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ASX Release (ASX code: "FYI")

## Significant Resource Upgrade Paves Way for HPA Testwork

FYI Resources Limited (ASX:FYI) is pleased to announce an updated Mineral Resource for the Cadoux kaolin deposit located in Western Australia.

### Key Highlights

- 53% tonnage increase in Mineral Resource estimate to 16.1Mt @ 11.76% Al
- 80% of Mineral Resource estimate now classified as 'Indicated'
- High grade zone of 7.2Mt at 13.1% Al contained within the Mineral Resource
- Resource remains open with the potential to be significantly increased
- Increased resource base provides sufficient feedstock for production of High Purity Alumina ('HPA') which is a critical component in the manufacture of high tech products used in lithium ion batteries, sapphire glass and LED's
- Initial metallurgical testwork well advanced to determine quality

**Table 1: Cadoux Mineral Resource estimate July 2017**

Classification	Tonnage	% -45 microns	Al%	Fe%	Ti%
Indicated	13.0	84.4	11.58	0.47	0.34
Inferred	3.1	84.4	12.50	0.69	0.49
<b>Total</b>	<b>16.1</b>	<b>84.4</b>	<b>11.76</b>	<b>0.51</b>	<b>0.37</b>

**Notes:**

% minus 45 micron was measured by wet screening based on previous testwork and assays were determined by ALS using ICP

The updated Mineral Resource estimate is based on the recent drilling of 58 aircore holes for 1,023 metres and has resulted in a significant increase from the previous Mineral Resource estimate of 10.5Mt at 11.25% Al.

The Resource remains open with significant potential to be increased to the northeast and east where the resource remains open. Higher grade kaolin of 7.2Mt at 13.10% Al at a cut-off greater than 12% Al occurs within the Mineral Resource area.

On reviewing the Resource results, FYI Managing Director, Mr Roland Hill said "The upgraded Resource estimate is consistent with the Company strategy to provide a world class feedstock for the looming boom in new technologies which include lithium ion batteries for the electric vehicle market. Recent announcement by the German automobile industry outlying a shift to electric cars will contribute to an increase demand for raw materials for these new technologies."

