BlackEarth Minerals NL
ACN: 610 168 191
Level 1
675 Murray Street
West Perth WA 6005
PO Box 1088
West Perth WA 6872
Mobile 0411 475 376
info@blackearthminerals.com.au
blackearthminerals.com.au

16 October 2018

ASX Announcement

High-Grade, Large Flake Concentrate Produced from Razafy Resource Materials

Highlights

- **A graphitic carbon concentrate of >96% TGC was obtained from initial metallurgical test work completed on material obtained from the Razafy Resource**
- **Greater than 52% of the graphite concentrate was represented by a flake size over 180µm, which should enable the product to be sold into premium market segments attracting higher prices**
- **Large flake graphite is predominantly used in the production of electric vehicle batteries and next generation fire retardant building materials**
- **Initial comminution results indicate low to moderate ore hardness which will potentially reduce processing costs**

BlackEarth Minerals NL (ASX: BEM) ("**BlackEarth"**, the "**Company"**) is pleased to provide an update on the initial metallurgical test work, completed on sample composites from the Razafy Resource. The Razafy Resource sits within the Company's broader Maniry Graphite Project which, covers a total of 142 km^2 in southern Madagascar.

The head grade of the master composite achieved 9.0% Total Graphitic Carbon (TGC) and the results obtained from the initial flotation tests, indicate the potential to produce high grade concentrates, in excess of 96% TGC. According to London based Benchmark Mineral Intelligence data, graphite concentrates at this level can attract US$100-200 premiums over comparable flake size 90-95%TGC material. The initial test work was performed on diamond drill core samples as part of the 800kg bulk drill core, sent to ALS Perth laboratories after recent completion of a drilling program.

Managing Director, Tom Revy commented:
"These preliminary results provide additional hard data, that materials from the Razafy Resource produces a high-quality, large flake size product, which currently attracts a premium price in global graphite markets. This complements, and vindicates, our detailed mineralogical and petrological assessment carried out earlier this year. The Company is now fast tracking the Scoping Study due to be completed in December 2018 and looks forward to providing an update regarding the Company's project."

Key testwork included:

- Testing 10 composites produced from 21 diamond drill holes from the Razafy Resource with head grades ranging from 8.04% to 9.39% TGC, including a Master Composite with a head grade of 9.00% TGC
- Test work conducted on two comminution composites show low to moderate ore hardness and competency, which reflects the high depth of weathering and consequently has the potential to positively reduce processing costs.
- First pass metallurgical testwork showed excellent results, with initial flotation tests on the Master Composite achieving high grade concentrate 96% TGC with recoveries above 90%.

The concentrate size distribution as shown in Table 1 below:

Size (µm)	Weight (%)	TGC %
500	3.8	95.1
300	18.5	96.4
180	29.7	96.5
150	12.8	96.3
106	11.7	96.0
75	9.6	95.5
-75	14.0	94.0

Table 1 Graphite Concentrate Size Distributio*n*

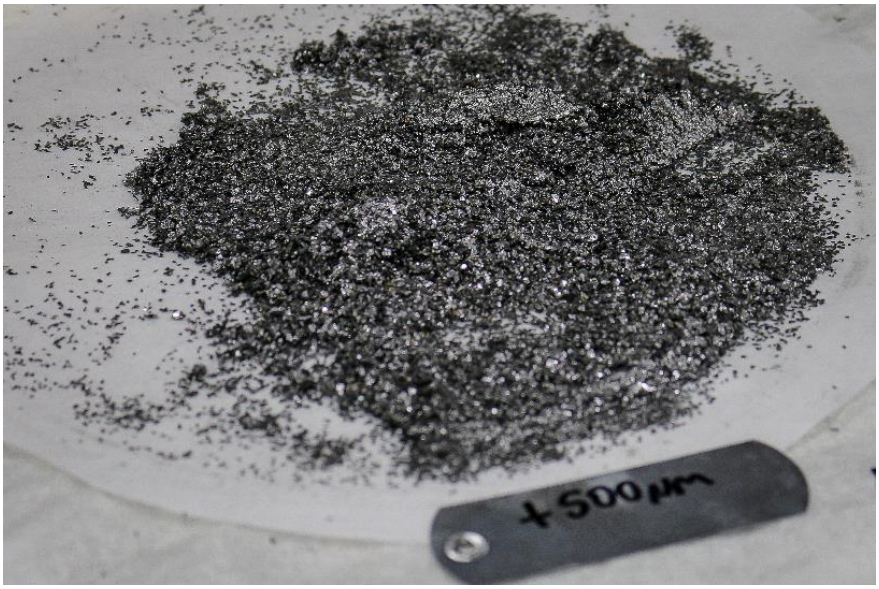

Figure 1 - Razafy +500µm graphite concentrate

High Grade, Large Flake Graphite Applications

High grade graphite is essential to the production of lithium-ion batteries in electric vehicles while large flake graphite is a key component in the next generation of fire-retardant building materials. Both of these key graphite applications are forecast to experience significant growth over the coming years.

