

29 April 2020

ASX Announcement**BLACKEARTH MINERALS NL
QUARTERLY ACTIVITIES REPORT****Quarter ended 31 March 2020****HIGHLIGHTS FOR THE QUARTER****OPERATIONAL**

- Independent German full service specialist in testing and engineering services, Dorfner ANZAPLAN, successfully completed a graphite anode suitability test program
- Testwork indicates that BEM concentrate produced results similar to a high-performance reference material used by ANZAPLAN
- BlackEarth is continuing discussions with industry leading manufacturers of expandable products, refractories and lithium ion batteries, with the aim of entering into offtake agreements
- Stage 1 pilot work program completed by Beijing General Research Institute of Mining & Metallurgy (“BGRIMM”), with results demonstrating improvements in both graphite recovery and final product grades
- World’s largest LiB anode manufacturer, BTR New Energy agrees to next stage battery anode evaluation test work program following successful preliminary test work results

CORPORATE

- COVID-19 response protocols implemented, with all nonessential spending deferred.
- Subsequent to quarter end, Directors have resolved to reduce wages and fees by up to 50%

BlackEarth Minerals NL (ASX: BEM) (“**BlackEarth**”, or the “**Company**”) is pleased to present its March 2020 quarterly update (“**Quarter**”) on its Madagascan graphite projects. BlackEarth has achieved several milestones during the quarter, as the Company continues to fast-track the development of its 100% owned Maniry Graphite Project in southern Madagascar.

Commenting on the Quarter, Tom Revy, BEM Managing Director said:

“The March 2020 quarter has been another important period for BlackEarth, as we continued to fast track our flagship Maniry graphite project in Southern Madagascar.

Completion during the quarter of the Stage 1 pilot testwork program by BGRIMM (on time and budget), further advances our current feasibility study adding to the Board’s confidence that Maniry graphite concentrate has the potential to produce a high purity, large flake product, suitable for the use in refractory and expandable markets, and in the manufacture of lithium ion battery anodes.

In addition, the sample endorsement given by BTR, as a global tier 1 natural graphite spheronising / anode producing company further highlights the quality of BEM's product range capable of being produced at its Maniry Graphite Project"

1. **BLACKEARTH GRAPHITE SUITABLE FOR LITHIUM ION BATTERIES**

The Company received the final testwork report from Dorfner ANZAPLAN ("ANZAPLAN"), a leading independent German full service specialist in testing and engineering, which BEM engaged in May 2019, to undertake an expansive testwork program for evaluating BEM graphite concentrate from the Maniry project in Southern Madagascar with regard to graphite anode suitability.

The graphite concentrate evaluation testwork program undertaken by ANZAPLAN considered:

1. Chemical and physical characterisation;
2. Micronisation and spheronisation performance and characterisation;
3. Purification of the spherical graphite produced; and
4. Electrochemical characterisation of the spherical purified graphite.

Items 1 – 3 (above) have previously been reported (ASX:BEM 12 August 2019 and ASX:BEM 3 September 2019).

The spherical graphite purification testwork included:

1. Conventional acid leach
2. Microwave assisted acid digestion
3. HF acid "Free" acid digestion
4. Thermal purification

In all four different purification methods tested, the spherical graphite was able to be purified to the minimum + 99.95 wt.-% fixed carbon which is required for battery applications. The testwork demonstrated the amenability to readily purify BEM spheronised materials, in meeting battery grade specifications. It should be noted that the testwork was preliminary in nature and not optimised in terms of reagent consumptions and conditions,

Following successful purification and spheronisation testwork, preliminary electrochemical characterization testwork was undertaken. This involved using BEM material as an anode and testing its effectiveness within a lithium ion battery over time. Testwork was completed on a sample of spheronised and purified graphite (BE L7) with the following characteristics shown in Table 1.

Table 1: Physical characteristics purified SPG product BE L7*

Tap density [g/cm ³]	D50 [µm]	D90/D10 ratio [-]	BET [m ² /g]	Fixed Carbon [LOI %]
0.94	14.7	2.6	6.9	99.96

*values were based on previous BE SP S1 testwork

For electrochemical evaluation, single layer full pouch cells were fabricated as shown in Figure 1.



Figure 1: Image of a single-layer pouch test cell

Preparation and testing of an anode material in full cells is the method of choice for most accurately characterizing the relative performance of a new material in actual lithium-ion cells. It is therefore preferable over testing in conventional half coin cell constructions.

In addition, the BEM material was compared to a high performance purified spherical graphite reference material which represents a reference material in the upper third of quality materials used in the anode application.

The testwork indicated that the BEM material produced results that were similar to the high-performance reference graphite material.

