

RESOURCE UPDATE FOR HIGH-GRADE CABINDA PHOSPHATE PROJECT

HIGHLIGHTS

- Total Measured, Indicated and Inferred Mineral Resource of 8.4 million tonnes at 29.6% P₂O₅.
- Mine optimisation and mine design work is well advanced with an Ore Reserve estimate for the Cácata deposit expected in the first Quarter of 2022.
- Progress on the Definitive Feasibility Study ("DFS") is well advanced with engineering costings expected to be completed in December 2021 and pending environmental reports, the DFS report is expected to be delivered Q1 2022.

Minbos Resources Limited (ASX:MNB) ("Minbos" or "the Company") is pleased to announce an updated JORC 2012-compliant Mineral Resource Report for the Cabinda Phosphate Project, located in Angola.

The Company's flagship Cabinda Phosphate Project is the first step in developing a high-impact self-sustaining agricultural sector throughout Angola and middle Africa, and the first step in alleviating poverty for millions of subsistence farmers who use minimal applied plant nutrition products or soil ameliorants.

The Cácata Phosphate Deposit is structurally simple, located in a narrow graben approximately 400m wide by approximately 4.5km long formed as part of the Atlantic rifting. The deposit supports simple free-dig mining without requiring drilling and blasting.

Mineralisation varies within the sedimentary layers from very high-grade gravels with coprolites, pellets, teeth and bones to silty fine grained phosphorite.

No new raw data has been incorporated in the Mineral Resource estimate (with the exception of Lidar topography, which has made a minimal, but favourable, impact).

However, there has been substantial revisions in the way in which the stratigraphic horizons and zones have been defined in the 2021 MRE versus that of the 2013 model¹.

The updated Mineral Resource Estimate ("MRE") has taken into account the requirement for 29-30% P₂O₅ grade phosphate rock to be granulated with water soluble phosphate ("WSP") to

¹ ASX announcement - Cabinda Resource Additional Information 5 December 2013

produce an Enhanced Phosphate Rock ("EPR"), which would be used directly in fertilizer manufacture of NPK fertilizer.

The MRE is reported within an optimised pit shell, and a cut-off grade of greater than 19% P₂O₅, which is based on metallurgical test work data to date and reflects a product specification grade of >29.5% P₂O₅.

TABLE 1: MINERAL RESOURCE STATEMENT CACATA PHOSPHATE PROJECT
(EFFECTIVE DATE 31 OCTOBER 2021)

Classification	Cut-off Grade (P ₂ O ₅ %)	Tonnes (Mt)	P ₂ O ₅ %	Contained P ₂ O ₅ (Mt)	Density	Ca:P ₂ O ₅ Ratio
Measured	19	2.20	29.9	0.66	1.83	1.48
Indicated	19	4.76	29.7	1.41	1.84	1.46
Measured and Indicated	19	6.96	29.7	2.07	1.84	1.47
Inferred	19	1.45	28.5	0.43	1.58	1.46

Note: Totals may not add up due to rounding.

In reporting the Mineral Resource Statement (prepared by SRK Consulting (UK) Limited ("SRK"), SRK notes the following:

- The Mineral Resources are reported on an in-situ basis for the individual phosphate seams, where the Mineral Resources are based on a cut-off grade of greater than 19% P₂O₅ which is based on the metallurgical test work data provided by Minbos, which reflects a product specification grade of greater than 29.5% P₂O₅.
- A pit optimisation exercise was completed using a re-blocked mining model, with an additional 5% ore loss factor incorporated.
- A product selling price of USD457.7/tonne for Cacata Enhanced Phosphate Rock has been applied, based on a MAP landed in Port Caio of USD700/t (52 P₂O₅ %), a blend of 15% MAP in the final product, and a Relative Agronomic Effectiveness ("RAE") of 85%.
- SRK considers there to be reasonable prospects for eventual economic extraction based on the pit optimisation exercise as well as consideration of the process flowsheet/requirements to deliver a saleable product.
- Mineral Resources have been reported on an inclusive basis, are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- The reported Mineral Resources have an effective date of 31 October 2021. The Competent Person for the declaration of Mineral Resources is Kathleen Body (SACNASP, Pr.Sci.Nat)

number 400071/07, an associate of SRK. The Mineral Resource estimate was reviewed by a team of consultants from SRK.

- Tonnages are reported in metric units, grades in percent (%). Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, SRK does not consider these to be material.

