16 June 2016

Harvest Minerals Limited
("Harvest" or the "Company")

INDEPENDENT JORC COMPLIANT RESOURCE ESTIMATE COMPLETE FOR THE MANDACARU PHOSPHATE PROJECT

Harvest Minerals Limited (ASX:HMI, AIM:HMI) is pleased to announce that an independent JORC (2012) compliant, Indicated and Inferred Mineral Resource estimate has been completed for the Company's 100% owned Mandacaru Phosphate Project ("Project") in Ceará State, Brazil.

Highlights

- The Project contains a JORC (2012) compliant total resource of 4.38Mt @ 4.55% P_2O_5, which includes an Indicated resource of 1.47Mt @ 5.30% P_2O_5 and an Inferred resource of 2.91Mt @ 4.18% P_2O_5.
- The Project has an estimated additional exploration potential of 4Mt of phosphate ore with similar grades, from the extension of the estimated mineralized layers, to be proven up by further exploration assessment.
- Associated uranium ("U") and thorium ("Th") grades are lower than 400 ppm.
- This resource estimate was completed by GE21 Consultoria Mineral ("GE21"), a newly established firm comprised of the same team who carried out the resource estimate at the Sergi Project on behalf of Coffey Mining.

Separately, the Company is pleased to report that the development of the Arapua project is on track and the Company expects to shortly announce a resource associated with its drilling programme conducted in Q1, 2016. Additionally, the Company is working with GE21 in the preparation of a scoping study. The Company anticipates substantial forward movement in relation to Arapua during Q3, 2016.

Commenting on the resource estimate, Harvest Executive Chairman, Brian McMaster stated:

"Completion of this resource estimate, within months of the acquiring the asset in December 2015, demonstrates Harvest's ability to quickly and substantially add value to projects at minimal cost. With Arapua, Sergi, Capella and now Mandacaru, we are steadily building a portfolio of phosphate and potash assets that will enable us to realise our goal of becoming a significant South American fertilizer company. Whilst we continue to acquire and develop other projects, which meet our capital and cost requirements, the short term focus remains on the development of the Arapua Phosphate Project which is progressing according to the Company's expectations."

Enquiries:

Harvest Minerals Limited	Brian McMaster, Chairman	Tel: +61 8 9200 1847
Strand Hanson Limited (Nominated & Financial Adviser)	Rory Murphy James Spinney Ritchie Balmer	Tel: +44 20 7409 3494
Mirabaud Securities LLP (Broker)	Rory Scott	Tel: + 44 20 7878 3360
Buchanan (Financial PR)	Bobby Morse Anna Michniewicz	Tel: +44 20 7466 5000

Mandacaru Project Background

Harvest acquired the Mandacaru project, in December 2015 and the Project now comprises three exploration licences covering a total area of 5,908.67 hectares.

Some exploration work, including a ground radiometric survey, mapping, surface rock sampling, trenching and a 2,141 metre diamond drilling programme over 32 holes, was carried out by the asset's former owner, B&A Mineração Ltda, in 2013.

Harvest acquired this data in return for a 2% Net Smelter Royalty from future production (capped at an aggregate amount of US$1 million).

Geological Model

At Mandacaru, the phosphate mineralisation occurs as colophanite, which is hosted in structurally controlled hydrothermal breccias, calcissilicated and gneissic rocks. Following the conversion of the license applications into full exploration licenses earlier this year, the Company's team in Brazil reprocessed the historic data.

Together with independent consultants GE21, the Company constructed a geological model through the interpretation of vertical sections based on the drill holes, using lines and polygons to generate solids (wireframes). In total, four mineralized layers were modeled for Mandacaru target (Figure 01).

