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GreenRoc Mining PLC
23 January 2023

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23 January 2023

GreenRoc Mining plc

("GreenRoc" or the "Company")

Amitsoq Graphite Project Update
Nearly Three Times Increase in Mineral Resource Estimate
Appointment of Sole Broker
Relinquishment of Inglefield Land licence

GreenRoc Mining plc (AIM: GROC), a company focused on the development of critical mineral projects in Greenland, is delighted to announce a very substantial increase to the mineral resource estimate ("Resource") at the Amitsoq Graphite Project in southern Greenland ("Amitsoq" or the "Project"), which has been confirmed as one of the highest-grade graphite deposits in the world.

GreenRoc is also pleased to announce that, effective today, S.P. Angel Corporate Finance LLP ("SP Angel") has been appointed as sole broker to the Company.

Highlights

- The 2023 Mineral Resource Estimate ("2023 MRE") comprises a total inferred, indicated and measured JORC Resource for the Amitsoq Island Deposit of 23.05 million tonnes (Mt) at an average grade of 20.41% Graphitic Carbon ("C(g)"), giving a total graphite content of 4.71 Mt.

- The 2023 MRE:
  - represents a Resource with almost three times the tonnage from the 2022 Maiden Resource Estimate (the "2022 MRE"), with the contained graphite increasing by 3.08 Mt from the 2022 MRE, an increase of ca. 180%; and
  - cements Amitsoq's position as one of the very highest-grade graphite deposits globally, with an average grade of 20.41% C(g) (up from 19.75% C(g)).

- The Amitsoq Island Deposit remains open along strike (predominantly to the north) and down dip to the west, indicating the potential for further significant Resource upgrades in the future.

- Every Resource category has increased substantially:
  - The upgraded Resource now includes 1.26 Mt of Measured Resource, this being the highest confidence pre-Reserves category.
  - The Indicated Resource has increased from 2.04 Mt to 6.12 Mt (a 200% increase over the 2022 MRE).
  - The Inferred Resource has increased from 6.24 Mt to 15.67 Mt (a c150% increase over the 2022 MRE).

- One third of the contained graphite in the 2023 MRE now falls within the higher Measured and Indicated categories, an important validation of the Project fundamentals as GreenRoc moves this year into the development phase and into further discussions with interested customers and offtake partners.

- The 2023 MRE incorporates the results of the extensive Phase 2 drilling programme at the Amitsoq Island Deposit which was completed in September 2022.

GreenRoc's CEO, Stefan Bernstein, commented:

"To deliver a resource update of this quantum and grade is a huge achievement for GreenRoc and underpins our confidence that our Amitsoq project meets the fundamental requirements to become a mine. Furthermore, we believe we can accelerate development in order to help meet the critical demand for new, high grade and conflict-free graphite sources and we look forward to providing further updates in relation to interested customers and offtake partners in due course.

"A JORC compliant resource of over 23 million tonnes at more than 20% graphitic carbon is a fantastic result particularly after having completed only two drilling seasons. Of particular importance is that we now have resource categories in both the Indicated and Measured categories, which imply an important increase in certainty about the Amitsoq mineral resource size and grade. Given that the deposit is open in at least two directions, there is potential for even further expansion of the resource presented today.

"It is also a great pleasure for me to announce that from today, SP Angel will act as sole broker for GreenRoc. SP Angel is a market-leading broker in the mineral raw materials industry and has many decades of experience in minerals projects all over the world. SP Angel publishes a daily newsletter typically read by around 3,000 individuals across the exploration and mining industry, investors, market analysts and politicians. We look forward to working together."