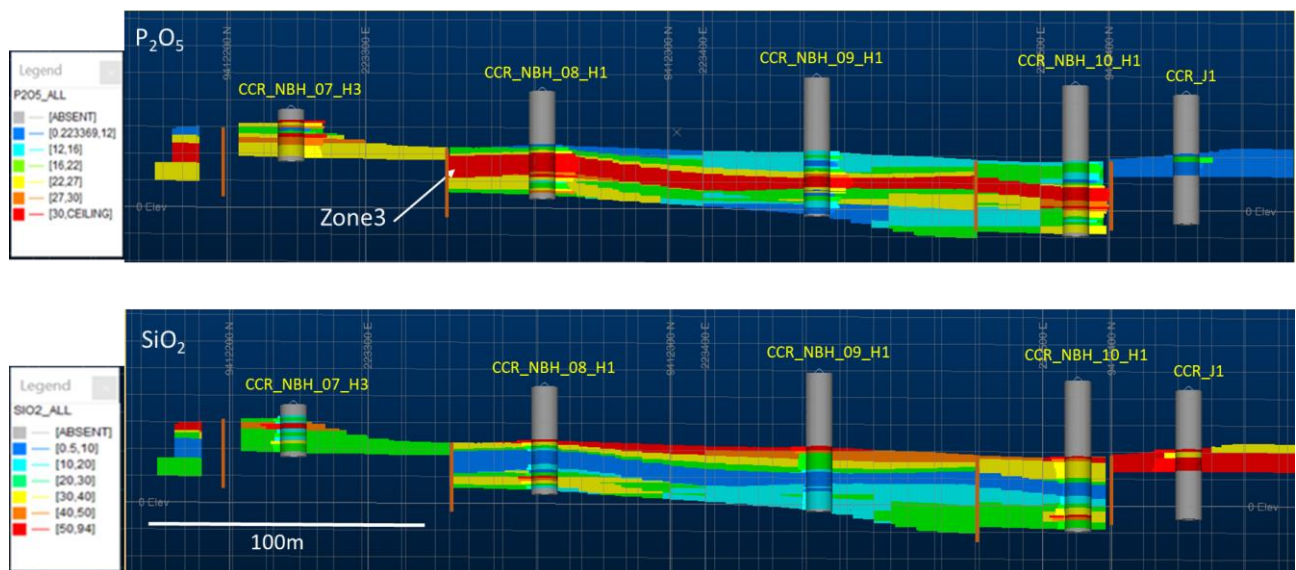


Figure 1 - Cross section through the 2021 Mineral Resource model showing the model and drillholes coloured by P_2O_5 grades (top) and SiO_2 grades (bottom) with interpreted faults shown as orange lines. Zone 3 (red) is the main phosphate unit.

Commenting on the Cacata Mineral Resource update, Minbos' CEO Lindsay Reed:

"The Company anticipates that a more continuous grade profile, due to pre-estimation domaining changes in the new Resource model, will deliver significant enhancements to the mine planning and production schedules, which are currently being generated by Orelogy Mine Consulting as part of the updated engineering study."

Next Steps

The updated Mineral Resource will now be used for open pit mine optimisation, design, and economic analysis for generation of an Ore Reserve for Cacata expected in the first quarter of 2022. The engineering works, which are being undertaken by Orelogy Mine Consulting, also includes the Mining Contract Tender process.

-ENDS -

This announcement is authorised for release by the Board of Minbos Resources

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**Grow to eat.
Grow to sell and
grow to export.**

Minbos is building a nutrient supply and distribution business that stimulates agricultural production and promotes food security in Angola and the broader Congo Basin.



Compliance Statement

With reference to previously reported Scoping Study Results, 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, in the case of material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of Minbos Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

Competent Person Statement

The Competent Person with responsibility for the total Mineral Resources of this report is Mrs Kathleen Body, Pr. Sci. Nat, who is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions ("SACNASP"). She is an Associate Resource Geologist with SRK Consulting (UK) Limited and the Director and a Principal Consultant of Red Bush Analytics. Mrs Body was a fulltime employee of Coffey Mining at the time the original Mineral Resource estimation was completed in 2013. Mrs Body has 26 years' experience in the mining industry and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which 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 Mineral Reserves. Kathleen Body consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

APPENDIX 1 - CACATA PHOSPHATE PROJECT 2021 MINERAL RESOURCE STATEMENT

Classification	Cut-Off Grade (%P ₂ O ₅)	Tonnes (Mt)	P ₂ O ₅ %	Contained P ₂ O ₅ (Mt)	CA:P ₂ O ₅ Ratio	SiO ₂ %	MgO%	CaO%	Al ₂ O ₃ %	Fe ₂ O ₃ %	K ₂ O%	Density
Measured	19	2.20	29.9	0.66	1.48	11.70	0.68	44.04	1.75	1.05	0.35	1.83
Indicated	19	4.76	29.7	1.41	1.46	13.34	0.54	43.38	1.83	1.07	0.40	1.84
Measured and Indicated	19	6.96	29.7	2.07	1.47	12.82	0.59	43.59	1.81	1.06	0.38	1.84
Inferred	19	1.45	28.5	0.43	1.46	13.93	0.57	42.99	1.79	1.10	0.41	1.58

Note: Totals may not add up due to rounding

In reporting the Mineral Resource Statement (prepared by SRK Consulting (UK) Limited ("SRK"), SRK notes the following:

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- A pit optimisation exercise was completed using a re-blocked mining model, with an additional 5% ore loss factor incorporated.
- A product selling price of USD457.7/tonne for Cacata Enhanced Phosphate Rock has been applied, based on a MAP landed in Port Caio of USD700/t (52 P₂O₅ %), a blend of 15% MAP in the final product, and a Relative Agronomic Effectiveness ("RAE") of 85%.
- SRK considers there to be reasonable prospects for eventual economic extraction based on the pit optimisation exercise as well as consideration of the process flowsheet/requirements to deliver a saleable product.
- Mineral Resources have been reported on an inclusive basis, are not Ore Reserves and do not have demonstrated economic viability, nor have any mining modifying factors been applied.
- The reported Mineral Resources have an effective date of 31 October 2021. The Competent Person for the declaration of Mineral Resources is Kathleen Body (SACNASP, Pr.Sci.Nat) number 400071/07, an associate of SRK. The Mineral Resource estimate was reviewed by a team of consultants from SRK.
- Tonnages are reported in metric units, grades in percent (%). Tonnages and grades are rounded appropriately. Rounding, as required by reporting guidelines, may result in apparent summation differences between tonnes, grade and contained metal content. Where these occur, SRK does not consider these to be material.

APPENDIX 2 - COMPARISON WITH 2013 MINERAL RESOURCE ESTIMATE

Although there has been no new raw data incorporated in the Mineral Resource estimate (with the exception of the Lidar topography, which has made a minimal impact) there have been substantial revisions in the way in which the stratigraphic horizons and zones have been established in the 2021 Mineral Resource versus that of the 2013 Mineral Resource, with the 2021 model having a more continuous grade profile due to the pre-estimation domaining changes.

The previous Mineral Resource estimate was also based on a processing method to include scrubbing and screening and flotation. The current run of mine material is intended to be granulated with Water Soluble Phosphate at the Futula granulation plant to produce an Enhanced Phosphate Rock, which will then be blended with N and K at a NPK plant to produce a NPK fertilizer which will be distributed to farmers within the region. The change of product largely affects the cut-off grade used for reporting the Mineral Resource and reduces the available tonnage in order to meet the >29.5% P₂O₅ product specification.

As a result of the modification to the geological model, the grade and tonnage profiles have also changed. These changes reflect the reinterpretation of the sedimentary layers and the estimation into domains with hard boundaries.

The high grade Measured and Indicated Mineral Resources at a cut-off of 19% has shown an increase in available tonnes. However, at an average feed grade of 29.5% there has been a reduction of approximate 10% (Measured) and 13% (Indicated) in available tonnes as some of the high-grade P₂O₅ from the 2013 estimate was contained in the footwall zones or PFCL. These tonnes now report to the Inferred category. The reduction in tonnage at 29.5%P₂O₅ is considered to be a result of the domaining which separated the very high-grade layers and there is less averaging of very high grades with lower grade hanging and footwall beds. This reduction is partially off- set by a much larger tonnage at 30% P₂O₅.

Table 1: Comparison of 2013 and 2021 Measured, Indicated and Inferred resources at various cut-off grades (not reported within a pit shell).

Classification	Cut-off Grade	2013			2021		
		Tonnes	P ₂ O ₅ %	Density	Tonnes	P ₂ O ₅ %	Density
Measured	14	4.55	24.03	1.9	2.34	29.39	1.83
Measured	19	3.35	26.80	1.9	2.30	29.57	1.83
Measured	30	0.71	32.07	1.9	1.29	33.20	1.84
Indicated	14	9.35	26.76	1.9	6.31	26.86	1.85
Indicated	19	8.23	28.16	1.9	5.08	29.22	1.84
Indicated	30	2.89	32.68	1.9	2.72	32.81	1.84
Inferred	5	11.91	8.72	1.9	8.22	14.27	1.88
Inferred	14	0.96	16.51	1.9	2.77	23.40	1.86
Inferred	19	0.12	21.79	1.9	1.61	28.96	1.84
Inferred	30	0.00	-	-	0.79	33.00	1.84
Total Measured, Indicated, Inferred	5	27.0	17.7	1.9	16.94	21.04	1.87

Figure 2: Section view comparison of the 2013 Mineral Resource model (top) with the 2021 Mineral Resource Model (bottom) coloured by P_2O_5 grades. Drillhole traces are coloured by P_2O_5 grades and also show SiO_2 grades (to the right of the drillhole traces)