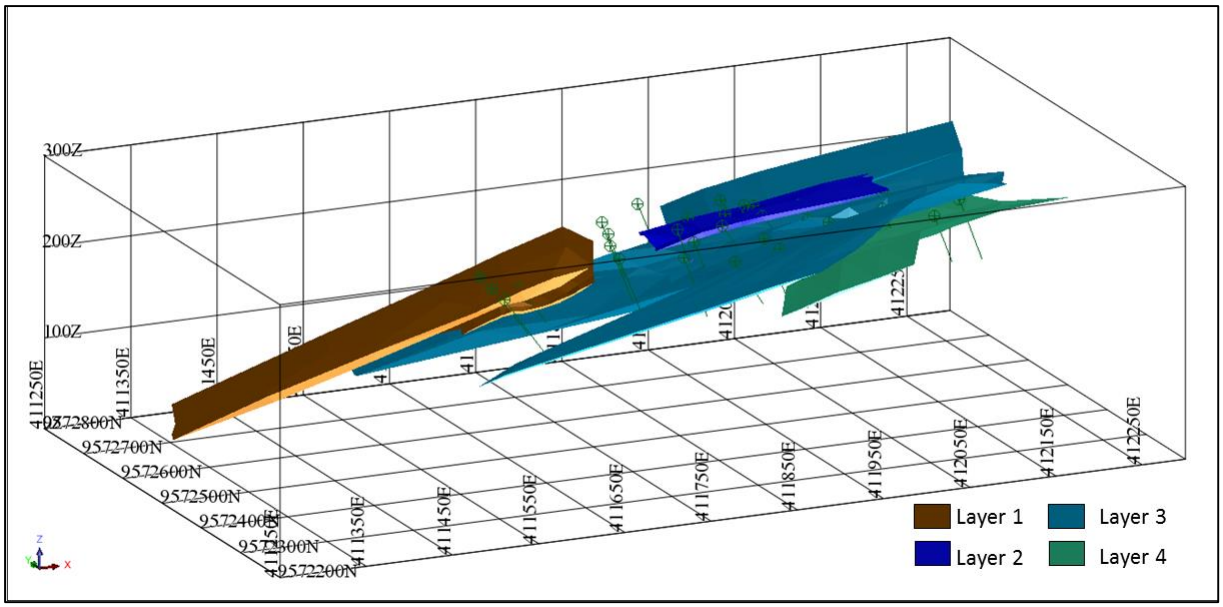


Figure 01 – Mandacaru Target – 3D Geological Model.

The shape of the geological models presents flat-lying phosphate mineralized bodies gently dipping to the WNW.

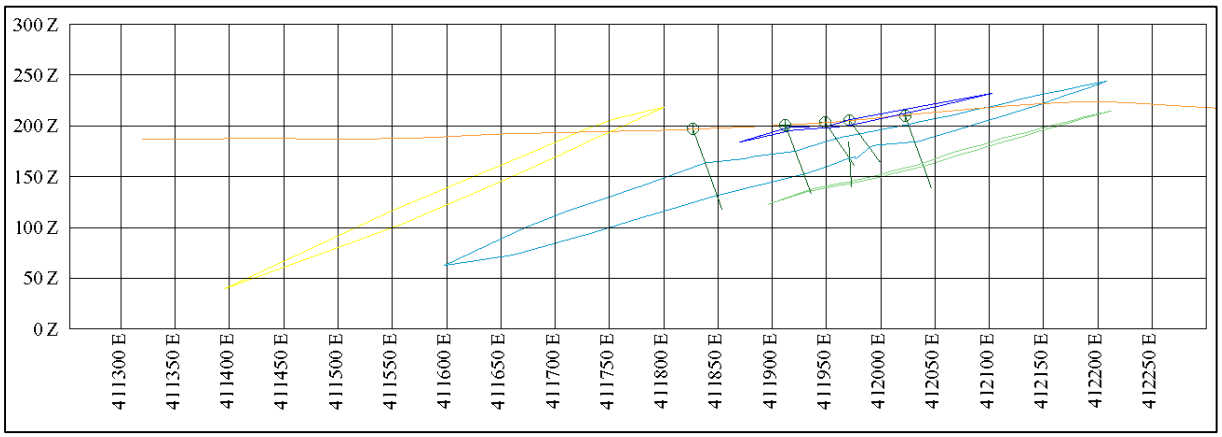


Figure 02 – Mandacaru Target – Vertical Section.