Electric Vehicles

Graphite is an important component used in the production of lithium-ion batteries in electric vehicles, which is an ever-expanding market, expected to realise significant growth over the following decades. The number of electric vehicles on the road is expected to grow from 3 million to 125 million by 2030[1], thereby driving increased demand for graphite, a key material in lithium ion batteries.

1 International Energy Agency - https://www.cnbc.com/2018/05/30/electric-vehicles-will-grow-from-3-million-to-125-million-by-2030-iea.html

Fire Retardant Materials

China is forecast to require a total of 40Mtpa of fire-retardant building materials per annum, which may provide significant demand for Razafy Resource large flake graphite. As these materials consist of approximately 5% expandable flake, China's demand for fire retardant graphite building materials could reach 2 million tonnes per annum. It is generally understood that China's large flake graphite reserves are significantly diminishing, hence the opportunity exists for BlackEarth to help meet this demand as a premium global graphite supplier.

The current test work program underway in Perth WA (Figure 2) is testing diamond drill core samples from the Razafy prospect, includes both oxide and primary ore mineralisation to establish a preliminary flow sheet design for the current scoping study.

Figure 2 - Razafy test work being undertaken at ALS laboratories in Perth WA

The test work is expected to deliver improvements in both concentrate grade and coarse flake size distribution and allow optimisation of the preliminary process flowsheet. In addition, the results from the ten variability composites will be used for initial geo-metallurgical modelling. The test work program is expected to be completed by late November**.**

CONTACTS

Tom Revy	BlackEarth Minerals NL	08 6145 0289 | 0411 475 376
Jane Morgan	Investor and Media Relations	0405 555 618

BlackEarth invites investors to attend an online investor briefing with Managing Director Tom Revy, live from the Graphite + Anodes conference in California on October 24. Register to attend here: http://www.blackearthminerals.com.au/webinar

BlackEarth encourages investors to update their contact details to stay up to date with Company news and announcements here: http://www.blackearthminerals.com.au/update-details/

Competent Person's Statement

The information contained in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr. Peter Langworthy, a member of The Australasian Institute of Mining and Metallurgy. Mr. Langworthy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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." Mr. Langworthy consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to the Exploration Target for the Maniry Graphite Project is extracted from the report entitled "Exploration Target Update" dated 14 August 2018 and is available to view on the Company's website (www.blackearthminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. 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 announcement.

The information in this report that relates to the Maiden Resource Estimation for Razafy at the Maniry Graphite Project is extracted from the report entitled "Update – Maiden Resource Estimation for Razafy at the Maniry Graphite Project" dated 14 August 2018 and is available to view on the Company's website (www.blackearthminerals.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. 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 announcement.

The information in this document that relates to metallurgical test work results is based on information compiled and reviewed by Mr David Pass, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pass is an employee of BatteryLimits. Mr Pass has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Pass consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

For more information – www.blackearthminerals.com.au

About BlackEarth Minerals NL (www.blackearthminerals.com.au)
BlackEarth Minerals NL (ASX: BEM) is an ASX listed company focused primarily on the exploration and development of its 100% owned Madagascan graphite projects.

The location of the Company's primary graphite projects: Madagascar (Maniry & Ianapera - above)

The Company's Madagascan projects consist of two primary exploration areas: the Maniry Project (**Maniry**) in the south, and the Ianapera Project (**Ianapera**) in the north. Maniry is highly prospective for large-scale, high-quality graphite deposits and is currently at an advanced evaluation stage. The Razafy indicated and inferred resource, comprising of **11.2Mt @ 7.10% Total Graphitic Carbon** (**TGC**) is summarised in Table below. The vast majority of the resource has been classified with a high degree of confidence at an 'Indicated' classification, with the remainder classified as 'Inferred'. The Mineral Resource is reported at a 6% TGC cut-off grade.

The higher confidence classification of the majority of the resource was supported by detailed petrological assessments (ASX Announcements dated 16 February 2018 and 5 July 2018) and has now been fully validated through this current program of metallurgical test work.

The Mineral Resource was estimated within constraining wireframe solids defined at a nominal 3% TGC cut-off grade.

Classification	Tonnes (Mt)	TGC Grade (%)	Contained Tonnes (t)
Razafy Indicated	8.0	7.22	577,600
Razafy Inferred	3.2	6.80	217,600
Total Resources	**11.2**	**7.10**	**795,200**

Mineral Resource Estimates for Maniry Project

Results, from recent diamond drilling have confirmed that the Razafy Prospect (contained within the Maniry Project area) consists of high grade, thick outcropping graphitic mineralisation contained within distinct lenses which remain not only open along strike but also at depth. Recent identification of further lenses to the east also highlights the prospectivity of the immediate area which, based on mapping and previous exploration represents only 5% of the current Maniry Project area.

Ianapera is located approximately 50km north of Maniry. It consists of a series of high-grade outcrops, up to 800m long and 30m wide, of graphite mineralisation within a broader graphite trend. Identified as a large conductive body, potential exists for the presence of a large graphitic mineralised system.