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ASX Limited
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# AMMAROO PHOSPHATE DEPOSIT RESOURCE UPGRADE

## Highlights

- **During 2016, 201 in-fill reverse circulation (RC) holes and 29 diamond cored holes were drilled in the central northern part of the Ammaroo Phosphate Resource**
- **This work focused on the shallowest, potentially most easily mined, part of the resource which also contains phosphate with low iron content**
- **Drilling was designed to uplift a portion of the Inferred Mineral Resource to Indicated and to enable a Bankable Feasibility level of mine planning in the shallow, low iron, part of the resource**
- **The Indicated Mineral Resource tonnage using a 10% $P_2O_5$ cut-off has more than doubled from 80 Mt at 15.3% $P_2O_5$ announced in December 2014 to 165 Mt at 15.5% $P_2O_5$**
- **The portion of Indicated Mineral Resource with low iron (<5% $Fe_2O_3$ and >10% $P_2O_5$) has almost tripled from 33 Mt to 90 Mt**
- **The Indicated plus Measured resource at 10% $P_2O_5$ cut-off is now 301 Mt at 15.5% $P_2O_5$ compared with 215 Mt at 15.4% $P_2O_5$ previously in 2014**
- **Using a 15% $P_2O_5$ cut-off, the Indicated Mineral Resource is now 72 Mt at 19% $P_2O_5$ compared with 38 Mt at 18.1% $P_2O_5$ previously in 2014**
- **The overall estimated Mineral Resource remains substantially unchanged at 1.141 billion tonnes at 14% $P_2O_5$ using a 10% $P_2O_5$ cut-off**

Verdant Minerals Ltd is pleased to announce a significant uplift of the Indicated Resource at its flagship Ammaroo Phosphate Project. The Project is located in the southern Georgina Basin, 280 km northeast of Alice Springs and 240 km southeast of Tennant Creek in the Northern Territory.

The Resource upgrade follows a 2016 drilling campaign designed to increase the Mineral Resource category of the central northern part of the phosphate resource from Inferred to Indicated. This infill drilling was required to enable mine planning at a Bankable Feasibility level of accuracy in the shallowest, potentially most easily mined, part of the resource which also contains low levels of potentially deleterious iron.

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## Ammaroo Phosphate Resource Upgrade March 2017

Table 1 shows that, relative to the December 2014 estimates, the Indicated Resource tonnage at 10% $P_2O_5$ cut-off has more than doubled with a corresponding 1% increase in $P_2O_5$ grade and an 18% decrease in potentially deleterious iron ($Fe_2O_3$).

| | December 2014 | | | March 2017 | | | Difference | | |
|---|---|---|---|---|---|---|---|---|---|
| **Category** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** |
| Measured | 135 | 15.4 | 4.94 | 136 | 15.4 | 4.93 | 1% | 0% | 0% |
| Indicated | 80 | 15.3 | 6.75 | 165 | 15.5 | 5.52 | 106% | 1% | -18% |
| Meas + Ind | 215 | 15.4 | 5.61 | 301 | 15.5 | 5.25 | 40% | 1% | -6% |
| Inferred | 930 | 14 | 6.6 | 840 | 13 | 6.9 | -10% | -7% | 5% |
| **Total** | **1,145** | **14** | **6.4** | **1,141** | **14** | **6.5** | **0%** | **0%** | **2%** |

**Table 1. Changes to the resource estimates at a 10% $P_2O_5$ cut-off since the December 2014 announcement. Figures are rounded and totals include rounding errors.**

The lower iron material that may be the focus of initial production, (Indicated material reported at 10% $P_2O_5$ lower cut-off and excluding blocks with estimated $Fe_2O_3$ grades of greater than 5%), has approximately tripled (Table 2).

| | December 2014 | | | March 2017 | | | Difference | | |
|---|---|---|---|---|---|---|---|---|---|
| **Category** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** |
| Measured | 89 | 16 | 2.34 | 90 | 16.0 | 2.33 | 1% | 0% | 0% |
| Indicated | 33 | 15.9 | 2.77 | 90 | 16.2 | 2.38 | 173% | 2% | -14% |
| Meas + Ind | 122 | 16.0 | 2.46 | 180 | 16.1 | 2.36 | 4% | 1% | -4% |
| Inferred | 420 | 14 | 2.9 | 360 | 14 | 3.0 | -14% | 0% | 3% |
| **Total** | **542** | **14** | **2.8** | **540** | **15** | **2.8** | **0%** | **2%** | **0%** |

**Table 2. Comparison of current and December 2014 estimates at a lower 10% $P_2O_5$ cut-off and 5% upper $Fe_2O_3$ cut off. Figures are rounded and totals include rounding errors.**

The Indicated Resource at a 15% $P_2O_5$ cut-off has also significantly increased (Table 3).