Mineral Resource

Block models were developed for each of the four mineralized layers (Figure 03) and the resource was estimated using Ordinary Kriging (OK) with the results validated with a comparative Nearest Neighbor estimation (NM).

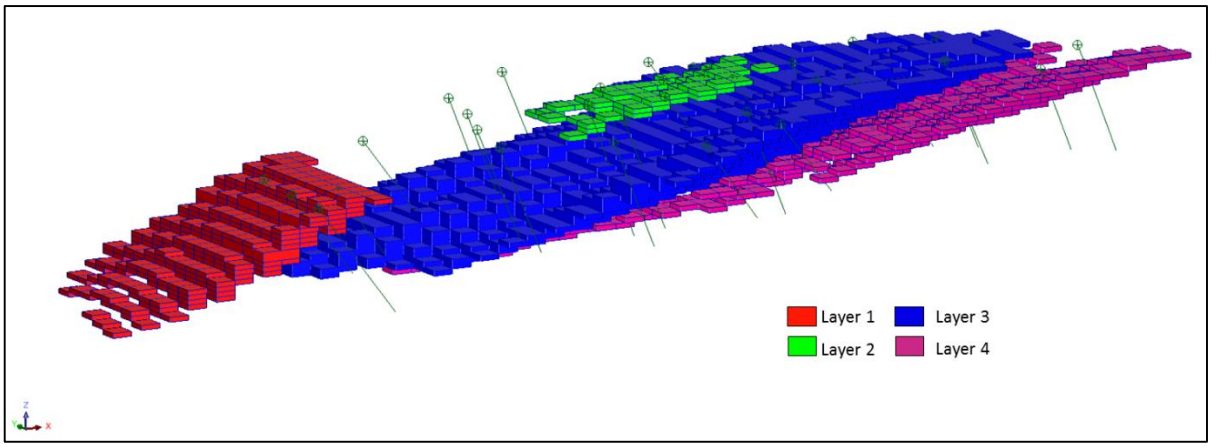


Figure 03 – Mandacaru Target – Block Model.

A 2.0% P_2O_5 cut-off grade was applied to the resource estimate which was categorized as Indicated and Inferred with a total global resource of 4.38Mt @ 4.55% P_2O_5 (Table 01).

The total U and Th grades for the global resources are under 400 ppm.

Table 01 – Mandacaru Target – Mineral Resources.

Block Model: 25m x 25m x 6m (12.5m x 12.5m x 3m) – 2.0% P_2O_5 cutoff grade applied						
Resource	**Layer**	**Tonnage (Mt)**	**P_2O_5%**	**CaO%**	**U ppm**	**Th ppm**
Indicated	3	1.47	5.30	15.88	265.23	57.81
Inferred	1	0.44	6.32	22.16	659.20	32.47
	2	0.05	4.66	8.11	128.37	38.67
	3	1.50	4.34	17.23	199.32	45.12
	4	0.92	2.87	9.47	328.57	49.59
Total Inferred		2.91	4.18	15.36	308.51	44.54
Total Indicated + Inferred		4.38	4.55	15.53	293.97	48.97

GE21 estimates that there is an additional potential of 4Mt of ore for exploration with similar P_2O_5 grades to the current resource. The additional potential is related to the extension of the mineralized layers at Mandacaru target and should be confirmed by further exploration works.

COMPETENT PERSON STATEMENT

The information in this statement that relates to the Mineral Resource and Exploration Target is based on information compiled by Mr. Bernardo H C Viana who is a geologist and full time director and owner of GE21 and is registered as Competent Person in the AIG (Australian Institute of Geoscientists). Mr. Bernardo Viana has sufficient relevant experience to the style

of mineralization and type of deposit under consideration and to the activity that is being undertaken 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. Viana also meets the requirements of a qualified person under the AIM Note for Mining, Oil and Gas Companies and consents to the inclusion in the release of the matters based on their information in the form and context in which it appears. Mr. Viana accepts responsibility for the accuracy of the statements disclosed in this release.