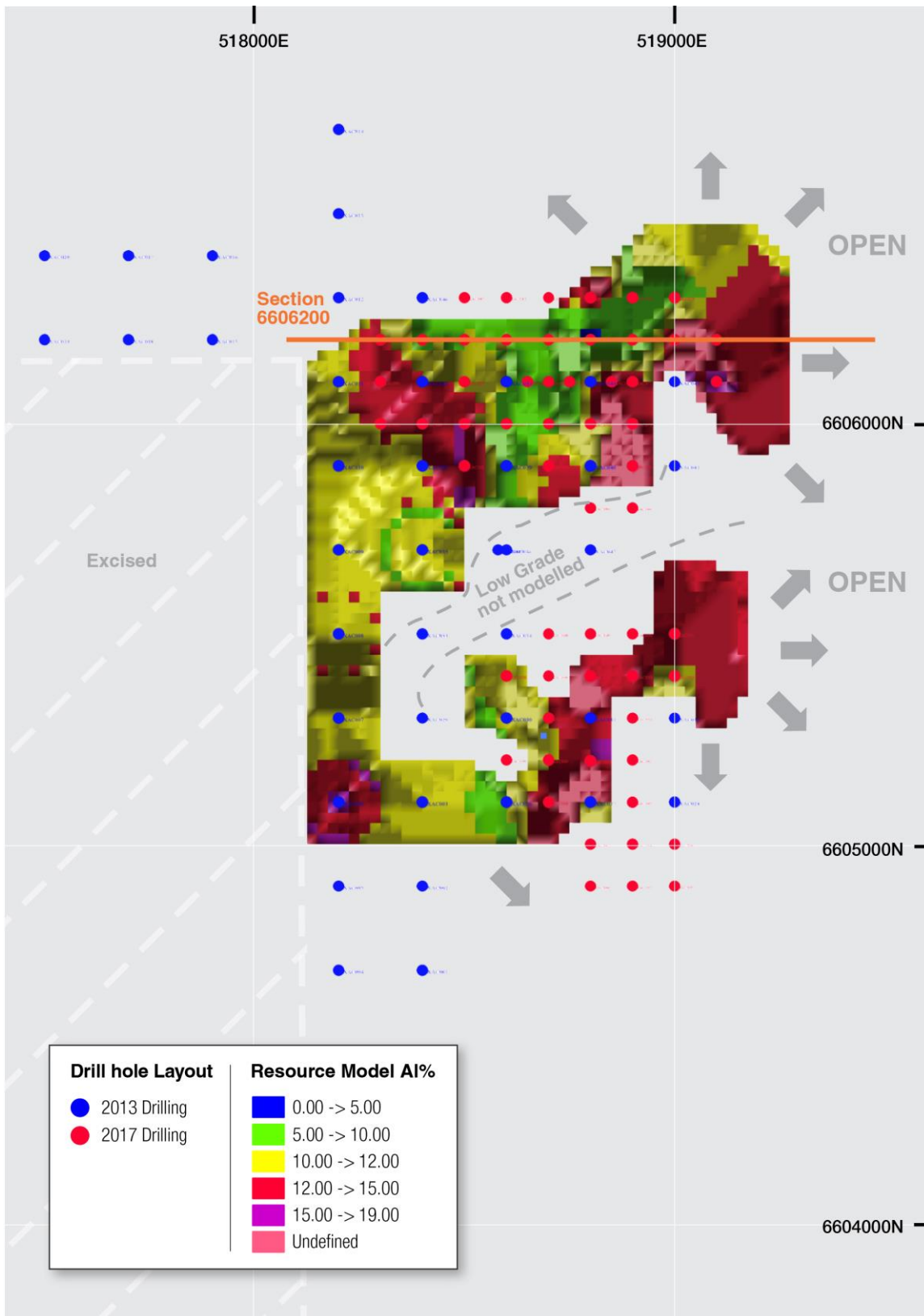
### Next Steps

The Company is now focussed on completion of the metallurgical test work which is well advanced and anticipates positive results including confirming that commercial HPA can be generated from high grade kaolin product from the Cadoux Resource.