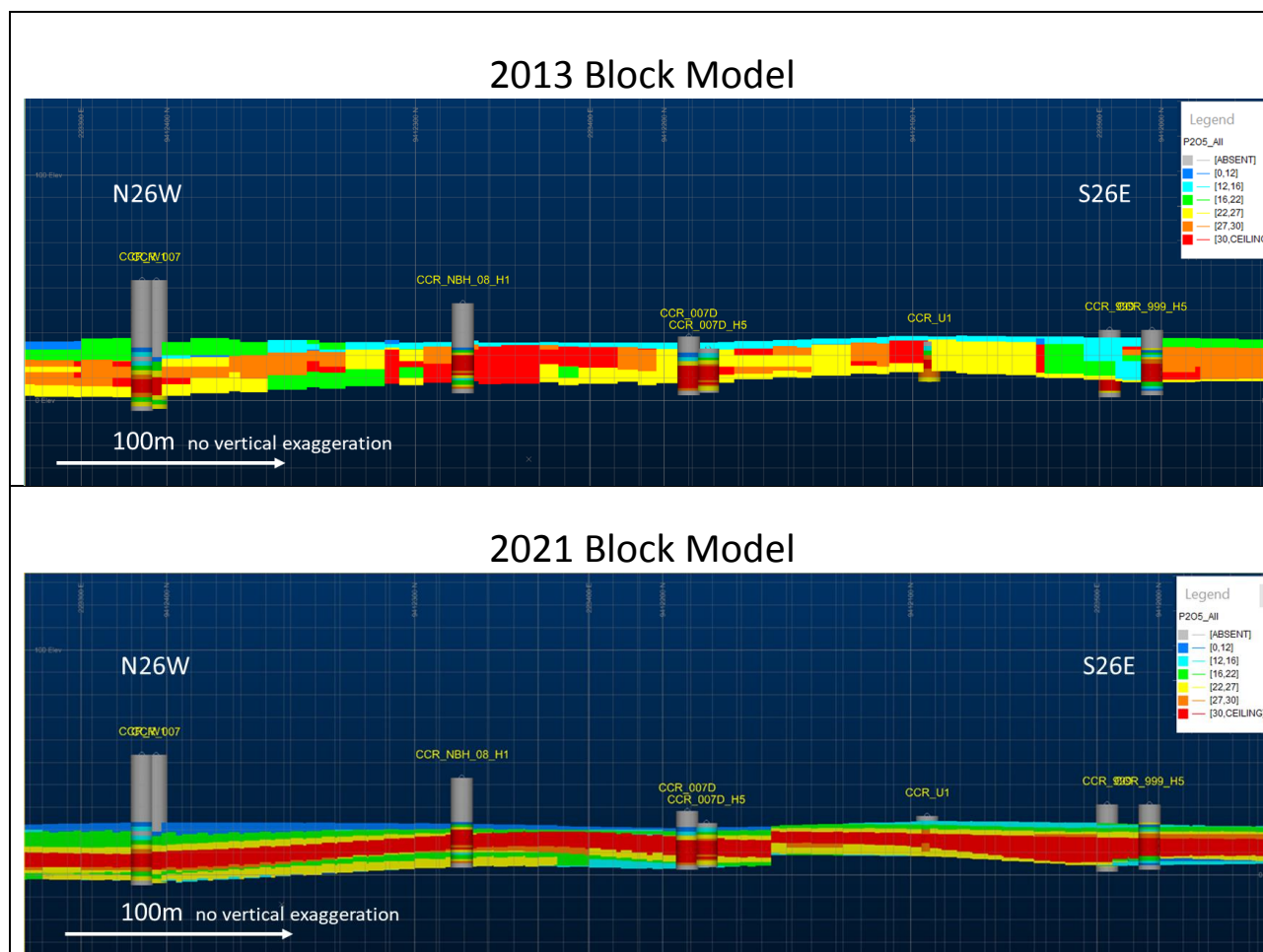
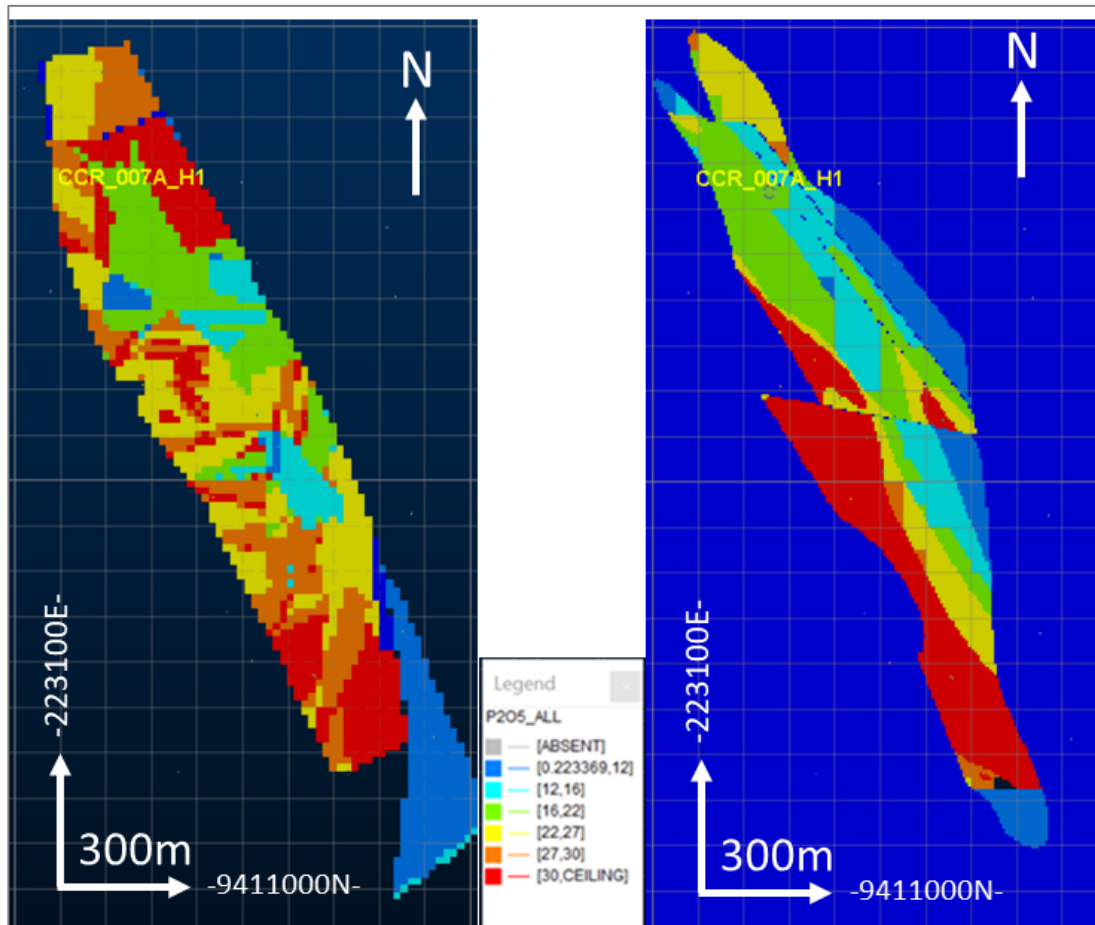