| | December 2014 | | | March 2017 | | | Difference | | |
|---|---|---|---|---|---|---|---|---|---|
| **Category** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** | **Mt** | **$P_2O_5$%** | **$Fe_2O_3$%** |
| Measured | 60 | 18.4 | 4.11 | 61 | 18.5 | 4.12 | 2% | 1% | 0% |
| Indicated | 38 | 18.1 | 6.68 | 72 | 19 | 5.23 | 89% | 5% | -22% |
| Meas + Ind | 98 | 18.3 | 5.11 | 133 | 18.8 | 4.72 | 36% | 3% | -8% |
| Inferred | 250 | 18 | 6 | 200 | 17 | 6.6 | -20% | -6% | 10% |
| **Total** | **348** | **16** | **5.7** | **333** | **18** | **5.8** | **-4%** | **-2%** | **2%** |

**Table 3. Comparison of current and December 2014 estimates at 15% $P_2O_5$ cut-off. Figures are rounded and totals include rounding errors.**

MPR Geological Consultants Pty Ltd (MPR) reviewed the reliability of drilling information and estimated Mineral Resources for the Ammaroo Phosphate Deposit as per JORC 2012 guidelines. Their study included 201 reverse circulation (RC) holes and 29 diamond cored holes drilled since MPR last estimated resources for the project in December 2014. The current estimates are based on data from RC and diamond drilling completed by Rum Jungle Resources Ltd (now Verdant Minerals Ltd) and Central Australian Phosphate Pty Ltd (now a subsidiary of Verdant Minerals Ltd) since 2010. Subset to the study area, the compiled database contains 3,584 RC holes and 116 diamond holes for 113,456 metres of drilling. RC holes were drilled at spacings varying from 50 by 50 metres in several central areas of the deposit to around 400 by 400 metres for much of the resource area with broader sampling in peripheral areas. Diamond holes were generally drilled in close proximity to RC holes and were primarily intended to provide samples for density measurement and comparison with RC results.

Cultural Exclusion Zones determined by Traditional owners and the Central Land Council have been excluded from the resource estimates. Any future resource drilling will be restricted by these zones.

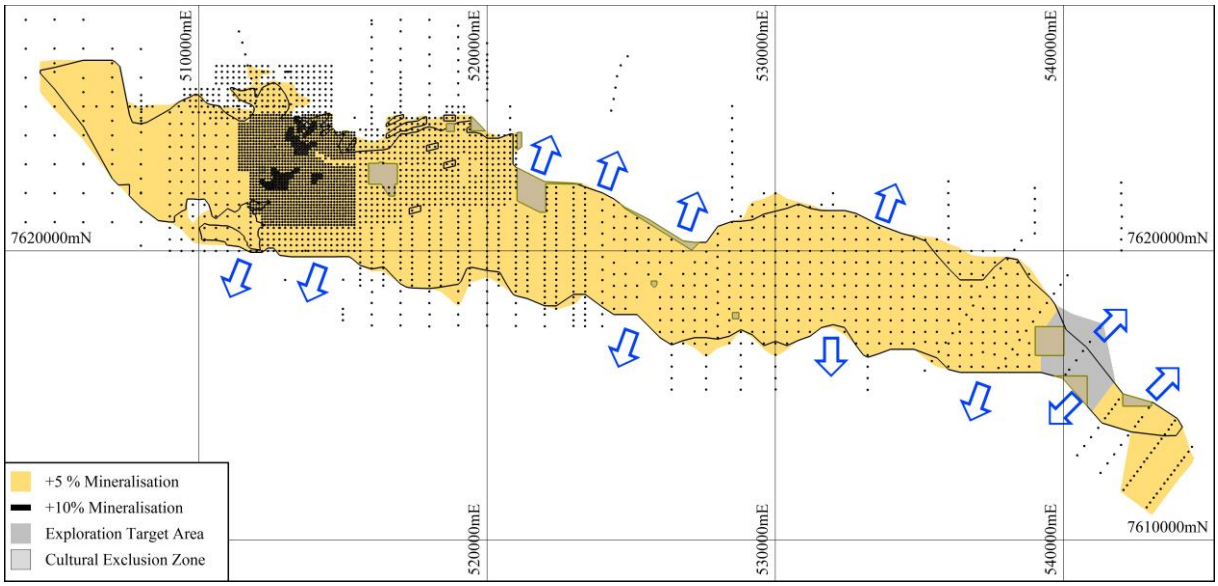


**Figure 1. Mineralised domains and drillholes at the Ammaroo Phosphate Project. The blue arrows indicate where mineralisation is open at 10% $P_2O_5$. Model B with a 5% cut-off referred to in text is shown in yellow.**

