



## Retraction and Re-submission of ASX Release

Minbos Resources Limited (Company) ( ASX: MNB) refers to the ASX announcement made on 6 December 2019, Announcement Title: "PHOSPHATE AND RARE EARTH ACTIVITY UPDATE"

The company retracts the above release as a result of estimates not previously released. Investors should not rely on the retracted release as a basis for an investment decision.

Please find attached the revised announcement for Phosphate and Rare Earth Activity.

END

## PHOSPHATE AND RARE EARTH ACTIVITY UPDATE

Minbos Resources Limited (**ASX:MNB**) (“**Minbos**” or “**the Company**”) is pleased to provide an update on its Angolan phosphate ore interests, which includes the area previously held by Minbos in Cabinda (Cácata), and recent exploration activities at its Madagascan Rare Earth Project.

### CÁCATA PHOSPHATE LICENCES - TENDER EXTENSION

Minbos advises that Angola’s Ministry of Mineral Resources and Oil (MIREMPET) has extended the date for tender submissions for the granting of mining rights to the Cabinda Cácata concessions. The date has been extended by one month, with the new closing date the 18<sup>th</sup> December 2019. Minbos will complete and lodge a formal submission with the awarding of the tender expected to be announced in Q1 2020.

The concession area of Cácata is located in Cabinda Province, in the Cácata and Tchôbo areas approximately 240km from Cabinda city and represents 90km<sup>2</sup> of phosphate ore potential. Minbos has substantial experience in developing phosphate projects in Angola and the wider Congo Basin, having spent AUD\$20 million on exploration and feasibility studies on the Cabinda Phosphate Project. The Company has a plan to deliver high-yield/low-cost phosphate fertilizer to the mutual benefit of local farmers and agribusiness (Figure 1).



Figure 1 – Field trial pots demonstrating the high-yield effectiveness of the Cabinda blend

Minbos has previously identified a Mineral Resource<sup>1</sup> of more than 7 million tonnes of Phosphate Rock in the Cacata deposit that is suitable for the production of enhanced phosphate rock and if successful in it's reapplication for the C acata Licenses, it is proposed to establish a mine at C acata to mine and truck phosphate rock to Porto de Caio.

A Granulation Plant would be constructed at Porto de Caio to granulate imported Water Soluble Phosphate (WSP) fertilizer and micronutrients with the C acata phosphate rock to produce enhanced phosphate rock. The enhanced phosphate rock would be bagged and barged from Porto de Caio to NPK fertilizer blending plants in Angola and regional countries (Figure 2).



Figure 1 – North West Angola with Cabinda phosphate licences, NPK plants and major ports. The field trial area of Huambo is also listed.

1. Minbos' ASX announcements dated 16 October 2013 and 5 December 2013 respectively entitled "Minbos announces resource upgrade for the Cabinda licenses in Angola" and "Cabinda Resource Additional Information"

The Company believes the agricultural impact of the enhanced phosphate rock project has the potential to transform Angola and the wider Congo Basin. The project could supply all of the phosphate nutrient requirements for the country; however, its most important contribution will be the ability to customize a phosphate nutrient granule to tailor phosphate release timing, incorporate micronutrients to specification, and reduce the economic scale size for phosphate granule production.

### **COMPLETED GREENHOUSE TRIALS – IFDC (ALABAMA)**

In partnership with the International Fertilizer Development Centre (IFDC), a science-based public international organization working to alleviate global hunger by introducing improved agricultural practices and fertilizer technologies to farmers and by linking farmers to markets, the Company has completed 24 months of greenhouse trials at IFDC headquarters in Muscle Shoals, Alabama (Figure 3).

The Company has completed four greenhouse trials with the IFDC, with the broad aim of maximising the fertilizers agronomic potential and ensuring the suitability of the crops for use in Angola and the surrounding Congo Basin.

The interim results have confirmed that Angolan soils, crops and climate are ideally suited for Cabinda enhanced rock phosphate which prefers moist, acidic (low-pH.) soils and staple crops such as cereals and legumes. The interim results also saw significant agronomic growth with the Cabinda phosphate fertilizer pot-trialled on winter wheat, maize, residual maize and sorghum.

The Company recently presented the findings from the greenhouse trials as well its plans for its phosphate interests at the 1<sup>st</sup> Angolan Mining Conference, which was attended by the Hon. João Manuel Gonçalves Lourenço, President of Angola.