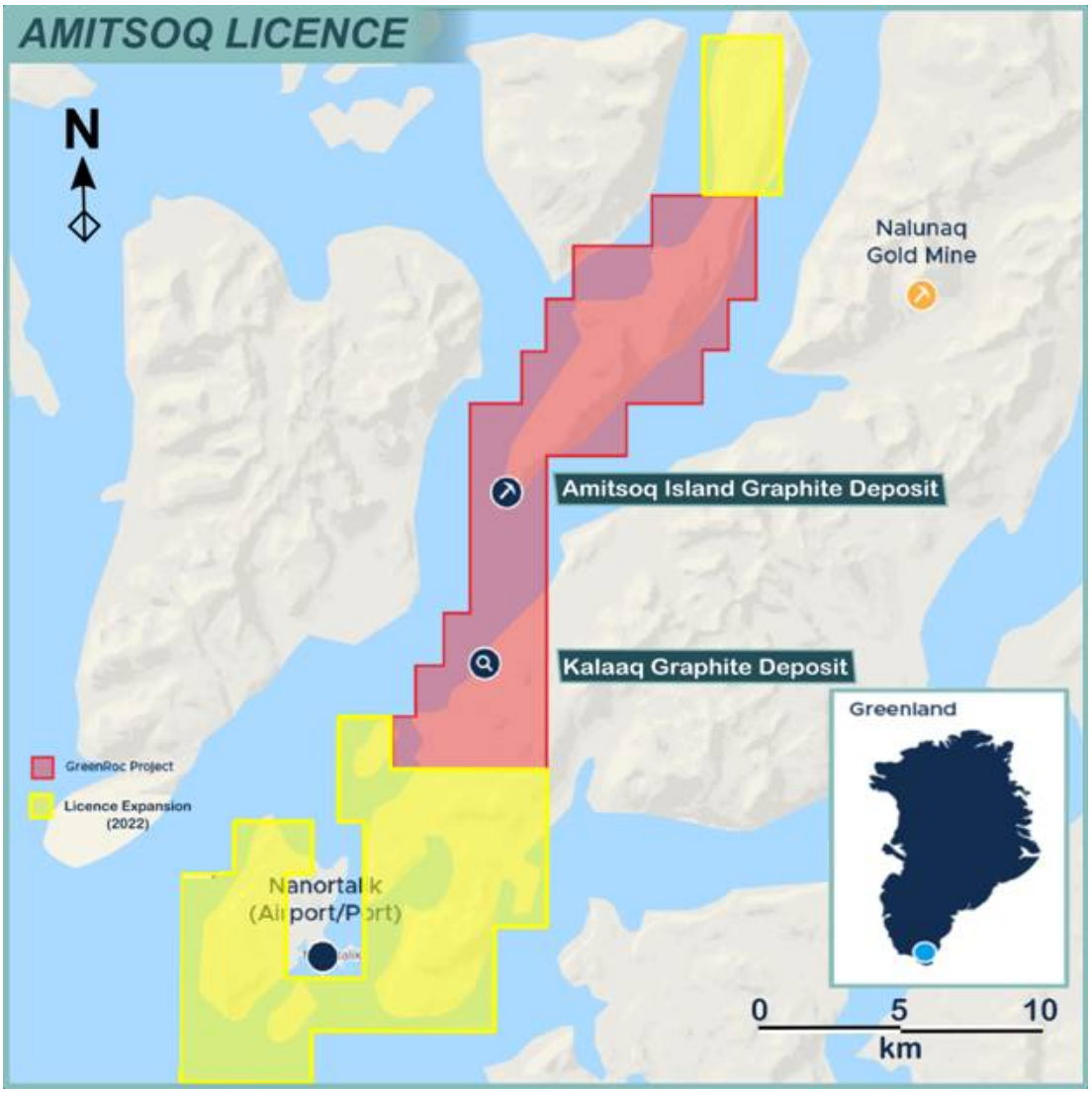


Figure 1. Amitsoq Graphite Project in southern Greenland, showing Amitsoq Island graphite deposit (site of the former graphite mine) and Kalaaq Deposit.

Details

The 2022 MRE, being the maiden JORC Resource at the Amitsoq Island Project, was declared in March 2022 based on 10 drill intersections drilled from three drill pads along the island's ridge during Phase 1 drilling (2022 MRE shown in Table 1). The 2023 MRE incorporates successful Phase 2 drilling completed in September 2022, where mineable widths (more than 2.0m true thickness) of graphite were present in eight intersections of the UGL and in all 19 intersections of the LGL, with graphite grades ranging from 13.52 to 24.52 Cg%. The assay results from the Phase 2 drilling programme were reported by the Company on 22 December 2022.