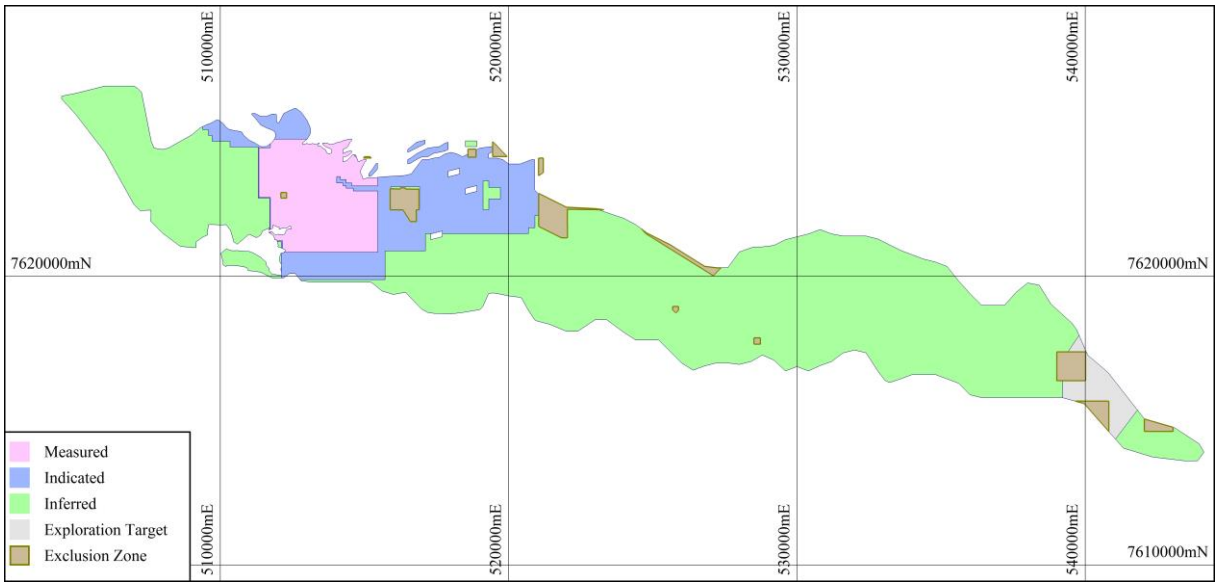


**Figure 2. Measured, Indicated, Inferred Resources at 10% $P_2O_5$ cut-off and Exploration Target. The resources quoted have been trimmed to exclude cultural exclusion zones within, and defining the periphery of, the resource.**

The estimates include a density of 1.7 t/bcm on the basis of 254 immersion density measurements of diamond core samples from 61 diamond holes.

Prior to variogram modelling and resource estimation, the mineralised domain composites were unfolded to remove the gentle undulations from the mineralised domains. Resources were estimated by Ordinary Kriging of one metre down-hole composited assay grades from RC and diamond drilling. The Kriged estimates were re-folded to their correct positions in the compiled block model. Two Ordinary Kriged models designated as Model A and Model B respectively were constructed to provide estimates at the range of cut-offs.

Model A, which is used for reporting estimates at $P_2O_5$ cut-off grades of 10% and higher is based on a mineralised envelope capturing zones of continuous mineralisation grading more than approximately 10% $P_2O_5$ with a comparatively small internal higher grade domain interpreted at nominally 23% $P_2O_5$ cut-off. Combined Model A domains trend approximately east-west over approximately 42 kilometres of strike with an average thickness of around 7.0 metres and an average north-south width of approximately 3.5 kilometres. The internal High Grade domain compromises several isolated zones with an average thickness of around 2.7 metres. The domains are overlain by an average of about 23 metres of generally barren material.

Model B, which is used for reporting estimates at 5% cut-off, is based on mineralised domains capturing zones of continuous mineralisation grading more than approximately 5% $P_2O_5$. The Model B domains comprise a main envelope and a subsidiary shallower zone at Limestone Bore. Model B domains extend over approximately 42 kilometres of strike with an average width of approximately 3.8 kilometres and an average thickness of about 10.5 metres.

Both models include estimates for approximately four kilometres of potentially mineralised strike in the far east of the deposit tested by a single traverse of RC holes. Mineralisation in this area is too poorly defined for estimation of Mineral Resources and all estimates for this area are considered as representing Exploration Targets and are not included in Mineral Resources.

For cut-off grades of up to 15% $P_2O_5$ mineralisation sampled by consistently 100 by 100 metre and spaced drilling are classified as Measured and estimates based on 200 by 200 metre spaced drilling are assigned to the Indicated category. More broadly sampled mineralisation is classified as Inferred.

For cut-off grades of 15 to 20% $P_2O_5$, mineralisation tested by consistently 200 by 200 metre or closer spaced drilling classified as Indicated and all other estimates are classified as Inferred.

For cut-off grades of 23% $P_2O_5$ and higher, estimated resources are restricted to the High Grade domain. Estimates in areas of consistent 50 by 50 metre sampling are classified as Indicated and more broadly sampled mineralisation are assigned to the as Inferred category.

Table 4 shows resources estimated at selected $P_2O_5$ cut-off grades. These estimates are trimmed by cultural exclusion zones and the figures are rounded to reflect the precision of the estimates and include rounding errors.

