydrostatic methods conducted during detailed metallurgical test work from representative drill holes throughout the project. This method is interpreted to be a fair estimate of the specific gravity of the mineralised material as it does not contain any significant void spaces.
		As the mineralised rock type does not change along strike with the lenses this density assumption is interpreted to be representative of the ore zones modelled.
		The Ridee Ganga Vein Graphite Project specific gravity of graphite veins varies from a minimum of 2.18 g/cm3 to a maximum of 2.35 g/cm3 and averages at 2.29 g/cm3. These densities have been used in tonnage calculation. The specific gravity of the host rock varies from a minimum of 2.60 g/cm3 to a maximum of 2.79 g/cm3 and averages at 2.66 g/cm3.

Criteria	JORC Code explanation	Commentary
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Competent Persons classifies the Ridee Ganga Vein Graphite Projects mineral resource estimates as 'Indicated' and 'Inferred' based on the current understanding of geological and grade continuity. The classification reflects the competent person's confidence in the location, quantity, grade, geological characteristics and continuity of the Mineral Resources. The Mineral Resource Estimate has been classified as Indicated and Inferred based on the following relevant factors: <ul> <li>Drill hole density;</li> <li>Style of mineralisation and geological continuity;</li> <li>Data quality and associated QA/QC and grade continuity;</li> <li>The extents of the electromagnetic anomalies that are the result of the graphite mineralisation and the consistency of the thickness and grade results from drill holes targeting the electromagnetic anomalies.</li> </ul> </li> <li>The resource classification accounts for all relevant factors. Two methods were used to determine the optimal drill spacing for Resource classification at Ridee Ganga Vein Graphite Project: These were: <ul> <li>Variogram methodology which analyses the different proportions of the sill;</li> <li>An estimation variance methodology.</li> </ul> </li> <li>The data spacing and distribution is sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	No external audits or reviews have been undertaken.
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	The estimates made in this report are global estimates. Local block model estimates, or grade control estimates, whose block grades are to be relied upon for selection of ore from waste at the time of mining will require additional drilling and sampling of blast holes. Confidence in the relative accuracy of the estimates is reflected in the classification of estimates as Indicated and Inferred.

Criteria	JORC Code explanation	Commentary
	<ul> <li>that could affect the relative accuracy and confidence of the estimate.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	Variography was completed for TGC and used to influence the resource classification. The variogram models were interpreted as being isotropic along the plane of vein mineralisation, with shorter ranges perpendicular to this plane of maximum continuity. Validation checks have been completed on raw data, composited data, model data and Resource estimates. The model validations checked to ensure data honouring. The validated data consists of no obvious anomalies which are not geologically sound. The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. The Competent Person has independently checked laboratory sample data. The selections are sound and suitable to be used in the modelling and estimation process. Where the drill hole data showed that no Graphite existed, the mineralised zone was not created in these areas. Further drilling needs to be completed to improve Resource classification of the Inferred Resource. Whilst it would be reasonable to expect that the majority of Inferred Mineral Resources would upgrade to Indicated Mineral Resources with continued exploration, due to uncertainty of Inferred Mineral Resources it should not be assumed that such upgrading will occur.