Figure 3: Plan view comparison of the 2013 Mineral Resource model (left) with the 2021 Mineral Resource Model (right) coloured by P_2O_5 grades. Please refer to Figure 2 for P_2O_5 legend colours.



APPENDIX 3 – JORC TABLE 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate for the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done; this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Primary Mineral Resource drilling used Aircore drilling (a Reverse Circulation drilling type where samples retrieved are pulverized in the drilling process.) to obtain 1m samples. Full samples were collected at the drill site. Confirmation drilling in selected locations was by conventional diamond drilling and collected core for the target horizon and some of the overburden. Sample weights of the Aircore drilling were monitored against expected recoveries. Twin twinning of drillholes with both Aircore and diamond drilling showed no substantial differences in the assay results. Depth errors in the Aircore drilling were small and not material to the Mineral Resource estimation. Samples were dried before being crushed. A rotary splitter was used to split the samples and approximately 1kg was taken for analyses. Samples were pulverised and then analysed by XRF for all major oxides, Cl, S and LOI. A Random 10% of the samples were submitted for analyses for U, F, As, Cd, Cu, Pb, Zn, Hg, TOC, C, CO₂
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is orientated and if so, by what method, etc.). 	<ul style="list-style-type: none"> Standard Aircore drilling method was used, and diamond drilling followed approaches typical for geotechnical drilling in poorly consolidated material. All holes were drilled vertically. Because of the unconsolidated/semi-consolidated nature of the material drilled the sidewalls of the holes were unstable and no downhole surveys were conducted. Most holes intersected mineralization at less than 50m below surface. Any deviation from the vertical is not material to the results of the mineral resource estimation.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure the representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Sample recovery was measured through the weight of the samples taken. Adequacy was assessed by statistical analysis to determine the mean and variability in recoveries by drillhole and material type. Core recoveries were measured as the drill core was abstracted. Recoveries were acceptable at well over 90%. Drillers' experience on the phosphate deposits and constant supervision of drilling by Senior Geologist ensured that sample recovery was of an acceptable standard. Results of twin drilling and variability testing show no correlation between sample recovery and grade.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Logging of geology and mineralization was done to a level of detail to support appropriate Mineral Resource estimation and other studies. Quantitative logging was done on all samples according to generally accepted standards for description of sedimentary rocks. Chip trays were kept for future reference. ½ Core was retained. Photographs of the core are stored with Minbos 1m samples were collected and logged from Aircore. Drill runs for the diamond drilling were in 1 m runs but sampling was done on geology and may have deviated from 1m samples. The full mineralized sequence of Upper Phosphate Member (UPM) and PFCL was sampled.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all of the core was taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality, and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise the representativity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate for the grain size of the material being sampled. 	<ul style="list-style-type: none"> • Quantitative logging was done on all samples according to the generally accepted standards for description of sedimentary rocks. Chip trays were kept for future reference. ½ Core was retained. • Half core was taken where core could be split with a blade. Where rock was severely incompetent approximately half of the material was removed from one side of the pile in the core box • Rotary splitting was used to subsample the Aircore samples. • An appropriate and tested quality control program was implemented. • In areas of economic interest, the full intersection of mineralization was sampled, samples were of uniform size and treated in the same manner. • The drilling process results in a partially pulverized and homogenized sample. Samples are at least 2 orders of magnitude larger than the largest particles. 1m samples are considered appropriate.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • Samples were analysed for major oxides using XRF. Contaminants were assayed using a variety of techniques including ICP, ISE, thermal combustion. Techniques are considered "Total" . • Deposit appropriate certified reference materials were used as quality control samples for phosphate only. There were no commercially available standard reference materials for the full oxide suite for phosphate deposits. Quality control procedures included standards, blanks, duplicates, variability testing on sample preparation procedures, multiple drilling techniques and twinning of drillholes. Umpire assays have not been done however accuracy has been demonstrated to a sufficient level of confidence with the procedures in place. Levels of precision and accuracy have been monitored over three years. Accuracy and precision have been consistent and good. Accuracy of analyses has been verified during process testwork on similar material used for the mineral resource assays.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • Verification of some intersection was done by the CP during site visits. • There are 8 twin holes at Cácata - Aircore holes twinned with core. • Assay method and QC program for twinned and diamond drill core is the same as for Aircore samples • Quality control procedures included standards, blanks, duplicates, variability testing on sample preparation procedures, multiple drilling techniques and twinning of drillholes. Umpire assays have not been done however accuracy has been demonstrated to a sufficient level of confidence with the procedures in place and subsequent process testwork. • Data entry and storage process were simple and used handwritten logs and Excel spreadsheets. No detailed written protocols were considered necessary Documentation of onsite procedures is not comprehensive but sufficient to record