The overall estimated resource remains substantially unchanged at **1.141 billion tonnes at 14% $P_2O_5$ and 6.5% $Fe_2O_3$ using a 10% $P_2O_5$ cut-off**. This compares to 1.145 billion tonnes at 14% $P_2O_5$ and 6.4% $Fe_2O_3$ announced in 2014.

| | Mt | $P_2O_5$ % | $Al_2O_3$ % | CaO % | $Fe_2O_3$ % | $K_2O$ % | MgO % | MnO % | $Na_2O$ % | $SiO_2$ % | $TiO_2$ % | $U_3O_8$ ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Meas. | 206 | 12.7 | 7.67 | 17.6 | 5.29 | 1.13 | 0.99 | 0.21 | 0.18 | 48.1 | 0.41 | 21.2 |
| Ind. | 312 | 11.5 | 7.13 | 15.7 | 5.34 | 1.29 | 0.93 | 0.16 | 0.16 | 52.1 | 0.37 | 18.7 |
| Inf. | 2,100 | 10 | 7.4 | 13 | 7.1 | 1.6 | 1.0 | 0.3 | 0.1 | 54 | 0.4 | 22 |
| **Total** | **2,618** | **10** | **7.4** | **14** | **6.7** | **1.5** | **1.0** | **0.3** | **0.1** | **53** | **0.4** | **22** |
| **10% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Meas. | 136 | 15.4 | 7.19 | 21.1 | 4.93 | 1.08 | 0.79 | 0.18 | 0.19 | 43.6 | 0.39 | 22.7 |
| Ind. | 165 | 15.5 | 6.96 | 20.9 | 5.52 | 1.26 | 0.76 | 0.16 | 0.18 | 43.3 | 0.36 | 21.0 |
| Inf. | 840 | 13 | 6.8 | 18 | 6.9 | 1.4 | 0.7 | 0.2 | 0.2 | 47 | 0.4 | 26 |
| **Total** | **1,141** | **14** | **6.9** | **19** | **6.5** | **1.3** | **0.7** | **0.2** | **0.2** | **46** | **0.4** | **25** |
| **15% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Meas. | 61 | 18.5 | 6.57 | 25.1 | 4.12 | 1.00 | 0.68 | 0.16 | 0.19 | 38.8 | 0.35 | 24.3 |
| Ind. | 72 | 19.0 | 6.08 | 25.8 | 5.23 | 1.12 | 0.67 | 0.16 | 0.19 | 36.5 | 0.32 | 22.1 |
| Inf. | 200 | 17 | 6.2 | 24 | 6.6 | 1.2 | 0.6 | 0.2 | 0.2 | 39 | 0.3 | 31 |
| **Total** | **333** | **18** | **6.2** | **25** | **5.8** | **1.1** | **0.6** | **0.2** | **0.2** | **38** | **0.3** | **28** |
| **20% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Ind. | 35 | 24.7 | 4.93 | 33.3 | 2.80 | 0.76 | 0.51 | 0.13 | 0.15 | 28.4 | 0.24 | 23.8 |
| Inf. | 24 | 22 | 5.3 | 30 | 5.2 | 1.1 | 0.5 | 0.2 | 0.1 | 31 | 0.3 | 34 |
| **Total** | **59** | **24** | **5.1** | **32** | **3.8** | **0.9** | **0.5** | **0.2** | **0.1** | **29** | **0.3** | **28** |
| **23% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Ind. | 3.5 | 27.2 | 4.04 | 36.4 | 2.41 | 0.57 | 0.44 | 0.16 | 0.12 | 24.8 | 0.20 | 29.5 |
| Inf. | 20.3 | 26 | 4.6 | 35 | 2.5 | 0.7 | 0.5 | 0.1 | 0.1 | 26 | 0.2 | 22 |
| **Total** | **23.8** | **26** | **4.5** | **35** | **2.5** | **0.7** | **0.5** | **0.1** | **0.1** | **26** | **0.2** | **23** |
| **25% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Ind. | 2.7 | 28.0 | 3.79 | 37.5 | 2.41 | 0.53 | 0.42 | 0.17 | 0.12 | 23.3 | 0.19 | 29.5 |
| Inf. | 12.1 | 27 | 4.3 | 36 | 2.3 | 0.7 | 0.4 | 0.1 | 0.1 | 24 | 0.2 | 22 |
| **Total** | **14.8** | **27** | **4.2** | **36** | **2.3** | **0.7** | **0.4** | **0.1** | **0.1** | **24** | **0.2** | **23** |
| **27% $P_2O_5$ cut-off** | | | | | | | | | | | | |
| Ind. | 1.7 | 29.2 | 3.50 | 39.0 | 2.36 | 0.49 | 0.40 | 0.17 | 0.11 | 21.3 | 0.17 | 29.3 |
| Inf. | 5.2 | 29 | 3.8 | 38 | 2.2 | 0.6 | 0.4 | 0.1 | 0.1 | 22 | 0.2 | 22 |
| **Total** | **6.9** | **29** | **3.7** | **38** | **2.2** | **0.6** | **0.4** | **0.1** | **0.1** | **22** | **0.2** | **24** |

**Table 4. March 2017 resource estimates for the Ammaroo Phosphate deposit, trimmed to exclusion zones. Figures are rounded and totals include rounding errors.**

The Limestone Bore area in the east (shown as grey in Figure 1 and 2) includes approximately 4 km of potential mineralised strike tested by a single traverse of 200 m to 400 m spaced RC holes. This area has insufficient drilling for estimation of Mineral Resources. Broadly spaced drilling in this area suggests the presence of an Exploration Target of around 50 Mt to 100 Mt at 8% to 10% $P_2O_5$ at a cut off grade of 5% $P_2O_5$, and 10 to 20 Mt at 12% to 15% $P_2O_5$ at a cut off of 10% $P_2O_5$. These estimates are based on broad spaced drilling and have not materially changed from the December 2014 ASX announcement. The potential quantities and grades are conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain that future exploration will result in estimation of a Mineral Resource. If further drilling were to be undertaken, 30 or more or holes at 50 metres deep would be required to infill to the standard 400 m x 400 metre pattern used for estimation of Inferred resources.