Figure 2 – Cabinda Phosphate Fertilizer Blend Greenhouse Trials at the International Fertilizer Development Center (Muscle Shoals, Alabama)

## ANGOLA IN-COUNTRY FIELD TRIALS – UNDERWAY

As part of the partnership with the IFDC, 500kg's of improved Cabinda Phosphate Rock was successfully processed at the IFDC's world-class trial plant in Muscle Shoals, Alabama. The granulation testing was designed to identify plant flow and design and produced 400kg's of Cabinda blend to be used for an in-country field trial, which was delayed due to inclement weather, but has now commenced with the planting of maize in Huambo, Angola (Figure 3).

The in-country field trials are being co-ordinated by the Angolan Institute of Agronomic Investigations in Huambo, with the initial concept and design being undertaken by the Plant Nutrition Science and Technology Company (NPCT) design in consultation with the IFDC. The maize field trial will be harvested next year with a second crop of beans to be planted in February. The Company will release results of the trials when available.



Figure 3 – Field trial are in Huambo, Angola with Maize expected to be planted in the coming days

## MADAGASCAR RARE EARTHS FIELD MAPPING PROGRAM – COMPLETED

Following highly encouraging results from a recent auger drilling program<sup>1</sup> (Figure 5), which confirmed an approximately 2km-long zone of REE anomalies in soils along with numerous peak values of greater than 5% TREO<sup>2</sup>, the Company has completed a follow-up mapping and target generation study on the Ambato Rare Earth Project in Madagascar.

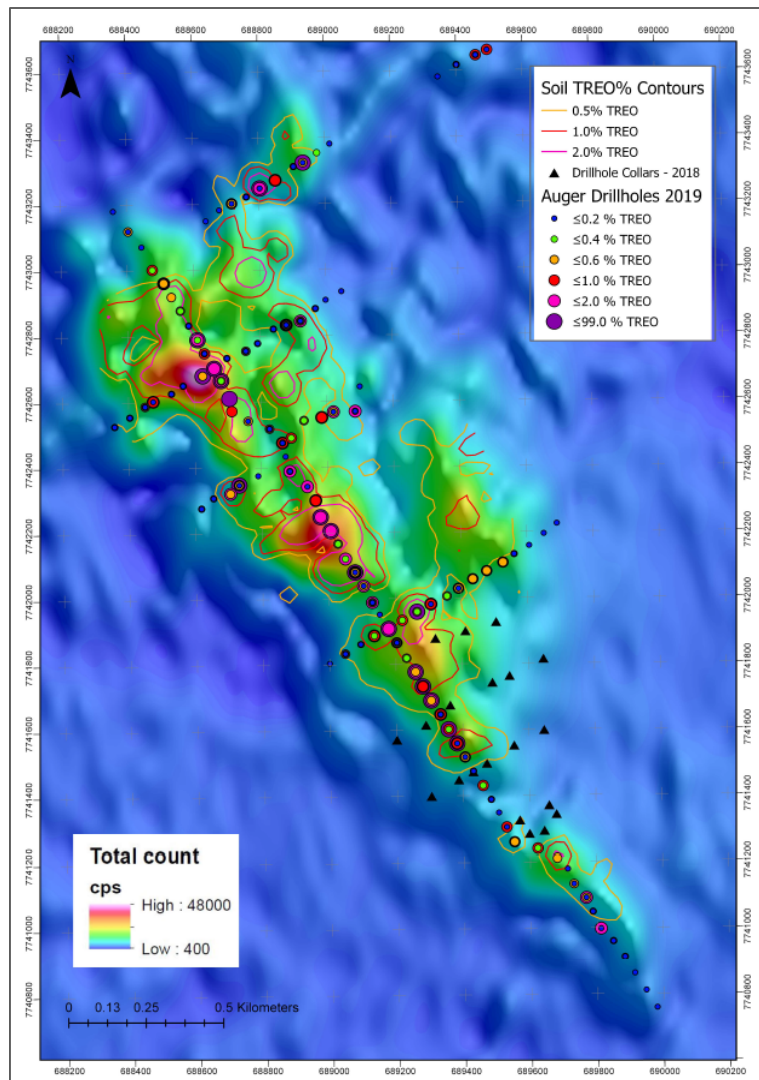


Figure 4 - Plan view of 2019 auger drilling results coloured by TREO% overlain with soil contours and 2018 diamond drillhole collars, and underlain by airborne radiometrics.