Criteria	JORC Code explanation	Commentary
		<p>the processes used.</p> <ul style="list-style-type: none"> Assays are considered accurate. No adjustments were made to the assays. No cutting or capping is used in the estimation.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All collar locations have been surveyed by DGPS or Theodolite as necessary by a qualified surveyor and are considered sufficiently accurate to support the MRE. The grid system used is UTM, WGS84. The positions of the collars have been surveyed. A LIDAR topographic survey was flown in 2017. All collars have been corrected to the LIDAR. In most cases the difference is less than 4m.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Aircore drilling is widely spaced and irregular at approximately 200-250m in the UPM zone and 250-700m along the axis of the graben in the PFCL zone. Spacing is largely due to access and limited funding at the time of drilling. Infill core drilling was at 125m spacing in a regular grid in the centre portion of the deposit. The distribution is sufficient to establish geology and grade continuity in the areas of economic interest. Areas known to be lower grade with potential mining more than 10 years beyond the start of any production or requiring a different processing method may be incompletely sampled. The mineral resource classification has taken this into account. Aircore samples are 1m. Assays were done mostly on 2m composite samples. 1m assay samples were occasionally used where there were no adjacent samples to make up a composite (i.e., at geological contacts). Diamond core samples are of variable length and sampled according to visual characteristics. All samples have been composited to 1m for estimation.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> All drillholes are drilled at -90 degrees. The phosphate deposits are essentially horizontal.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> There are no security issues associated with this deposit. Possibility of major contamination or deliberate alteration is very low. Samples were put in the exploration camp where the site staff was staying. Samples were secured and there were always personnel on site camp. Samples sent to South Africa had a full set of shipping documents.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sampling procedures for drillholes were audited by the CP during drilling and assaying. There has been no additional drilling since 2012. The CP did not attend the bulk sampling nor the sampling for process testwork.

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Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>In October 2019 the Angolan Ministry of Mineral Resources and Oil announced a Tender for the Angolan phosphate licenses. Minbos submitted a successful bid and was awarded the Exploration License (314/03/03/T.E/ANG-MIREPET/2021) was issued on 10 March 2021 over the Cácata deposit. The nominal area of the License is 85km². A Mineral Investment Contract was concluded In JANUARY 2021. The licence is valid for 10 years, with a renewal requirement after 5 years. The Mining License is 85km² with sufficient area for all mining operations.</p> <p>There are no known impediments to obtaining all required licenses and permit to operate.</p> <p>Some processing facilities will be at the Futila Industrial Zone and not on the ML. Minbos has secured an appropriate site in August 2021.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Exploration was conducted by Mongo Tando Limitada of which MINBOS was one of the Partners. In 1969-1971, exploration work was conducted by Companhia de Fosfatos de Angola (Anglo American Corporation). The information is from Angolan government archives and is not of sufficient quality to be used in mineral resource evaluation.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting, and style of mineralisation. 	<ul style="list-style-type: none"> Phosphate deposits and phosphatic horizons are located in the Atlantic coastal basin within the Cretaceous and Eocene sediments. Deposits are similar to those found in Morocco, Saudi Arabia and Florida and consist of marine and fluvial gravels sands and silts. Regionally extensive low-grade deposits of phosphatic sand and silts are found in the Late Cretaceous Maastrichtian sediments. The sequence can be up to 80m thick with three mineralized layers separated by thick barren layers. Thicker sequences are found preserved in grabens. These Maastrichtian sediments are referred to in Angola and the Lower Phosphate Marker. Younger more restricted deposits of medium to high grade phosphatic gravels and sands are found developed in grabens aligned sub parallel to the Atlantic coastline. Phosphates are found on the upper most layers of the Eocene aged Pebbly Foraminiferal Clay and limestone unit (PFCL) and the Overlying Eocene/Ypresian unit Known in Angola as the Upper Phosphate Marker. The PFCL consists of phosphatic sands and lesser gravels with no limestone. There is however a dolomitic matrix in this unit sampled at Cácata and Mongo Tando to the northwest. A partial sequence has been intersected at Cácata and Mongo Tando. The Phosphorite layers of the UPM are sandy, with some gravels and overlain by sandstone and argillites. A rich fauna was found in which the following fossils have been identified: <i>Odontaspis speyeri</i> Darteville (shark-teeth), <i>Physodon tertius</i> Winkler (mackerel shark-teeth), <i>Pristis lathami</i> Galeotti (sawfish) and other. Remains found in pits dug by MTL are teeth, jawbones, and coprolites. The UPM is 6-38m thick in the Cabinda Province properties. Mineralization styles vary over the Cabinda deposits from very high-grade gravels with