The BEM graphite concentrate from the Maniry project in Southern Madagascar, which is the subject of this announcement, is a product of metallurgical test work completed in late 2018. This was the subject of an announcement made on 12 December 2018 titled “Update to Maniry Metallurgical Test Work”. The announcement outlines the sample selection/drill hole data in detail and the logic applied as to why it is representative of the Maniry Resource, and refers to the future requirement for downstream test work, which is the subject of this announcement.

In summary, the testwork has demonstrated that the BEM graphite material:

- Can be successfully spheronised and purified by industry standard methodologies; and
- Preliminary electrochemical testwork on uncoated spheronised purified graphite has shown suitability for Li battery applications.

2. BEM COMPLETES PILOT PROGRAM - STAGE 1

The Company received results from laboratory testwork completed by the Beijing General Research Institute of Mining & Metallurgy (“BGRIMM”), for Stage 1 of the Agreed work (“Agreement”), undertaken to finalise all process engineering related matters, as part of the Company’s definitive feasibility study (“DFS”) on its Maniry Graphite Project in Southern Madagascar (“Maniry”, the “Project”).

Following the successful testwork from Stage 1, under the Agreement, a Stage 2 test program will be undertaken and is planned to be completed in Q3 2020.

The 2 Stages of testwork by BGRIMM are outlined below:

Stage 1 (Completed)

Stage 1 of testwork by BGRIMM was based on an initial 250kg sample of Maniry graphite material, with results from this stage being used to confirm all work carried out at ALS Perth (ASX Release - 12 December 2018). The testwork also aimed to optimise process flow, reagent systems, industrial equipment selection and process operating conditions, for the Stage 2 large scale process pilot test.



Figure 2-1 Test Pit sampling

Stage 2

The second stage of testwork to be undertaken by BGRIMM, will involve a large scale pilot test program, and will use approximately 60 tonnes of Maniry graphite ore. This stage will be used to optimise the Maniry flow sheet, provide final equipment specifications and produce sufficient material required to finalise legally binding offtake arrangements.

Stage 1 Test Work Results

As part of the Stage 1 testwork, a 250kg sample from the trial mining test pit (ASX Release - 13 November 2019) was despatched to BGRIMM.



Figure 2-2 Sample Transport

The test work program comprised:

- Head assay analysis
- Process mineralogy
- Batch flotation test work to confirm flowsheet to maximise flake preservation while achieving the target grade of >95% TGC, the work included;
 - Primary and secondary grind size
 - Reagent type and addition rate
 - Flotation time
- Flotation cleaner optimisation;
 - Number of stages of regrind and flotation
 - Regrind time
 - Regrind media
- Confirmatory locked cycle testing of established flowsheet
- Bond Rod Work Index
- Preliminary concentrate filtration and tailings thickening test work
- Initial equipment selection

Mineralogical investigation was undertaken by a combination of optical microscope, scanning electron microscope and XRD. The content Mineral composition and relative content of the ore is shown in Table 2.

Table 2 Mineral composition and relative content of feed material

Mineral name	Content, %	Mineral name	Content, %
Graphite	10.30	Diopside	1.07
Pyrite	0.37	Rutile	0.22
Quartz	58.07	Biotite	0.35
Kaolinite (Dickite)	11.53	Chlorite	0.62
Dolomite	10.15	Apatite	0.38
Calcite	2.59	Gahnite	0.22
Orthoclase	2.70	Barite	0.08
Albite	1.10	Other minerals	0.25

Table 3 Graphite particle liberation

Grinding Fines %-0.2mm	Free particle %
45	54.60
53	58.08
63	62.28
78	67.22

The flotation test work included open circuit flowsheet development, and the test sample was predominately oxide ore and had an average head grade of 9.3% TGC. The test work confirmed the ability to achieve the target grade >95% TGC in all concentrate size fractions.

The results achieved were comparable to data produced in previous test work by ALS Perth (ASX release 12 December 2018).

Based on the confirmed results achieved in Stage 1, in March 2020, BlackEarth and BGRIMM now plan to proceed with the Stage 2 large scale 60 tonne pilot test program. The Stage 2 program will confirm and optimise the flow sheet, establish scale up factors, finalise equipment specification, likely concentrate specifications and provide bulk concentrate for market end user testing.

3. **POSITIVE RESULTS SEE BEM MATERIAL MOVE TO NEXT STAGE QUALIFICATION TEST WORK WITH BTR NEW ENERGY**

During the quarter the Company announced the receipt of testwork results from BTR New Energy Materials (“BTR”), who undertook their own testwork program for evaluating BEM graphite concentrate from the Maniry project in Southern Madagascar with regard to graphite anode suitability.