*The information in this report that relates to the Mineral Resource estimates and Exploration Targets is based on information compiled by Jonathon Abbott, a Competent Person who is a Member of the Australian Institute of Geoscientists. Jonathon Abbott is a full time employee of MPR Geological Consultants Pty Ltd and is an independent consultant to Verdant Minerals Ltd.*

*Mr Abbott has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves".*

*Mr Abbott consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

**Jonathon Abbott**
**Consulting Geologist**
**MPR Geological Consulting Pty Ltd**

*This announcement contains forward looking statements. Forward looking statements are not based on historical facts, but are based on current expectations of future results or events. These forward looking statements are subject to risks, uncertainties and assumptions which could cause actual results or events to differ materially from the expectations described in such forward looking statements. Although Verdant Minerals Ltd believes that the expectations reflected in the forward looking statements in this presentation are reasonable, no assurance can be given (and Verdant Minerals Ltd does not give any assurance) that such expectations will prove to be correct. Undue reliance should not be placed on any forward looking statements in this announcement, particularly given that Verdant Minerals Ltd has not yet made a decision to proceed to develop the Ammaroo Project or any other project, and Verdant Minerals Ltd does not yet know whether it will be able to finance this project.*

**Chris Tziolis**
**Managing Director**

# Appendix 1 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.* | • Ammaroo resource drilling includes RC and diamond drilling by Rum Jungle Resources (RUM) and Central Australian Phosphate since 2010 totalling 3,584 reverse circulation (RC) holes and 116 diamond core holes for approximately 113,456 m of drilling. |
| | • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | • RC and diamond holes were generally sampled over one metre down hole intervals.<br>• RC sub-samples were collected by cone or riffle splitting. Sampling of diamond drilling used various combinations of quarter and three quarter PQ core cut using a diamond saw.<br>• All drilling and sampling was supervised by RUM or Central Australian Phosphate geologists. |
| | • *Aspects of the determination of mineralisation that are Material to the Public Report.* | • Hand-held XRF measurements were used to aid selection of intervals for assaying. These results were not used for resource estimation. |
| | • *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* | • Primary samples from RUM's drilling were submitted to AMDEL Bureau Veritas laboratories for analysis by ICP. Laboratory sample preparation included jaw crushing to a nominal 2 mm and riffle spiting to 100 g and pulverizing to a nominal 90% passing 75 micron.<br>• Samples from Central Australian Phosphate's drilling were submitted to ALS laboratories for analysis by XRF. After oven drying, samples were riffle split to 3 kg and pulverised to 85% passing 75 microns, with sub-samples assayed by XRF. |
| ***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).* | • The RC drilling utilised face sampling bits with diameters of generally 112 to 121 mm.<br>• All diamond drilling was triple tube, PQ diameter.<br>• All holes are vertical. Core was not oriented. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Core was reconstructed into continuous runs by end-matching by the site geologist. Recovered core lengths recorded by drillers were checked by site geologists and average around 94% for mineralised intervals.<br>• RC sample recovery was assessed by weighing total recovered sample material. These data show generally reasonable sample recovery, with a slight association between higher phosphate grades and lower weights. Reasons for this trend are unclear, however low weight samples represent only a small proportion of the samples, and may reflect mineralisation variability rather than a systematic bias associated with selective sample loss.<br>• Additional confirmation of the reliability of RC |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | sampling is provided by results of 89 twinned diamond holes which show very similar average phosphate grades to the paired RC holes.<br>• The available information suggests that the RC and diamond sampling is representative and does not include a systematic bias due to preferential sample loss or gain. |
| ***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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • The RC and diamond holes were routinely geologically logged by industry standard methods, with logging available for over 99% of drilling.<br>• Subsamples of all RC chips were retained in chip trays for the future reference.<br>• The geological logging is qualitative in nature, and of sufficient detail to support the current resource estimates.<br>• Hand-held XRF measurements were used to aid selection of intervals for assaying. These results were not used for resource estimation. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • RC samples were collected over generally 1 m down-hole intervals and sub-sampled with a cone splitter or rarely a three tier riffle splitter. Virtually all RC samples (>99%) were dry.<br>• Diamond core was sampled using various combinations of quarter and three quarter core using a diamond saw.<br>• Measures taken to ensure the representivity of RC and diamond sub-sampling include close supervision by field geologists, use of appropriate sub-sampling methods, routine cleaning of splitter and cyclones, and rigs with sufficient capacity to provide generally dry, high recovery RC samples.<br>• Information available to demonstrate the representivity of sub-sampling includes RC field duplicates and paired RC and diamond holes.<br>• The available information demonstrates that the sub-sampling methods and sub-sample sizes are appropriate for the grain size of the material being sampled, and provide sufficiently representative sub-samples for resource estimation. |