CAUTIONARY STATEMENTS

The Company's Exploration Target includes potential quantity and grade and is conceptual in nature. There has been insufficient exploration to define these mineral resources and it is uncertain if further exploration will result in the determination of mineral resources.

The reader is cautioned that a Mineral Resource is an estimate only and not a precise and completely accurate calculation, being dependent on the interpretation of limited information on the location, shape, and continuity of the occurrence and on the available sampling results. Actual mineralisation can be more or less than estimated depending upon actual geological conditions. The Mineral Resource statement includes Inferred Mineral Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there can be no certainty that further exploration work will result in the determination of Indicated or Measured Mineral Resources. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. No Mineral Reserves are being stated.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole 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 representivity 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• *Harvest Minerals LIMITED (Harvest Minerals) has acquired the historical data from Mandacaru Project of B&A Mineração Ldta. The data includes information from 32 diamond drill holes. The drill hole database includes information of collar location, geological log, geotechnical, handheld XRF, gamma-spectrometry, sample assay, QA/QC and dip survey data.* • *Diamond drill core was sampled as half core in intervals varying from minimum 0.3m to maximum 3m, in compliance to the geological description. Average sample length was 1.6m.* • *100% of the drilling was diamond drill core. There is a total of 2,141.8 meters of drilling.* • *To ensure representative sampling, diamond cores were marked considering mineralization intensity and structure orientations, then sawn, and the half core was sampled.* • *Drill samples collected in 2013 were sent to the SGS Geosol laboratory in Belo Horizonte - Brazil. Samples were prepared and analysed at SGS Geosol in Brazil. Samples were prepared by drying at 105°C, crushing at 3mm, homogenization, splitting to obtain a 250 g representative pulp and pulverizing to 150 mesh. The assay package used for all samples sent to SGS laboratories was ICP95A/IMS95A with dissolution by Lithium metaborate fusion. The Lithium metaborate fusion dissolves the major rock-forming elements of a sample as well as most trace minerals. This package, which includes major and some trace elements analyzed via ICP-OES. For a further suite of trace elements, the same solution was analyzed via ICP-MS.* • *QA/QC samples, including reference materials, blanks, and duplicates, were systematically introduced in the batches to the lab at a nominal rate of approximately 2:10.*

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• *Diamond drilling was carried out using NQ (47.6mm) and HQ (63.5mm) core-sized equipment with standard tubes. Approximately 36% of the core is HQ size and 74% is NQ size.*
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure 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.*	• *Recoveries from core drilling were measured and recorded in the database. Core recovery averaged 92%. Higher core loss occurred in the top weathered zone.* • *No significant loss of mass was observed in the mineralized zone.*
Logging	• *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.*	• *Drill core was logged in detail for lithology, weathering, alteration style and intensity, mineralization style and intensity and structures. A Rock Quality Designation (RQD) log was kept for geotechnical purposes.* • *Geologic rock types, alteration and structure are recorded based on visual determination.* • *Diamond core was photographed.* • *All drill holes were logged in full.*
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core 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 representivity 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 to the grain size of the material being sampled.*	• *Diamond core was cut in half using an electric core saw in competent ground and hand split in clay.* • *The sample was prepared and bagged to prevent the absorption of atmospheric moisture* • *The core sample preparation technique is compliant with best practices and appropriate for the mineralization type.* • *Field duplicates were taken at 1 in 10 for assessment of sampling error.* • *Sample sizes are considered appropriate to the phosphate mineralization based on the style of mineralization, thickness and consistency of the intersections, sampling methodology, and assay value ranges for phosphate.*
Quality of assay data and	• *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 analyses were conducted at the SGS Geosol lab, located in Belo Horizonte, Brazil. The assay package used for all samples sent to SGS laboratories was ICP95A/IMS95A with dissolution by Lithium metaborate fusion. Inductively Coupled Plasma Optical Emission*

