GreenRoc Mining Plc / EPIC: GROC / Market: AIM / Sector: Mining

20 January 2023

GreenRoc Mining Plc

("GreenRoc" or the "Company")

Project Updates

Amitsoq Purification Tests Achieve 99.97% Purity & Successful Meetings Held with Community and Minister for Mineral Resources

GreenRoc Mining Plc (AIM: GROC), a company focused on the development of critical minerals projects in Greenland, is pleased to announce the results of purification test work carried out by GreenRoc's technical consultants, ProGraphite GmbH ('ProGraphite') on spheronised graphite produced from an Amitsoq graphite sample. The test work achieved purity of 99.97% using alkaline purification, which exceeds the purity required to produce spheronised graphite used in the manufacturing of anodes for electric vehicle ("EV") batteries.

The Company also reports that a series of positive and successful meetings have taken place in Greenland this week between CEO Stefan Bernstein and various project stakeholders including the local community at Amitsoq, the Minister for Mineral Resources and Justice and the newly established Government body, NunaGreen, which is leading the transition to carbon-neutral energy in Greenland.

Finally, GreenRoc provides a brief update on the status of Thule Black Sands ("TBS") test work and resource assessment.

Key Points

- A graphite sample from the Lower Graphite Layer ("LGL"), successfully spheronised last autumn, was subjected to purification tests using sodium hydroxide and reached a purity of 99.97%.
- Amitsoq graphite thereby surpasses the 99.95% purity required for spheronised graphite used in the manufacture of anodes for EV batteries.
- An information meeting in Nanortalik between the local community, GreenRoc's CEO, Stefan Bernstein, and Niras, (the Company's specialist sustainability consultant), in preparation of the Amitsog Social Impact Assessment ("SIA"). Meetings were also held with other local stakeholders, including industry representatives, the trade union, hunters' organisation and representatives from the Municipality of Kujalleq.
- GreenRoc's CEO, Stefan Bernstein, met in Nuuk with Aqqaluaq B. Egede, Minister for Mineral Resources and Justice and Permanent Secretary Jørgen Hammeken-Holm. The Minister expressed strong support for the Greenland mineral exploration industry in general and specifically for the Amitsoq Graphite Project.
- GreenRoc's CEO, Stefan Bernstein, also met with representatives of the new Government body NunaGreen to discuss carbon-neutral energy sources to meet the energy needs for commercial operations at Amitsoq.
- Coarser grain fraction (> 1mm) from TBS drill samples to be tested for ilmenite content prior to finalisation of assays and resource assessment. The material larger than 1mm was initially discarded from the analytical work, though potentially containing appreciable amounts of ilmenite.

GreenRoc's CEO, Stefan Bernstein, commented:

"This confirmation that our spheronised graphite, produced from concentrate from the Lower Graphite Layer at the Amitsoq Island deposit, can be purified to an exceptional 99.97% purity using a preferred alkaline purification route is a very significant milestone for our flagship project. It demonstrates that our graphite is suitable for processing into anode-grade spherical graphite, a key raw material in the manufacturing of batteries for electric vehicles "This week I held a series of very constructive meetings in southern Greenland with key Community and Government stakeholders in our Amitsoq Project. I was greatly encouraged by what I felt to be the overwhelmingly positive engagement I was met with, concerning the Amitsoq project. I have high expectations that our Amitsoq project can bring real value to Nanortalik and the Municipality of Kujalleq and I very much look forward to working with all stakeholders over the coming years as we plan the mine reopening, and thereafter."

Details

Successful Purification Test Results

After the successful micronisation and spheronisation test work conducted on LGL graphite material in the autumn of 2022, which was announced on 8 November 2022, the next step was to assess whether that spheronised graphite could be purified to at least 99.95%, that being the requirement for anode-grade material.

Purification test work had previously been carried out by ProGraphite in 2021, where they ran a series of tests on graphite concentrates and found that a high degree of purification could be reached using hydrofluoric acid, which is the standard method for purification. Because of the toxicity of hydrofluoric acid, ProGraphite also conducted purification tests using sodium hydroxide (an alkali) and found that the required purity could also be achieved with this agent.

These tests were repeated recently by ProGraphite on spheronised graphite material produced from LGL drill core. Several tests were conducted, and it was found that a leaching at a relatively low temperature of 250°C resulted in a purified graphite product containing 99.97% graphite. Levels of unwanted elements such as Fe, Cu and Cr were all at very low levels of 15.4ppm, 0.8ppm and 0.2ppm respectively.

Meetings in Nanortalik

On 17 January 2023, GreenRoc CEO Stefan Bernstein held an information meeting at the Culture House in Nanortalik, South Greenland. Nanortalik is the town closest to Amitsoq, lying only 20km to the south. Specialist consulting firm Niras, which is conducting the Social Impact Assessment for the Company, was represented by Director Gertrud Øllgaard. Stefan Bernstein gave an overview at the meeting of GreenRoc's activities in 2022 and its plans for Amitsoq in the light of the positive outlook both for the graphite deposit at Amitsoq and the growing global graphite market. There was considerable interest in the Project and many pertinent questions asked, mainly relating to job prospects whether in the development, construction or production phases of the Project.