| ***Quality of assay data and laboratory tests*** | • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *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.* | • Field XRF measurements are regarded as semi-quantitative and these results were used only to aid selection of samples for assaying. They were not included in resource estimates.<br>• Assay quality control procedures adopted by RUM and Central Australian Phosphate include certified reference standards, blanks and external laboratory checks. These results have generally established acceptable levels of precision and accuracy for the assays included in the current estimates.<br>• Standards assay results, XRF repeats and comparisons with CaO assays suggest that ICP $P_2O_5$ assays from RUM's drilling are biased slightly low. For the current estimates, $P_2O_5$ assays were multiplied by a factor of 1.03 to compensate for this apparent bias. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.* | • No individual drill hole results are reported in this announcement. |
| | • *The use of twinned holes.* | • RUM's diamond drilling includes 89 holes drilled in close proximity to RC holes drilled by RUM (73 holes) and Central Australian Phosphate (16 holes) with an average separation of 3.9 m. Paired samples from these holes show very similar mineralisation grades and thicknesses. |
| | • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | • The sampling database is hosted in a secure, remote location and regularly backed-up by a specialist company who also undertake data entry and QA/QC.<br>• Laboratory assay files are sent directly to the database custodians and merged directly into the database to avoid transcription errors.<br>• All data entry is double checked internally and by the database custodians.<br>• Drill data were supplied to MPR in a set of Microsoft Access format database extracts. Consistency checking between and within the database tables by MPR showed no significant inconsistencies.<br>• Additional database checking by MPR included comparison of the supplied assay values with original laboratory source files. These checks showed no inconsistencies. |
| | • *Discuss any adjustment to assay data.* | • Standards assay results, XRF repeats and comparisons with CaO assays suggest that the ICP $P_2O_5$ assays from RUM's drilling are biased slightly low. For the current estimates, $P_2O_5$ assays were multiplied by a factor of 1.03 to compensate for this apparent bias. |
| ***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.* | • The majority of resource holes (97%) have been accurately collar surveyed by differential GPS. For the remaining holes, collar coordinates were surveyed by hand-held GPS with elevations derived from a DTM generated from differential GPS collar surveys and SRTM topographic data.<br>• No holes were down-hole surveyed. For the comparatively widely spaced and shallow vertical holes the lack of down-hole surveys does not affect confidence in resource estimates. |
| | • *Specification of the grid system used.* | • All surveying was undertaken in Map Grid of Australia 1994 (MGA94) Zone 53 coordinates. |
| | • *Quality and adequacy of topographic control.* | • A topographic surface DTM was produced from differential GPS collar surveys and SRTM topographic data. The mineralisation does not outcrop.<br>• Topographic control is adequate for the current estimates. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.* | • Drill hole spacing within the resource area varies from around 50 by 50 m, 400 by 400 m and locally broader in peripheral areas.<br>• Measured and Indicated resources, which represent around 20% of the total estimated resources are based on 50 by 50 to 200 by |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 200 m spaced drilling. Mineralisation tested by broader spaced sampling is classified as Inferred. |
| | • *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.* | • The data spacing has established geological and grade continuity sufficiently for the current Mineral Resource Estimates. |
| | • *Whether sample compositing has been applied* | • Drill hole samples were composited to 1 m down-hole intervals for 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.*<br>• *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.* | • The mineralisation is flat lying to gently undulating, and perpendicular to the vertical drill holes.<br>• The drilling orientation achieves un-biased sampling of the mineralisation. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • All sample collection, bagging and labelling was undertaken onsite under the supervision of RUM or Central Australian Phosphate geological staff.<br>• All RC and core samples were transported by road directly from site to the assay laboratory, with the calico bag samples sealed in polyweave bags within a bulka bag.<br>• RUM's chip trays are stored at their Alice Springs depot.<br>• Unused core is stored onsite at Ammaroo.<br>• Results of field duplicates and inter-laboratory checks, and the general consistency of results between sampling phases and drilling methods provide confidence in the general reliability of the resource data. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • Sample data reviews have included comparisons between various sampling phases and methods which provide some confidence in the general reliability of the data.<br>• MPR geological consultants independently reviewed the quality and reliability of the resource data. These reviews included observation of drilling and sampling, review of database consistency, comparison of original laboratory source files with database entries, and review of QAQC information.<br>• MPR consider that the sample preparation, security and analytical procedures adopted for the Ammaroo drilling provide an adequate basis for the current Mineral Resource estimates. |