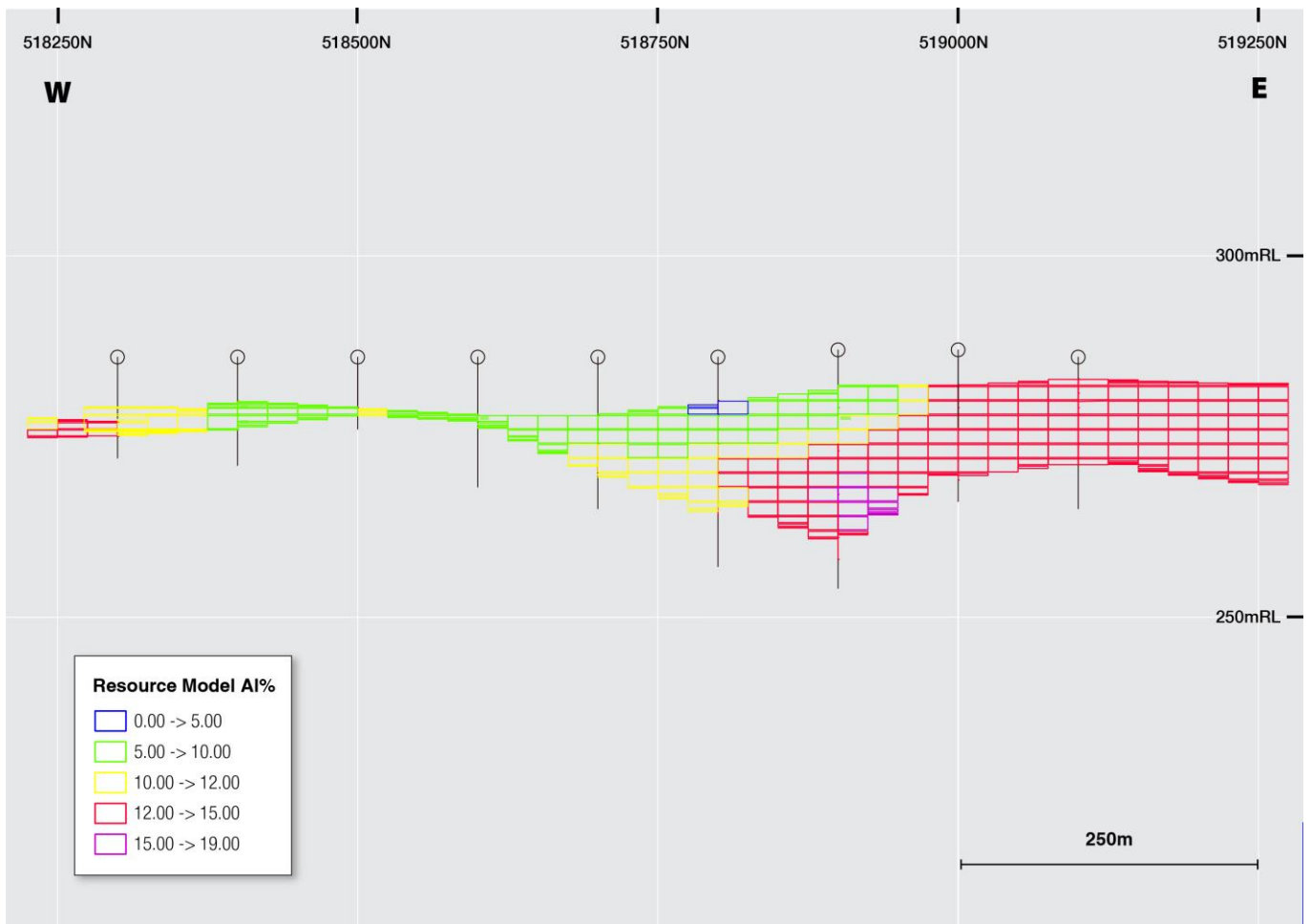
It is expected that higher classification can be achieved with the completion of further technical work which includes the metallurgical work underway.



**Figure 1: Updated Cadoux Kaolin Resource outline**



**Figure 2: Geological plan showing drilling and resource model outline**



**Figure 3: Geological section 6606200**

### Mineral Resource Estimate

The Mineral Resource estimate is based on the inclusion of the results from the recent drilling campaign (see FYI ASX announcement 22/5/2017) combined with previous drilling results.

The Resource is based on information from 98 air core drill holes for 1,840.5m, with hole depths ranged from 6 to 36m depending on the depth of kaolin and granite weathering. The drilling generated 27 bulk samples and 220 samples ranging intervals from 1 to 6 of which 207 were used in the Resource estimate. The average composite width for the Resource calculation was 2.3m. Hole spacing ranges from a 100x50m to 200x200m grid spacing.

All resources are within 4 to 14 metres of the surface. The kaolin profile ranged from 2m thickness to 24m and averaged 8.9m. The resource volumes were estimate by wire-framing the kaolin material and creating a geological model using Surpac software. The resource was estimated by visual classification of the kaolin. All material from drilling was considered as kaolin and logged and modelled as such if it appeared bright white.

Aluminium, iron and titanium were estimated using ordinary kriging. Indicated material was based on search radii of 100m and 200m and the inferred category included informing samples using a search radius of 300m. With further development of the deposit and understanding of the kaolin properties and products the Resource confidence is expected to be upgraded to the next category.

A minimum thickness of 2m was used. Apart from this, no mining or processing factors have been applied to the resources. The Resource Al% distribution is presented in figure 2 and geological section presented in figure 3 above.

### **About the Cadoux Kaolin Project**

The Cadoux kaolin deposit demonstrates excellent specifications and characteristics as a high grade low impurity feedstock for HPA processing. The Resource's quality of elevated aluminium combined with low impurities, low strip ratio and proximity to Perth and major infrastructure, highlights this project potential as a significant asset.

### **Background**

FYI is fully committed to progress its Southeast Asian potash strategy and in particular continuing the reviews and joint venture negotiations on the Sino-Lao Potash project in Laos.