Criteria	JORC Code explanation	Commentary
laboratory tests	*the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	*Spectrometry (ICP-OES) and Inductively coupled plasma mass spectrometry (ICP-MS) equipment were used for the assay measurements. The results comprise the grades for oxides (Al_2O_3, CaO, Cr_2O_3, Fe_2O_3, K_2O, MgO, MnO, Na_2O, P_2O_5, SiO_2, TiO_2,) and elements (Ba, Sr, V, Zn, Zr, Ce, Co, Cs, Cu, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Lu, Mo, Nb, Nd, Ni, Pr, Rb, Sm, Sn, Ta, Tb, Th, Tl, Tm, U, W, Y and Yb).* • *Measurements with handheld XRF (model Delta Standard - Innov-X Systems manufacturer) and gamma-ray spectrometer (model RS 230 with Bismuth Germate Oxide detector type) were taken in the core at each 50cm interval. The handheld XRF analyzer was calibrated after each 20 measurements. The measurements using the gamma-ray spectrometer were made in assay mode with each sample measured for 60 seconds. The assay mode allowed the recording measurements of Total Count, K, Th and U channels.* • *Industry standard certified reference materials (CRMs) and blanks were utilized in order to check laboratory assay quality control.* • *QA/QC samples, including reference materials, blanks, and duplicates, were systematically introduced in the batches to the lab in nominal rate of approximately 2:10.*
Verification of sampling and assaying	• *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.*	• *All drilling results are historical in nature.* • *Verifications of mineralization intersections in core samples have been undertaken and reported by GE21 consultant.* • *There are no twin holes.* • *A comprehensive library of protocols were produced and stored in electronic storages.* • *No adjustments have been made to the assay data.*
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• *The location of each auger drill hole was registered with the help of a hand-held GPS Garmin model 62CSX Map and the coordinates were recorded on System UTM, Datum SAD69, zone 24 south.* • *Down-hole surveys of core holes were performed by the drilling contractor using the "FlexIT SmartTool" electronic multi-shot.*

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is 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.*	• *Drill hole spacing varies from 11m to 108m.* • *Drill spacing is adequate to define the geological and grade continuity for Mineral Resource and Ore Reserve estimation. Classification has taken into account data quality, drill spacing and production data.* • *Sample lengths within the database are not composited. Sample compositing was applied to data extracts for statistical analysis and Mineral Resource modelling.*
Orientation of data in relation to geological structure	• *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.*	• *Most of the holes are angled holes, with inclinations ranging from 55 to 70 degrees, dipping in general to ESE. The phosphate-mineralized bodies follow a flat-lying regional structure with a gentle dip to the WNW.* • *No sampling bias is recognized as a result of drilling orientation and mineralized strata.*
Sample security	• *The measures taken to ensure sample security.*	• *Drilling and sample custody were supervised by B&A technical team.* • *Samples are stored on site at a fenced and gated facility until collected for transport to SGS laboratory in Belo Horizonte.* • *Tracking sheets are available to track sample progress.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *GE21 performed a database audit in February 2016 with site review of geologic processes, production sampling and process control. All available assay certificates from the SGS laboratory were compared to the database.* • *GE21 is of the opinion that the QA/QC indicates the information collected is acceptable, and the database can be used for Mineral Resource estimation.*