## 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 land tenure status*** | • *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.*<br>• *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 Ammaroo resource lies within granted exploration licenses EL 25184 and EL 24726 both held by Territory Phosphate Pty Ltd which is a wholly owned subsidiary of Verdant Minerals Ltd (formerly Rum Jungle Resources Ltd)<br>• Work was approved by the pastoralist leaseholder, NT Department of Primary Industries and Resources and the Central Land Council before commencement. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Some previous work on EL 24726 was undertaken and reported by Central Australian Phosphate including with RC providing 15 % of the combined resource dataset.<br>• All other work on the project has been by RUM. |
| **Geology** | • *Deposit type, geological setting and style of mineralisation.* | • Ammaroo is a stratabound, sedimentary phosphate deposit located on a Cambrian shoreline of the Georgina Basin. It is a similar style of mineralisation to other phosphate deposits in the Georgina Basin. Lithology is reasonably consistent across the entire deposit. |
| ***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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • No individual drill hole results are reported in this announcement. |
| ***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.*<br>• *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.* | • No individual drill hole results are reported in this announcement. |
| | • *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • The estimated resources do not include equivalent values. |
| ***Relationship*** | • *These relationships are particularly important in the reporting of Exploration* | • The mineralisation is flat lying to gently undulating, and perpendicular to the vertical drill holes, with |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***between mineralisation widths and intercept lengths*** | *Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | down-hole lengths representing true thicknesses. |
| ***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.* | • A suitable diagram is included in the announcement. |
| ***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.* | • No individual drill hole results are reported in this announcement. |
| ***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.* | • Mineral Resources were estimated from drill hole assay data, with geological logging used to aid interpretation of mineralised domains. Other exploration data including shallow costeans and metallurgical test work results have previously been released to the market. An Environmental Impact Study and a Bankable Feasibility Study is currently underway. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Further extensional and infill drilling may be carried out. Diagrams of extensions will not be shown as they may be limited by/and show culturally sensitive areas that are confidential. A Bankable Feasibility Study and Environmental Impact Study are underway. |