The 2023 MRE for Amitsoq has delivered a Measured Mineral Resource of 1.26 Mt at 22.05 % C(g) for 0.28 Mt of contained graphite, Indicated Mineral Resource of 6.12 Mt at 21.04 % C(g) for 1.29 Mt of contained graphite, and an additional Inferred Mineral Resource of 15.67 Mt at 20.04 % C(g) for 3.14 Mt of contained graphite as follows (Tables 1-3; Figures 3 and 4):

Table 1. Mineral Resources Summary (comparison between 2022 and 2023 MREs)

Mineral Resource Category	Tonnes (Mt)	Graphitic Carbon (%)	Graphite content (Mt)
2022 MRE			
Measured	-	-	-

Indicated	2.04	20.65	0.42
Total Measured + Indicated	**2.04**	**20.65**	**0.42**
Inferred	6.24	19.45	1.21
Total Resources	**8.28**	**19.75**	**1.63**
2023 MRE Update			
Measured	1.26	22.05	0.28
Indicated	6.12	21.04	1.29
Total Measured + Indicated	**7.38**	**21.21**	**1.57**
Inferred	15.67	20.04	3.14
Total Resources	**23.05**	**20.41**	**4.71**

Notes:

1. The Mineral Resource is reported at a graphitic Carbon cut-off grade of 0 (zero) C(g)%.
2. Mineral Resource estimates are not precise calculations being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. Therefore, reporting of tonnage and grade figures reflects this relative uncertainty and figures are rounded to appropriate significant figures. As a result, some error may be incurred when reporting global figures based on rounded values.
3. The Mineral Resource Statement presented above has been reported in accordance with the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC 2012 Edition). The Competent Person who assumes responsibility for reporting of the Mineral Resource is Dr John Arthur who is a Competent Person as defined by the JORC Code 2012 Edition, having more than 5 years' experience that is relevant to the style of mineralisation and type of deposit described herein, and to the activity for which he accepts responsibility. The effective date of the Mineral Resource statement is 1 January 2023.
4. Resources are not constrained other than by the geological boundary limits of the mineralised unit. At this stage no consideration has been made as to what tonnes and grade would be reasonably expected to be extracted profitably. Notwithstanding, the Competent Person considers the distance constraints in both the dip and strike directions to be a reasonable approximation and expectation of potential mining extents.
5. Mineral Resources which are not Ore Reserves do not have demonstrated economic viability. The estimate of Mineral Resource reported may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
6. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to the Indicated Mineral Resource and must not be converted to a Ore Reserve. It is reasonably considered that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.
7. Currently, no Ore Reserves have been established for the Amitsoq Project.