Criteria	JORC Code explanation	Commentary
		coprolites, pellets, teeth, and bones to silty fine grained phosphorite with low grade regular deposits of phosphates. The phosphorite beds consist of three main mineral phases, a phosphate phase of mainly apatite/francolite/crandollite, a sand phase of predominantly silica/quartz and a clay phase of primarily iron-potassium rich clay minerals. These phases are clearly seen in the assay results from high grade phosphates and show grouped distributions of Fe_2O_3 - Al_2O_3 , SiO_2 and $\text{CaO-P}_2\text{O}_5$. Except for K_2O and MgO , other major oxides have very low grades. At lower phosphate grades the distributions are more complex and dolomite is a component of most of the deposits.
Drillhole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole downhole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> Minbos (under the Mongo Tando Limitada JV) has drilled over 300 holes throughout the Cabinda Province in 2011-2012 including 67 at Cácata. Historical drilling information is fully available in the MINBOS ASX announcements via its website. There has been no new drilling since the 2013 Mineral Resource Estimate was completed and published.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> No exploration results are being reported in this document. No metal equivalents are used in reporting or the Mineral resource estimation.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known'). 	<ul style="list-style-type: none"> Drilling is generally oriented on a grid parallel to the major deposit dimensions Drillholes intersect the mineralization perpendicular to the sedimentary layering.
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Basic maps and sections have been included in the body of this announcement.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high-grades and/or widths should be practised to avoid misleading reporting of Exploration Results. 	There is no additional exploration data material to the project.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<p>Bulk samples for test work were taken in 2016 and 2021 and are largely representative of the higher-grade layers. Additional bulk samples may be taken if current feasibility studies require additional material.</p> <p>Bulk densities were measures as part of the diamond drilling programme.</p> <p>Geotechnical characteristics were evaluated qualitatively during the bulk testing.</p> <p>Environmental studies will be required will for groundwater characteristics and contamination potential.</p>
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<p>Additional drilling or bulk sampling will only be considered as part of advanced studies at the feasibility or operational level and will be based on operational requirements determined during these studies.</p> <p>A bulk sample was collected in September 2021 and is currently on route to the United States for granulation testwork.</p>

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data have not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> Supervision and hard copy checking against the electronic version were done. Original certificates from the labs were used. Spot checks of handwritten logs and electronic copies were made. Geological boundaries were cross-validated with assay information for consistency.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> The CP has visited the site on 1 occasion after drilling operations in 2011 to assess drilling and sampling methods, inspect samples and recommend changes where needed. The CP was on site during drilling operations at related deposits in Cabinda during 2011 to observe the drilling and sampling as part of a single integrated drilling campaign.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations of Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The geology is understood to an appropriate level of detail to support the proposed approach to mining and processing being planned and the product to be produced. Levels of uncertainty are reflected in the Mineral Resource Classification. The data available consists of surface surveys, collar data, geological data, and assay results – and used in the Mineral Resource estimation. Bulk sampling and mineral processing testwork and mining studies were considered in determining cut-off grades and economic potential. Structure and sedimentological and chemical characteristics were used to define homogeneous domains. The deposit is considered as being deposited in a lagoonal/ fluvial environment. There is good sedimentological and chemical continuity at the scale of mining. The structural continuity is sufficiently well understood in terms of the hosting graben and cross cutting structures.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<p>The known dimensions of the Căcata deposit are</p> <ul style="list-style-type: none"> UPM (high grade portion) 1700m x 380m x up to 20m thick PFCL (low grade portion) 3750m x 380m x 18m thick
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer-assisted estimation method was chosen, include a description of the computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the 	<ul style="list-style-type: none"> Grades of the major elements estimated are not highly skewed and there are no extreme values that require cutting or capping. Domaining is on the basis of geometry and whole rock chemistry. <ul style="list-style-type: none"> The UPM constitutes a single sedimentary domain, split based on chemical layering and four structural blocks The PFCL constitutes a single sedimentary domain and 7 structural blocks Hierarchical and K-means cluster analysis and spatial relationships were used to define the chemical layering. Geometry was based on chemical boundaries for layering, known displacement between drillholes and Datamine's Minimum Curvature Method and Anisang facility to interpret (dis) continuity and interpolate between drillholes. Grade Estimation was based on Ordinary Kriging within chemical layering but across structural domains Full estimation parameters are not given in this table but are documented in the full Mineral Resource report include search parameters, variogram models, block model dimensions and