<sup>1</sup> ASX Announcement - NEW AUGER RESULTS CONFIRM 2KM-LONG ZONE OF RARE EARTH ANOMALIES

<http://www.investi.com.au/api/announcements/mnb/0116aa55-215.pdf>

<sup>2</sup> Handheld XRF instrument only detects La, Ce, Nd, Pr, and Y. The TREO values being stated are the sum of La, Ce, Nd, Pr, and Y (converted into oxides) only

Geological and structural mapping was completed at the Ambato Project focussed primarily on the known mineralisation and 2km-long geochemical soil anomaly. The study is designed to generate a suitable drill target based on observations and a resultant model for the formation of rare earth mineralisation at the Project.

The Company engaged respected mining consultants CSA Global to complete the mapping exercise and target generation study which has included compiling and collecting lithological, structural and soil colour information in the field as well as remote sensing and existing geological and assay data from Minbos' work to date to construct a geological and mineralisation model to vector down on potential drill target(s). Final results from the report are due in January 2020 and will be announced shortly thereafter.

The Ambato Rare Earth Project is located approximately 200km to the southwest of Antananarivo, in the Ambatofinandrahana Municipal area of the South Central Highlands of Madagascar. The Project comprises two permits covering 440km<sup>2</sup> and consists of seven (7) prospects; Marovoalavo, Ankazohambo, Andoharano, Sahafa, Lesada, Vohiniariana, and Sambalahy.

Surface sampling has returned high-grade Rare Earth Elements (REE) contained predominantly in Bastnaesite. Bastnaesite is typically low in Uranium and Thorium and one of only three REE minerals to have been commercially beneficiated. The Ankazohambo prospect has been sampled over a 2.4km strike length returning rock chip samples up to 41% TREO of predominantly bastnaesite with low uranium and thorium. The project hosts multiple occurrences outcropping at surface that remain undrilled.

**-END-**

For further information, please contact

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**ABOUT MINBOS**

Minbos Resources Limited (ASX: MNB) is an ASX-listed exploration and development company with interests in phosphate ore within the Cabinda Province of Angola and Rare Earth Elements in Madagascar. The Company's immediate focus is to develop a project to produce a low-cost/high-yield fertilizer blend suitable for crops and soils within Angola and the wider Congo Basin.

For more information: [www.minbos.com](http://www.minbos.com)



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## Competent Persons

### **Ms Kathleen Body**

The information in the release that relates to the Exploration Results and Phosphate Resources, Production Targets and Cost Estimation was extracted from Minbos' ASX announcements dated 16 October 2013 and 5 December 2013 respectively entitled "Minbos announces resource upgrade for the Cabinda licenses in Angola" and "Cabinda Resource Additional Information" and the Minbos Annual Report for the years ended 30 June 2014, 30 June 2015, 30 June 2016 and 30 June 2017, 30 June 2018 and Half Year Reports for the periods ended 31 December 2014, 31 December 2015, 31 December 2016 and 31 December 2017 which are available to view on the Company's website.

The information in this Annual Report has been reviewed and approved for release by Ms Kathleen Body, Pr.Sci.Nat, who has over 20 years' experience in mineral exploration and mineral resource estimation. Ms Body is a Principal Consultant and Director of Red Bush Geoservices (Pty) Ltd and contracted to Minbos. Ms Body is registered with the South African Council for Natural Scientific Professions (SACNASP) as a Professional Natural Scientist. She has sufficient experience in relation to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined by the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code 2012 Edition). Ms Body has consented to inclusion of this information in the form and context in which it appears.

Other than the status of the License as referred to in this release, Minbos confirms that: a) it is not aware of any new information or data that materially affects the information included in the original ASX announcements and 30 June 2018 Annual Report b) all material assumptions and technical parameters underpinning the Phosphate Resource included in the ASX announcements and 30 June 2018 Annual Report continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this announcement have not been materially modified from the original ASX announcements and 30 June 2018 Annual Report.

### **Ms Rebecca Morgan**

The information in this Report that relates to Rare Earth Exploration Results and Data Quality is based on, and fairly represents, information and supporting documentation prepared by Rebecca Morgan, who is a member of the Australian Institute of Geoscientists. Miss Morgan is a consultant to Minbos. Miss Morgan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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'. Miss Morgan consents to the inclusion in this Report of the matters based on her information in the form and context in which it appears.