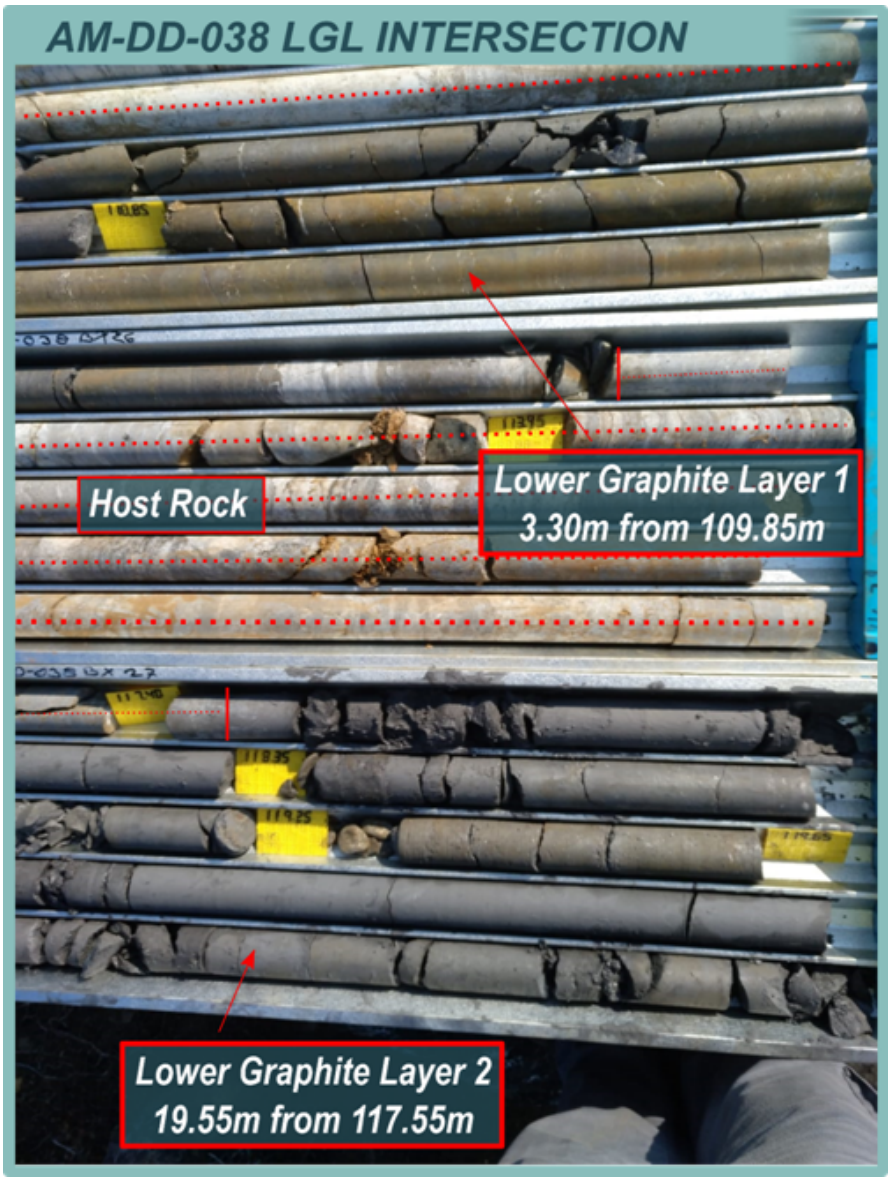


Figure 2. High-grade LGL intercept in AM-DD-038

Table 2 breaks down the 2023 MRE by graphite layer and Resource category. The total resource includes a particularly high-grade contribution from the Lower Graphite Layer of 16.88 Mt, at a grade of 21.51% for 3.634 Mt of contained graphite, which accounts for more than 77 per cent. of the total resource.

Table 2. Breakdown of Resources per Graphite Layer and comparison with 2022 MRE

Mineral Resource Category	Tonnes (Mt)	Graphitic Carbon (%)	Graphite content (Mt)
2022 MRE			
Upper Graphite Layer			
Indicated	0.59	18.97	0.111
Inferred	4.02	18.61	0.748
TOTAL UGL RESOURCE	**4.61**	**18.65**	**0.859**
Lower Graphite Layer			
Indicated	1.45	21.32	0.309
Inferred	2.22	20.97	0.466
TOTAL LGL RESOURCE	**3.67**	**21.19**	**0.775**

2023 MRE Update			
Upper Graphite Layer			
Indicated	0.59	19.02	0.112
Inferred	5.58	17.26	0.963
TOTAL UGL RESOURCE	**6.17**	**17.43**	**1.075**
Lower Graphite Layer			
Measured	1.26	22.05	0.277
Indicated	5.53	21.25	1.176
Inferred	10.09	21.58	2.178
TOTAL LGL RESOURCE	**16.88**	**21.51**	**3.634**

Table 3 displays the highly consistent nature of the graphite grades intersected during Phase 1 + 2 drilling. The Measured Resource is unchanged from a 0% cut-off grade to a 20.5 % cut-off grade. The Total Resource only displays a marginal drop-off of Resources when using a 15 % cut-off grade. This bodes well for the resilience of the deposit in the face of potentially fluctuating graphite prices and operational cost profiles.

Table 3. Sensitivity Table

	Mineral Resource Category								
Cut-Off Grade (Cg%)	Measured			Indicated			Inferred		
	Tonnes (Mt)	Graphitic Carbon (Cg%)	Graphite Content (Mt)	Tonnes (Mt)	Graphitic Carbon (Cg%)	Graphite Content (Mt)	Tonnes (Mt)	Graphitic Carbon (Cg%)	Graphite Content (Mt)
Base Case 0% C(g)	**1.256**	**22.05**	**0.277**	**6.120**	**21.04**	**1.288**	**15.674**	**20.04**	**3.141**
13.0%	1.256	22.05	0.277	6.120	21.04	1.288	15.627	20.06	3.135
15.0%	1.256	22.05	0.277	6.068	21.09	1.280	14.275	20.61	2.942
17.5%	1.256	22.05	0.277	6.005	21.14	1.270	12.976	21.06	2.733

Figures 3, 4 and 5 show the extent of the Resource categories in plan and cross-section views.