Meetings were also held with representatives of the Municipality of Kujalleq responsible for youth, recreational and sports activities in Nanortalik, as well as with representatives from the local fishing/hunters' organisation (KNAPP), the workers' union (SIP) and with several private service industries. Important viewpoints relating to future mining activity at Amitsoq were expressed and discussed.



Presentation and discussions of the Amitsoq project with Nanortalik community.

Meeting with Ministry of Mineral Resources and Justice

On 16 January 2023, CEO Stefan Bernstein met in Nuuk with Minister for Mineral Resources and Justice, Aqqaluaq B. Egede and Permanent Secretary for same ministry, Jørgen Hammeken-Holm. During a very positive discussion, GreenRoc's CEO presented the Company's plans for advancing the Amitsoq graphite project to production and the Minister in turn expressed his views on how the mineral industry could contribute in a positive way to the development of the towns and villages in South Greenland. The Minister stressed that the Naalakkersuisut (Government of Greenland) has a positive attitude towards the exploration and mining industry in general and he expressed strong support specifically to the Amitsoq graphite project. The important subject of renewable energy sources to supply both the mines and the towns in South Greenland was also discussed.

This latter issue was also discussed during a meeting the same day with NunaGreen, which is a newly established Governmental body which seeks to help Greenland transition away from the use of fossil fuels and instead to exploit the country's formidable hydropower potential in order to underpin Power-to-X plants and possible other energy-intensive plants - some of which could well be in the mineral sector. Other options presented were a combination of smaller hydropower plants supplemented with wind turbines and tidal-water turbines, all of which could be exciting solutions delivering a CO_2 -neutral mining operation at Amitsoq.



Meeting in Nuuk between Minister for Mineral Resources and Justice, Aqqaluaq B Egede and GreenRoc's CEO Stefan Bernstein.

Re-analysis of Thule Black Sands ("TBS") samples

As announced on 26 September 2022, the drill results from the TBS Ilmenite Project were delayed due to the requirement for additional analytical work to be carried out. An upper screening of 1.0mm had initially been employed, which excluded a significant mass of potentially ilmenite-bearing material, the ilmenite being locked up in a dolerite matrix. This locked-up ilmenite will accordingly be subjected to a grinding, attritioning and a separation test work programme to determine whether it is recoverable to produce and in what grade and quality. This work is anticipated to commence by the end of January 2023, with results to be delivered approximately 6-8 weeks after commencement.

Following the completion of this next round of test work, the Company will be in a position to report final assay results from the drill programme and then proceed with the finalisation of a revised resource assessment for TBS.

metal and titanium dioxide, a widely used pigment.

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.

Competent Person Declaration

The information in this release that relates to Exploration Results has been reviewed by Mr Mark Austin. Mr Austin is a member of SACNASP (Reg. No. 400235/06), Fellow of The Geological Society and Fellow of the Geological Society of South Africa. He has a B.Sc. Honours in Geology with 38 years' experience.

Mark Austin 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. Mr Austin consents to the inclusion in the announcement of the matters based on his information in the form and context in which they appear.

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.

About ProGraphite

ProGraphite GmbH is a specialist consultancy laboratory based in Germany and has served the carbon and graphite industry for more than 20 years. ProGraphite provides in-house testing capacity over a wide range of carbon and graphite products and is an industry-leading expert.

ENDS

For further information, please contact:

GreenRoc Mining Plc	+44 20 3950 0724
Stefan Bernstein, CEO	
Cairn Financial Advisers LLP (Nomad)	+44 20 7213 0880
James Caithie / Sandy Jamieson / Louise O'Driscoll	
OvalX (Broker)	+44 20 7392 1494
Tom Curran / Thomas Smith	
St Brides Partners Ltd (Financial PR & IR)	+44 20 7236 1177
Susie Geliher / Paul Dulieu / Isabelle Morris	

GreenRoc's Projects

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 Indicated and Inferred JORC Resource of 8.28 million tonnes (Mt) at an average grade of 19.75% C(g) giving a total graphite content of 1.63 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;
- Inglefield Multi-Element Project, which has the potential to host a range of mineralisation styles, including iron oxide-copper-gold.

This information is provided by RNS, the news service of the London Stock Exchange. RNS is approved by the Financial Conduct Authority to act as a Primary Information Provider in the United Kingdom. Terms and conditions relating to the use and distribution of this information may apply. For further information, please contact ms@lseg.com or visit www.ms.com.

RNS may use your IP address to confirm compliance with the terms and conditions, to analyse how you engage with the information contained in this communication, and to share such analysis on an anonymised basis with others as part of our commercial services. For further information about how RNS and the London Stock Exchange use the personal data you provide us, please see our <u>Privacy Policy</u>.

END

DRLLKLLFXFLLBBD