ASX Announcement 10 March 2020

MAIDEN MINERAL RESOURCE AT MAKUUTU RARE EARTH PROJECT CENTRAL ZONE

ORO VERDE LIMITED
(ASX code: OVL)

An emerging resource company focused on defining a world-class Rare Earths project

KEY PROJECTS –
Uganda
Makuutu Rare Earths Project
Nicaragua
San Isidro Gold Project

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Key Highlights:

- **Maiden Mineral Resource Estimate for the initial drilled portion of the Makuutu Rare Earth Project is:**

  47.3 Mt @ 910 ppm TREO, at a cut-off grade of 500 ppm TREO-Ce_2O_3

- **Resource grade is at the upper end of the Exploration Target range**
- **The Maiden Mineral Resource is based on only 681.5 m of core drilling undertaken in late 2019 within the Makuutu Central Zone, which covers only a portion of the larger Makuutu Prospective area as represented by the Exploration Target***
- **The 2020 drilling program will commence shortly, with exploration drilling continuing to progressively test other areas of the Exploration Target to expand the Resource, and in-fill drilling undertaken to increase Resource confidence level**
- **The Exploration Target for Makuutu remains at:**

270 - 530 million tonnes grading 0.04 – 0.1% (400 – 1,000 ppm) TREO*

***This Exploration Target is conceptual in nature but is based on reasonable grounds and assumptions. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Oro Verde Limited ("Oro Verde" or "the Company") (ASX: OVL) is pleased to advise that it has completed the maiden Mineral Resource Estimate ("MRE") for the Makuutu Rare Earth Element (REE) project located in Uganda, Africa.

Commenting on the issue of the resource estimate, Oro Verde Technical Director Dr Marc Steffens said:

"This initial mineral resource estimate covers only a very small portion of the Makuutu Project prospective area and there is strong potential to significantly grow future resources. Encouragingly, the resource grade is at the upper end of expectations, which is very promising for overall project potential.

Additionally, Makuutu already demonstrates a significantly larger mineral endowment than some peer projects.

Furthermore, considering this initial resource is based on less than 700 m of drilling, the company expects to substantially expand this maiden resource with its next phase of drilling which is scheduled to start shortly."

Summary of Maiden Mineral Resource Estimate

The Maiden Mineral Resource Estimate (MRE) for the Makuutu Rare Earth Project was prepared by independent specialist resource and mining consulting group, Cube Consulting Pty Ltd ("Cube"). A summary of the mineral resource estimate derived is shown in Table 1.

Table 1. Inferred Mineral Resource – Makuutu Central Zone (MCZ), March 2020.

Category	Estimation Domain	Tonnes (Mt)	TREO (ppm)	TREO no Ce_2O_3 (ppm)
Inferred	**Clay**	47.3	910	670

The Mineral Resource has been compiled using a 500 ppm TREO minus Ce_2O_3 marginal cut-off grade. This cut-off has been selected based on published information from more advanced projects with comparable mineralisation and conceptual processing method. The grade-tonnage relationship of the resource, for various cut-off grades, is illustrated in Figure 1, and a Table summarising the resource estimate at various cut-off grades is included in Appendix 2.

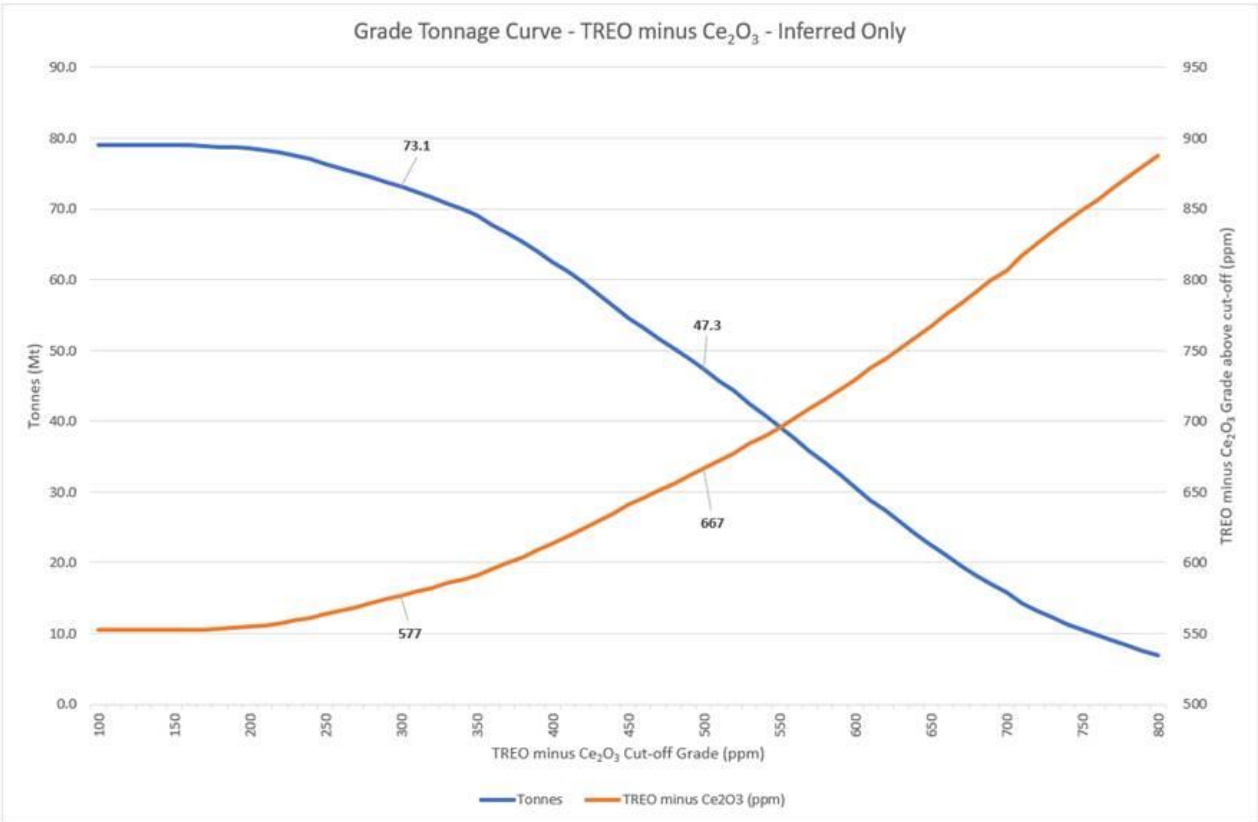

Figure 1. Grade-Tonnage Curve for the Maiden Makuutu Mineral Resource Estimate.

Estimates were also made of the uranium and thorium content. Both are found in low concentrations in the deposit with uranium averaging 30 ppm U_3O_8 and thorium 30 ppm ThO_2. These are not considered to be at significant levels.

The resource estimate has shown the REE mineralisation is distributed consistently through the clay horizon above the marginal cut-off grade. This consistency suggests an increase in resource confidence with limited infill drilling requirements.

Mineral Resource Estimate Area

The maiden MRE is limited to a portion of the Makuutu Central Zone ("MCZ") which was drilled in late 2019, with 681.5 m of core drilling undertaken in the MCZ. Figure 2 depicts the Makuutu Rare Earth Project area, and the maiden MRE covers the area demarcated in green. Further clay-hosted REE mineralisation has been identified on the Project licence by core drilling[1] located between 6 and 12 kilometres east of the MRE and by historic RAB drilling[2] up to 10 kilometres west of the MRE.

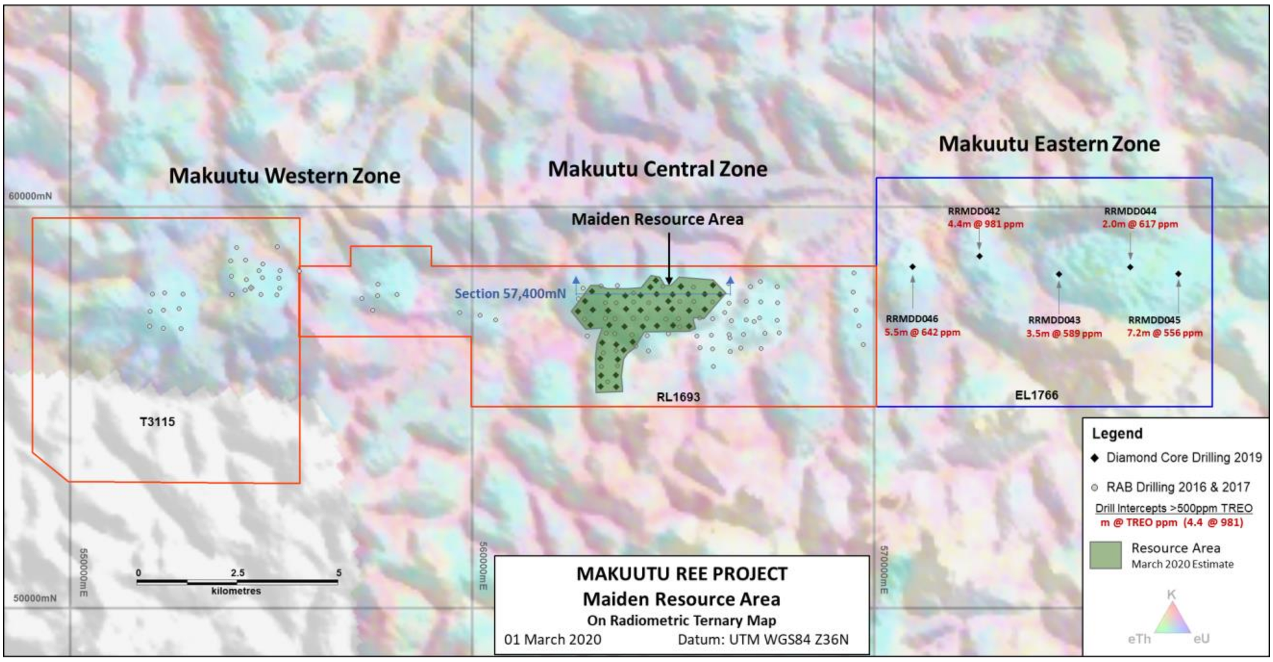

Figure 2. Makuutu Rare Earth Project Area with maiden Mineral Resource Estimate area highlighted (green).

The resource estimate covers the clay zone of the regolith hosted deposit and does not include the hardcap above and the basement sediments below the clay mineralisation, both of which also contain Rare Earth Mineralisation. The clay has an average thickness of 11.9 metres and is overlain by soil and hardcap with an average thickness of 3 metres. A cross-section of the resource block model, shown in Figure 3, shows the large continuous nature of the mineral resource and the presence of large higher-grade zones of resource.

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[1] ASX Announcement OVL, 23 December 2019; "Exploration Drilling Shows Significant Extension to REE Mineralisation"

[2] ASX Announcement OVL, 28 August 2019; "Due Diligence Confirmation Of Makuutu Mineralisation Bearing Rare Earths"

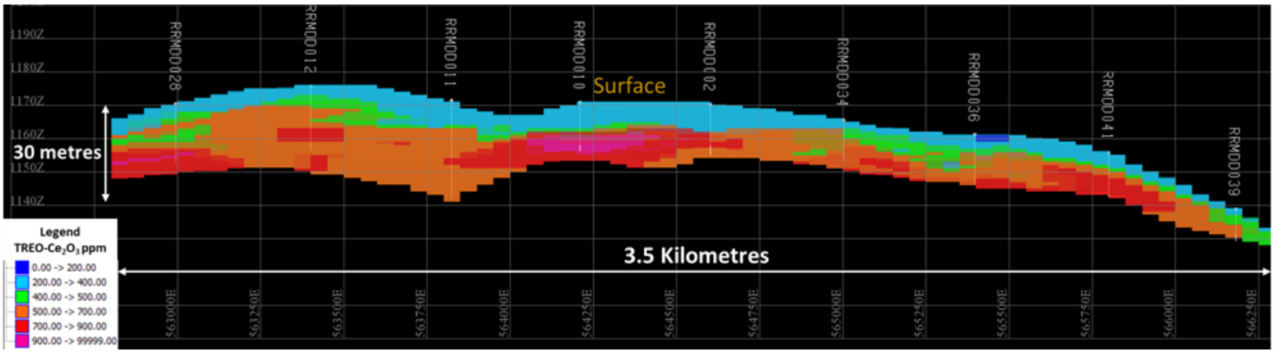

Figure 3. **Cross section 57,400mN (looking north) with TREO no Ce_2O_3 block grades. Section width 3.5 kilometres (10x vertical exaggeration)**

Current Makuutu Project Work Program

The Company is currently preparing for drilling at Makuutu to:

- Extend the resource area initially to the east of the maiden resource area (Figure 2),
- Generate further resource understanding and work toward upgrading resource confidence, and
- Provide samples for metallurgical test-work over a broader area of the Project.

The program will commence in March 2020.

Also, the Company together with its Strategic Advisor, continues to engage with parties regarding the Makuutu Rare Earths Project, which includes project product off-take and marketing.

Summary of Material Information Used to Estimate the Mineral Resource.

The following is a summary of material information used to estimate the Mineral Resource, as required by Listing Rule 5.8.1 and JORC 2012 Reporting Guidelines.

Mineral Tenement and Land Tenure Status

The Makuutu Project comprises one (1) granted Retention Licence (RL1693), one (1) Retention Licence application (TN3115), and one (1) granted Exploration Licence (EL1766), located in the Republic of Uganda (Figure 1). The tenements RL1693 and EL1766 are in good standing and no known impediments exist.

The Makuutu Rare Earth Project is 100% owned by Rwenzori Rare Metals Limited, a Ugandan registered company. Oro Verde currently has a 20% shareholding in Rwenzori and may increase its shareholding to 60% by meeting expenditure commitments.

1. OVL to contribute US$1,700,000 of expenditure by 1 October 2020 to earn up to a 51% staged interest in RRM.
2. Oro Verde to fund to completion of a bankable feasibility study to earn an additional 9% interest for a cumulative 60% interest in RRM.
3. During the earn-in phase there are milestone payments, payable in cash or Oro Verde shares at the election of the Vendor, as follows:
   - US$750,000 on the Grant of Retention licence over RL1693 which is due to expire in November 2020;

- US$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and
- US$375,000 on conversion of existing licences to mining licences.
- At any time should Oro Verde not continue to invest in the project and project development ceases for at least two months RRM has the right to return the capital sunk by Oro Verde and reclaim all interest earnt by Oro Verde.

Geology

The Makuutu deposit is interpreted to be an ionic adsorption REE clay-type deposits like those in South China, Madagascar and Brazil.

The mineralisation is contained within the tropical lateritic weathering profile of a basin filled with sedimentary rocks including shales, mudstones and sandstones potentially derived from the surrounding granitic rocks. These granitic rocks are considered the original source of the REE which were then accumulated in the sediments of the basin as the granites have degraded. These sediments then form the protolith that was subjected to prolonged tropical weathering.

The weathering developed a lateritic regolith with a surface indurated hardcap, followed downward by clay rich zones that grade down through saprolite and saprock to unweathered sediments (Figure 4). The thickness of the regolith is between 10 and 20 metres from surface.

The REE mineralisation is concentrated in the weathered profile where it has dissolved from its primary mineral form, such as monazite and xenotime, then adsorbed on to fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). This adsorbed REE is the target for extraction and production of REO.

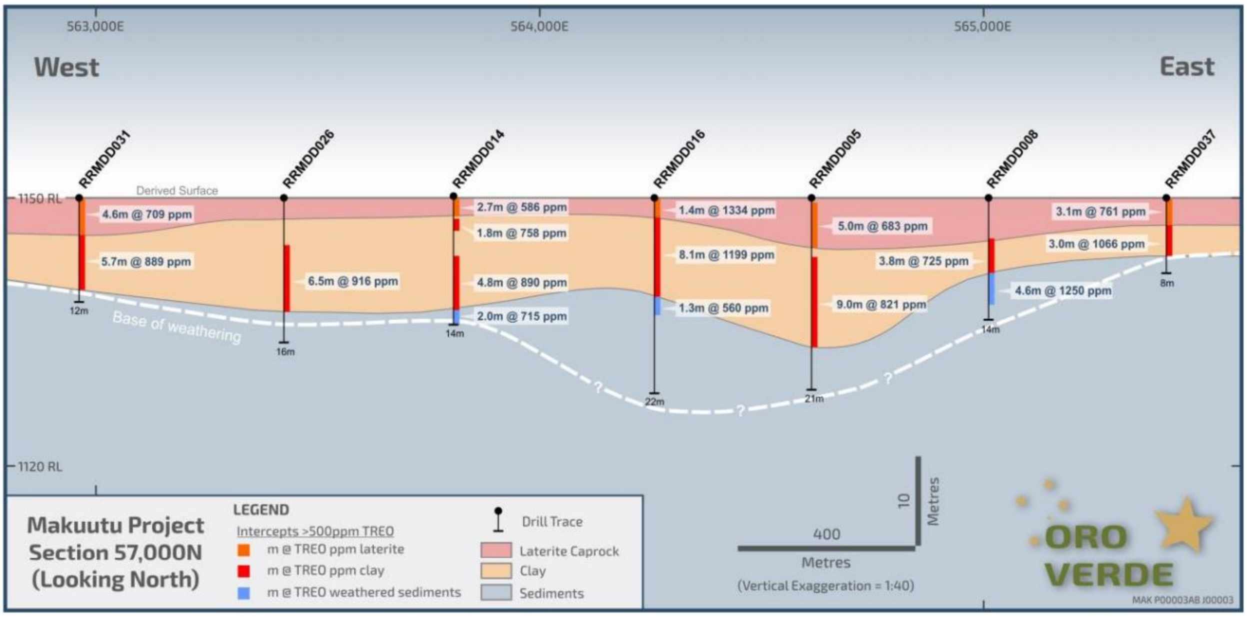

Figure 4. **Makuutu Rare Earths Project; 57,000mN Cross Section of Simplified Geology and Drill Results[3].**

Drilling Techniques and Hole Spacing

Drilling completed at the Makuutu project and used to support the mineral resource includes 41 diamond core (DDH) holes for a total of 681.5 m (Figure 5). All diamond holes are drilled from surface and oriented vertically. Drilling used a HQ size (~63.4 mm diameter) and employed triple tube techniques to maximise

[3] The surface level is shown as fixed level of 1150 m as the vertical exaggeration required to capture the section width reduces the representivity of the diagram. Elevation change from west to east is approximately-30 metres.

core recovery. Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed.

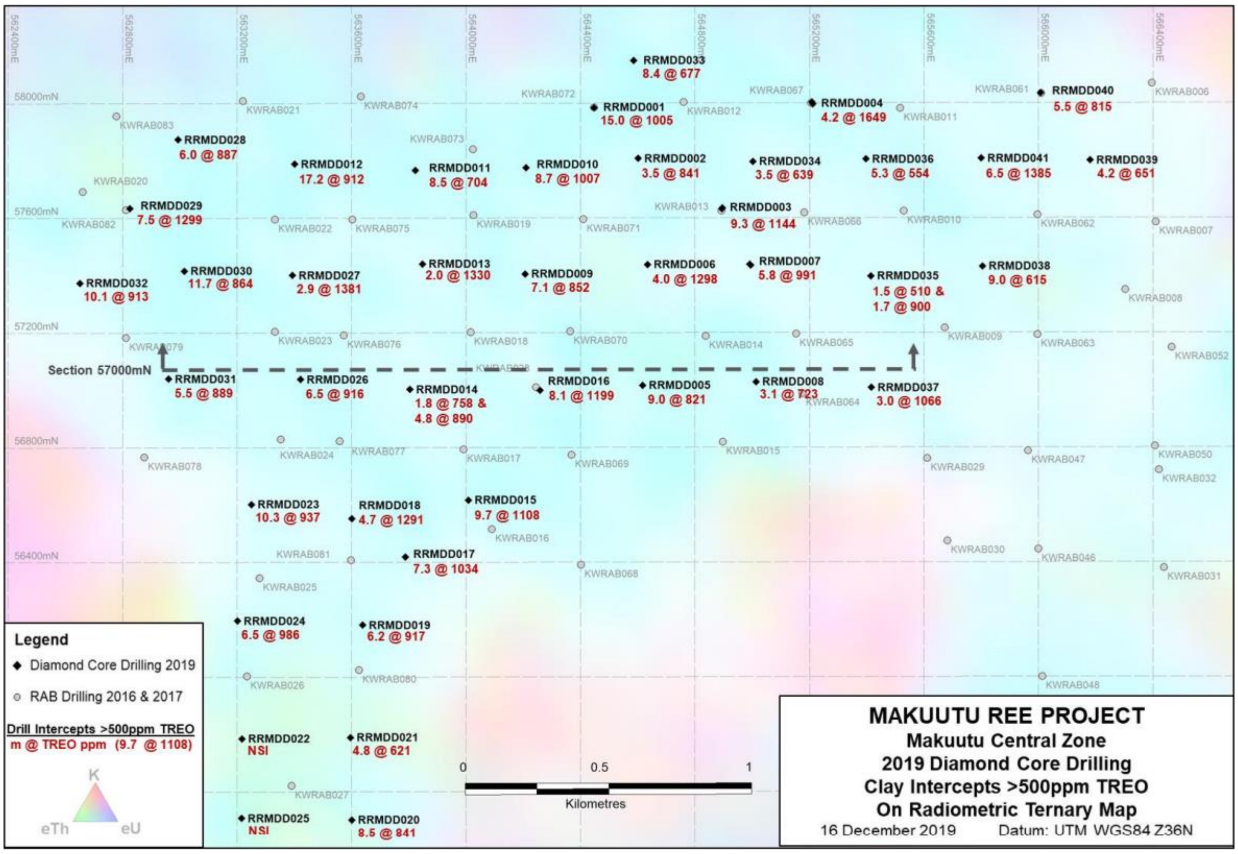

Figure 5. **Makuutu REE Project; Drill Layout with Clay Intercept Results.**

Sampling

Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Using either method, core was initial cut in half then one half was further cut in half to give quarter core. Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques. Half core was collected for metallurgical test work.

Certified reference materials (CRM), analytical blanks, and field duplicates were used as part of the QAQC procedures and were each inserted at a rate of 1:25 samples.

Sample Analysis

All DDH samples were dispatched by air freight direct to ALS laboratory Perth Australia. Sample preparation included whole sample crushing to 70% less than 2mm, Boyd rotary splitting to generate a 750 g sub-sample, and pulverising to achieve better than 85% passing 75 microns. Analysis for REE suite was via Lithium Borate Fusion ICP-MS (ALS code ME-MS81), with elements analysed at ppm levels. This method is considered a total analysis.

Estimation Methodology

The geological interpretation utilised lithological logging data, and assay data to guide and control the Mineral Resource estimation. Leapfrog™ implicit modelling software was utilised to generate three-dimensional wireframes of the major regolith units. Estimation domains were based on grouping of the regolith domains into three zones as defined by regolith rheology, and by comparison of regolith statistics:

- Domain 3 – Cover zone
- Domain 7 – Clay zone
- Domain 9 – Basement zone

Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains. Sample data was composited to one-metre downhole lengths using a best fit-method. No residuals were generated. Statistical analysis was carried out on data from all estimated domains, with hard boundary techniques employed within each estimation domain.

Outlier analysis of the composite data indicated application of top-cut values was required for Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Sm, Tb, Tm, U, Y and Yb within both the cover zone and the clay zone. Top cuts were generally selected above the 99^{th} percentile, with a total of 31 composites capped.

A total of 15 REE grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu) and 2 deleterious elements (U, and Th) were estimated. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO). The grade estimation process was completed using Leapfrog Edge software using Ordinary Kriging (OK) together with dynamic anisotropy to guide the grade interpolation parallel to the regolith boundaries. For estimation domains with insufficient sample data a variogram model from a comparable domain was assigned.

Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis (KNA) with a minimum number of 6 composites and a maximum number of 14 composites, with a restriction on the number of composites per drill hole set to four. Blocks were estimated in a single pass strategy with maximum search distances for 950 and 1500 metres depending on estimation domain. A cross section looking north with estimated TREO block grades is presented in Figure 3.

The model has a block size of 200 m (X) by 200 m (Y) by 4 m (Z) with sub-celling of 50 m (X) by 50 m (Y) by 1m (Z). Grades were estimated into the parent cells.

The block model was validated using a combination of visual and statistical techniques including global statistics comparisons, correlation coefficients comparisons, and trend plots.

Resource Classification

A range of criteria was considered by Cube when addressing the suitability of the classification boundaries. These criteria include:

- Geological continuity and volume;
- Drill spacing and drill data quality;
- Modelling technique; and
- Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.

Blocks have been classified as Inferred, primarily based on drill data spacing in combination with other model estimate quality parameters (Figure 6).

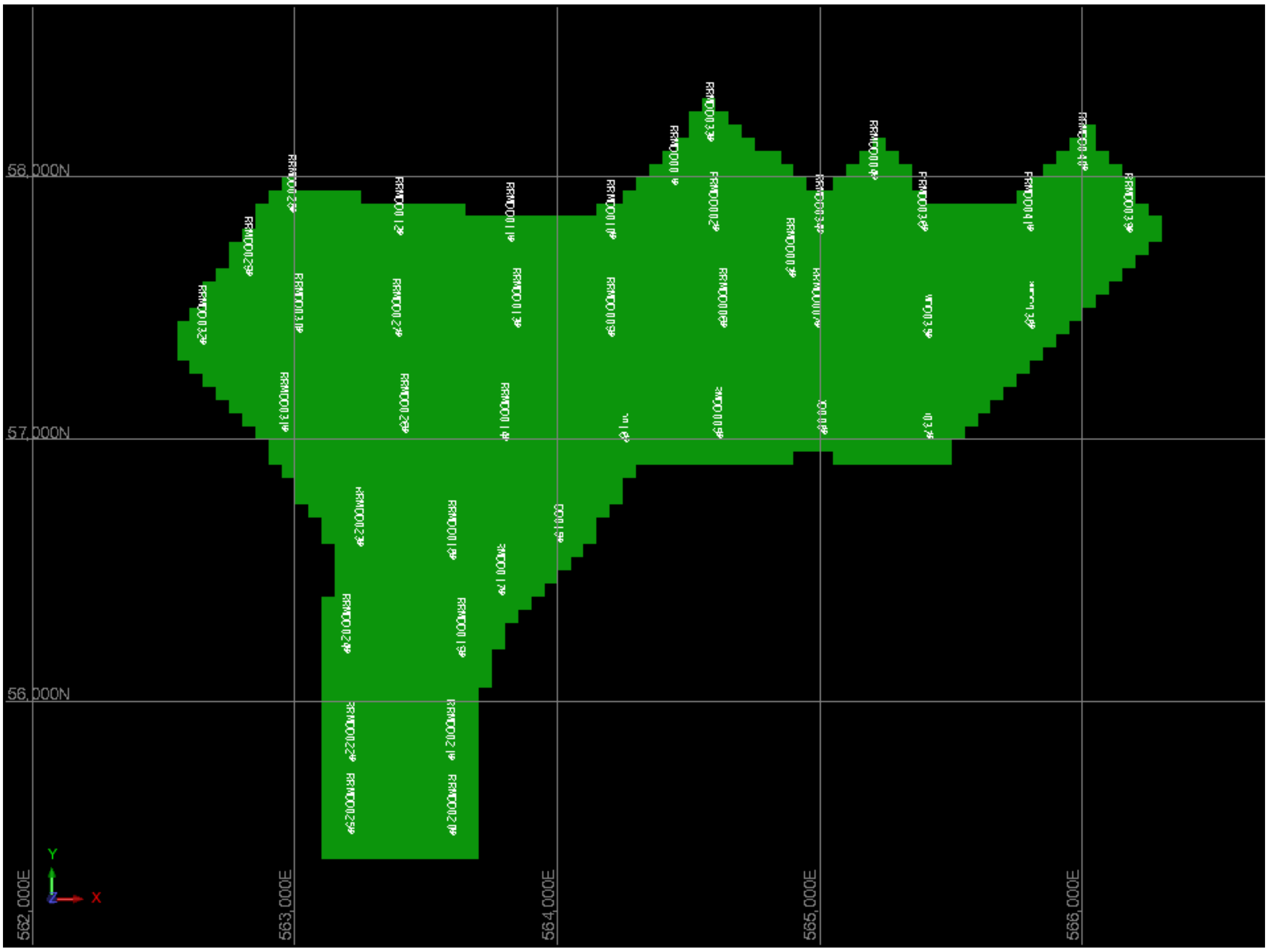

Figure 6. Makuutu REE Project – Inferred Mineral Resource Limits

Cut-off Grade

The Mineral Resource has been reported above a 500 ppm total rare earth oxide (TREO) minus Ce_2O_3 cut-off. Given the early stage of investigations at Makuutu, this cut-off has been selected based on published information from more advanced projects with comparable mineralisation and conceptual processing methods. Material above this cut-off has, in the opinion of the Competent Person, met the conditions for reporting of a Mineral Resource with reasonable prospects of economic extraction.

Mining and Metallurgy

Development of this Mineral Resource assumes mining using standard equipment and methods. The assumed mining method is conventional truck and shovel, open pit mining at an appropriate bench height.

Preliminary metallurgical test work on mineralisation at the project has been completed and previously reported (ASX release dated 18 February 2020). Results of test work indicate metallurgical recoveries of up to 75% TREE-Ce (Total Rare Earth minus Cerium) were achieved using simple extraction techniques. These results are considered adequate to achieve reasonable expectations of economic metallurgical processing of the project mineralisation.

Project Overview

The Makuutu Rare Earth Project, located in Uganda, is significant in size and is understood to be potentially one of the largest ionic clay deposits outside of China. Drilling at the project site to date totals 47 diamond core holes and 109 historic RAB holes, with the Company working toward **progressively** validating its previously announced exploration target of (ASX: 4 September 2019):

270 - 530 million tonnes grading 0.04 – 0.1% (400 – 1,000 ppm) TREO*.

> ***This Exploration Target is conceptual in nature but is based on reasonable grounds and assumptions. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.**

The Makuutu Rare Earth Project contains ionic clay-hosted rare earth mineralisation, like those found in China, which are the source of the majority of the world's heavy rare earths production, and vastly different to hard rock-hosted rare earths projects. Mineralisation at Makuutu occurs from surface to depths of 15-20 metres where simple shallow mining methods will be applicable. The processing of ionic clays is also simple, where the clay undergoes a simple desorption process – akin to washing – in which rare earths are desorbed from the ore into a salt solution, concentrated and precipitated to create a mixed rare earth product. Tailings (the washed clay) are expected to be returned to the mined open pits and areas progressively rehabilitated. The process is expected to have a small environmental footprint.

The project area is well supported with infrastructure, which is illustrated in Figure 7. There is substantive nearby hydroelectric generation capacity with electrical grid infrastructure nearby to the project area, the project area is readily accessible with existing road and rail infrastructure nearby that connects to Kampala and Port of Mombasa, and the area has cell phone coverage. Additionally, nearby centres present a pool for a professional workforce.

The Company has acquired a 20% interest in the project and is working toward acquiring up to a further 40% interest via an "earn-in" process through the expenditure of funds, bringing its total potential interest in the project to 60%.

Key project highlights:

1. Ion Adsorption Clay deposits are currently the lowest cost sources of rare earths in the world,
2. Favourable concentration of high demand rare earths – Tb, Dy, Pr and Nd,
3. Simple open pit mining, and
4. Simple processing to produce a high-value concentrate.

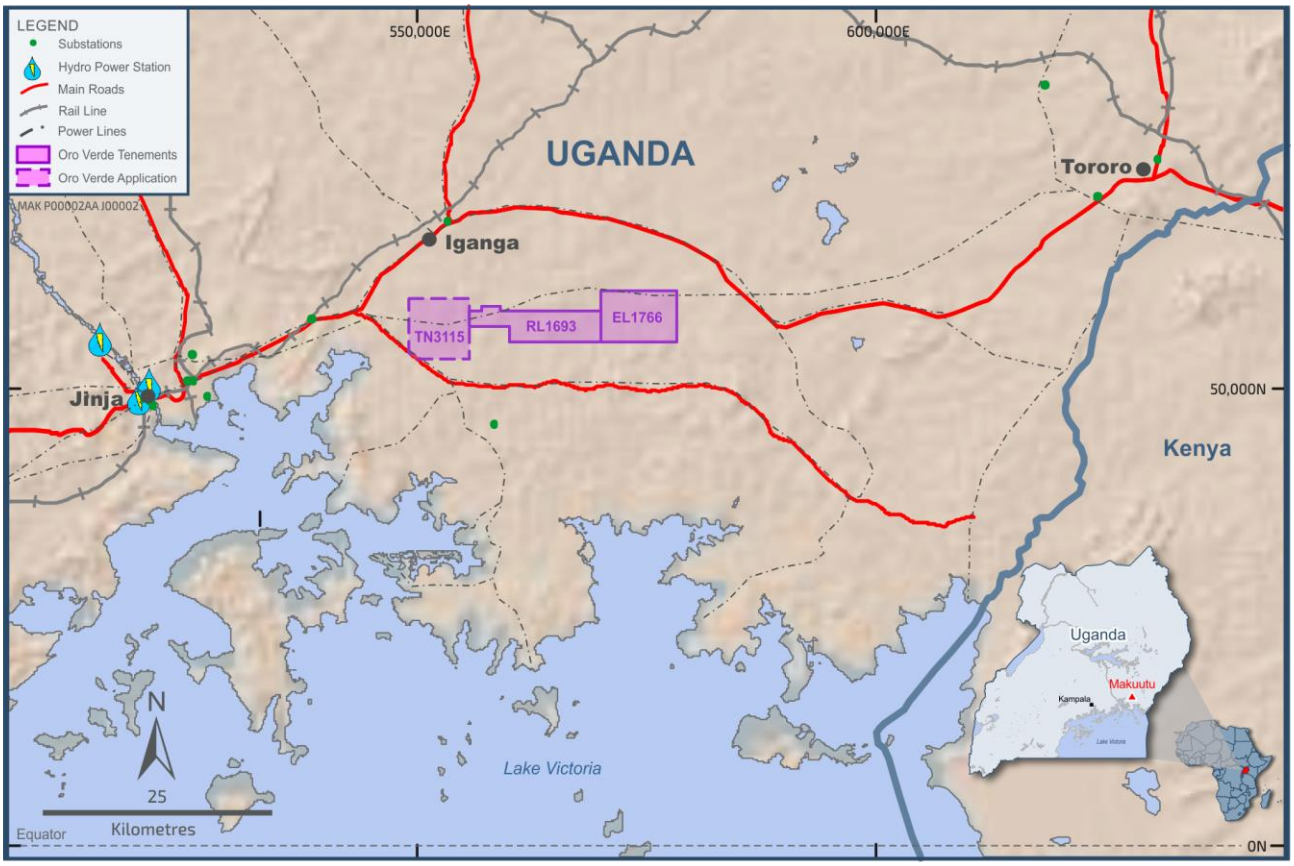

Figure 7. Map Showing Infrastructure Nearby to the Project.

Addendums

Appendix 1: Makuutu Project RRMDD Diamond Core Hole Details.
Appendix 2: Inferred Grade Tonnage Data of the Makuutu Maiden Resource Estimate.
JORC Code, 2012 Edition – Table 1 Report.

***** ENDS *****

Authorised for release by M Steffens, Director.

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Competent Persons Statements

The information in this report that relates to Mineral Resources is based on information compiled by Mr Daniel Saunders, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Saunders is a full-time employee of Cube Consulting Pty Ltd, acting as independent consultants to Oro Verde Limited. Mr Saunders has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity 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 Saunders consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this Report that relates to exploration results including drilling, sampling, assay and bulk density data applied to the mineral resource estimate for the Makuutu Project is based on information compiled by Mr. Geoff Chapman, who is a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Mr. Chapman is a Director of geological consultancy GJ Exploration Pty Ltd that is engaged by Oro Verde Limited. Mr. Chapman has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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' (JORC Code). Mr. Chapman consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Information in this report that relates to previously reported Exploration Targets and Exploration Results has been crossed-referenced in this report to the date that it was originally reported to ASX. Oro Verde Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

Appendix 1: Makuutu Project RRMDD Diamond Core Hole Details (Datum UTM WGS84 Zone 36N).

Drill Hole ID	UTM East (m.)	UTM North (m.)	Elevation (m.a.s.l.)	Drill Type	Hole Length EOH (m.)	Azimuth	Inclination
RRMDD001	564,447	57,983	1,158	DD	21.60	0	-90
RRMDD002	564,602	57,807	1,163	DD	15.40	0	-90
RRMDD003	564,894	57,630	1,161	DD	15.60	0	-90
RRMDD004	565,209	58,002	1,150	DD	15.60	0	-90
RRMDD005	564,617	57,016	1,154	DD	21.40	0	-90
RRMDD006	564,635	57,437	1,164	DD	20.10	0	-90
RRMDD007	564,992	57,437	1,157	DD	11.60	0	-90
RRMDD008	565,014	57,028	1,144	DD	13.60	0	-90
RRMDD009	564,207	57,405	1,172	DD	30.10	0	-90
RRMDD010	564,210	57,775	1,164	DD	14.50	0	-90
RRMDD011	563,824	57,766	1,164	DD	29.70	0	-90
RRMDD012	563,401	57,788	1,169	DD	19.40	0	-90
RRMDD013	563,848	57,440	1,171	DD	16.10	0	-90
RRMDD014	563,804	57,003	1,170	DD	14.10	0	-90
RRMDD015	564,009	56,616	1,154	DD	14.20	0	-90
RRMDD016	564,259	56,999	1,162	DD	21.69	0	-90
RRMDD017	563,789	56,419	1,152	DD	20.00	0	-90
RRMDD018	563,601	56,553	1,159	DD	13.80	0	-90
RRMDD019	563,639	56,181	1,153	DD	14.30	0	-90
RRMDD020	563,602	55,502	1,163	DD	21.60	0	-90
RRMDD021	563,596	55,789	1,153	DD	18.10	0	-90
RRMDD022	563,217	55,785	1,158	DD	17.60	0	-90
RRMDD023	563,250	56,602	1,155	DD	23.60	0	-90
RRMDD024	563,201	56,196	1,155	DD	15.00	0	-90
RRMDD025	563,216	55,508	1,163	DD	11.60	0	-90
RRMDD026	563,422	57,037	1,164	DD	16.10	0	-90
RRMDD027	563,394	57,400	1,170	DD	14.10	0	-90
RRMDD028	562,995	57,874	1,163	DD	17.90	0	-90
RRMDD029	562,826	57,635	1,159	DD	15.00	0	-90
RRMDD030	563,017	57,416	1,162	DD	18.50	0	-90
RRMDD031	562,961	57,040	1,154	DD	11.60	0	-90
RRMDD032	562,651	57,374	1,152	DD	14.50	0	-90
RRMDD033	564,585	58,149	1,154	DD	17.00	0	-90
RRMDD034	565,002	57,796	1,158	DD	12.50	0	-90
RRMDD035	565,415	57,396	1,148	DD	12.50	0	-90
RRMDD036	565,397	57,804	1,154	DD	15.00	0	-90
RRMDD037	565,416	57,008	1,136	DD	8.30	0	-90
RRMDD038	565,804	57,430	1,141	DD	19.00	0	-90
RRMDD039	566,180	57,799	1,132	DD	9.50	0	-90
RRMDD040	566,007	58,035	1,136	DD	16.50	0	-90
RRMDD041	565,799	57,806	1,149	DD	13.20	0	-90

Appendix 2: Inferred Grade Tonnage Data of the Makuutu Maiden Resource Estimate.

Cut-off Grade (TREO no Ce_2O_3)	Tonnes (Mt)	TREO (ppm)	TREO no Ce_2O_3 (ppm)	U_3O_8 (ppm)	ThO_2 (ppm)
200	78.5	780	560	20	30
300	73.1	800	580	20	30
400	62.5	850	610	30	30
500	***47.3***	***910***	***670***	***30***	***30***
600	30.7	990	730	30	40
700	15.8	1,080	810	30	40

JORC Code, 2012 Edition – Table 1 report

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.*	**Diamond Core Drilling** Drill core was collected from a core barrel and placed in appropriately marked core trays. Down hole core run depths were measured and marked with core blocks. Core was measured for core loss and core photography and geological logging completed. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Using either method core was initial cut in half then one half was further cut in half to give quarter core. Quarter core was submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques. Half core was collected for metallurgical testwork.
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 Core Drilling** Core size was HQ triple tube. The core was not oriented (vertical)
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.*	**Diamond Drilling** Core recovery was calculated by measuring actual core length versus drillers core run lengths. Core recovery ranged from 70% to 100% and averaged 97%. No relationship exists between core recovery and grade.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Logging</td><td>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.</td><td> All (100%) drill core has been geologically logged and core photographs taken. Logging is qualitative with description of colour, weathering status, alteration, major and minor rock types, texture, grain size and comments added where further observation is made. Additional non-geological qualitative logging includes comments for sample recovery, humidity, and hardness for each logged interval. </td></tr>
<tr><td>Sub-sampling techniques and sample preparation</td><td>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.</td><td> Diamond Drill Core Where the core contained continuous lengths of soft clay a carving knife was used to cut the core. When the core was too hard to knife cut it was cut using an electric core saw. Sample lengths were determined by geological boundaries with a maximum sample length of 1 metre applied in clay zones and up to 2 metres in laterite zones where core recovery was occasionally low. Samples were collected from core trays by hand and placed in individually numbered bags. These bags were dispatched to ALS for analysis with no further field preparation. Sample weights were recorded prior to sample dispatch. Sample mass is considered appropriate for the grain size of the material being sampled that is generally very fine grained and uniform. Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. </td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels</td><td> Assay and Laboratory Procedures – All Samples Samples were dispatched by air freight direct to ALS laboratory Perth Australia. The preparation and analysis protocol used is as follows: <table><tr><th>ALS Code</th><th>Description</th></tr><tr><td>WEI-21</td><td>Received sample weight</td></tr></table></td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	of accuracy (ie lack of bias) and precision have been established.	

LOG-22	Sample Login w/o Barcode
DRY-21	High temperature drying
CRU-21	Crush entire sample
CRU-31	Fine crushing – 70% <2mm
SPL-22Y	Split sample – Boyd Rotary Splitter
PUL-31h	Pulverise 750g to 85% passing 75 micron
CRU-QC	Crushing QC Test
PUL-QC	Pulverising QC test

The assay technique used for REE was Lithium Borate Fusion ICP-MS (ALS code ME-MS81). This is a recognised industry standard analysis technique for REE suite and associated elements. Elements analysed at ppm levels:

Ba	Ce	Cr	Cs	Dy	Er	Eu	Ga
Gd	Hf	Ho	La	Lu	Nb	Nd	Pr
Rb	Sm	Sn	Sr	Ta	Tb	Th	Tm
U	V	W	Y	Yb	Zr		

Analysis for scandium (Sc) was by Lithium Borate Fusion ICP-AES (ALS code Sc-ICP06).

The sample preparation and assay techniques used are industry standard and provide a total analysis.

All laboratories used are ISO 17025 accredited

Criteria	JORC Code explanation	Commentary
		QAQC Diamond Drill Core Samples • Analytical Standards CRM AMIS0275 and AMIS0276 were included in sample batches at a ratio of 1:25 to drill samples submitted. This is an acceptable ratio. The assay results for the standards were consistent with the certified levels of accuracy and precision and no bias is evident. • Blanks CRM blanks AMIS0681 and OREAS22e were included in sample batches at a ratio of 1:25 to drill samples submitted for analysis. This is an acceptable ratio. Both CRM blanks contain some REE, with elements critical elements Ce, Nd, Dy and Y present in small quantities. The analysis results were consistent with the certified values for the blanks. No laboratory contamination or bias is evident from these results. • Duplicates Field duplicate sampling was conducted at a ratio of 1:25 samples. Duplicates were created by lengthways halving the ¼ core primary sample into 2 identical portions. Duplicate samples were allocated separate sample numbers and submitted with the same analytical batch as the primary sample. Variability between duplicate results is considered acceptable and no sampling bias is evident. Laboratory inserted standards, blanks and duplicates were analysed as per industry standard practice. There is no evidence of bias from these results.
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.*	No independent verification of significant intersection undertaken. No twinning of diamond core drill holes was undertaken. Sampling protocols for diamond core sampling and QAQC were documented and held on site by the responsible geologist. No procedures for data storage and management have been compiled as yet. Data were collected in the field by hand and entered into Excel spreadsheet. Data are then compiled with assay results compiled and

Criteria	JORC Code explanation	Commentary
		stored in Access database. Data verification is conducted on data entry including hole depths, sample intervals and sample numbers. Sample numbers from assay data are verified by algorithm in spreadsheet prior to entry int the database. Assay data was received in digital format from the laboratory and merged with the sampling data into an Excel spreadsheet format for QAQC analysis and review against field data. Once finalised and validated data is stored in a protected Access database. Data validation of assay data and sampling data have been conducted to ensure data entry is correct. All assay data is received from the laboratory in element form is unadjusted for data entry. Conversion of elemental analysis (REE) to stoichiometric oxide (REO) was undertaken by spreadsheet using defined conversion factors.(Source:https://www.jcu.edu.au/advanced-analytical-centre/services-and-resources/resources-and-extras/element-to-stoichiometric-oxide-conversion-factors)

Element ppm	Conversion Factor	Oxide Form
Ce	1.1713	Ce_2O_3
Dy	1.1477	Dy_2O_3
Er	1.1435	Er_2O_3
Eu	1.1579	Eu_2O_3
Gd	1.1526	Gd_2O_3
Ho	1.1455	Ho_2O_3
La	1.1728	La_2O_3
Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.1703	Pr_2O_3
Sm	1.1596	Sm_2O_3

Criteria	JORC Code explanation	Commentary
		<table><tr><td>Tb</td><td>1.151</td><td>Tb_2O_3</td></tr><tr><td>Tm</td><td>1.1421</td><td>Tm_2O_3</td></tr><tr><td>Y</td><td>1.2699</td><td>Y_2O_3</td></tr><tr><td>Yb</td><td>1.1387</td><td>Yb_2O_3</td></tr></table> Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: Note that Y_2O_3 is included in the TREO, HREO and CREO calculation. TREO (Total Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3. HREO (Heavy Rare Earth Oxide) = Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_2O_3 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3, + Y_2O_3 + Lu_2O_3 CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_2O_3 + Dy_2O_3 + Y_2O_3 LREO (Light Rare Earth Oxide) = La_2O_3 + Ce_2O_3 + Pr_2O_3 + Nd_2O_3 HREO% of TREO= HREO/TREO x 100 In elemental form the classifications are: Note that Y is included in the TREE, HREE and CREE calculation. TREE: La+Ce+Pr+Nd+Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Lu+Y HREE: Sm+Eu+Gd+Tb+Dy+Ho+Er+Tm+Yb+Y+Lu CREE: Nd+Eu+Tb+Dy+Y LREE: La+Ce+Pr+Nd
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.*	Drill hole collar locations for holes RRMDD001 to RRMDD041 were surveyed a relational DGPS system. The general accuracy for x,y and z is $\pm$ 0.2m. Hole locations for RRMDD042 – RRMDD046 were surveyed using handheld GPS. The accuracy for this type of device is considered $\pm$ 5m

Criteria	JORC Code explanation	Commentary
		in x and y coordinates however the elevation component of coordinates is variable and z accuracy may be low using this type of device. Datum WGS84 Zone 36 North was used for location data collection and storage. This is the appropriate datum for the project area. No grid transformations were applied to the data. No downhole surveys were conducted. As all holes were vertical and shallow, the rig setup was checked using a spirit level for horizontal and vertical orientation Any deviation will be insignificant given the short lengths of the holes Detailed topographic data was not sourced or used.
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.*	Drilling was conducted on a nominal 400m x 400m spacing.
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.*	The Makuutu mineralisation is interpreted to be in a flat lying weathered profile including cover soil, lateritic caprock, clays transitioning to saprolite and saprock. Below the saprock are fresh shales, siltstones and mudstones. Pit mapping and diamond drilling indicate the mineralised regolith to be generally horizontal All drill holes are vertical which is appropriate for horizontal bedding and regolith profile.
Sample security	• *The measures taken to ensure sample security.*	After collection, the samples were transported by Company representatives to Entebbe airport and dispatched via airfreight to Perth Australia. Samples were received by Australian customs authorities in Perth within 48 hours of dispatch and were still contained in the sealed shipment bags. Samples were subsequently transported from Australian customs to ALS Perth via road freight and inspected on arrival by a Company representative.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been undertaken

Section 2 Reporting of Exploration Results

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Mineral tenement and land tenure status</td>
<td>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</td>
<td>The Makuutu Project comprises one (1) granted Retention Licence (RL1693), one (1) Retention Licence application (TN3115), and one (1) Exploration Licence (EL1766).

The granted tenements RL1693 and EL1766 are in good standing and no known impediments exist. The application T3115 was formerly a portion of a larger Exploration Licence. Exploration work conducted on this licence included 27 RAB holes, the only diamond drill hole and 19 of the 2012 pits. The application area is excluded from field work until grant of TN3115.

All licences are located in Republic of Uganda.

The Makuutu Rare Earth Project is 100% owned by Rwenzori Rare Metals Limited, a Ugandan registered company. Oro Verde currently has a 20% shareholding in Rwenzori and may increase its shareholding to 60% by meeting expenditure commitments.

1. OVL to contribute US$1,700,000 of expenditure by 1 October 2020 to earn up to a 51% staged interest in RRM as follows
<table>
<tr><th>Spend</th><th>Interest earned</th><th>Cumulative Interest earned</th></tr>
<tr><td>Exercise of Option US$100,000 (Completed)</td><td>20%</td><td>20%</td></tr>
<tr><td>Expenditure contribution of US$650,000</td><td>11%</td><td>31%</td></tr>
<tr><td>Expenditure contribution of further US$800,000</td><td>15%</td><td>46%</td></tr>
</table>
2. Oro Verde to fund to completion of a bankable feasibility study to earn an additional 9% interest for a cumulative 60% interest in RRM.</td>
</tr>
</table>

Criteria	JORC Code explanation	Commentary
		3. During the earn-in phase there are milestone payments, payable in cash or Oro Verde shares at the election of the Vendor, as follows: • US$750,000 on the Grant of Retention licence over RL1693 which is due to expire in November 2020; • US$375,000 on production of 10 kg of mixed rare-earth product from pilot or demonstration plant activities; and • US$375,000 on conversion of existing licences to mining licences. • At any time should Oro Verde not continue to invest in the project and project development ceases for at least two months RRM has the right to return the capital sunk by Oro Verde and reclaim all interest earnt by Oro Verde.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous exploration includes: 1980: Country wide airborne geophysical survey identifying uranium anomalies in the Project area. 1990s: French BRGM and Ugandan DGSM undertook geochemical and geological survey over South-Eastern Uganda including the Project area. Anomalous Au, Zn, Cu, Sn, Nb and V identified. 2006-2009: Country wide high resolution airborne magnetic and radiometric survey identified U anomalism in the Project area. 2009: Finland GTK reprocessed radiometric data and refined the Project anomalies. 2010: Kweri Ltd undertook field verification of radiometric anomalies including scout sampling of existing community pits. Samples showed an enrichment of REE and Sc. 2011: Kweri Ltd conducted ground radiometric survey and evaluated historic groundwater borehole logs. 2012: Kweri Ltd and partner Berkley Reef Ltd conducted prospect wide pit excavation and sampling of 48 pits and a ground gravity traverse. Pit samples showed enrichment of REE weathered profile. Five (5) samples sent to Toronto Aqueous Research Laboratory for REE leach testwork.

Criteria	JORC Code explanation	Commentary
		2016 – 2017: Rwenzori Rare Metals conduct excavation of 11 pits, ground gravity survey, RAB drilling (109 drill holes) and one (1) diamond drill hole. The historic exploration has been conducted to a professional standard and is appropriate for the exploration stage of the prospect.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Makuutu deposit is interpreted to be an ionic adsorption REE clay-type deposits similar to those in South China, Madagascar and Brazil. The mineralisation is contained within the tropical lateritic weathering profile of a basin filled with sedimentary rocks including shales, mudstones and sandstones potentially derived from the surrounding granitic rocks. These granitic rocks are considered the original source of the REE which were then accumulated in the sediments of the basin as the granites have degraded. These sediments then form the protolith that was subjected to prolonged tropical weathering. The weathering developed a lateritic regolith with a surface indurated hardcap, followed downward by clay rich zones that grade down through saprolite and saprock to unweathered sediments. The thickness of the regolith is between 10 and 20 metres from surface. The REE mineralisation is concentrated in the weathered profile where it has dissolved from its primary mineral form, such as monazite and xenotime, then adsorbed on to fine particles of aluminosilicate clays (e.g. kaolinite, illite, smectite). This adsorbed REE is the target for extraction and production of REO. There is insufficient geological study to determine any geological disruptions, such as faults or dykes, that may cause variability in the mineralisation.
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*	The material information for drill holes relating to this announcement are contained in Appendix 1.

Criteria	JORC Code explanation	Commentary
	○ *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.*	
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 such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents values are used.
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').*	Down hole lengths, true widths are not known. The mineralisation is interpreted to be horizontal, flat lying sediments and weathering profile, with the vertical drilling perpendicular to mineralisation. Any internal variations to REE distribution within the horizontal layering was not defined, therefore the true width is considered not known.
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.*	Refer to diagrams in body of text.
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.*	This report contains all drilling results that are consistent with the JORC guidelines. Where data may have been excluded, it is considered not material.
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical*	Metallurgical leach testing was previously conducted on samples derived from exploration pits, RAB drilling, and one 8.5 tonne bulk pit sample.

Criteria	JORC Code explanation	Commentary
exploration data	*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.*	In 2012, 5 pit samples were sent to the Toronto Aqueous Research Laboratory at the University of Toronto for leachability tests In 2017, 2 pit samples were sent to SGS Laboratory Toronto for leachability tests. 2017/18, 29 samples were collected from 7 RAB drill holes. 20 of these were consigned to SGS Canada and 4 to Aqueous Process Research (APR) in Ontario Canada. The remaining 5 samples were consigned to Bio Lantanidos in Chile. 2018/19, 8.5 tonne bulk sample was consigned to Mintek, South Africa, to evaluate using Resin-in-leach (RIL) technology for the recovery of REE. 2019: 118 samples from 31 holes from the 2019 diamond drilling program had preliminary variation testwork conducted TREE-Ce extraction ranged from 3% to 75%. Evaluation of results from these programs and testing of samples from the project is ongoing.
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.*	Future work programs are intended to evaluate the economic opportunity of the project including extraction recovery maximisation, resource definition and estimation on the known areas of mineralisation, regional exploration on adjoining licences and compilation of a Preliminary Economic Assessment (PEA)

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 collected in the field has been validated against core photography and original data collection files Analytical data is received in digital format from the laboratory and merged with the sampling data into an Excel spreadsheet format for QAQC analysis and review against field data. Once finalised and validated data is stored in a protected Access database. Data validation of original sampling and assay data have been conducted on the database on a 1:10 entries spot check basis. Data has also been correlated against interval lengths and EOH details. Any data entry errors identified have been correct 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.*	The project site has been visited by the Competent Person for Exploration Results who has observed drilling operations, reviewed drill core, and reviewed sampling and QAQC procedures. The project has not been visited by the Competent Person responsible for the reporting of Mineral Resources.
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 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.*	The mineral deposit is hosted in a tropical laterite regolith profile derived from generally flat lying sediments. The regolith commences from surface to an average depth of approximately 15 metres. All drilling was geologically logged in the field including rock type and degree of weathering. Following field data collection and receipt of analytical data the deposit has been categorised on a Regolith Zone basis based on visual observation from drill core and multi-element ratio analysis. There is a moderate to high degree of confidence in the interpretation of the regolith units given the flat lying and reasonably consistent nature of the regolith. There is unlikely to be any significant structural disruption to the mineralisation through the resource area. Estimation domains were based on grouping of the regolith domains into three zones as defined by regolith rheology, and by comparison of regolith statsitics:

Criteria	JORC Code explanation	Commentary
		- Domain 3 – Cover zone - Domain 7 – Clay zone - Domain 9 – Basement zone
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 overall defined mineralised zone is elongated to the north-east with a strike extent of ~6,500m, across strike extent of ~3,000m an average vertical thickness of 12m. The top of the mineralised zone is defined by a thin surficial soil/hardcap zone that averages 3.5m in thickness. The base of the mineralised zone is defined by the top of the saprock/fresh rock boundary which extends to an average vertical depth of 17m.
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.*	A total of 15 rare earth element (REE) grade attributes (Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu) and 2 deleterious elements (U, and Th) were estimated. Final estimated values are converted to stoichiometric oxide values by calculation using published ratios to support reporting of rare earth oxides (REO). The grade estimation used the Ordinary Kriging ("OK") technique together with dynamic anisotropy to guide the grade interpolation parallel to the regolith boundaries. Grade interpolation used 1m composited samples constrained by the estimation domain hard boundaries. An appropriate top cutting strategy (generally above the 99th grade percentile) was used to minimise the influence of isolated high-grade outliers. Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis ("KNA"), which included: - Oriented ellipsoidal search radii ranged from 950m to 1500m depending on the estimation domain; - Minimum number of samples = 6; - Maximum number of samples = 14, and - Limited to a maximum of 4 samples per hole.

Criteria	JORC Code explanation	Commentary
		The maximum extrapolation distance from the last data points was no more than 100m, which is the less than half the average drill hole spacing (~400 m) for the deposits. Computer software used for the modelling and estimation were: • Leapfrog Geo v5.0.4 was used for geological and estimation domain modelling. • Leapfrog Edge v3.0 was used for grade estimation. • Supervisor v3.0 for geostatistical analysis. • Surpac v6.9 for block modelling and reporting The estimation block model definitions are: • Non-rotated block model with an azimuth of 000ºGN; • OK panel size was set at 200m x 200m x 4m (XYZ) • Sub-block size of 50m x 50m x 1m (XYZ); • The bulk of the drilling data is on 400m by 400m grid spacings with some local infill holes at 200m spacing, and • Appropriate search ellipses were derived from KNA with an average search radii of 950m to 1500m and anisotropy of 15:7.5:1 to 5:4:1 (major/semi/minor). Selection of the block size was based on the geometry of the mineralisation, data density, and the likely degree to which selective mining can be successfully applied to the geologically based domain boundaries. Estimations of U and Th elements were completed for the Mineral Resource estimate. No other deleterious elements or other non-grade variables of economic significance were estimated. Correlations between the elements were determined from statistical analysis of the REE and demonstrated strong positive correlations between the majority of REE variables, particularly within the Clay Zone (estimation domain 7) The estimation model was validated using the following techniques: • Visual 3D checking and comparison of informing samples and estimated values.

Criteria	JORC Code explanation	Commentary
		• Global statistical comparisons of raw sample and composite grades to the block grades. • Comparison of correlation coefficients between composite and block data; • Validation 'swath' plots by northing, easting and elevation for each domain, and • Analysis of the grade tonnage distribution. No by-product recoveries were considered. No previous estimates or mining production has taken place at the deposit.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnes are estimated on an Insitu Dry Bulk Density basis. No moisture content has been determined by testwork or used in estimation.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The adopted cut-off grade for reporting is 500 ppm TREO (excluding Ce_2O_3) based on peer comparisons with similar projects and mineralisation styles.
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.*	Mineralisation is near surface, broadly flat lying, and of grades amenable to conventional open pit mining methods. The assumed mining method would be 'free dig' using truck and shovel.
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.*	Processing of the REE mineralisation is considered relatively simple, with the clay undergoing a desorption process in which the REE are desorbed from the mineralisation into a salt solution, concentrated, and precipitated to create a mixed rare earth product. Preliminary metallurgical test work has been completed on core samples from the project area (Oro Verde Ltd, ASX Release 18 February 2020). This reports metallurgical recoveries up to 75% TREE minus Cerium using simple extraction techniques. These recoveries compare

Criteria	JORC Code explanation	Commentary
		favourably to other known ionic clay hosted rare earth projects.
Environmen-tal 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.*	Tailings (the processed clay) are expected to be returned to the mined open pits and areas progressively rehabilitated.
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 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.*	Bulk density has been determined from 64 individual drill core measurements from 18 drill holes. Measurements were made on samples of approximately 10cm length from HQ core. Methods employed were the calliper method (54 samples) and Archimedes method (13 samples) Samples measured with the calliper method had dimensions recorded in the field using a Verier calliper. Samples were then dried and weighed on an analytical balance. Samples tested using the Archimedes method were dried, coated with water repellent spray then weighed dry and in water using an appropriate analytical balance. Bulk densities for the Clay Zone varied from 1.3 to 1.4. Density for all regolith zones was by direct assignment based on reported measurements.
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*	Classification of the mineral resource considered the interpretation confidence, drilling density, demonstrated continuity, estimation statistics (conditional bias, kriging efficiency) and block model validation results. Based on the broad drill spacing, the Inferred Mineral resource classification reflects the Competent Person's view of the deposit.

Criteria	JORC Code explanation	Commentary
	view of the deposit.	
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No audits or review have been completed for the Mineral Resource estimate.
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.*	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to the global estimates of tonnes and grades. No production data is available.