BTR is the world’s largest manufacturer of battery anode materials for lithium ion batteries. Based in Shenzhen, China, BTR is also a world leader in technology development and production of battery anode materials supplying both the Chinese domestic and export markets.

The material tested was taken from concentrate produced, as part of the recently completed Stage 1 pilot program undertaken at BGRIMM’s piloting facilities in Beijing, China (ASX release: “BEM Completes Pilot Program – Stage 1”, dated 26 February 2020). The sample tested (BEM-195-1) comprised of graphite concentrate, - 150 microns and > 95%C. BTR highlighted the very low impurity content in BEM’s concentrate as a distinct advantage.

Subsequent to the completion of testing, BTR has requested a larger BEM concentrate sample to be sent to BTR’s testing facilities in Shenzhen for confirmatory test work and evaluation as potential future feed to their spheronising and LiB anode manufacturing plants.

4. **COMMUNITY RELATIONS**

BlackEarth continues its partnerships with the local communities in which it operates, to ensure positive and enduring impacts well into the future.

5. WESTERN AUSTRALIA TENEMENTS

The Company continues to review the Donnelly River tenements.

The Company will continue focusing its efforts during the remainder of CY2020 on its Maniry and Ianapera graphite projects located in Madagascar.

6. CORPORATE

(a) COVID-19 RESPONSE

The health and well-being of our employees is of the utmost importance to BEM. Accordingly, COVID-19 procedures for travel to and from site in Madagascar and for site-based activities have been implemented to maintain social distancing.

In light of Government restrictions on the movements of personnel and the volatility of capital markets, BEM has implemented a work program which will see all non-essential spending across the Company deferred while at the same time facilitating the continued advancement of the definitive feasibility study over the remainder of CY2020.

(b) DIRECTORS FEES AND SALARY REDUCTION

In response to the unprecedented market and social changes occurring at present, along with an acknowledgement that the capital markets are likely to be tight for some time, the Company's Directors reduced their fees by 50%.

In addition, there has been a temporary variation to the Managing Director's remuneration which has effectively reduced his salary by 25%, which is to be reviewed in line with Covid-19 developments.

The Company continues to further reduce other overheads where possible.

This announcement is authorised for release by Mr Tom Revy, Managing Director.

CONTACTS

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

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/>

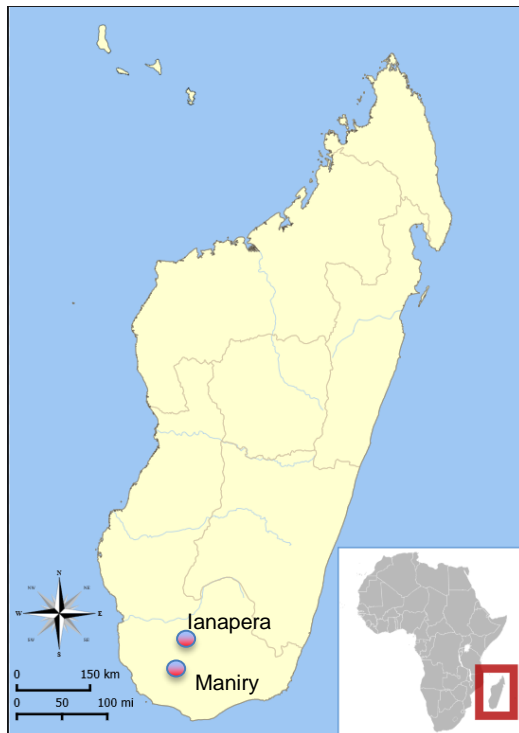
Competent Person's Statement

- The information contained in this report that relates to Exploration Results and Mineral Resources has been compiled and / or reviewed by Ms Annick Manfrino, a member of The Australian Institute of Geoscientists. Ms Manfrino is the Principal of Sigma Blue and Manager Geology of BlackEarth Minerals. Ms Manfrino has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that she 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." Ms Manfrino 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 report that relates to the Maiden Resource Estimation for Haja at the Maniry Graphite Project is extracted from the report entitled "Update – Maiden Resource Estimation for Haja at the Maniry Graphite Project" dated 27 December 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 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

BlackEarth Minerals NL (ASX:BEM) is an ASX listed company focussed primarily on the development of its 100% owned Madagascan Maniry and lanapera graphite projects. For more information, visit <https://www.blackearthminerals.com.au>.