Section 2 Reporting of Exploration Results

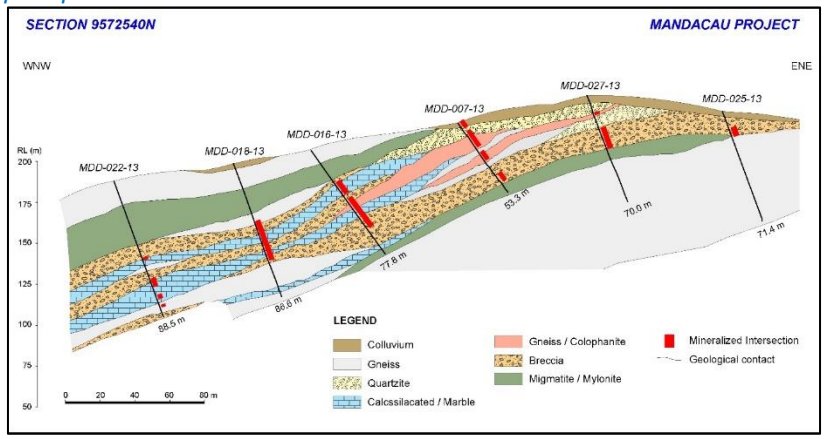
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and	• *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*	• *The Mandacaru Project comprises three exploration licences covering a total area of 5,908.67 hectares.* • *The mineral properties at Mandacaru Project are registered under the following processes; 800.122/2015, 800.123/2015 and 800.651/2015.*

Criteria	JORC Code explanation	Commentary
land tenure status	*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.*	• *The licenses are in good standing with no known impediment to the granted mining permit.*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *In 2013, TSX listed Rio Verde Minerals Ltd conducted an exploration program on the project which was subsequently extended by a Brazilian mining company, B&A Mineração Ltda ("B&A").* • *Historical data, including the physical core dated 2013, was acquired from B&A.*
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The Mandacaru Phosphate Project is located within the Borborema Province, more specifically inside the Ceará Central, which is composed of a gneiss-migmatitic Transamazonic basement, metassedimentary sequences, which occur predominantly within the domain, and the Archean core with U-Pb age of 2.78Ga, called Tróia-Tauá Massif.* • *Amorphous apatite (collophanite) phosphate mineralization in Paleoproterozoic metamorphic rocks.*

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole 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.*
		• *Production drilling and surface mapping was available for the construction of the geological and Mineral Resource model.*

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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*	• *Mineralized intersections were aggregated based on the weighted arithmetic mean.* • *A cut-off grade of 2.0% P_2O_5 was used.* • *No metal equivalent values have been used.*

Criteria	JORC Code explanation	Commentary
	such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *Phosphate mineralization occurs along a flat-lying structure* • *The geological model created for the mineral resource estimate incorporates an inherent correction for down hole length and true width of mineralization.*
Diagrams	• *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 drill hole collar locations and appropriate sectional views.*	• *The cross-section below shows a flat-lying structural control of the phosphate mineralization.* 
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• *Grades included in this announcement are historical in nature and not generated by Harvest.*
Other substantive exploration data	• *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.*	• *Historical exploration activities conducted over the property include ground radiometric survey, mapping, surface rock sampling, trenching and 2,141.8 meters of diamond drilling.*

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg 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.*	• *Extension of ground radiometric survey.* • *Diamond drilling program.*

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has 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.*	• *Data extracted from the database for Mineral Resource estimation purposes was run through general checks to ensure data is valid. GE21 performed an audit on the database on February 2016. The audit compared scans of original drill logs (lithology, sampling, results) to values contained in the database and also with the core and annotations on the core boxes. The audit also electronically compared assay results supplied directly from SGS Geosol to the database.* • *Checks on data include sensible ranges of values for attributes, drill hole collars matching topography and with expected limits, overlapping sample intervals, depths, azimuths, dips and co-ordinates for consistency. Any inconsistent information is either modified or excluded from use in estimation.* • *There are no significant problems found in the database.*
Site visits	• *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.*	• *Mr. Bernardo H C Viana who is registered as Competent Person in the AIG (Australian Institute of Geoscientists) visited the project area and core shed between February 21st and 24th, 2016.* • *As part of the external audit, field locations for 32 historic drill collars were collected and compared to database coordinates.* • *Drillholes location and data materiality and the conceptual geological model have been validated. Sampling procedures were also validated.*
Geological interpretation	• *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 geologic model level of confidence is considered moderate to good, with information available from 32 drill holes.* • *The data used for the geologic model included all the information*