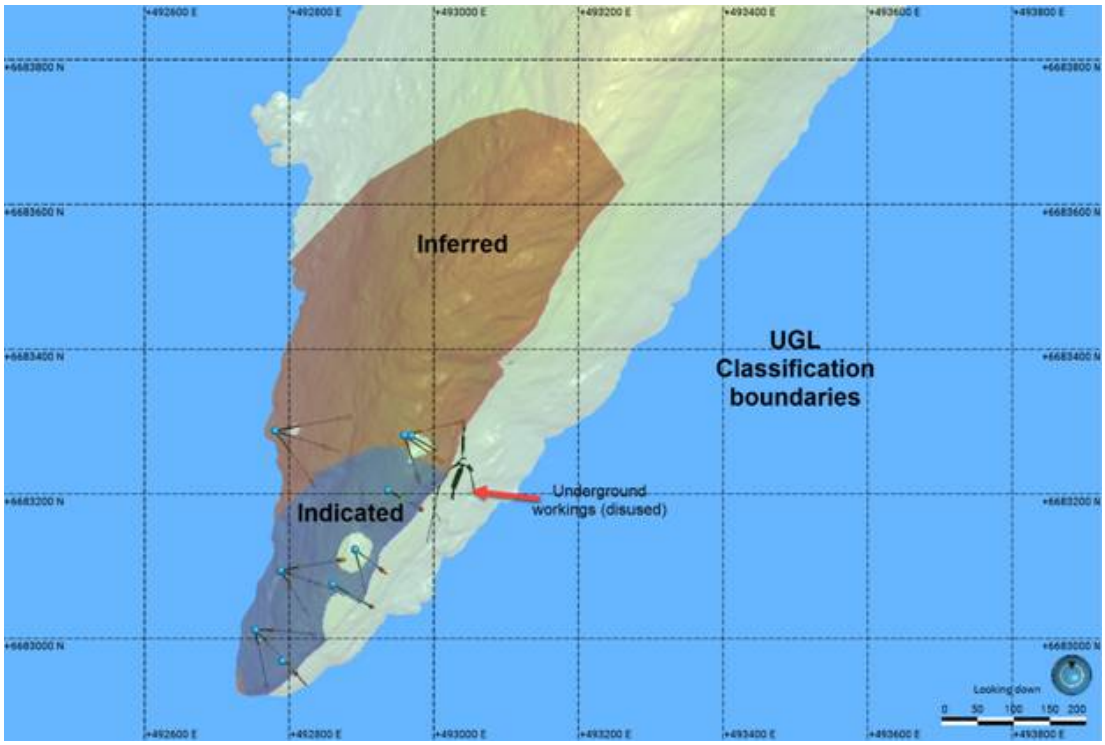


Figure 3. Plan view of UGL Resource categories; scale shown in metres

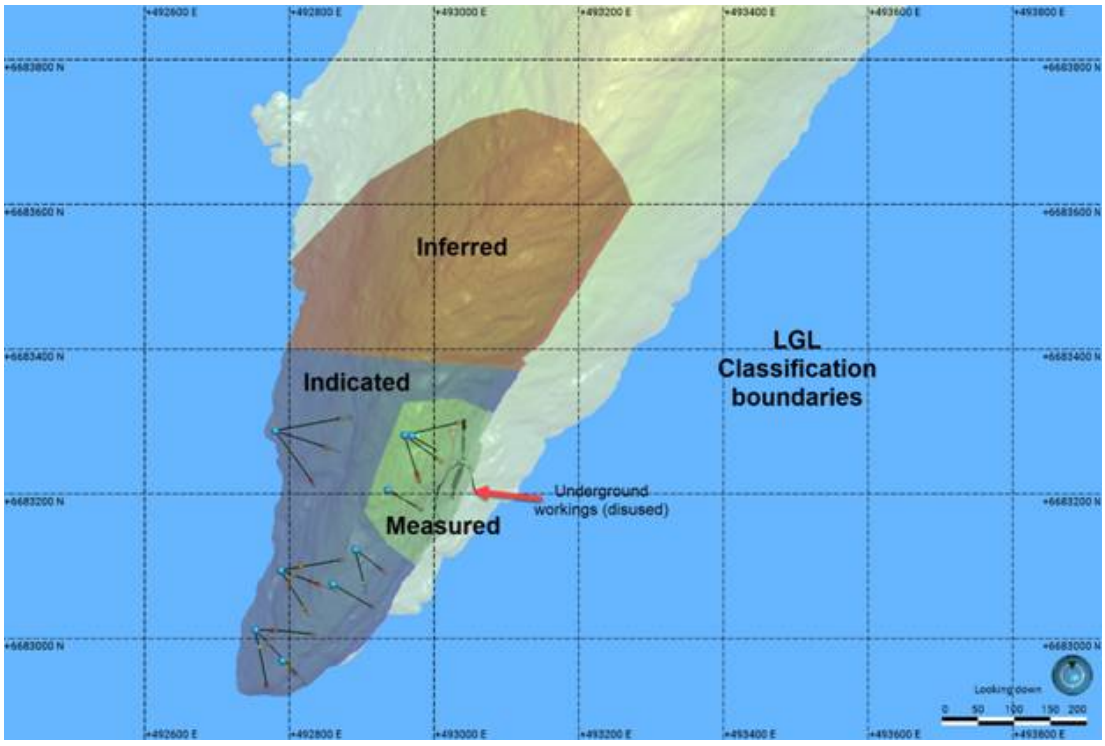


Figure 4. Plan view of LGL Resource categories; scale shown in metres

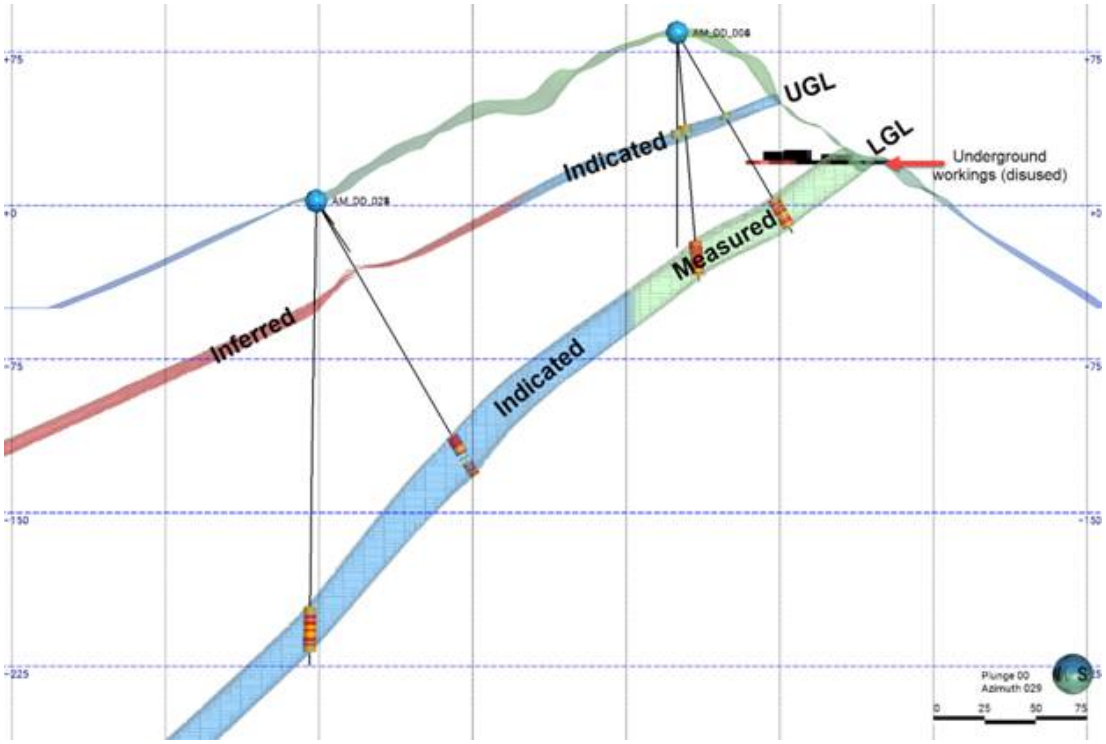


Figure 5. East-West Cross-section showing the relationship of the graphite layers and Resource categories (scale shown in metres).

Relinquishment of Inglefield Land exploration licence.

Given the recent advances of the Amitsoq graphite project and after an assessment of the Company's licence portfolio, the GreenRoc board has decided to relinquish exploration licence 2018-25 in Inglefield Land, North Greenland. This licence is at a very early stage with a high degree of risk and the Company wishes to concentrate efforts to advance the Amitsoq project to production as fast as possible.