Project Life	10 Years
NPV @ 10% pre-tax	US\$ 103M
IRR pre-tax	42%
Project CAPEX Stage 1	US\$ 41M (500ktpa ore)
Project CAPEX Stage 2	US\$ 29M (1Mtpa ore)
Payback for Stages 1 & 2	3.7 years (Stage 1 - Only 2.7 years)
Annual graphite production	Av 30ktpa (Stage 1 – Years 1-3) Av 60ktpa (Stage 2 – Years 4+)

Project	Deposit	Tonnes (Mt)	TGC Grade (%)	Contained Tonnes (t)
	Razafy - Indicated	8	7.22	677,600
	Razafy - Inferred	3.2	6.8	217,600
	Razafy -Total	11.2	7.1	795,200
Maniry	Haja - Inferred	9	5.79	521,100
	Haja Total	9	5.79	521,100
Total Resources		20.2	6.51	1,316,300

Above: Maniry Graphite Project Scoping Study Results
Left: Location of BEM's Maniry & lanapera graphite projects

The Razafy Resources (both indicated and inferred) are reported at 6% TGC with cut off constraining wireframe solids defined at a nominal 3% cut off grade.

The Haja Resource is reported at 5% TGC cut off with cut off constraining wireframe solids defined at a nominal 15% cut off grade.

The indicated mineral resource at Razafy was first reported in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project".

The inferred mineral resource at Razafy was first reported in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project".

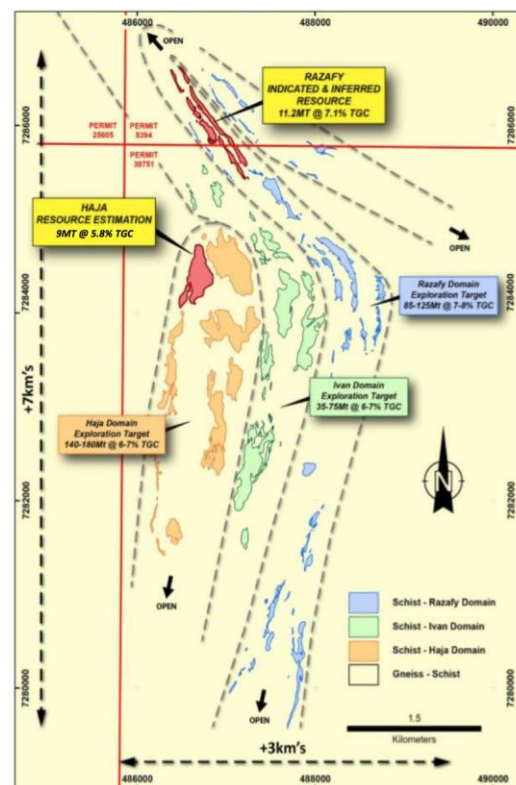
The inferred mineral resource at Haja was first reported in the announcement of 27 December 2018 entitled "Maiden Resource Estimation for Haja at Maniry Graphite Project".

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised.

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 in respect of the scoping study results (see the announcement of 30 January 2019 entitled "BlackEarth announces positive Scoping Study results for the Maniry Graphite Project") and that all material assumptions and technical parameters underpinning the estimates of forecast financial information continue to apply and have not materially changed.

Additionally, the Company confirms that it is not aware of any new information or data that materially affects the information regarding the indicated mineral resource at Razafy in the announcement of 14 August 2018 entitled "Update – Maiden Resource Estimation for Razafy at Maniry Project", which forms the basis of the production targets outlined in the table above.



Maniry Graphite Project – Overview

For further information regarding the Maniry exploration target, please refer to the announcement entitled "Exploration Target Update" dated 14 August 2018 "Update Maniry Exploration Target"

SCHEDULE OF MINING TENEMENTS

Details of Mining Tenements at Quarter ended 31 March 2020 (ASX Listing Rule 5.3.3)			
Australia			
Tenement ID	Location	State	Interest
E70/4824	Yanmah, Donnelly	WA	100%
E70/4825	Manjimup, Donnelly	WA	100%
International			
Tenement ID	Location	Country	Interest
PR25605	Maniry	Madagascar	100%
PR25606	Maniry	Madagascar	100%
PR3432	Maniry	Madagascar	100%
PR39750	Maniry	Madagascar	100%
PR39751	Maniry	Madagascar	100%
PE5394	Maniry	Madagascar	100%
PE5391	Ianapera	Madagascar	100%
PE5392	Ianapera	Madagascar	100%
PE5393	Ianapera	Madagascar	100%
PE25093	Ianapera	Madagascar	100%
PE25094	Ianapera	Madagascar	100%

CORPORATE INFORMATION

28 April 2020
 113,655,521 fully paid ordinary shares
 28,142,750 \$0.25 partly paid shares paid to
 \$0.0001 and unpaid \$0.2499
 2,750,000 Unlisted \$0.30 options
 8,000,000 Performance Rights
 \$3.9 million market capitalisation

BOARD OF DIRECTORS

Phil Hearse (Non-executive Chairman)
Tom Revy (Managing Director)
George Bauk (Non-executive Director)