Criteria	JORC Code explanation	Commentary
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	*available from diamond drilling.* • *The limits of mineral resources were determined using the drill hole information.* • *The continuity of modelled potential zone was based on drill hole information and interpretation results from surface mapping and ground radiometric survey.*
Dimensions	• *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.*	• *The Mineral Resource extends 800m in the east/west direction by roughly 300m north/south.* • *Four mineralized layers were modelled for Mandacaru target. The layers 01, 02 and 03 outcrop in their eastern portion. Layers 02 and 03 roughly reach 130 m bellow surface in their western portion.*
Estimation and modelling techniques	• *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 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 (eg 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 resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• *The resource estimation was performed on the P_2O_5wt% variable.* • *Resources were estimated for 4 layers using 2.0% P_2O_5 cut-off grade.* • *The tonnages and grades were estimated based on the volume estimate calculated from a Gemcom Surpac wireframe model of the project to which the average density and weighted average P_2O_5 grade of each drill hole was applied.* • *No previous estimates were conducted in the project.* • *No assumptions were made regarding recovery of by-products.* • *No assumptions were made regarding these elements.* • *Drill hole spacing varies from 11m to 108m. A block model was created for the Mandacaru Project area in using a parent block of 25mE x 25mN x 6mRL with sub-blocks of 12.5mE x 12.5mN x 3mRL in all mineralized layers*. • *No assumptions were made regarding selective mining units.* • *Exploratory data analyses (EDA) showed that phosphate mineralization has a structural control forming flat-lying mineralized bodies with gentle dipping to WNW. The mineralization was not constrained by rock types.* • *The method used for the estimate was Ordinary Kriging (OK). Validation of estimated grades was carried out with a comparative Nearest Neighbour estimation (NM).*

Criteria	JORC Code explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• *Tonnages are estimated on a dry basis.*
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• *The cut-off grade for resource was determined at 2% of P_2O_5 based on the deposit interceptions.*
Mining factors or assumptions	• *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.*	• *No assumptions were made regarding mining factors.*
Metallurgical factors or assumptions	• *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.*	• *No assumptions were made regarding metallurgical factors.* • *No metallurgical tests were conducted on Mandacaru Project.*
Environmental factors or assumptions	• *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 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.*	• *No assumptions were made regarding environmental factors.* •
Bulk density	• *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*	• *Bulk density determinations are made on selected diamond drill core samples using the water displacement method.* • *The density test procedure was applied on 232 core samples from Mandacaru Target.* • *An estimated variable density by Distance Square method was*

Criteria	JORC Code explanation	Commentary
	methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	*performed for the mineralized bodies and the wall rock.*
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie 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.*	• *Mineral Resources were classified as Indicated resources and Inferred resources based on the on the assessment of the data, geological interpretation, quality of grade estimation and type of mineralization.* • *Drill hole spacing varies from 11m to 108m, but the average distance for drill holes spacing is roughly 60m.* • *Results reflect the Competent Persons' view of the deposit.* • *The Mandacaru Target contains a JORC (2012) compliant total resource of 4.38Mt @ 4.55% P2O5, which includes an Indicated resource of 1.47Mt @ 5.30% P2O5 and an Inferred resource of 2.91Mt @ 4.18% P2O5.* • *The Project has an estimated additional exploration potential of 4Mt of phosphate ore with similar grades, from the extension of the estimated mineralized layers, to be proven up by further exploration assessment.*
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• *No audit of the estimate has been undertaken.*
Discussion of relative accuracy/ confidence	• *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 compared with production data, where available.*	• *Estimated grades were compared to a nearest neighbour model to check for global bias. The bias obtained for P_2O_5 in the axis E, N and RL were considered within acceptable ranges.* • *No trends in the grade estimates were identified by plotting the mean values from the nearest neighbour estimate versus the kriged results for Indicated blocks in east-west, north-south and vertical swaths.* • *There are no production data to be compared.*