Criteria	JORC Code explanation	Commentary
	<p>resource estimates.</p> <ul style="list-style-type: none"> Discussion of the basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available. 	<p>statistics of input samples.</p> <ul style="list-style-type: none"> Software used is <ul style="list-style-type: none"> Standard packages statsmodel, numpy, scipy, sklearn, matplotlib in Python 3.8 for statistics and cluster analysis, Power BI for Multivariate analysis Datamine for surface modelling, block model construction, variogram modelling and Ordinary Kriging, and Leapfrog has been used for some validation routines Resource models were validated using statistical and visual checks. This study is an update of the previous modelling to account for the change in planned mineral processing and change in final product specifications. Previous models were compared with the present ones. No production has taken place
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages were estimated as dry.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> No cut-off grade was applied to the geological models. Cut-off grades in the Mineral Resource classification and reporting are based on the current processing plans and product specifications.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> Conventional quarry/mining can be done as the mineralization is unconsolidated or partially consolidated and near the surface. It constitutes a single continuous deposit, vertically and laterally, and overburden is sand and clay. There is little to no internal dilution. Faulting is minor and displacements are generally small and not expected to cause major disruption to mining. Recovery of mineralized material is expected to be approximately 95%
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> The Project sets a requirement for a 29-30% P₂O₅ Phosphate Rock to be granulated with WSP to produce an EPR which will be blended with N and K to produce an NPK fertilizer product for distribution within Angola Zone 3 (high grade phosphate >30% P₂O₅) can be used "as is" with little or no processing required. Other zones. 21,22 and 25 are lower grades but the >19% P₂O₅ will be blended with the higher grade material to create a 29-30% feed grade A product selling price of USD457.7/tonne for Cacata Enhanced Phosphate Rock has been applied, based on a MAP landed in Port Caio of USD700/t (52 P₂O₅%), a blend of 25% MAP in the final product, and a Relative Agronomic Effectiveness ("RAE") of 85%.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this 	<ul style="list-style-type: none"> Land degradation and noise/air pollution should be factors considered as part of the mine planning process. Minor agricultural activities will be disturbed, and some settlements will need to be relocated. Contaminants normally associated with phosphate deposits are at or below levels seen in

Criteria	JORC Code explanation	Commentary
	<i>stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	<p>operations at similar deposits.</p> <ul style="list-style-type: none"> No major environmental issue has been identified at this stage No tailing dam is required for the current processing methods Low grade stockpiles and overburden waste dumps will be required during mining. Primary risks are dust and sediment runoff from the operations and flooding in the river adjacent and flat lying area immediately south of the proposed pit.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss the assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Density was measured from drill core. All density is dry density. Density calculated based on measured weight/drilled volume. Drilled volume is the length of material * nominal diameter of the core. This method was used to account for swelling in the core when extracted from the core barrel and/or shrinking due to dehydration in the drying process. Immersion methods could not be used due to the unconsolidated nature of the drilled material. Weights were measured from short core lengths and multiple runs in filled core boxes. Methodology for the historical data is not known. All three sets of density measurements had similar means. Whole rock was measured before crushing. Porosity was preserved in the measured rock. A mean density for the phosphate units was used. The densities measured were in a narrow range and in the presumed bulk mining methods to be used local variability in density is unlikely to be a major variable.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> Drillhole spacing, drill type, density measurements, geology and grade continuity and processing factors were considered when classifying the Mineral Resources. All known factors related to Mineral Resource Classifications were considered. The results reflect the Competent Person's view of the Cácata phosphate deposit.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> A resource geologist from the (Mongo Tando) joint venture partner was involved in the reviews of the work done in 2012-2013. No reviews external to the project have been undertaken.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be 	<ul style="list-style-type: none"> The confidence on the Mineral Resource estimation is low to high. There is high confidence on grade continuity for the high-grade Zones at a cut-off of 19%P₂O₅. There is little difference in the global mean and variability between the different levels of classification (mean 29.57%P₂O₅+/- 9%P₂O₅ at block grades) for Zone 3. Confidence in the local estimates varies from moderate to high for the grade distributions and low to moderately high for the volume estimates. The uncertainty is reflected in the classification. Uncertainty is primarily in the volumes defined by restricted channelling in the lower layer and by the lateral limits of the host graben. Local estimates were within chemical units with well defined boundaries using Ordinary Kriging. Distributions are not highly skewed and no significant bias in the mean can be demonstrated, There is no production data for Cácata.

Criteria	JORC Code explanation	Commentary
	<i>compared with production data, where available.</i>	