Whilst the potash strategy is progressing, FYI proposes to pursue a high purity alumina development opportunity in Western Australia in parallel to the potash.

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### **Competent person statement**

*The information in this report that relates to Mineral Resources is based on information compiled by Mr Andrew Kohler, Principal Resource Geologist and a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Kohler is an employee of Strategic Resource Management, and consultant to the Company. Mr Kohler has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity that he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Mineral Resources and Ore Reserves. The Mineral Resource estimate complies with recommendations in the Australian Code for Reporting of Mineral Resources and Ore Reserves (2012) by the Joint Ore Reserves Committee (JORC). Mr Kohler consents to the inclusion of the report in the form and context in which it appears.*

**Appendix A July 2017**

**JORC Code, 2012 Edition – Table 1**

**Section 1 Sampling Techniques and Data**

<b>Criteria</b>	<b>Commentary</b>
<b>Sampling techniques</b>	Air core samples were collected at 1m intervals from a rig mounted riffle or cone splitter. 75% of each metre sample was collected in a 900x600mm green plastic bag, and the remaining 25% (split sample) was collected in a 610x405mm green plastic bag. The split samples were collected directly from the cyclone because the samples for assay were to be collected in plastic rather than calico bags (% moisture needs to be measured, and fine dust (red) can get into the calico).
<b>Drilling techniques</b>	Air Core drilling using a Mantis 100 drill rig with an NQ Air Core sand bit.
<b>Drill sample recovery</b>	Actual recoveries from Air Core drilling were not measured, however it is demonstrated from core sample photos of each hole that samples were even sized and reported that recovery of drill samples from all holes were of an acceptable standard.
<b>Logging</b>	Chip tray samples were taken along with usual logging and the chip tray samples were non-sieved and dry. All holes were field logged by 1m intervals by a qualified geologist for geological characteristics.
<b>Sub-sampling techniques and sample preparation</b>	<p>All sampling procedures for the Air Core drilling have been reviewed by a qualified geologist and are considered to be of a high standard. Air Core drilling procedure was 1m samples split using a rig mounted cone splitter and collected in marked plastic bags. 1-2kg was collected in small green plastic bags and 4-6kg was collected in large green plastic bags. All samples were dry. 1-2kg samples totalling 824metres were brought back to Perth and sorted into composites. 70, 2m composite samples were made up from the 824 metres that intercepted the kaolin material. The composites were made using a spear making sure equal amounts were collected from each metre, thus giving a homogeneous of each metre amount in the composites. Samples were submitted to ALS laboratories in Perth (using ICP analysis methods), Western Australia.</p> <p>Also using a spear technique 27 bulk samples were taken of the Kaolin material intercepted in 27 out of a total of 47 holes. Samples were sent to the Bureau Veritas Australia Laboratories for XRF analysis on a range of elements and kaolin parameters. The QAQC information of the laboratory was used to determine the QAQC of the samples because commercial standards for kaolin are not readily available. Mr Kohler has reviewed the QAQC data and has found it to be acceptable</p>
<b>Quality of assay data and laboratory tests</b>	Analysis for Sizing , SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , CaO, MgO, K <sub>2</sub> O, Na <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , Mn <sub>3</sub> O <sub>4</sub> , V <sub>2</sub> O <sub>5</sub> , Cr <sub>2</sub> O <sub>3</sub> , BaO, ZrO <sub>2</sub> , ZnO, SrO and LOI, was completed using XRF. The majority of duplicates are within tolerance of the original assay and without bias. Mr Kohler reviewed internal QAQC reports and analysis and confirms that all assay data used has passed standard industry quality assurance/quality control procedures.

<b>Verification of sampling and assaying</b>	Geological personnel supervised the sampling, and infill drill holes were completed. Primary data are captured on paper in the field and then re-entered into spreadsheet format by the supervising geologist, to then be loaded into the company's database. No adjustments are made to any assay data.
<b>Location of data points</b>	All drill holes used in the resource estimate have been accurately surveyed using Garmin GPSMAP 62s equipment (+/-5m accuracy) by the geologist on site. No down hole surveys have been conducted however all holes are drilled vertically.
<b>Data spacing and distribution</b>	The resource is based on information from 98 air core drill holes for 1,840.5m, with hole depths ranged from 6 to 36m depending on the depth of kaolin and granite weathering. The drilling generated 27 bulk samples and 220 samples ranging intervals from 1 to 6 of which 207 were used in the resource estimate. The average composite width for the Resource calculation was 2.3m. Hole spacing ranges from a 100 x50 to 200 x 200m grid spacing. The drill spacing was considered adequate to establish both geological and grade continuity for definition of Indicated Mineral Resource. Samples were composited to 2m for analysis.
<b>Orientation of data in relation to geological structure</b>	Drill holes were vertical given the horizontal nature of deposit. The risk of sample bias is considered to be low.
<b>Sample security</b>	All samples were under supervision from the rig to the laboratory. All residual sample material is stored securely in sealed bags.
<b>Audits or reviews</b>	Mr Kohler has reviewed QAQC results and found these to be acceptable.

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	The granted Exploration Licence 70/4673 in Western Australia, covering an area of 59km <sup>2</sup> .
<b>Exploration done by other parties</b>	White Gold Kaolin (WGK) carried out all the previous prospecting and drilling work that is on the tenement EL 70/4673. The aircore drilling comprises of 47 drill holes for 824m. The exploration work was carried out from 2011 to 2014.
<b>Geology</b>	The project area is underlain by weathered granitoid Archaean rock of the Yilgarn Granites is the likely parent material for the kaolin. Here, deep weathering of the feldspathic and ferromagnesian minerals within the metamorphosed granitic has resulted in the formation of kaolinite. There is no outcrop but recognizable granitoid fragmental rocks are sometimes present just below surface. The crust of the overburden comprises gravel and sands over reddish to off white clay. White kaolin underlies the overburden followed by weathered, partial oxidised and then fresh granitoids at depth. The recent drilling at the property has revealed a weathering profile which is very common in Western Australia with the granitoid rocks, deeply weathered forming a leached, kaolinized zone under a lateritic crust. Analysis at the Laboratory shows particle size distributions are typical of "primary style" kaolins produced from weathered granites. The crust of

<b>Criteria</b>	<b>Commentary</b>
	overburden comprises gravel and sands over reddish to off-white clay to an average depth of 5m. White kaolin then averages approximately 16 m before orange to yellow sandy and mottled clays are intersected which are followed by recognizable rounded granitoid material. The thickness of the kaolin profile varies from less than 1m to a maximum of 22m. Fresh granitoids are found at depths of between 10 and 30m. All kaolin resources are within 4 to 11 metres of the surface. 47 air core drillholes were completed with a total of 824m drilled. All holes were drilled vertically. Intersected kaolin thickness ranged from 4-11m.
<b>Drill hole Information</b>	Sample and drill hole coordinates are provided in market announcements.
<b>Data aggregation methods</b>	The Model required a minimum thickness intercept of 2m of kaolinite with the requirement of having to be visually bright white to be included in the estimate. Samples within the wireframe were composited to 2m intervals based on visually contiguous down-hole intervals. The intervals were selected by the site project Geologist. No high-grade cuts were applied. Industry standard for Kaolinite cutoffs are a maximum value of 0.7% Fe <sub>2</sub> O <sub>3</sub> , 0.5% TiO <sub>2</sub> and 2% K <sub>2</sub> O. Assay results from drilling were all lower than the cut-off values.
<b>Relationship between mineralisation widths and intercept lengths</b>	All drill holes are vertical. The orientation of the drilling is approximately perpendicular to the strike and dip of the mineralisation.
<b>Diagrams</b>	Refer to figures 1,2 and 3. Additional diagrams are presented in previous announcements.
<b>Balanced reporting</b>	The reporting is considered to be balanced.
<b>Other substantive exploration data</b>	Nothing material to report.
<b>Further work</b>	Metallurgical testwork is continuing the current, combined with further density work will lead to high classification being achieved.



### Section 3 Estimation and Reporting of Mineral Resources

<b>Criteria</b>	<b>Commentary</b>
<b>Database integrity</b>	Initial database audits as follows: Drill hole collar coordinates were checked against hole labels and drill hole logs and coordinates as well as visually on the field plan and sections. The hole depths were checked by looking at the logs and also the drillers plods and the field drill hole sections. Assay data was checked against logs of the intercepts and the submission sheets and the spread sheet of two and from data made during logging process. A final check was made of the database against the drill logs.
<b>Site visits</b>	A site visit has not been undertaken by the competent person. The drilling program was supervised in-field by Mr Kohler's designated Project Geologist, under overall supervision of the competent person.
<b>Geological interpretation</b>	Geological drilling has confirmed a generally continuous kaolinite unit within 70/4673. One discrete high grade zone of visually bright white Kaolinite has been confirmed.
<b>Dimensions</b>	The Kokardine, Cadoux deposit extends for approximately 1.2km in a NS and 1.5km in the EW direction and is open in the north, south and east directions. The kaolinite extends from near-surface to 30m below the surface.
<b>Estimation and modelling techniques</b>	The Cadoux deposit was domained based on kaolinite occurrence of 2m thickness and kaolin had to be visually bright white to be included in the estimate one domain was created and applied as a hard boundary in the estimate. Statistical analysis was carried out on data from the kaolin domain. High grade cuts were not applied as low co-efficients of variation (CV) were observed. The block model used a parent block size of 25m NS by 25m EW by 2m vertical. The block size was selected on the basis of approximately an eighth of the nearest drill hole spacing. The dimensions in other directions were selected to provide sufficient resolution to the block model in the across-strike and down-dip direction. Inverse distant squared interpolation method was used.
<b>Moisture</b>	Moisture content has not been ascertained. Mr Kohler estimates the moisture to be in the range of 7-14% moisture. Tonnage estimates are based on the assumed bulk density (1.7m <sup>3</sup> /t) that is deemed to be a dry weight.
<b>Cut-off parameters</b>	Overall the kaolinite unit displays good continuity. The Model used Kaolinite that was logged visual as being bright white and the elements modelled were below the cut-off industry standard specs for Kaolinite of maximum values of 0.7% Fe <sub>2</sub> O <sub>3</sub> , 0.5% TiO <sub>2</sub> and 2% K <sub>2</sub> O. Grade-tonnage plots were produced to allow further studies.
<b>Mining factors or assumptions</b>	No Assumptions have been made and the model is undiluted at this time.
<b>Metallurgical factors or assumptions</b>	No assumptions have been made regarding metallurgy.
<b>Environmental factors or assumptions</b>	A mining concept study has been completed by Steve O'Grady of Intermine Engineering Pty Ltd that outlines the mining methodology, mining equipment, site layout, and outlines the storage of waste rock in waste rock dumps adjacent to the resource.

<b>Bulk density</b>	A bulk density of 1.7 was used for the kaolinite unit, which is based on conservative estimations from previous studies of other kaolin deposits. Density sample test work program is needed to verify this assumption.
<b>Classification</b>	Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC 2012) The classification of the Mineral Resource was completed by Andrew Kohler (AusIMM). The reasonable drill hole spacing and demonstrated continuity of mineralisation warranted a classification of both Indicated and Inferred Mineral Resource. Indicated material was based on a search radii of 100 and 200m and the inferred category included informing samples using a search radius of 300m. With further development of the deposit and understanding of the kaolin properties and products the Resource confidence is expected to be upgraded to the next category In accordance with Clause 49 of the JORC Code (2012), the product specifications and general product marketability were considered to support the Mineral Resource Estimate for Industrial Minerals. As reported previously test work programs have previously determined.
<b>Audits or reviews</b>	Internal audits have been completed by Mr Kohler as a Competent Person and the Mineral Resource estimate was considered to be satisfactory.
<b>Discussion of relative accuracy/ confidence</b>	Global and locally the statistics of the drill hole data values compare well to the block model values the coefficient of variation is low. The histograms and cumulative frequency graphs of drill hole data versus the model compare well. Conditional bias was also examined by Mr Kohler and was found to be satisfactory for all attributes modelled. Comparison of model blocks to drill hole data correlate well.