This announcement contains inside information for the purposes of the UK Market Abuse Regulation and the Directors of the Company are responsible for the release of this announcement.

Forward Looking Statements

This announcement contains forward-looking statements relating to expected or anticipated future events and anticipated results that are forward-looking in nature and, as a result, are subject to certain risks and uncertainties, such as general economic, market and business conditions, competition for qualified staff, the regulatory process and actions, technical issues, new legislation, uncertainties resulting from potential delays or changes in plans, uncertainties resulting from working in a new political jurisdiction, uncertainties regarding the results of exploration, uncertainties regarding the timing and granting of prospecting rights, uncertainties regarding the timing and granting of regulatory and other third party consents and approvals, uncertainties regarding the Company's or any third party's ability to execute and implement future plans, and the occurrence of unexpected events.

Actual results achieved may vary from the information provided herein as a result of numerous known and unknown risks and uncertainties and other factors.

Competent Person Declaration

The information in this release that relates to Exploration Results and Mineral Resources has been reviewed by Dr John Arthur. Dr Arthur is a Fellow of The Geological Society of London and a Chartered Geologist (FGS CGeol no.

1005744) and 28 years' experience in the minerals and mining industry.

Dr Arthur has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the ''Australasian Code for Reporting of Exploration targets, Exploration Results, Mineral Resources and Ore Reserves'', also known as the JORC Code. The JORC code is a national reporting organisation that is aligned with CRIRSCO. Dr Arthur consents to the inclusion in the announcement of the matters based on his information in the form and context in which they appear.

Glossary

Cut-Off	The minimum grade required for a mineral or metal to be economically mined (or processed). Material found to be above this grade is considered to be ore, while material below this grade is considered to be waste.
Graphitic	of, relating to, resembling, or having the structure of graphite.
Graphitic Carbon or Total Graphitic Carbon (TGC)	Carbon may be present in rocks in various forms including organic carbon, carbonates or graphitic carbon. Carbon in rocks may be reported as fixed or total carbon (i.e. organic carbon + carbon in carbonate minerals + carbon as graphite) or as graphitic carbon or total graphitic carbon (or TGC) (i.e. total carbon - (organic + carbonate carbon)).
Indicated Resource	Definition of mineral deposit at a reasonable level of confidence.
Inferred Resource	Definition of mineral deposit at low level of confidence.
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code') is a professional code of practice that sets minimum standards for Public Reporting of minerals Exploration Results, Mineral Resources and Ore Reserves.
Maiden Mineral Resource Estimate	The first resource estimate to be completed on a project.
Measured Resource	Definition of a mineral deposit at a high level of confidence.
Metallurgical Testing	Metallurgical Testing typically uses microscopy to provide important information about the structure and properties of metal and alloy samples.
Reserve	A Reserve is the economically mineable part of a Measured Mineral Resource and/or Indicated Mineral Resource
Spherical graphite	Used as the anode in lithium-ion batteries. Natural flake graphite is first purified and shaped into small spheres, at which point the material is referred to a High Purity Spherical Graphite ("HPSG"). After shaping, the natural flake graphite is purified by chemical leaching to remove impurities and raise the carbon content to above 99.95% C.
Strike	The direction and length of a geological feature (for example, a vein or rock formation) measured on a horizontal surface.

****ENDS****

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About GreenRoc

GreenRoc Mining Plc is an AIM-quoted company which is developing mining projects in Greenland in critical, high-demand and high-value minerals.

Led by a group of highly experienced mining industry professionals, GreenRoc has a portfolio of 100% owned projects:

- **Amitsoq Graphite Project**, one of the highest-grade graphite deposits in the world with a combined Measured, Indicated and Inferred JORC Resource of 23.05 million tonnes (Mt) at an average grade of 20.41% graphite giving a total graphite content of 4.71 Mt;
- **Thule Black Sands Ilmenite Project** ('TBS'), which has an initial Mineral Resource of 19Mt@ 43.6% Total Heavy Minerals with an in-situ ilmenite grade of 8.9%;
- **Melville Bay Iron Project**, which has a Mineral Resource Estimate of 67Mt at 31.4% iron and has been proven to be processable to a high-grade, 70% concentrate with low impurities.

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