## 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.*<br>• *Data validation procedures used.* | • Resources were estimated from drill hole data supplied to MPR in a set of Microsoft Access databases. Consistency checking between and within the database tables by MPR showed no significant inconsistencies.<br>• Additional database checking by MPR included comparison of the supplied assay values with original laboratory source files. These checks showed no inconsistencies. |
| ***Site visits*** | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | • Mr Abbott visited Ammaroo from the 12th and 13th of April 2011 and the 15th to 16th of May 2012. The site visits included inspection of mineralisation exposures in costeans, and drilling and sampling activities, and discussions of the details of the project's geology and drilling and sampling with RUM and Central Australian Phosphate geologists gaining an improved understanding of the geological setting and mineralisation controls, and the resource sampling activities. |
| ***Geological interpretation*** | • *Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | • Geological setting and mineralisation controls of the Ammaroo mineralisation have been confidently established from drill hole logging.<br>• Model A is based on interpreted mineralised domain wireframes capturing zones of continuous mineralisation grading more than approximately 10% $P_2O_5$ with a comparatively small internal higher grade domain interpreted at nominally 23% $P_2O_5$ cut-off.<br>• Model B is based on mineralised domains capturing zones of continuous mineralisation grading more than approximately 5% $P_2O_5$. These domains comprise a main zone, and a subsidiary upper zone at Limestone Bore which contributes around 2% of model estimates.<br>• The mineralised domains were interpreted with reference to geological logging and are trimmed by areas of basement highs, where mineralisation has been not developed or has not been preserved. The mineralised domains are consistent with the geological understanding of the flat lying, stratabound mineralisation.<br>• Due to the confidence in understanding of mineralisation controls and the robustness of the mineralisation model, investigations of alternative interpretations are unnecessary. |
| ***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 combined mineralised domains trend WNW-ESE over approximately 42 km of strike with an average width of approximately 3.8 km.<br>• Thickness of the combined mineralised domains averages around 10.5 m with an average of around 21 m of barren overburden. Estimated resources extend to around 70 m depth, with approximately 94% from depths of less than 45 m. |
| ***Estimation and modelling*** | • *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,* | • Resources were estimated by Ordinary Kriging of 1m down hole composited assay grades within the mineralised domains. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***techniques*** | *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 models include estimates for $P_2O_5$, $Al_2O_3$, CaO, $Fe_2O_3$, $K_2O$, MgO, MnO, $Na_2O$, $SiO_2$, $TiO_2$ and $U_3O_8$.<br>• Variograms were modeled for each Kriged attribute.<br>• No upper cuts were applied to the estimates. This reflects the generally moderate variability of most attributes, and ameliorates the risk of understating secondary attribute grades.<br>• Around the margins of the interpreted mineralisation, domain boundaries were generally extrapolated to a maximum of around half the drill hole spacing beyond drilling, an extrapolation distance of generally less than 300 m except in broadly sampled areas used only for estimation of exploration targets.<br>• Estimation included a seven pass, octant based search strategy, with a hard boundary between the low grade and high grade domains.<br>• Grade estimation included un-folding of composite locations using the top of the mineralised domain as a reference surface.<br>• Micromine software was used for data compilation, domain wire-framing, and coding of composite values, and GS3M was used for resource estimation.<br>• The estimation technique is appropriate for the mineralisation style. |
| | • *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 current estimates are consistent with previous resource estimates.<br>• There has been no production from the project. |
| | • *The assumptions made regarding recovery of by-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* | • In addition to $P_2O_5$, the resource model includes estimates, $Al_2O_3$, CaO, $Fe_2O_3$, $K_2O$, MgO, MnO, $Na_2O$, $SiO_2$,$TiO_2$ and $U_3O_8$ grades.<br>• Estimated resources make no assumptions about recovery of by-products. |
| | • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* | • For Model A, grades were estimated into 25 by 25 by 1 m blocks (east, west, vertical). Plan view dimensions of the blocks approximate half the drill hole spacing in the closest drilled portions of the deposit.<br>• For Model B, grades were estimated into 50 by 50 by 1 m blocks ((east, west, vertical).<br>• Grade estimation included a seven pass, octant based search strategy. Search ellipsoid radii (east, west, vertical) and minimum data requirements range from 75 by 75 by 2 m (8 data) for search 1 to 600 by 600 by 16 m (2 data) for search 7. Search 7 was used primarily for estimation of exploration targets and represents only 0.1% of estimated resources |
| | • *Any assumptions behind modelling of selective mining units.* | • The estimates are intended to reflect open pit mining, with ore definition by close spaced grade control sampling and tight vertical selectivity.<br>• Details of potential mining parameters are unclear reflecting the early stage of project evaluations. |
| | • *Any assumptions about correlation between variables.* | • The modelling did not include specific assumptions about correlation between variables. |
| | • *Description of how the geological interpretation was used to control the resource estimates.* | • The mineralised domains used for resource estimation are consistent with geological interpretation of mineralisation controls. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Discussion of basis for using or not using grade cutting or capping.* | • No upper cuts were applied to the estimates. This reflects the generally moderate variability of most grade attributes, and ameliorates risk of understating secondary attribute grades. |
| | • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | • Model validation included visual comparison of model estimates and composite grades, and trend (swath) plots.<br>• No production data is available. |
| ***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 tonnage basis. |
| ***Cut-off parameters*** | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • The range of cut-off grades used for resource reporting reflect RUM's interpretation of potential project economics, subject to the finding of the BFS. |
| ***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.* | • Details of potential mining parameters are unclear reflecting the early stage of project evaluations.<br>• The estimates are intended to reflect progressive open pit mining.<br>• With a maximum depth of 70 m, and around 94% of resources from depths of less than 45 m, the resources appear amenable to open pit mining. |
| ***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.* | • Exact economic cut-off grades are not yet known, nor are phosphate recoveries, however it is anticipated beneficiation of ore from potential mining will enable ore to be upgraded to a suitable specification for sale or as feed to a phosphoric acid plant. Metallurgical test work is ongoing as part of a BFS currently in progress. A number of processing options are being considered. |
| ***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.* | • Environmental studies and process route testing are ongoing as part of a BFS currently in progress. Baseline flora and fauna studies have not indicated any impediments to mining or processing at this stage. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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.*<br>• *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.*<br>• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | • The estimates include a density of 1.7 t/bcm for all material. This value was derived from 254 wax coated immersion density measurements of oven-dried drill core from 61 diamond holes. |
| ***Classification*** | • *The basis for the classification of the Mineral Resources into varying confidence categories.* | • The estimates are classified as Measured, Indicated and Inferred on the basis of estimation search pass and a set of polygons defining areas of relatively consistent drill hole spacing.<br>• For cut-offs of up to 15% estimates for mineralisation with consistent drill hole spacing of up to 100 by 100 m and 200 by 200 m are classified as Measured and Indicated respectively and estimates for more broadly sampled areas to a maximum of generally around 300 m from drill holes are classified as Inferred.<br>• Mineralisation continuity decreasing with increasing phosphate grade, and for cut-offs of greater than 15% no estimates are classified as Measured.<br>• For cut-offs of 15 to 20% estimates for mineralisation with consistent drill hole spacing of up to 200 by 200 m are classified Indicated and estimates for more broadly sampled areas are classified as Inferred.<br>• For cut-off grades of greater than 20%, estimated resources are restricted to the High Grade domain. Estimates for areas tested by 50 by 50 m spaced drilling are classified as Indicated and estimates for more broadly sampled areas are classified as Inferred. |
| | • *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).* | • The resource classification accounts for all relevant factors. |
| | • *Whether the result appropriately reflects the Competent Person's view of the deposit.* | • The resource classifications reflect the competent person's views of the deposit. |
| ***Audits or reviews*** | • *The results of any audits or reviews of Mineral Resource estimates.* | • The resource estimates have been reviewed by RUM geologists, and are considered to appropriately reflect the mineralisation and drilling data. |
| ***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* | • Confidence in the relative accuracy of the estimates is reflected by the classification of estimates as Measured, Indicated and Inferred. |

| Criteria | JORC Code explanation | Commentary |
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| | *approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>• *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.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | |